RCRA Practitioners Enforcement Workshop

EPA

Office of Enforcement and Compliance Assurance

Office of Regulatory Enforcement/RCRA Enforcement Division

September 1995

RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

LIST OF MODULES

1. OBTAINING AND DEVELOPING EVIDENCE/RCRA ACCESS
2. PITFALLS IN RCRA CASES
3. PREPARING THE EXPERT WITNESS
4. IDENTIFYING SOLID AND HAZARDOUS WASTES
5. NEW AND UPCOMING DEVELOPMENTS
6. STATE/FEDERAL LEGAL RESPONSIBILITIES IN RCRA ENFORCEMENT
7. RCRA PERMITS: RELATIONSHIP TO ENFORCEMENT
8. ENVIRONMENTAL JUSTICE
9. RCRA CIVIL AND CRIMINAL ENFORCEMENT: "TOOLS OF THE TRADE"
10. BANKRUPTCY FOR RCRA ATTORNEYS
11. SAMPLING AND ANALYSIS
12. COMPLIANCE ASSISTANCE
13. CIVIL PENALTIES UNDER RCRA

LIST OF ABBREVIATIONS AND ACRONYMS

AMC – American Mining Congress
CAA – Clean Air Act
CBI – Confidential business information
CEM – Continuous emissions monitor
CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act
CESQG – Conditionally exempt small quantity generator
CLP – Contract Lab Program
CMI – Corrective measures implementation
CMS – Corrective measures study
CSI – Common Sense Initiative
CWA – Clean Water Act
DEQ – Department of Environmental Quality
DOJ – U.S. Department of Justice
DQO – Data quality objective
ECP – Environmental Leadership Program
EEJC – Environmental Equity and Justice Commission
EMA – Environmental management assessment
EPA – U.S. Environmental Protection Agency
ERP – Enforcement Response Policy
FACA – Federal Advisiory Committee Act
GAO – U.S. Government Accounting Office
GIS – Geographic information systems
HSWA – Hazardous and Solid Waste Amendments
HWIR – Hazardous Waste Identification Rule
IM – Interim measures
IR – Infrared
LDR – Land disposal restriction
LOIS – Loss of interim status
MACT – Maximum achievable control technology
MOA – Memorandum of agreement
MWC – Municipal waste combustor
NOD – Notice of deficiency
NOV – Notice of violation
OC – Office of Compliance
OECA – Office of Enforcement and Compliance Assurance
ORC – Office of Regional Counsel
OSW – Office of Solid Waste
PCB – Polychlorinated biphenyl
PRP – Potentially responsible party
QA – Quality assurance
QAMS – Quality assurance management staff
QAPjP – Quality assurance project plan
QC – Quality control
RCPP – RCRA Civil Penalty Policy
RCRA – Resource Conservation and Recovery Act
RFI – RCRA feasibility investigation
RI/FS – Remedial investigation/feasibility study

SAP – Sampling and analysis plan
SBAP – Small Business Assistance Program
SEP – Supplemental environmental project
SWMU – Solid waste management unit
TC – Toxicity characteristic
TCLP – Toxicity characteristic leaching procedure
TOC – Total organic carbon
TRI – Toxics Release Inventory
TSD – Treatment, storage, and disposal
TSDF – Treatment, storage, and disposal facility
UTS - Universal treatment standards
VO – Volatile organic

Obtaining/Developing Evidence

RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

1. OBTAINING AND DEVELOPING EVIDENCE/ RCRA ACCESS

EPA

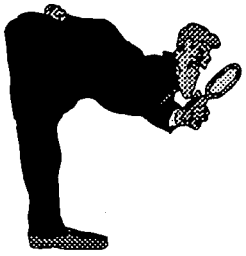
Module 1 Objectives

- **Discuss the role of obtaining evidence through inspections**
- **Review information on access**
- **Become familiar with inspection methods and documentation**
- **Discuss file reviews as a critical element in obtaining evidence**
- **Maximize use of evidence and information by minimizing legal defenses and factual inconsistencies**

Notes:

Module Overview

- **Strategy development for obtaining evidence from an inspection**
- **RCRA § 3007 information request letters**
- **Access**
- **Site inspections and gathering evidence**
- **Followup and reporting**



Notes:

Developing a Strategy for Obtaining Evidence in an Inspection

- **Purpose of the inspection**
- **File review**
- **Strategy development for the inspection**
- **Strategy development for gathering information**
  - **RCRA § 3007 Information Request letter**

Notes:

Purpose of Inspection

- Routine periodic compliance assessment
- Enforcement action followup
- Compliance deadlines followup
- Comprehensive review of records or data
- Sampling waste streams/environmental media
- Response to alleged violations at the facility
- Review of pre-permit environmental conditions
- Evaluation of facility monitoring/cleanup actions
- Identification mechanisms for cross-program and media compliance

Notes:

File Review

- **RCRA Notification Form (3010)**
- **RCRA Part A Permit application**
- **RCRA Part B Permit application**
- **RCRA Part B Permit**
- **Contact information of responsible persons**
- **Process flow chart with waste streams**
- **List of wastes generated**

Notes:

File Review (Continued)

- **Information sources (cont.):**
  - **List of wastes treated, stored, disposed by type of management unit (TSDs)**
  - **Inspection reports, photographs**
  - **Diagram of the facility layout showing waste generation processes in management units**
  - **Biennial or annual report, monitoring reports, other reports and studies**
  - **Citizen's complaints against the facility**
  - **Telephone logs**
  - **Enforcement actions**
  - **Response to a § 3007 request**

Notes:

Inspection Strategy:
A Deliberative Decisionmaking Process

- **Facility pre-notification**
- **Units/processes/documentation focus**
- **Sampling**
- **Checklist use**
- **Order of inspection**
- **Inspection attendees and coordination**

Notes:

RCRA § 3007 Inspection Authority

- **RCRA § 3007(a)- "[f]or purposes . . . enforcing the provisions of this title," EPA is authorized to:**
  1) Enter at reasonable times any establishment where hazardous wastes are or have been generated, stored, treated, disposed of, or transported from
  2) Inspect and obtain samples from any person of any such wastes and samples of any containers or labeling for such wastes
  3) Request information relating to hazardous wastes from the facilities and obtain copies of all records relating to hazardous wastes.

Notes:

Facility Rights:
The Fourth Amendment

"The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched and persons or things to be seized."

Notes:

Commonly Requested Access Conditions

- **Indemnification--The U.S. cannot be indemnified**
- **Split Samples--RCRA entitles owners to split samples**
- **Reasonable Times--Use judgment**
- **Providing Notice--Practical issues; use judgment**
- **Observation by Owner or Representative--Only if will not delay inspection**
- **Photographs--EPA inspector can take; facility can request confidentiality**

Notes:

Inspector's Response to Denial of Access

- **Request the reason for denial**
- **Do NOT discuss potential penalties or do anything that could be construed as threatening**
- **Complete a "Denial of Access Report" and, if possible, obtain facility representative signature**
- **Leave the premises and document any observations**
- **Report denial to appropriate office**

Notes:

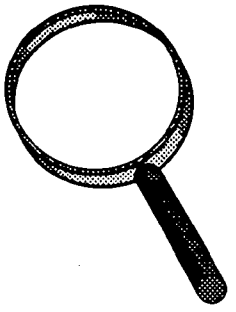
Confidential Business Information

- **RCRA § 3007(b)- records, reports, or information obtained by EPA are available to the public, unless it can be shown that the material contains confidential information.**
- **Information must be appropriately marked to claim confidentiality.**
- **EPA determines whether the designation of confidentiality is appropriate and notifies facility of determination.**

Notes:

Conducting Inspections

- **Preparation and entry**
- **Opening discussions and review of waste handling procedures and records**
- **Visual inspection and documentation**
- **Closing discussion**



Notes:

Opening Meeting Agenda

- **Discuss RCRA authority to conduct inspection**
- **Outline inspection objectives**
- **Provide information on RCRA**
- **Establish the order of the inspection**
- **Schedule a closing conference**
- **Gather general and specific information**
- **Ascertain whether the owner/operator will claim information as CBI**

Notes:

Information Sources:
Records/People

- **Records to be maintained by generators**
  - **Manifests and exception reports**
  - **Biennial reports**
  - **Waste analyses and test results**
  - **Land disposal notifications and certifications**
  - **Training plan and training records, by employee and job title**
  - **Contingency plan and agreements with local authorities**
- **Key people knowledgeable about facility/operation**

Notes:

Inspections

- **Inspectors should conduct inspections in a way that allows them to understand the waste flow within the facility and to determine the compliance status of each segment of the facility's waste management system**

- **Includes:**
  - **Points of generation and accumulation**
  - **Waste onsite transfer**
  - **Storage, treatment unit**

Notes:

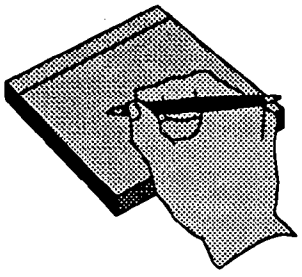
Inspector Objectives

- Hazardous waste generated at each point
- Wastes that may not be considered hazardous by the facility
- Storage, point of generation, and satellite accumulation areas
- Quantities of waste (by type) at each area
- Mislabeled, mishandled, or waste exceeding 90-day limit
- Noncomplying practices
- Situations that could cause a spill or result in a violation
- Evidence of spills and areas to collect samples

Notes:

Documentation

- **Original documentation becomes part of the inspection file upon completion of the inspection:**
  - **Field notebook**
  - **Checklist**
  - **Map or drawings with notations**
  - **Photographs**
  - **Photocopy relevant documents**



Notes:

Closing Meeting

- **Maintain professional courteous demeanor**
- **Review findings**
- **Answer questions**
- **Request additional information, if necessary**
- **Establish mechanism for responding to questions for which the inspector has no answer**

Notes:

Followup and Reporting

- **Followup--A review of all information and outstanding questions**
  - **Review all field notes, photographs, checklist, drawings, file information**
  - **Interview other inspectors**
  - **Return to facility**
  - **Submit § 3007 information requests**
- **Reporting--A compilation of all relevant information and evidence gathered during an inspection into a comprehensive and usable manner**

Notes:

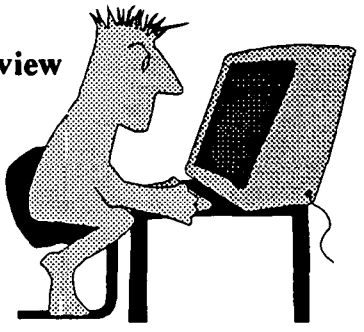
Writing the Report

- **How the information is conveyed is as important as what is said.**
- **Be accurate--State the facts**
- **Be concise, yet complete--Tell all but do not be redundant**
- **Be clear**
  - Use active voice
  - Use simple, unstilted language
  - Reference photographs, drawings, and documents
  - Cite the regulations and explain how/why the facility is not in compliance

Notes:

Steps to Writing the Report

- **Organize and outline**
- **Reference the sources--Primary sources should be used first**
- **Write the report**
  Case development staff review



Notes:

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RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

1. OBTAINING AND DEVELOPING EVIDENCE/ RCRA ACCESS

Background Materials

EPA

1. OBTAINING AND DEVELOPING EVIDENCE/RCRA ACCESS

1.1 OBTAINING AND DEVELOPING EVIDENCE AND ACCESS

Evidence and information developed by the inspection team constitutes the core material that the Resource Conservation and Recovery Act (RCRA) case development staff will build into an enforcement case. If the evidence supporting a violation is not properly obtained, or is insufficient, the case will be difficult to develop and may lead to a dismissal. For several reasons case development staff benefit by understanding how relevant information is gathered and what constraints may hinder case development. Such understanding allows case development staff to coordinate with the RCRA inspection team throughout the case development process, to aid in the gathering of information (e.g., issuance of RCRA § 3007 information requests), to provide appropriate input into the inspection process, and to review the products of the inspection process for adequacy and completeness, as well as to gain an appreciation of the potential limitations that may be placed on such products (e.g., suppression of improperly gathered information). In addition, coordination between the RCRA inspection and case development teams decreases the probability that legal and factual issues, such as chain-of-custody, authentication of documents, and sampling techniques, do not pose an obstacle to settlement negotiations or litigation.

1.1.1 Overview of Discussion

Evidence is obtained primarily through inspections and RCRA § 3007 information requests. This module is divided into four sections that deal with obtaining and developing evidence by the Agency that maximizes its use and minimizes legal defenses and factual inconsistencies or discrepancies. These sections include:

- Developing an Inspection and Information-Gathering Strategy
- Access
- Inspecting the Site
- Followup and Reporting

Each is discussed below.

1.1.2 Developing an Inspection Strategy

The more clearly defined the purpose of an inspection, the more likely it is to achieve its objective and obtain the necessary evidence for subsequent enforcement. Thus, the development of well thought-out inspection strategy promotes achievement of RCRA enforcement objectives. Where an inspection is proactive (i.e., the U.S. Environmental Protection Agency [EPA] initiates based on its own compliance monitoring objectives), the Agency has sufficient time to marshall the information needed to conduct a thorough inspection. In other instances (i.e., where EPA is responding to some event or new information) an inspection is reactive and preparation time is constrained. Here, followup inspections may need to be conducted.

1.1.3 Purpose of Inspection

The purpose and objectives of an inspection determine its scope. The scope of a routine inspection will differ from an inspection performed to determine compliance with an enforcement action, and from one to determine historical operating practices. Inspections typically have one of the following purposes:

- Routine periodic assessment of RCRA compliance
- Review facility activities with respect to an enforcement action
- Review of compliance with deadlines established in a RCRA permit
- Comprehensive review of records or data
- Sampling of waste streams or environmental media
- Response to alleged violation at the facility
- Review of facility environmental conditions prior to permit issuance
- Evaluation of facility monitoring/cleanup activities, or
- Identification of mechanisms for cross-program/media compliance.

The more specifically the purpose of the inspection can be defined, the more focused the inspection can be in terms of 1) the records and files reviewed in preparation, 2) the number and types of units that need to be examined during the inspection, and 3) the type of documentation and evidence that must be collected during the inspection or through follow-up RCRA § 3007 information request letters.

1.2 PREPARATION

1.2.1 File Review

Inspectors generally want to obtain as much information about a site as possible prior to an inspection. Hence, an inspector should review the facility's file to obtain information and develop a strategy for conducting the inspection. Depending on the complexity of the facility, file review may commence in the initial phases of the planning and continue as the inspector prepares for the inspection. Files may also be re-visited during the followup activities and report writing. For a followup inspection where probable violations have already been identified, both the inspector and the case development staff should become familiar with facility information. This will enable a coordinated effort in gathering the type of evidence needed during the inspection. Files should be reviewed to:

- Develop a technical understanding of the facility, its waste generating processes, wastes managed, waste management units

- Develop an understanding of the compliance history of the facility, including outstanding compliance issues, the facility's efforts to come into compliance, alleged violations, and status of selected enforcement items and schedules

- Identify inconsistencies in the file that may require clarification during the inspection, and

- Ascertain applicable regulations.

The inspector may have to assemble documents not only from RCRA facility files and enforcement document files, but also from other programmatic files and interviews with other inspectors. In general, the following list of documentation should be reviewed, although it is not comprehensive:

- RCRA Notification Form (3010)
- RCRA Part A Permit application (for TSDs)
- RCRA Part B Permit application, including supplement
- RCRA Part B Permit and modifications (for permitted TSDs only)
- A summary of the names, titles, locations, and telephone numbers of responsible persons
- A flow chart showing the process flows, and waste streams generated
- A list of wastes generated
- For TSDs, a list of wastes treated, stored, disposed by type of management unit
- Inspection reports, including photographs
- A facility diagram layout showing waste generation processes and management units
- Enforcement actions taken
- Biennial or annual report
- Monitoring reports
- Other reports submitted to EPA or the state agency (Comprehensive Environmental Response, Compensation and Liability Act reports, e.g., National Capacity Assurances Plans; Preliminary Assessment/Site Investigation)
- Previous special studies, consultant's reports
- Citizen's complaints against the facility
- Telephone logs
- Response to Section 3007 request.

Additional sources of information might include Occupational Safety and Health Administration files, workman's compensation claims, corporate or partnership papers, Securities and Exchange Commission filings, Dunn & Bradstreet reports, etc.

During the file review, the inspector should develop an initial basic understanding of the facility and its waste generating/storage/treatment/disposal processes. Also during this period, the inspector should review the applicable sections of the regulations and return to the file review to gather a greater depth of understanding of the conditions that may be encountered at the site.

The depth of understanding of the facility and its compliance history gained by the inspector during the file review will, to some extent, determine the effectiveness of the inspection and his/her ability to gather evidence. By implementing a cooperative review where appropriate, the inspector and the case development staff will ensure greater depth of review and understanding of the facility resulting in greater effectiveness of the inspection.

1.2.2 Developing a Strategy to Implement the Inspection

The inspector should determine a strategy or plan for the inspection. This plan need not be onerous, but decisions on approach should be made in a deliberative process considering the desired outcome. The decisions that should be considered during this process include:

- When the inspection is to be performed
- Whether or not it is appropriate to notify the facility in advance of the inspection
- Which units/processes and/or documentation should be the focus of the inspection
- Whether or not sampling will be performed
- Whether the records review should precede or follow the walk-through
- Whether a standard or individually created checklist will be used, and
- In which order the units will be inspected.

Working through the process-flow to waste generation and subsequent waste management may provide a greater understanding for initial inspections. Another approach is to work backwards from waste transport off-site through generation. A third approach could be to establish a plan based on the facility layout.

Routine and followup inspections to determine compliance with applicable regulations are generally most successful when unannounced. This ensures that what is observed will be a true representation of ongoing practices, rather than a "cleaned up" version of the facility operations (afforded to the facility when advance notice of inspection is given). Other inspections/site visits such as evaluations of monitoring programs or a RCRA Facility Assessment will prove most successful when scheduled in advance with the facility. This gives the facility time to gather the needed/requested information prior to the inspector arriving on site and to allow the appropriate facility representatives to be present.

Another consideration is who should attend the inspection. Generally, two inspectors should plan to attend for safety reasons. Additionally, two observers can observe more comprehensively than one. Sometimes inspectors from other programs may want to coordinate an inspection with the RCRA inspector. If another program is involved, time for coordination should be allowed.

> Developing a strategy or plan for the inspection may be an iterative process, particularly if the facility is complex or the file review uncovers unexpected information.

1.2.3 Developing a Strategy to Gather Information: RCRA § 3007 Information Request Letter

Section 3007 of RCRA requires that persons who generate, store, treat, transport, dispose, or otherwise handle hazardous waste must, upon request of an EPA employee or authorized state representative, furnish information relating to such wastes (RCRA § 3007(a)). Pursuant to this authority, the Agency uses information request letters to collect information relevant to RCRA compliance. (EPA also uses RCRA § 9005 to gather information about underground storage tanks.) Such requests are a powerful tool that can help fill information gaps or possibly focus an inspection.

This particular tool can be used at various points during case development. If, for example, an information request was already present in the case file due to a prior action, the facility's response may provide a wealth of information or may reveal questions that should be addressed during the inspection. In addition, information request letters are used when doing follow-up to an inspection.

Information request letters do not necessarily need to be sent to the person (e.g., generator, owner or operator of a facility) who is the subject of EPA's investigation. Information request letters can be directed to individuals who come within the scope of RCRA (e.g., generate hazardous waste) and have dealings with the subject of the investigations (e.g., TSD). For example, prior to an investigation, EPA could contact generators of hazardous waste that is being sent to a facility for treatment. The generators' responses may provide additional insight into the facility's operation and focus the inspection. It should be noted that in some instances EPA can utilize RCRA § 3007 information request letters to obtain information from a third party even after a compliant has been filed by the Agency.

1.3 ACCESS

This portion of the module provides information on:

- EPA's inspection authority under RCRA
- The rights of the facility
- Negotiating consent to gain access
- Confidential business information (CBI)
- Denial of access and warrants

1.3.1 RCRA Authority

Section 3007(a) of RCRA provides that "[f]or purposes of developing or assisting in the development of any regulation or enforcing the provisions of this title," EPA is authorized to:

- Enter at reasonable times any establishment or other place where hazardous wastes are or have been generated, stored, treated, disposed, or transported from;

- Inspect and obtain samples from any person of any such wastes and samples of any containers or labeling for such wastes;

- Request information relating to hazardous wastes from the facilities and obtain copies of all records relating to hazardous wastes.

This section grants EPA, authorized states, and EPA's contractors broad inspection authority. For purposes of this discussion, the authority is limited to enforcement at facilities where hazardous wastes are managed or have been managed. Note, however, that the term "hazardous waste" as used in Section 3007(a) has been interpreted to include not only the listed and characteristic wastes, but also any solid waste that EPA believes may pose a substantial threat to human health or the environment. This includes the Appendix VIII hazardous constituents listed in 40 CFR Part 261.

RCRA inspection authority includes the right to enter a facility at reasonable times, which clearly include the operating hours of the facility. The authority extends to sample collection, as well as photography, although there are limits to the use of this authority.

1.3.2 Facility Rights

In contrast to EPA's broad inspection authority under RCRA Section 3007, facility owners have the fundamental right to be free from unreasonable searches. Specifically, the Fourth Amendment provides:

> The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched and persons or things to be seized.

Warrantless searches are not unreasonable if the owner gives knowing consent. The preferred method of gaining access is, therefore, consent. This consent must be provided for the inspector to perform the inspection without a warrant. The consent must be voluntary and freely given, and must be obtained without misrepresentation (e.g., claiming you have a warrant when you don't). Contractors performing inspections for EPA shall only represent themselves as contractors performing an inspection under direction of EPA, and shall never represent themselves as an employee of the Agency. Consent may be withdrawn at any time during an inspection. Once consent is withdrawn, the inspection team must leave the property and obtain a warrant if EPA wishes to return to the facility and conduct the inspection.

Exceptions to the rule that warrantless searches are per se unreasonable include 1) knowing consent, 2) exigent circumstances (emergencies), 3) open fields (i.e., observing what is in plain view), and 4) pervasively regulated industries.

Certain actions that are not legally defensible may result in denial of access. These include owner/operator's refusal to allow:

- An inspector to bring in necessary equipment (e.g., camera)
- Access to documents
- Entry due to a strike and/or a plant shutdown
- Entry due to an inspector's refusal to sign a waiver or other legal document restricting the owner/operator's liabilities or obligations (signing an entry log that does not constitute such a waiver is acceptable).

When access is denied under these circumstances, the inspection team should document the denial in their field notes and consult legal counsel.

1.3.3 Negotiating Consent

If access is denied initially, the first step should be to try to negotiate a resolution to the problem. This negotiation between the case attorney and the facility may be dispensed with in a few minutes over the telephone. Although EPA's authority to access the property can be cited

during this process, neither the attorney nor the inspector, if present, should threaten or give the appearance of threatening the facility representatives because access has been denied.

The facility representative may request that the inspector meet certain conditions before allowing EPA access to the facility. In short, EPA cannot agree to conditions that would not be in a warrant or that are required under RCRA. Some recurring issues are provided below which may assist Agency negotiations:

- **Indemnification**—The United States cannot agree to indemnify the property owner for damages caused by EPA or its contractor. However, the attorney can remain silent on the matter; or can say that claims from damage would be covered by the federal Tort Claims Act; or that the owner, in allowing access, would not be in any worse legal position than if a warrant is sought and granted.

- **Split Samples**—The owner is entitled to split samples under RCRA. The property owner is expected to provide his/her own bottles and make necessary arrangements for analyses. The owner should probably be informed that data generated without following the U.S. EPA QA/QC procedures would not be comparable to the EPA data.

- **Reasonable Times**—The property owner may want to limit the days and times the inspectors can be on-site. Because the inspectors usually have no intention of arriving at night, it may be acceptable to state that the specific inspection will proceed during daylight hours.

- **Providing Notice**—While the owner is not legally entitled to advance notice, there may be some practical reasons for providing it. For example, if sampling is to be performed, the facility may face some logistics in providing access to processes of points of generation which EPA may want to sample. Likewise, notice could ensure that the appropriate facility personnel are available. During these negotiations, EPA's right to enter in an emergency without advance notice must be preserved.

- **Observation by Owner or Representative**—Sometimes an owner will request that his/her environmental consultant be present during the inspection to observe. Although the EPA attorney can agree to allow the consultant's presence, s/he cannot agree to delay the inspection for the convenience of the consultant.

- **Provide Copy of Sample Results**—RCRA requires that EPA provide a copy of sample analysis data to the facility owner, operator, or agent in charge in a prompt manner. RCRA Sec. 3007(a). Normally, EPA provides the property owner with a copy of the final inspection report once it is prepared and has undergone appropriate review. EPA cannot agree to provide the report within a specified time period, or agree to release drafts of the report or raw data that has not been subject to proper quality assurance/quality control. Such information is exempt as pre-decisional under the Freedom of Information Act (see 40 CFR 2.118(a)(5)).

- **Photographs**—It is EPA's practice to take photographs during an inspection to document the inspection process and provide an accurate picture of the site conditions. Some

facilities have policies allowing photographs to be taken only by company employees, citing protection of trade secrets. EPA's position is that in order to claim confidentiality, the owner must follow the procedures in RCRA 3007(b), 42 U.S.C. Section 6927(b), and 40 CFR Part 2, Subpart B. The inspector must be allowed to take the pictures with his/her own camera and where s/he deems necessary or appropriate.

1.3.4 Confidential Business Information

Section 3007(b) of RCRA provides that any records, reports, or information obtained by the EPA pursuant to RCRA Section 3007 are available to the public unless it can be shown that the material contains CBI protected under federal law. When such a showing has been made, the information must be treated as confidential, pursuant to EPA regulations. Under general CBI restrictions (40 CFR Part 2, Subpart B), only authorized personnel are allowed access to CBI and no copies can be made unless authorized in writing by the document control officer. RCRA provides criminal penalties for the improper disclosure of confidential information.

In addition to the general RCRA CBI restrictions, 40 CFR 2.305 provides that CBI collected pursuant to RCRA Sections 3001(b)(3)(B) or 3007 may be disclosed by EPA where it is relevant to specified proceedings (e.g., rulemakings, adjudication, licensing, issuance of administrative orders, and approval or disapproval of plans) provided such disclosure meets specified requirements. These provisions generally require that EPA: provide notice to the affected business that the Agency is considering disclosing confidential information, allow the business an opportunity to comment, consider the comments submitted, and find that the information is relevant to the particular proceeding and that disclosure is in the public interest. EPA must also provide 5 days notice prior to actual disclosure of the information.

Hence, inspectors and case development staff should be familiar with both the general CBI regulations and the regulations addressing disclosure of CBI where relevant to a RCRA proceeding. CBI may be part of an inspection report and must be handled appropriately pursuant to the generally CBI rules. Where it appears that disclosure of CBI may be necessary to conduct an enforcement case, staff should work with the responsible regional organizational unit and EPA's General Counsel to ensure that CBI restrictions are satisfied.

1.3.5 Denial of Access and Warrants

Where access to a site or facility is denied the inspector should respond as follows:

- Request the facility to state the reason for denial
- If the problem is beyond the inspector's authority, suggest that the facility official contact his/her attorney to obtain legal advice
- Do NOT discuss potential penalties or do anything that could be construed as threatening
- If access is still denied, complete a "Denial of Access Report" and if possible obtain facility representative signature

- Leave the premises and document any observations made pertaining to the denial, including suspicion of violations

- Report all aspects of denial of access to the appropriate enforcement office to determine appropriate action and to get assistance in obtaining a warrant

- Contact an EPA attorney to assist the inspector in preparing the documentation necessary to obtain a civil search warrant and in arranging for a meeting with the inspector and a U.S. or State Attorney. (The attorney will bring a copy of the appropriate draft warrant and affidavits to the meeting.)

- The attorney will secure a warrant and forward it to the inspector and/or the U.S. marshall or equivalent state law enforcement authority.

Under EPA's policies, an administrative warrant must be obtained if the owner or operator denies access to a facility. Such a warrant is sought only when all other efforts to gain lawful entrance have been exhausted by EPA.

After EPA decides to seek a warrant, EPA policies require the regional office to notify EPA headquarters and then contact the local U.S. Attorney's office to assist in preparation of the application for a warrant and necessary affidavits. The application for a warrant must identify the following:

Note that information gathered during denial of access may be useful to the Agency in gaining subsequent access (e.g., observation of probable violations) or other strategies (e.g., targeting areas or units). In addition, all contacts should be considered potential witnesses, and inspectors may be able to provide insight regarding the potential value of such persons as witnesses.

- The statutes and regulations under which EPA is seeking the warrant

- The name and location of the site or facility to be inspected, and

- If possible, the owner or operator.

The application must be accompanied by an affidavit which describes all of the facts in support of the warrant. The affidavit must be prepared by a person with firsthand knowledge of the facts, most likely the EPA inspector.

If a warrant must be used to gain access, the inspector must conduct the inspection in strict accordance with the warrant, which may restrict the time, areas of inspection, or access to certain records. Inspectors must comply with these restrictions. If sampling is to be conducted as authorized by the warrant, all procedures must be carefully followed, including presentation of receipts for all samples taken by EPA. The facility has a right to retain a portion of the sample (a split sample). If records or property are authorized to be taken from the facility, the inspector must provide receipts and maintain an inventory of all items removed.

Inspectors must be cautioned to avoid any statements to the facility representatives that could be construed as threatening or inflammatory. This condition must be strictly followed, even if the facility representative threatens the inspector.

1.4 INSPECTING THE SITE

The authority to conduct inspections is provided in Section 3007(a) of RCRA. This authority allows EPA or its contractors to enter a facility at reasonable times to enforce provisions under Subtitle C. The authority and its relation to access issues have already been discussed. This section provides information on:

- Preparation and entry
- Opening discussions and review of waste handling procedures and records
- Visual inspection and documentation
- Closing discussion.

1.4.1 Preparation and Entry

An inspector should be prepared with the appropriate equipment to conduct an inspection. Numerous items may be needed to facilitate a proper inspection (e.g., proper identification, business cards, notice of inspection, EPA-issued Letter of Credential [for EPA contractors], checklists, file documentation, measuring devices, calculator, flashlight, maps, CFRs, locking briefcase, safety and sampling equipment). Among those items that are essential for proper and complete documentation are a camera, a weather-proof field notebook, and perhaps a tape recorder or cam-corder.

While inspectors need to be prepared for a variety of conditions and situations that may arise during an inspection, a mechanism of keeping the equipment organized is also essential if the inspection is to be carried out efficiently. The lead inspector may want to delegate the photography and its documentation to the secondary inspector, allowing him/herself greater focus on recording the observations, measurements, and facility representative's responses. Logistical arrangements between two or more inspectors should be made before arrival at the site.

Upon arrival, the inspectors should introduce themselves and request the appropriate facility representative. The inspectors should present their official identification as well as their business cards, and announce the purpose of inspection, citing RCRA authority.

Inspectors may be asked to sign a log book or passbook. In general, inspectors may sign logs or passbooks; however, an inspector should never sign waivers or other legal documents that would limit the facility's liability. Inspectors should not sign other legal documents limiting EPA's rights or the owner's responsibilities while the facility visit is occurring. EPA's rights and responsibilities have been discussed in greater detail in the section on RCRA access.

1.4.2 Opening Discussion and Review of Waste Management Practices and Records

When the inspectors have located the appropriate facility authorities, it may be appropriate to discuss the inspection plan. However, an opening meeting may not be appropriate in all cases.

For example, if a violation is suspected, the inspector may want to view a waste handling process before the facility could change any of their routine procedures. This determination should be made during development of the inspection strategy. If an opening meeting is conducted, the inspector should establish control during the opening discussion by providing an overview of the inspection objectives and a plan for viewing the facility.

During the opening meeting and all subsequent interviews, the inspector should document each person's full name, title, and telephone number. By obtaining a business card from each facility representative, this information can be easily gathered. In talking with each individual or in a group, the inspector should ask open-ended questions to gather information on the questions basic to an investigative reporter (i.e., who, what, when, where, why, and how). The inspector should seek to get specific details and should pursue inconsistencies until they are resolved.

> Sources of information within a company include: Environmental Coordinator, Emergency Coordinator, Safety Director, treatment Plant Operator, Employees, Ex-Employees. Ask for an organization chart and note that shift work may offer new sources.
>
> Other sources include: neighbors, observers, customers, police, utility people, consultants, other regulatory inspectors, newspaper reporters.

Inspectors should take notes and record observations, including observations of body language that may provide indications about how the interviewee feels about what s/he is saying. Notes should be taken in a field notebook that is dedicated to the inspection. Notebooks should contain factual information and observations; comments should be professional in nature. Remember, field notebooks can be subject to subpoena.

After the opening meeting, inspectors may proceed with a record review or the site visit. RCRA inspectors are responsible for reviewing all records required by RCRA. However, the inspector should be mindful of the objectives of the inspection by reviewing those records that are most pertinent to the objectives. Recordkeeping required under RCRA that must be maintained by facilities is lengthy; a list is provided in the RCRA Inspector's Manual, 1993 revision.

Although no standard format for records review has been developed, inspectors should check for: 1) the presence of the required records or plans, 2) document dates, to ensure documents are kept current and maintained for the required period, and 3) any suspected falsification of data. Appendix III of the RCRA Inspector's Manual provides a regulatory section-by-section approach in assessing compliance. If the inspection checklist does not contain this information, the inspector should be familiar with it, or bring the appropriate sections to the inspection.

1.4.3 Visual Inspection and Documentation

Inspectors should conduct inspections in a way that allows them to evaluate and understand the waste flow within the facility and to determine the compliance status of each segment of the facility's waste management system. Visual inspections generally proceed in accordance with the inspection plan, but inspectors should be flexible enough to change the planned approach, if needed to accommodate the conditions they find at the site. Some inspectors prefer to work from

the point of generation to the point in which waste is transported off-site. Others prefer to go in the reverse order, or still others may want to inspect areas that are in close proximity to one another.

Regardless of the order of inspection, inspectors should be able to identify:

- All hazardous waste generated at each point
- Hazardous wastes that may not be considered hazardous by the facility
- Storage areas, points of generation and satellite accumulation areas
- Quantities of waste (by type) at each area
- Non-complying practices that are part of the facility's operations
- Mislabeled, mishandled, or improperly tracked wastes
- Unusual situations that differ from the facility's stated operating procedures
- Evidence of spills and areas to collect samples

Information may be gathered from people through conversations, interviews, and interrogations:

- Conversations—Ask employees for information while inspecting processes/areas. Actively listen for relevant leads.
- Interviews—May be formal (inquiring of management about major issues, programs, waste management, documents); or outside the scope of the inspection (at facility or away from facility). Obtaining background information is key. Be knowledgeable and act professionally to create a good first impression. Remain focused, be observant of non-verbal cues, and preserve exchange in original notes, timely report, and/or tape recording.
- Interrogations—Most formal technique. Requires proper preparation and deliberate strategy. Less suited to inspections because risks creating non-cooperative atmosphere.

Inspectors should always maintain control of the pace and direction of an inspection. They should ask relevant questions and pursue inconsistencies until they are sure that they understand the practice as it is being conducted. Inspectors should record answers to the questions and observations in their field notebooks; and they should complete the inspection checklist. However, checklists should not be used exclusively to guide the inspection. It is important for the inspector to have a thorough understanding of the practices and not be limited by the format of the checklist. Also, adhering rigidly to the use of a checklist during the physical inspection may anger facility representatives and could eliminate any cooperative relationship that has developed between the facility and EPA. A conversational approach (i.e., without checklist in hand) may afford the acquisition of information broader in scope than that outlined in the checklist. The inspector should attempt to answer all specific questions identified during the strategy meeting(s), as discussed previously. The inspector may want to refer to the relevant questions in Appendix III of the RCRA Inspector's Manual.

The accuracy and adequacy of an inspector's written and photographic documentation can determine the ability of the agency to take effective enforcement action following an inspection. The value of good documentation cannot be overstated. It aids in the development of the case,

may eliminate potential legal defenses that might otherwise be put forth, and generally adds to the Agency's credibility during enforcement. Documentation should include the following elements:

- **Field notebook**—Field notebooks should contain: dates and times of the inspection; the name, title and position of those present; the location and address of the facility; the weather conditions; and observations, and answers to questions the inspector has posed to the facility representatives. Field notebooks should also contain measurements such as distances and direction to waste units, sizes of buildings, results of field instrument readings, locations within a building of drums or tanks, numbers of drums or tanks at each location, estimated quantity of waste in a tank or in drums, aisle space between rows or drums, the location and types of process equipment types. Observations of environmental conditions such as soil staining should be documented in the field notebook as well as photographed.

- **Checklist**—Checklists should be completed as much as possible during the records review phase of the inspection and after the physical site inspection and prior to the closing meeting. The checklist information should be based on direct evidence.

- **Map or drawings with notations**—A schematic diagram or map of the site may be obtained prior to the inspection. The schematic diagram can be used to direct the inspection, as well as a form of documentation. Documentation on schematics or drawings can include: process flow and waste generation points; changes in location of any of the units or processes; areas of staining; new buildings that have been erected, or former buildings no longer on-site; new locations for storage facilities; and the locations of photographs taken. In wetter climates or seasons, inspectors may want to laminate schematic diagrams before the inspection.

- **Photographs**—Photographs can provide very convincing evidence. A photographic log should be maintained indicating: the date, time the picture was taken, the direction the photographer was facing, the unit that was observed and other relevant elements within the picture. The facility representative should not be allowed to take the picture, or to mandate that the company provide the camera. The company can request that photographs be handled as confidential business information. Following the inspection, the inspector who took the pictures and maintained the photolog should type up the photographic log so it is legible.

- **Photocopies of relevant facility documents**—Photocopies of relevant facility documents help to resolve past issues discovered in previous inspections, as well as document current non-compliant conditions.

- **Physical Evidence**—Document before removal.

Original documentation (field logs, checklists, maps or drawings, and photographs with the accompanying photolog) become part of the inspection file upon completion of the inspection. Therefore, inspectors should write as legibly as possible and be clear in the documentation provided.

When the inspector is certain the inspection objectives have been accomplished and all pertinent units/areas have been visually inspected, s/he can prepare for the closing meeting. Inspectors should not waste the time of facility representatives, but neither should they leave the site without an understanding of the processes, waste flow and waste management. The facility representatives would rather spend the necessary time during the inspection than have requests for scheduling additional visits. Some facilities are sufficiently complex that inspections may require more than one day. Inspectors should ensure they have all the information or should request additional written documentation be submitted before the inspection is deemed complete.

1.4.4 Closing Discussion

Usually, facility representatives will be anxious to discuss the findings of an inspection before the inspectors leave. Inspectors should schedule a closing meeting during the opening discussion and then followup. Before the closing discussion, the inspectors should review the notes and checklists to determine any information gaps and any areas of uncertainty as to how the regulations apply to the site. This process should be carried out in private.

In preparation for the closing discussion, the inspectors should consider how to best present information about violations observed during the inspection. Inspectors should be prepared to discuss general findings in the context of applicable requirements. It is important to let the facility representatives know that all inspection findings are preliminary until reviewed by the inspector's supervisor. The inspector may not want to discuss findings that are questionable or tentative. The closing meeting is also the time to request additional documentation from the facility or documentation that the facility was unable to locate during the inspection. Submittals to the inspector's office after the inspection should be accompanied by a facility affidavit stating the information provided is accurate and true. The timeframe for these submittals should not delay the preparation of the inspection report.

The inspector should also anticipate any questions the facility representatives may have of them, so as to provide answers when asked. If the inspector anticipates questions for which s/he does not have an answer, s/he can seek an answer before the closing meeting. If an inspector does not know the answer to a question that is or is not anticipated, s/he should tell the facility representative that EPA will provide an answer at a subsequent time, and then follow up accordingly. If the question is of a complex nature, the inspector should request that the facility put its inquiry in writing and forward it to her/his attention. Then the inspector should follow up.

In conducting the closing meeting, the inspector must maintain a professional, courteous approach, even if the facility representatives are not particularly cordial. This approach may help build a more positive working relationship in the long-term. The closing conference can provide an opportunity for inspectors to offer assistance to the facility representatives, although inspectors should take care to avoid providing "consultant" type of advice. Inspectors should also avoid providing advice with implicit promises of compliance or recommending a particular consulting firm. Inspectors can suggest resources and outreach materials that are available.

1.5 FOLLOWUP AND REPORT WRITING

Proper inspection followup, including report preparation and documentation of inspection observations and results, provides the foundation for case development. By ensuring that all questions have been answered the inspection team can develop a report that provides clear and concise information about conditions at the site and the violations that were observed. Again, in this phase, the case development staff is encouraged to work with the inspector. The report must identify the clear evidence which supports the enforcement action.

Once all of the information is acquired and organized, the inspector should prepare a well-written narrative report that documents all key facts about the site, remembering that the inspection report may become the focal point of an enforcement action. The narrative report should be accurate, relevant, comprehensive, and concise. The narrative report must integrate all known information about the site that is pertinent to the inspection and its objectives.

> Since the Inspection Report is often one of the first documents the court will see, it must be clear, complete, and well-documented. A good report can be the basis for an accelerated decision.

1.5.1 Followup Activities

Followup activities should begin with a review of the log book, checklist, and photographs, but should not end there. Inspectors need to determine whether all the questions have been answered or whether, as a result of something that was observed during the inspection, additional questions or areas requiring clarification have arisen. If additional questions have arisen, the inspector should review the files to determine whether s/he can make a certain determination. If not, other options are available. The inspector may want to discuss the questions with a staff member who performed a previous inspection or an inspector from another regulatory program (e.g., NPDES).

There may be times when an inspector may want to obtain further information from the facility after the inspection has been completed. The inspector may call or return to the facility to ask for additional clarification. The inspector may want to consider this approach carefully, because the company representative may become alarmed or adversarial.

Additional information may be requested following an inspection using a Section 3007 letter. Information requests and questions posed in this format should be extremely well-written and request precise information. Likewise, the facility's response to a 3007 information request may be received after an inspection, due to logistic and scheduling issues. This information should be reviewed prior to writing the narrative inspection report.

1.5.2 Inspection Reports

Inspection reports should coordinate all relevant information and evidence gathered during an inspection in a comprehensive and useable manner. To ensure that the report accurately reflects conditions observed during an inspection, the report should be prepared as soon as possible after the inspection, before the inspector's ability to visualize the site begins to fade. To optimize its utility, the inspector should write in a simple manner, using active rather than

passive voice. Inspectors should organize the material in a logical manner to provide clarity and avoid repetition. Each paragraph should be brief, yet present a complete set of observations about the topic. Where possible, the inspector should incorporate references to the photographs taken during the inspection.

> An inspection report is complete when it answers the questions who, what, when, why, where and how for the pertinent units, processes and wastes at a facility.

Inspectors should follow three basic steps in writing the report. First, after reviewing the information as discussed previously, the inspector should organize the material and outline the report in one of several ways, depending on the strategy developed for the inspection at the outset. The information should be presented in a comprehensive and easily understandable system. Using the checklist as an organizational tool and cross-referencing it can be useful. For a complex site, the report could be geographically organized, or organized according to the different processes that produce, treat, or store waste.

Second, the inspector should clearly reference all supporting documentation that accompanies an inspection report. Where possible, the inspector should use primary sources as references. If a large number of references are used, a numbered reference system can be useful. By assigning each document a number and developing a numbered list of references that will be attached to the report, the inspector can maintain organization of the documents. If CBI is used in the report, it should be included in a nonconfidential manner, or the entire inspection report should be treated as CBI. Where CBI is used, the references should include the CBI document numbers.

Third, the inspector should write the narrative report as a factual presentation of the procedures used and observations made during the inspection. The inspection report should contain general tabular information including:

- Name, address, and telephone number of the facility
- Name and title of the site representative
- Names, titles, and agencies or company of the inspection participants
- Date of inspection
- Purpose of the inspection
- A brief description of the facility
- A list of violations observed.

> Strive to eliminate any possibility of erroneous conclusions, inferences, or interpretations, as well as ambiguity. These detract from the credibility of the report.

The report should include a description of what documentation was reviewed and how each of the requirements is or is not being met. For observations made during the walk through, observations of how each of the requirements was not met in each area should be recorded. Observed violations should be discussed in detail with supporting documents and photographs referenced. Where applicable, measurements should be provided, for example, the numbers of drums, the total volume of waste, the distance from buildings to storage areas, the flows of waste streams. Where conditions have changed at a site since a previous inspection, the inspector should provide a description relating the historical condition to the present condition. This will provide more continuity to the next inspector. For

example, if a drum storage area was reported previously to be located along the south wall of a specific building, but was observed at a new location during the recent inspection, the author should provide not only the previous and new locations, but any pertinent information as to why the storage area was moved, if available.

When the draft report is finished, the inspector should proof-read it to ensure that it is as complete and concise as possible. The draft narrative report should be assembled into a complete inspection report with the other components. These components include: a complete and legible checklist, the photographs and a typed photograph log describing each picture, the field notebook, the reference list, and any other primary documentation.

EXERCISE

In response to recent complaints of an unusual odor emanating from Deep Creek, an RCRA inspection is undertaken at the chemical facility located on the creek immediately upstream from where the citizens have noticed the sickening smell. The facility holds a Part B permit for hazardous waste storage. Before attempting to enter the facility the inspector takes several photos of three aboveground hazardous waste storage tanks she has identified from a review of the Part B permit. Leaving her briefcase and log in the car, the inspector takes the photos from the shoulder of the highway, puts away her camera, and hurries to the facility. The unannounced inspection surprises the facility's manager. He insists that the inspector sign an entry log that and asks that she sign a non-disclosure statement if she wants to examine particular parts of the plant. She signs the log, but refuses to sign the statement. After negotiating, the manager provides verbal consent and allows the inspection to proceed in all areas except the manufacturing area. A plant engineer joins the inspector and manager. Without initiating any discussion with the engineer, the inspector proceeds immediately through the plant toward the three storage tanks, which she suspects may be leaking onto the ground and into the river. As she approaches within view of the tanks, the manager points out they are off limits, since they are in the manufacturing area. Upon hearing that, the inspector pulls out her camera (which has a zoom lens) and prepares to start taking photos of what appear to be leaks in the tanks. Upon seeing the camera, the plant manager announces that photos are not allowed, and that the inspector must leave immediately. All three proceed back into the plant and toward the exit when the inspector notices dark fluid and stained soil on the ground under a pipeline. As she is walking toward the exit she snaps a photo of the leak. The inspector notices other stains and turns right to move closer. She snaps another picture. Upon exiting, the manager directs that the plant engineer escort the inspector to her car and watch her leave. No words are passed.

1. Are any of the photos valuable as evidence of the tanks or pipes causing a release of hazardous waste? Why or why not?

2. Is any of the information collected after verbal consent was withdrawn useful in an enforcement action? Which? Why?

3. What additional steps would have helped make the evidence collected more useful in an enforcement action?

4. What can be done to supplement the information collected and build a defensible case?

RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

2. PITFALLS IN RCRA CASES

EPA

Module 2 Objectives

- **Become familiar with technical and legal pitfalls in RCRA enforcement case development**
- **Recognize bias introduced by consultants**
- **Recognize scientific biases that can occur in the three stages of technical information gathering and evaluation (i.e., sampling, analysis, and modeling)**
- **Recognize potential legal pitfalls associated with chain-of-custody and authentication of documentation**

Notes:

Technical Pitfalls

- **Technical information used in RCRA cases can be biased in two ways:**
  - **Bias introduced by the use of consultants**
  - **Scientific bias**

Notes:

Types of Consultants

- **Non-affiliated consultants**
- **Consultants acting as "hired guns," knowingly or unknowingly**
- **Multi-consultant teams**
- **Low bid consultants**
- **Unsupervised consultants**
- **Miscellaneous consultants**

Notes:

Non-Affiliated Consultant

- **Consultant unencumbered by any restrictions imposed by client**

Notes:

Consultant Acting as "Hired Gun"--Knowingly

- **Client directs consultant and consultant willingly agrees to the direction**

Notes:

Consultant Acting as "Hired Gun"-- Unknowingly

- **Consultant unknowingly directed by client**

Notes:

Multi-Consultant Teams

- **Several consultants working on a specific subtask of a large project**
- **Each consultant, with similar capabilities, vying for a larger piece of the project**
- **Consultants who satisfy client given larger roles or more tasks; those who do not given smaller roles**

Notes:

Low bid or Low Cost Model Consultant

- **Client solicits fixed price bids from dozens of consultants**
- **Consultant with lowest priced bid awarded contract**
- **Winning consultant only able to provide the minimum or substandard work product**

Notes:

Unsupervised Consultant

- **Unsophisticated client with deep financial pockets requires environmental investigation**
- **Client places total faith in consultant**
- **Consultant sees opportunity to make money by performing superfluous work**

Notes:

Miscellaneous Consultants

- **Relationship between consultant and client can pose conflict of interest**
- **For example, consultant:**
  - **Is relative or former employee of the client**
  - **Has an extracurricular business or financial relationship with the client**

Notes:

Scientific Bias

- **Scientific bias can occur at all three stages of technical information gathering and evaluation:**
  - **Sampling**
  - **Analysis**
  - **Data evaluation and modeling.**

Notes:

Types of Bias

- **Positive Bias**
- **Negative Bias**
- **Erratic Data**

Notes:

Sampling Bias

- **Geologic Characterization**
  - **Drilling technology**
  - **Cross contamination**
  - **Composite Sampling**
  - **Failure to archive soil samples**

Notes:

Sampling Bias (Continued)

- **Geologic Characterization (continued)**
  - **Random adjustment of the soil sampling interval**
  - **Different consultants use different terms to describe the same geology**
  - **Inadequate number, depth, and location of borings or wells**
  - **Interpretation of geologic information**

Notes:

Sampling Bias (Continued)

- **Ground Water Characterization**
  - **Hydraulic properties of soils or aquifers**
  - **Groundwater direction, velocity and gradient**

Notes:

Sampling Bias (Continued)

- **Ground Water Monitoring Wells**
  - **Upgradient verses downgradient**
  - **Monitoring well location**
  - **Screen length**
  - **Construction materials**
  - **Improper grouting procedures and well construction practices**

Notes:

Sampling Bias (Continued)

- **Ground Water Sampling**
  - **Use of bailers**
  - **Sample bottles (clear versus amber)**
  - **Field filtering of samples**
  - **Exceedance of holding time**
  - **Improper use of sampling equipment**
  - **Decontamination of sampling equipment**
  - **Sample transport and handling**

Notes:

Laboratory Analyses

- **Common Sources of Error**
  - **Composite samples**
  - **Use of method not sensitive enough (or detection limit too high)**
  - **Use of wrong method**
  - **Reporting selected contaminants**
  - **Interferences/laboratory contaminants**
  - **Lack of QA/QC samples and analyses**
  - **Poor documentation**

Notes:

Modeling

- **Selection of contour interval**
- **Contouring method or algorithm**
- **Omission of data**
- **Data "massaging"**
- **Reporting data ranges (instead of actual data points)**

Notes:

Statistical Analyses

- **Excessive statistical treatment of chemical or hydrogeological data should be viewed as a "red flag."**
- **Graphical presentation of statistical data can be misleading.**
- **Use of data transformations should be viewed as "red flag."**
- **Seek assistance from professional statistician and current EPA guidance.**

Notes:

Chain-of-Custody

A sample is under custody if:

- **It is in your possession**
- **It is in your view, after being in your possession**
- **You secured the sample in an appropriate container and made arrangements to transport it to the laboratory**
- **You transferred the sample to authorized personnel**
- **It is held in a secure area.**

Notes:

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RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

2. PITFALLS IN RCRA CASES

Background Materials

2. PITFALLS IN RCRA CASES

Understanding the information collected in a hazardous waste investigation poses a complex challenge, especially in terms of data validity. The purpose of this module is to provide information to help identify elements of environmental investigations with data most susceptible to error, bias, or intentional manipulation and to understand how to recognize those errors, biases, and manipulations.

2.1 TECHNICAL PITFALLS

Technical information used in RCRA cases can be biased in two ways:

- Bias introduced by consultants
- Scientific bias.

2.1.1 Bias Introduced by Consultants

One way to evaluate whether the information may be biased is to determine the type of consultant supporting the project. The following types of consultants may introduce technical bias:

- Non-affiliated consultants
- Consultants acting as "hired guns," knowingly or unknowingly
- Multi-consultant teams
- Low-bid consultants
- Unsupervised consultants
- Miscellaneous consultants.

Potential concerns associated with each are described below.

Non-Affiliated Consultant

Typically the non-affiliated consultant is unencumbered by any restrictions imposed by the client. Often, such consultants are tenured university faculty and not-for-profit researchers. Some corporate clients may be hesitant to use non-affiliated consultants because they exercise less control over such entities and, therefore, may have concerns over the legal or economic consequences of the consultant's findings. In some cases, it may be difficult to control their scope of work because non-affiliated consultants are largely motivated by the search for answers. Citizen groups may prefer non-affiliated consultants because they are least likely to come to the table with unknown relationships and hidden agendas. Case development staff should be aware that this type of entity may be subject to somewhat less control by the client than consultants in other settings.

Consultant Acting as "Hired Gun"—Knowingly

A consultant knowingly acts as a "hired gun" when the client directs the consultant and the consultant *willingly* agrees to the direction. This presents the concern that such a consultant's

work product may be less than complete or serve to not fully inform or even mislead enforcement staff. Case development staff can often identify this relationship through careful examination of the investigatory approach. For example, the reviewer may find that the client had instructed the consultant where to place monitoring wells, where to collect soil samples, or what chemical analyses to perform. The reviewer may also note that the distribution or placement of the monitoring wells tended to avoid areas where hazardous materials were known to be handled.

One potential problem that may arise is the editing of reports by the client or the client's legal counsel. For example, draft versions may show significant editing by the client that is maintained in the final version. It is also possible that the client may have directed that substantive changes be made in the technical conclusions or executive summary. These situations may suggest tacit agreement by the consultant to be directed by the client. Therefore, reports that have been edited by clients may warrant critical review for omissions, as well as stated technical findings.

Consultant Acting as "Hired Gun"—Unknowingly

Sometimes, the consultant is unknowingly directed by the client. The client may filter information given to the consultant (e.g., withholding information about spills or hazardous waste activities in specific areas of a facility; identifying specific site areas for soil gas surveys, soil borings, or well installations; and omitting knowledge about chemicals used at the facility). In addition, the client may indirectly limit the project's technical scope by funding control (e.g., the client may reduce the budget so that funds are not available for certain activities, such as geophysical, soil gas analyses, examination of aerial photographs, and laboratory analyses recommended by the consultant). These activities might have revealed the full extent of contamination. This type of consultant situation presents the concern that information developed by the consultant may not be complete or comprehensive.

Multi-Consultant Team

Frequently, a consultant is one of several working on a specific subtask of a large project; each consultant, with similar capabilities, may be vying for a larger piece of the project. Multi-consultant teams create a situation where bias may result. In certain instances, consultants who satisfy the client are given larger roles or more tasks. Conversely, consultants who do not perform in a manner amenable to the client are assigned fewer tasks or removed from the project. This relationship may occur where large sums of money will be spent on environmental consulting work (e.g., municipal or hazardous waste landfills). For example, a hazardous waste operator may designate the environmental activities in the following manner:

- Consultant A performs ground water sampling
- Consultant B is responsible for monitoring well installation
- Consultant C logs the geologic profile during drilling
- Consultant D performs field or laboratory analyses of the sample.

Each consultant is aware of the other consultants (i.e., they are working together in the field) and of the approximate dollar value of the work performed by each consultant. Each firm's

project manager may seek to obtain a larger portion of the pie. One result is that project personnel become pawns to upper management, who may violate a reasonable scientific practice to acquire a larger piece of the project.

Sometimes a client insulates himself/herself somewhat from direct involvement by managing the project through a management consultant, who is retained to oversee the technical consultants.

Low-Bid or *Low-Cost* Model Consultant

"Low bid" is where the client solicits fixed price bids from dozens of consultants, and the consultant with the lowest priced bid (and usually the most limited scope) is awarded the contract. In some cases, the winning consultant only may be capable of providing the client with a minimum or substandard work product. One potential indicator of such a tactic or firm is when all the engineers or scientists performing the field work are very junior level (e.g., recent college graduates with a B.S., typically in geology, who usually have less than 1 year of experience. Environmental work that can be performed by nearly any consultant (e.g., removal of underground storage tanks) or laboratory analysis (e.g., TDS, pH measurements) is most amenable to a low bid, client-consultant relationship.

Low-bid environmental projects can result in incomplete or qualitative findings. The work is usually re-visited to obtain information that was not collected during the original investigation because of cost or staffing constraints. This must be kept in mind when a low bid client-consultant relationship has been identified.

Unsupervised Consultant

Consultants may not be supervised if an unsophisticated client with significant financial resources requires an environmental investigation. The client may place total faith in the consultant, and the consultant may see an opportunity to perform superfluous work—work that may not be germane to an enforcement investigation. A consulting firm that is vertically integrated (i.e., has drilling, consulting, physical and analytical laboratory, and remediation services) offers the greatest danger. This type of consultant situation is typified by activities that do not provide information directly related to the project, for example:

- Excessive laboratory analyses (especially when the consultant also owns the laboratory)
- Extensive use of geophysical or other "black box" qualitative tools in the investigation (consultant has large capital investment in this equipment)
- Seemingly superfluous activities (e.g., fish trawls at a nearby lake, microscopic examination of the crystalline structure of the soils, infrared satellite imagery, or excessive analyses of aerial photography)
- Over-emphasis on ground water or contaminant transport modeling exercises (a.k.a. financial black holes)

- Extensive geotechnical soil testing (e.g., shear, triaxial), which have little applicability to a hazardous waste investigation (often indicates that the firms or project manager is a reborn geotechnical firm/engineer).

This situation is often revealed through an audit initiated by the client's controller or legal counsel. The original consultant is often removed from the project and a second consultant is retained to perform the work that should have been done by the first consultant.

Miscellaneous Consultant

A number of other consultants can introduce bias, including the following:

- A consultant that is a former employee of the client
- A consultant that has a non-business-related relationship with the client
- A consultant that has an extracurricular business or financial relationship (e.g., joint ownership in a small business or real estate) with the client
- A consulting firm that is a subsidiary of the client (e.g., environmental consulting firm performs Phase I environmental audits for the real estate developer/owner).

2.1.2 Scientific Bias

Scientific bias can occur at all three stages of technical information gathering and evaluation:

1. **Sampling**—Gathering data in the field
2. **Analysis**—Evaluating data in the lab
3. **Modeling**—Using computers or mathematical calculations to extrapolate field data or assess future site conditions and contaminant transport.

Types of Bias

Three basic type of bias exist:

- **Positive Bias**—In a monitoring context, a positive bias arises when a test incorrectly indicates contamination or an increase in contamination at a regulated unit when none exists.
- **Negative Bias**—In a monitoring context, a negative bias occurs when monitoring fails to detect contamination or an increase in concentration of a hazardous constituent.
- **Erratic Data**—In a monitoring context, data can be collected that are so anomalous that it is difficult to develop trends and correlations.

Sampling Bias

Biasing the Geologic Characterization

Numerous factors can result in biasing the geologic characterization phase:

- The drilling technology can affect a geologist's ability to accurately describe the lithology of a borehole. Air or mud rotary are examples of drilling methods that significantly affect the ability to characterize the geology accurately.

- Improper or inadequate cleaning of the drilling equipment between boreholes. For example, failure to properly steam clean hollow stem augers between boreholes can cross contaminate boreholes with contaminated soils smeared onto the auger.

- Collection of "composite" soil samples rather than discrete samples for physical or hydraulic testing.

- Failure to archive soil samples for future analyses or testing.

- Random adjustment of the soil sampling interval. For example, collecting soil samples at a geologically complex site at different depths in different boreholes or within the same borehole results in a confusing array of data for geologic correlation. Larger soil sampling intervals (> 10 ft) preclude developing a detailed mapping of site soils. The same technique can be used successfully to create erratic chemical results when these soil samples are collected for chemical analysis.

- The use of different consultants who use different terms to describe the same soil or geologic formation. This often occurs at sites that have been investigated over a long period (more than 10 years).

Example

The same soil is described by four consultants as follows:

- Consultant 1—Silty sand
- Consultant 2—Sandy silt
- Consultant 3—Medium grained sand
- Consultant 4—Dune sands.

Consultant 4 is asked to peer review the previous geologic descriptions. He/she is at a loss to rigorously correlate the geologic descriptions into one comprehensive geologic picture.

- The use of different, but acceptable, standards to classify soils. One consultant using the USDA classification scheme will call a soil with a particle size of 0.02 to 0.10 mm a "silt," while a consultant using the International Soil Science Society classification scheme will call the same soil "sand." Both are correct. It is *imperative*, therefore, to know what

classification scheme is used. The same is true for describing the soil color. A standardized color chart such as the Munsell Soil color chart should be used by consultants logging boreholes. These charts standardize soil, hue, chroma, and value. Otherwise, a "gray" soil to one person may be a "brown" soil to another.

- Performance of soil borings where:

  - The number of soil borings is insufficient to properly characterize the geologic environment.

  - Borings are not deep enough to characterize the geologic profile of interest.

  - Borings are located to preclude developing useful information for characterizing the geologic setting.

- Interpretation of geologic information. A tremendous amount of interpretative latitude is available to the geologist when using boring log information to create geologic cross sections. These interpretations become extremely important when one interprets horizons as "confining layers" to the flow of contaminates.

  Allowing a computer to "interpret" geologic information and portray these results graphically can result in highly erroneous interpretations. Numerous opportunities exist for gross errors in computer interpretation. Geologic profiles can be correlated using a variety of mathematical techniques, the most common being a linear or spline fit.

  One needs to carefully examine both the vertical and horizontal scales as the vertical, especially, is often a reduced scale and can be highly misleading in terms of viewer perceptions.

Ground Water Characterization

Bias may also affect ground water characterization. Areas of concern include hydraulic properties of soils or aquifers, ground water flow, and ground water monitoring wells.

Hydraulic Properties of Soils or Aquifers. Numerous hydraulic properties directly affect one's knowledge of contaminant transport in soils and ground water. The most common hydraulic properties measured and reported are:

- **Permeability**—The property or capacity of a porous rock, sediment, or soil for transmitting a fluid

- **Porosity**—The percentage of the bulk volume of a rock or soil that is occupied by interstices, whether isolated or connected

- **Transmissivity**—The rate at which liquid is transmitted through a unit width of an aquifer under a unit hydraulic gradient

- **Hydraulic Conductivity**—The rate of flow of water in gallons per day through a cross section of 1 square foot under a unit hydraulic gradient at a prevailing temperature

- **Hydraulic Gradient**—The rate of change in total head per unit of distance of flow in a given direction.

These properties are usually measured in either the field or laboratory. The "representativeness" of measured values depends on where they were measured (i.e., in the *field* or *laboratory*). The three most common methods of measuring saturated hydraulic conductivity of an aquifer are (listed from *least to most accurate* method):

- Laboratory
- Slug test (field)
- Pump test (field).

Ground Water Direction, Velocity, and Gradient. Direction, velocity, and gradient of the ground water are critical pieces of information needed for examining contaminant transport. Common errors found when determining ground water direction, velocity, and gradient are:

- Installing a well (to measure ground water levels) near activities that may disrupt the aquifer, for example:

  - Municipal wells that are periodically pumped
  - Surface water bodies (streams, lakes) with highly fluctuating flows
  - Surface water bodies that exhibit both effluent and influent characteristics during different times of the year
  - Surface and ground water bodies that are influenced by tidal cycles
  - Leaking sewer or water mains.

- Inaccurately surveying monitoring wells. This error is usually discovered after additional wells are installed in what were thought to be upgradient (or downgradient) locations. Wells should be surveyed to a vertical accuracy of 0.01 foot.

- Using inaccurate measuring equipment or technique. For example, Exhibit 2-1 illustrates the difference between water levels measured with a steel-tape versus pressure transducers (from D. Rosenberry. 1990. Effect of Sensor Error on Interpretation of Long-Term Water-Level Data. *Ground Water*. Vol. 28(6), 927-936). There is sufficient error in the two measurement techniques to produce misleading information about the direction of ground water flow, especially for small ground water gradients and/or small sites (< 500 acres).

  Knowing what equipment was used to measure the ground water elevations and if the method of measurement was frequently changed can help to explain apparent anomalies in ground water flow patterns.

  Taking ground water level measurements from three widely spaced (thousands of feet) monitoring wells. This may not provide sufficient data about local ground water flow and direction.

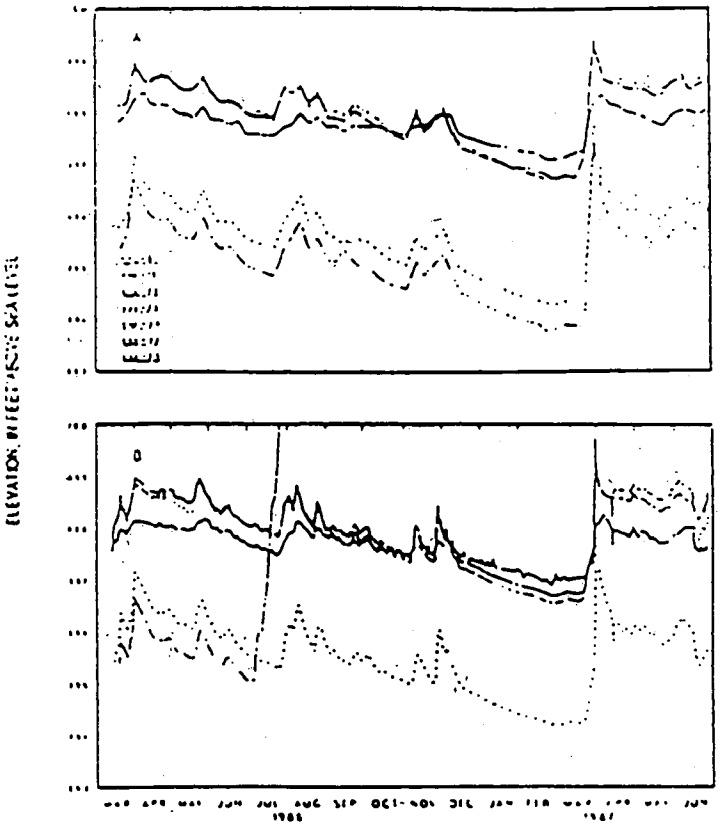


Exhibit 2-1. Water Levels in Seven Wells Measured Using a Chalked-Steel Tape (top) and Pressure Transducers (bottom), Mirror Lake, New Hampshire

- Combining ground water level measurements from wells that may be screened in hydraulically disconnected aquifers. This can be misleading if the data are used to create a ground water contour map that shows a single aquifer.

- Completing wells in a confined and unconfined aquifer. This can result in a water level value that is representative of only the confined aquifer.

- Using large-scale regional maps to determine groundwater flow and direction rather than installing wells onsite. USGS (U.S. Geological Survey) map scales are large—1 inch usually equals 24,000 feet. Small-scale differences in ground water flow direction are usually not reflected in "regional" ground water flow maps.

- Accepting reported ground water direction or velocity a priori without carefully reviewing the actual measurements. This includes plotting the data to create a ground water contour map. The ground water direction yielded from the graphing should be compared to the general direction of reported ground water flow.

- Using *inconsistent units* of measure throughout the reports. When there are tremendous amounts of data from numerous reports written by different consultants, it becomes a reviewer's nightmare to constantly change the various units to common denominator units.

Example

Ground water velocity can be reported in Darcy's Meinzer (gal. per day per ft.^{2}), metric (cm/sec), and/or U.S. (ft/day) units. Interchanging parts per million (ppm) with mg/L sometimes occurs. Clients may ask their consultant to put concentrations in ppm rather than ppb so that the ***values are perceived to be very small.***

Ground Water Monitoring Wells. The definition of upgradient and downgradient may not be clear in many hydrogeologic systems. This is significant because ambiguities can be reported or manipulated to distort what is hydraulically background or downgradient. For example, what is "upgradient" and "downgradient" for an island with a landfill in the center of the island? The same question may be asked of a source located in a pueblo atop an isolated mesa in New Mexico. A different scenario is tidally impacted wells. A downgradient well may be monitoring changes in apparent ground water quality that is actually tidally controlled surface waters.

The monitoring well location may also be manipulated to varying extents. Given sufficient information on the hydrogeology and physical characteristics of the chemical released into the subsurface environment, one can locate wells that will not detect the chemical(s) of interest or will significantly underestimate/overestimate the presence of the contaminant in the ground water. Examples include selecting a well location that is influenced by nearby surface waters and placing wells far from known areas of contaminant releases.

The screen length of a monitoring well also may affect monitoring or sampling results. A well screened the entire depth of an aquifer can significantly *dilute* a contaminant entering the well at one discrete depth. This results in a negative bias. In addition, in wells with short

(< 10 ft) screened lengths, a contaminant traveling in a discrete layer, usually one with a higher hydraulic conductivity, can be missed.

Combining data from poorly located and screened wells with data from wells that are properly located and screened (i.e., "integrating") often results is highly erratic hydraulic and chemical data that do not reveal clearly discernible (statistically) hydraulic or chemical trends. This frequently occurs at sites where wells were installed for different purposes and construction standards combined.

Construction materials used for monitoring wells also have the potential to affect sampling data. When the contaminant level is near analytical detection limits, casing and screen materials can significantly affect whether these chemicals are detected in the ground water sample.

The most commonly used well construction materials and potential associated issues are:

- **Teflon® (PTFE-polytetrafluoroethylene)**—This is the material of choice, though very expensive.

- **Stainless steel 304 or 316 grade**—This may leach out certain metals and may also provide a substrate for microbiological growth on the casing/screen and in the immediate vicinity of the well.

- **PVC (polyvinylchloride)**—PVC may sorb certain chemicals (permetherin, for example, can be preferentially sorbed by PVC). PVC can leach certain plasticizers or fail when in contact with certain free phase compounds, primarily aromatic hydrocarbons. At least 80 percent of all monitoring wells installed in the United States are estimated to be constructed of PVC.

If monitoring wells are constructed from different materials, this might indicate an attempt to manipulate the chemical data through well construction materials. It may also suggest several generations of consultants working at the site who had different construction material preferences.

Another potential problem is elevating the pH of a sample through improper grouting procedures or use of inappropriate grouting materials. Cement grout ($CaCO_3$) as a sealant in a monitoring well can raise the pH of the surrounding soil by as much as 3 to 4 pH units. Elevated pH in the vicinity of the well screen may cause precipitation of otherwise soluble metals as they enter this halo of higher pH ground water. The result may be that these precipitate trace metals are not detected in the ground water sample.

In addition, ground water wells may possibly spread contaminants into uncontaminated aquifers through a variety of means:

- Sloppy well construction practices, of which the most important is grouting.

- Poorly constructed security covers or valve boxes that allows surface seepage into the well.

- Drilling through a confining layer.

- Screening of a monitoring well across several geologic/soil horizons, of which only the upper horizon was originally contaminated. Contaminants from the upper, contaminated zone enter the lower, previously uncontaminated zone.

- Introduction of a contaminant into a lower zone by using a drilling method, such as a hollow stem auger, that smears a contaminant from a higher zone into a lower zone. Cross contamination of previously uncontaminated boreholes may also be caused by augers that are not steam cleaned between drilling.

- Drilling through a confining layer that separates an upper, contaminated layer from a lower, uncontaminated layer. The consultant backfills the lower portion of the borehole with bentonite or cement in an attempt to remediate (or hide), the "overdrilling" of the borehole.

Ground Water Sampling

Ground water sampling probably represents the greatest opportunity of all field activities for biasing the chemistry of a sample. This results from field sampling, field decontamination, and sample transport and handling.

Field sampling procedures, especially when looking for *volatile* compounds (which includes many hydrocarbons and solvents), usually result in *negative bias* (i.e., failure to detect). Reasons for this include:

- **Ground water sampling with a bailer**—Sample aeration during sample transfer from bailer to sample container airstrips the volatile compounds.

- **Sample bottles**—The use a *clear* rather than *amber* bottle affects compounds sensitive to photo-oxidation.

- **Filtered samples in the field**—Many metals, such as iron, oxidize and precipitate onto solids during repeated handling in the field during field filtering.

- **Sample holding time (i.e., time between sampling and analysis)**—The longer the holding time, the greater the *negative bias*. Recent allegations of fraud committed by EPA contractors included backdating when chemical analyses were performed. Otherwise, EPA-specified holding times would have been exceeded.

- **Improper use of state of the art sampling equipment**—Examples of improper use include overpressurizing a dedicated bladder pump (analogous to air stripping a water sample prior to sampling) when the contaminant of interest is a VOC (volatile organic compound). Also, pumping at excessive pumping rates (e.g., > 1,000 ml/min).

Field decontamination of sampling equipment represents a major source of *positive bias*. There is a greater probability of cross contamination between boreholes when sampling

equipment is cleaned in the field versus a laboratory, where QA/QC procedures are followed more rigorously. However, it is more expensive to hire a laboratory to clean equipment. Dedicating a set of sampling equipment, such as the pump and bailer, to each well also reduces the chance of cross contamination. Field decontamination often indicates a "low bid" client/ consultant relationship.

Sample transport and handling is also a source of bias. Common problems include:

- Cross contamination via diffusion through the porous Teflon® and silicone rubber septum of a 40 ml vial. This can produce *erratic* data between sampling events.

- Contamination from the ice chest used to transport samples. There may be freon (from the styrofoam) in the ice chest, or volatile compounds may remain from grossly contaminated samples in a previous shipment. This usually results in *positive bias.*

- Cross contamination from samples transported within the same ice chest. For example, adhesives in electrical tape contain toluene (at the ppm level) that can diffuse into a water or soil sample via the permeable Teflon® or silicone septum. This usually results in a *positive bias.*

- Sample bottles were not cleaned properly before sampling. (A certificate or documentation documenting its cleaning and QA/QC procedures should be requested.) This may result in *positive bias.*

Laboratory Analyses Bias

Laboratory error may also affect the accuracy of sampling data. Common sources of error and issues to be aware of include the following:

- Compositing samples, in which samples (usually soils) are mixed, creating a "homogenized" sample for analysis. Compositing usually results in a *chemical dilution* of the sample (due to physical "averaging" of constituent concentration data). Samples to be analyzed for volatiles should be collected and maintained in an as undisturbed state as possible and *never* be mixed, homogenized, or composited in the field.

- Using a high detection limit (e.g., 500 ppb versus 5 ppb) to mask the presence of compounds at lower levels.

Example

A consultant uses a 5 ppb detection level on the first round of sampling. He replaces the lower limit with a detection level of 100 ppb on subsequent analyses, citing cost as the reason (i.e., cheaper analyses when a higher detection limit is used). The true purpose may be to avoid detecting contaminants below the 10 ppb limit.

- Selecting an analytical method that will not analyze for what is a suspected contaminant in the sample.

- Requesting and reporting analytical results for only the contaminant(s) of interest, although the analytical method analyzes for other contaminants (i.e., laboratories refer to this as "blinders"). For example, a site is contaminated with industrial solvents. Ground water samples will be analyzed by EPA Method 601. In the environmental report, results are summarized for TCE, PCE and TCA. *Vinyl chloride*, which is almost always found in concert with TCE and is one of the 28 compounds analyzed in Method 601, is not reported. Vinyl chloride is more toxic than PCE or TCE. The original laboratory data sheets are not included in the report.

- Selecting an analytical method that may significantly bias the results.

Example

A client asks a consultant to characterize the extent of apparent TPH (total petroleum hydrocarbon) contamination detected in soil at a gas station. After collecting soil samples the consultant asks the laboratory to analyze the soils for TPH using infrared (IR) spectrometry (Method 418.1). The analyses reveal gross contamination (> 1,500 mg/kg). The state requires cleanup to a level of 1,000 mg/kg. Remediation commences. During remediation, the state collects samples, analyzes the soils, and finds that all samples tested are below < 200 mg/kg. Remediation is not necessary. The client is irate.

One explanation is that IR analysis, compared to gas chromatography (GC) (Method 8015), frequently overestimates the presence of TPH. For example, the analytical results by both IR and GC of 13 soil samples are presented in Exhibit 2-2. TPH results by IR were consistently higher than by GC.

- Not understanding the effect a calibration standard has on a chemical analysis (i.e., some standards will result in consistently higher, or lower, values).

  For example, a consultant and state regulatory split six soil samples taken at an oil refinery. The two sample sets are analyzed at different laboratories. The state's results are higher than the consultant's. Whose values are correct?

  In this example, the differences arise from the calibration standard. Exhibit 2-3 lists the TPH results under two commonly used calibration standards—#6 fuel oil and free product. The soil sample analyzed using the free product standard procedures consistently lower TPH values.

Exhibit 2-2. TPH Analyses by Infrared and Gas Chromatography

Sample	TPH (mg/kg)	
	by IR	by GC
1	317	69
2	250	75
3	172	60
4	167	105
5	160	65
6	153	114
7	148	109
8	144	109
9	136	48
10	110	67
11	76	9
12	33	10
13	not detected	10

Source: R. Block, T. Clark, and C. Swanberg. Proper Calibration Standard Is Key to Success of Soil Treatment. *Soils*. November-December 1990. pp. 32-33.

Exhibit 2-3. Total Petroleum Hydrocarbon (TPH) by GC (mg/kg)*

Sample Number	#6 Fuel Oil Standard	Free Product Standard
1	3380	2273
2	525	347
3	507	332
4	443	290
5	217	112
6	113	57

*Results of TPH analyses of soil samples from a single site under two standards indicate the measured value of TPH is greatly dependent on the calibration standard.

Source: R. Block, T. Clark, and C. Swanberg. Proper Calibration Standard Is Key to Success of Soil Treatment. *Soils*. November-December 1990. pp. 32-33.

- The extraction method can bias the sample.

- Using several laboratories during a project, especially in a low bid scenario, can produce dramatically different analytical results. Issues include:

  - The analytical results from a low bid laboratory should be treated with suspicion when common laboratory contaminants are present.

  - Common laboratory contaminants are:

    -- Methylene chloride
    -- Acetone
    -- Freon 113 (1,1,2-Trichlor-1,2,2-Trifluoroethane)
    -- Chloroform
    -- Carbon tetrachloride
    -- Toluene

  - BTEX (benzene, toluene, ethylbenzene, and xylene) are also common laboratory artifacts due to the large volume of BTEX analyses processed through most laboratories.

  - Cross contamination (*positive bias*) is a common error associated with BTEX analyses.

- No duplicate, field blanks, laboratory blanks, or spiked samples are analyzed. No QA/QC documentation.

- Original laboratory work (gas chromatograms, for example) are not included or are not available upon request.

- The consulting firm conducting the field investigation uses its in-house laboratory to analyze the chemicals. This arrangement adds a menu of analyses that are unnecessary.

- *Core dumping* the original laboratory data into long tables placed in the appendices. The tables are photocopies and reduced several times, which tends to obscure significant data. Other indicators are:

  - Limited or cursory discussion of the analytical results in the body of the report.

  - Tables within the body of the report show only *selected* analyses, while the complete, and possibly important, analytical results are buried in the appendices.

Contaminant Modeling and Statistical Analyses Bias

Contaminant modeling and statistical analysis also present opportunities for data to be misinterpreted or manipulated. Below are key points to remember:

- A model is a simplified representation of conditions that are too intricate to be formulated in complete detail. The model does not encompass the complete reality, but rather only selected aspects of this reality.

- Models and their graphic representations take on a life of their own. A graphical portrayal of a site created by a model tends to become reality in the eye of the beholder. This is especially dangerous in terms of presenting a computer-generated model to a judge or jury.

- Models offer tremendous opportunities for manipulation: one usually does not model unless a presumed condition can be validated by the model. Model calibration provides an opportunity to fudge the model to correspond to observed data.

- The focus should be on the input parameters, especially aquifer hydraulic properties, such as ground water velocity, retardation factor coefficients (Kd), sorptivity, and dispersivity. Remember that the more complex the model, the more parameters are required. As input parameters are difficult to measure, these complex models become more difficult to validate.

- Even if the model begins with an unbiased effort, the resulting graphical portrayal can be biased.

The graphical manipulation of scientific data presents specific issues of concern, including:

- Varying the *contour interval* of two-dimensional contours can transform the perceived contaminant source and magnitude of the contamination. Exhibit 2-4 presents an example of this, showing three, two-dimensional contours generated with the software program *SURFER*. Each contour was created using identical analytical TCE data with a single variable, the contour interval or density. More information about potential sources and breadth of contamination manifests as the interval decreases, from 15 ppm (bottom graph) to 1 ppm (top graph). Source areas and other possibly useful features differ significantly, depending on whether one is viewing the upper or lower most contour map. The contour interval is usually left up to the environmental consultant. (The client usually does not specify the contour interval.)

- With three-dimensional contours, one can adjust the many variables in a 3D contour to affect the view of a site. Exhibit 2-5 illustrates what the same surface data look like at *angles of inclination* of 5, 15, 45, and 75 degrees.

  By changing the angle of inclination, the relief (i.e., perception of contamination) changes. A higher angle results in a less defined relief. It is important, therefore, to understand this bias and to consider having the consultant provide graphs at different angles of inclination if one feels that the original graphical portrayal is biased.

  The 3D figures in Exhibit 2-6 illustrate how *rotation* can affect the interpretation of data.

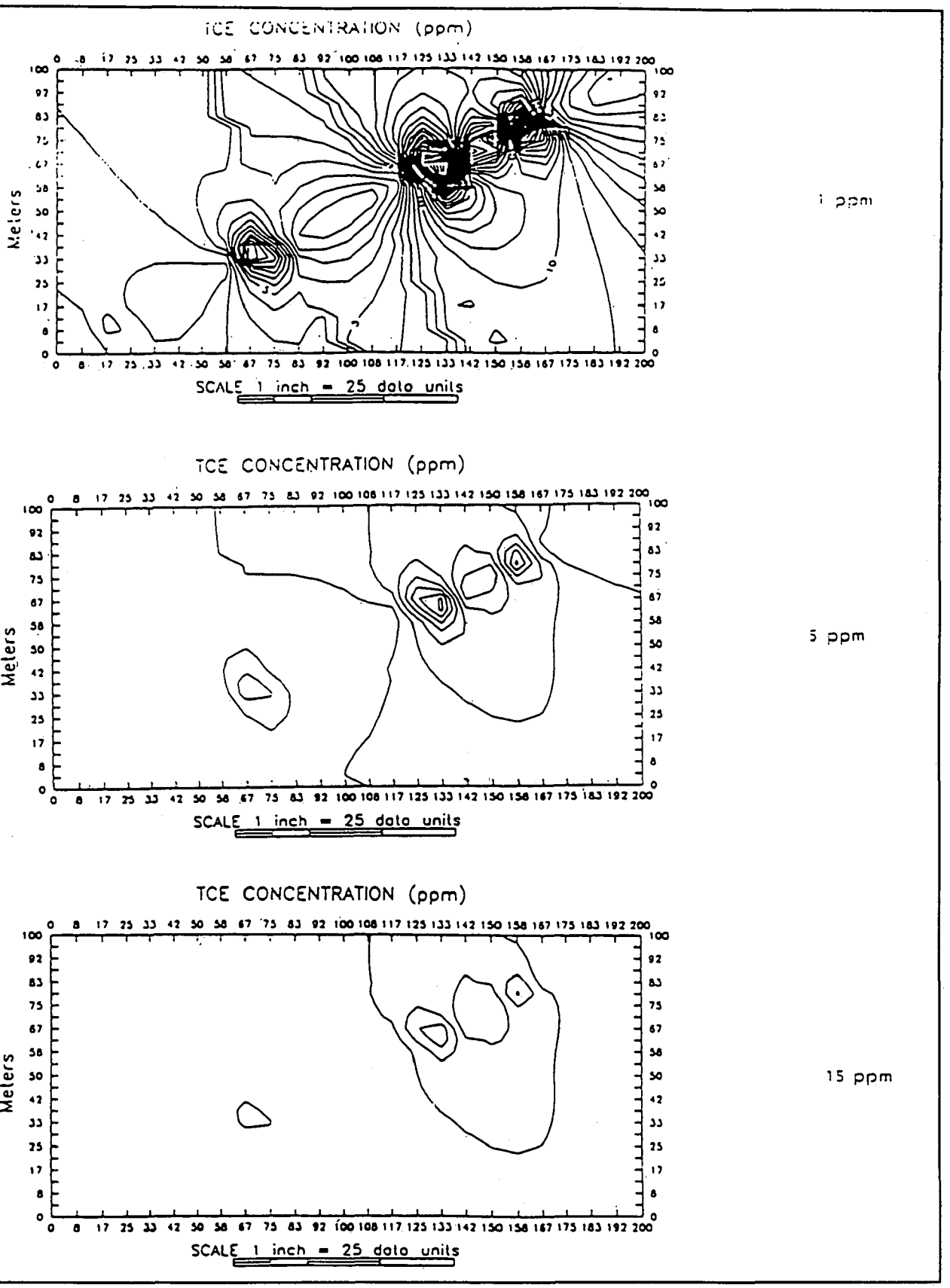


Exhibit 2-4. TCE Concentration Under Contour Intervals of 1 ppm, 5 ppm, and 15 ppm

85

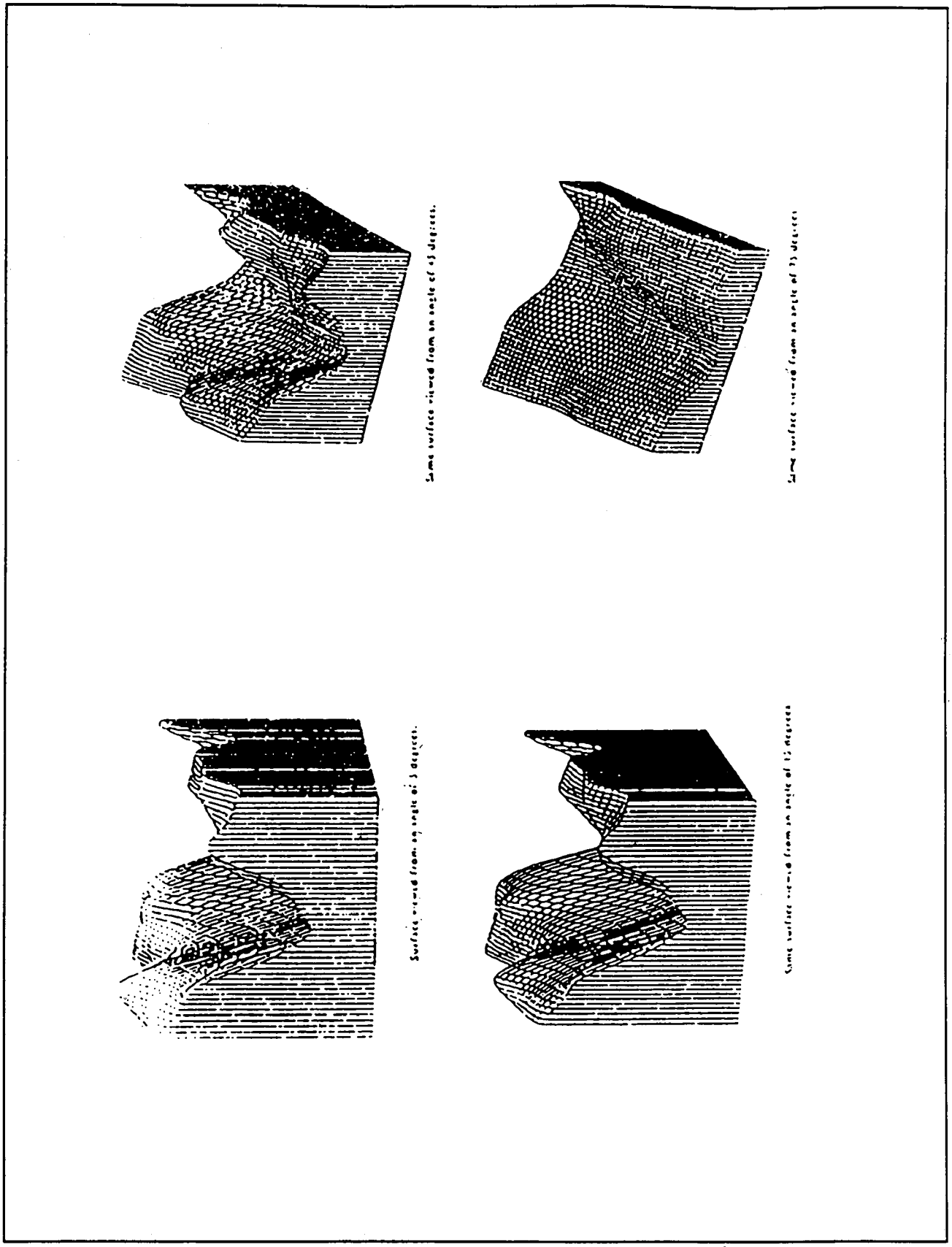


Exhibit 2-5. 3D Contours at Angles of Inclination of 5, 15, 45, and 75 Degrees

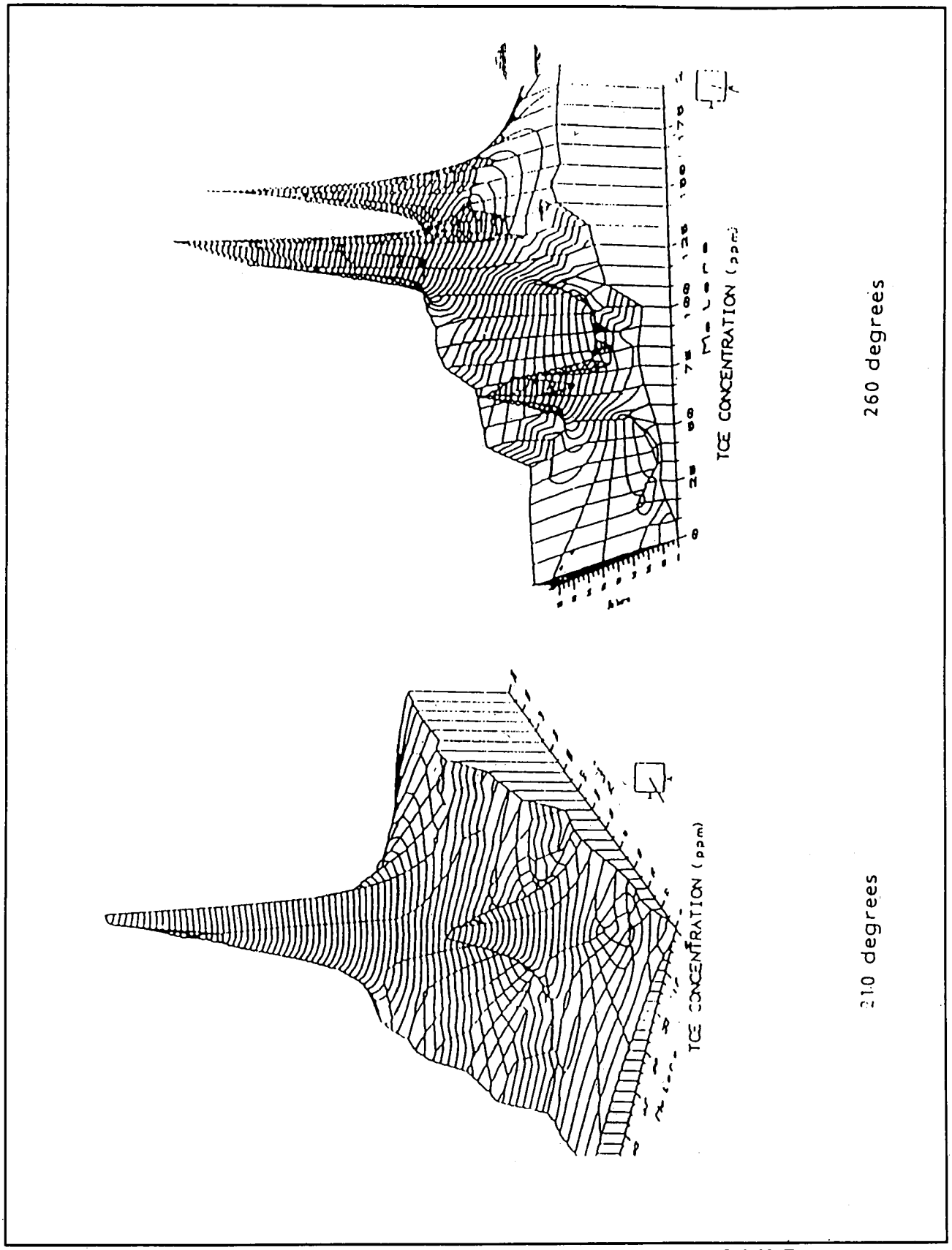


Exhibit 2-6. TCE Concentration Rotated at 210 Degrees and 260 Degrees

Both figures are generated from the same data set with an angle of inclination of 30 degrees. The spikes represent TCE concentration detected in an area through sampling; the taller the spike, the higher the level of TCE.

The rotation differs in each figure. The rotation is *210 degrees* in the left figure and *260 degrees* in the right. It is significant that in the right figure a second, very high TCE spike is clearly apparent, suggesting another source of contamination; this spike is obscured in the left figure.

The selection of a figure's rotation is usually at the discretion of the computer programmer.

- The contouring *method* or algorithm can have a pronounced impact on the final shape of a contour. The most common contouring methods are inverse distance, kriging, and the minimum curvature method, all of which are scientifically valid.

  - **Inverse distance**—Weights the influence of a single data point over all others. Its influence declines as one proceeds farther from the point. The greater the weighing power, the faster the decrease in influence on the interpolation.

  - **Kriging**—Assumes an underlying linear variogram. This method is more accurate than the inverse distance method except for areas of missing data.

  - **Minimum curvature method**—Calculates the initial values of the grid based on the data, then repeatedly smoothes the gridded surface. Projects trends in areas of missing data, which causes more variation than the inverse distance method.

  Exhibit 2-7 illustrates contours, using the same data set (11 data points) and contour density, but different contouring algorithms.

  Each contour appears different. When there is a high data density (i.e., many data points) in a small area, kriging provides the most accurate portrayal of conditions represented (see the left side of the maps). Where there is very low data density (see the right side where there were only three data points), minimum curvature provides the least accurate representation. Given the overall data density and range of values, the inverse distance method is probably the most representative, although the other methods may be more accurate over limited sections of the map.

- Data that may be unfavorable to one's technical case can be omitted. A consultant may use the excuse that the data are anomalous or represent *background* values.

- Data "massaging," such as smoothing, averaging, and moving averages, can be used. Smoothing and averaging conceals high (and low) contaminant levels. *Actual* values on a particular date should be used in graphs and contours.

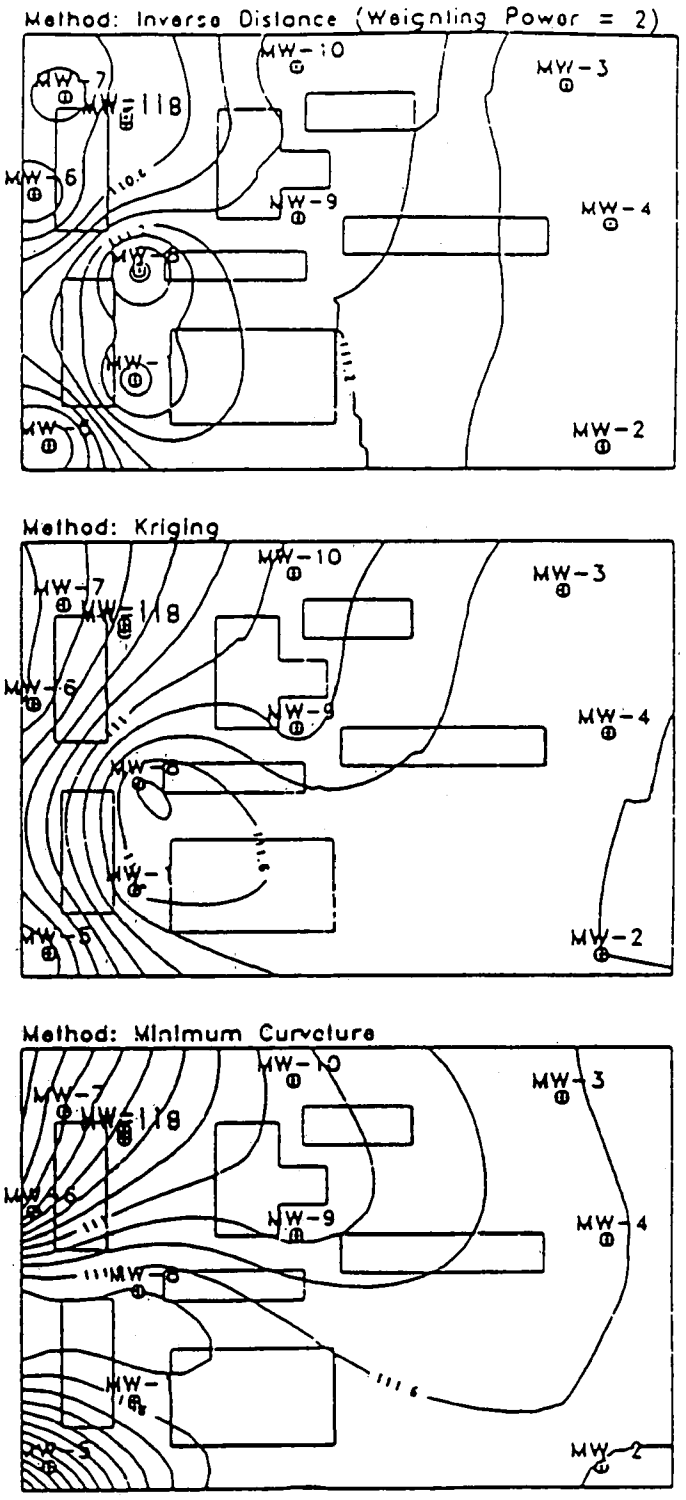


Exhibit 2-7. TCE Concentrations Under Three Contouring Methods—Inverse Distance, Kriging, and Minimum Curvature

- Data *ranges* can be used instead of actual data points, and/or non-uniform contour intervals. This practice fails to locate contaminant sources that would be more apparent under usual contouring practices.

- The selected data may not be graphed at all. The analytical results are simply posted on a site map in table form next to the monitoring well or sampling location.

Statistical analyses also introduce the opportunity for data to manipulated. Major concerns are identified below:

- Excessive statistical treatment of chemical or hydrogeological data should be viewed as a "red flag."

- Graphical presentation of statistical data is often misleading; be wary of graphs with axes converted to logarithmic scale ("logged") or with data excessively smoothed (e.g., cubic splining, high [> 5] degree polynomials).

- The use of data transformations can lead to bias. For example, in making a hazardous waste determination, SW-846 recommends the calculation of the upper confidence limit for comparison to the TC regulatory level. Often, environmental data do not exhibit a normal distribution, and the consultant might perform a data transformation (such as a log-normal transformation) to linearize the data set. One seemingly plausible, but incorrect, method sometimes employed by consultants is to transform the data to the log scale, apply the standard normal theory statistics to the transformed data, and then retransform the results back to the original scale for comparison to the regulatory level. This method is incorrect and results in a biased estimate of the mean and confidence limit. Consult a professional statistician or see Gilbert, R.O. 1987. *Statistical Methods for Environmental Pollution Monitoring*. Van Nostrand Reinhold, New York; EPA. 1992. *Supplemental Guidance to RAGS: Calculating the Concentration Term*, Volume Number 1. OERR Publication 9285.7-08I.

  Guidance on correct statistical methods for the evaluation of ground water monitoring data is presented in U.S. EPA. 1992. *Statistical Training Course for Ground-Water Monitoring Data Analysis*. EPA/530/R-93/003. [NOTE: Contains Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, Addendum to Interim Final Guidance.]

2.2 LEGAL PITFALLS

Two legal issues that arise are chain-of-custody and authentication of documents. The possession of samples must be traceable from the time the sample are collected until they or the data derived from the samples are introduced as evidence in legal proceedings. Chain-of-custody is a very important aspect of the inspection, case development, and presentation of the evidence during litigation. It is often attacked during litigation and could adversely affect the credibility of EPA's case, if not get it dismissed altogether.

A sample is under custody if:

- It is in your possession.
- It is in your view, after being in your possession.
- You secured the sample in an appropriate container and made arrangements to transport it to the laboratory.
- You transferred the sample to authorized personnel.
- It is held in a secure area.
- Technical considerations
  - Chain-of-custody record must demonstrate who is responsible for evidence at any given time
  - Removal of physical evidence (if you really need to remove it, document with photos, use evidence log, be sure to give receipt and get signature from other party)
  - Considerations after leaving site (e.g., minimize the number of people in the chain, make sure that evidence is properly stored).
- Legal consideration
  - Sample and evidence are accompanied by a Chain-of-Custody Record. When transferring the possession of samples, the individuals relinquishing and receiving will sign, date, and note the time on the record. All sample shipments should be accompanied by the completed Chain-of-Custody Record.

Remember, documentation is key.

The second legal issue of concern is the authentication of documents. Authenticating documents is the process of establishing, through the use of different forms of evidence, that a document is what it purports to be (i.e., that a document has not been created or altered such that it lacks the credibility required by the administrative or legal process). Such authentication often becomes an issue when the Agency is filing for an accelerated decision, is placing a document into evidence, or is requesting that a document become part of the record. The authenticity of virtually any document (e.g., field logbooks, notes, reports, etc.) may be challenged. Hence, it is important to be able to authenticate each document that will be used in evidence. To authenticate documents, the Agency must be able to show, at a minimum, when and how the evidence in question was gathered (i.e., during an inspection), as well as demonstrate the document's authorship, where copies were located within a facility, and to whom it was distributed. The process of authentication relies primarily on documenting how the information or document was discovered and obtained, and can extend to how the information or document was developed. Such documentation may consist of notes in a field log (specificially describing the exact source of the document and the reason for collecting it are important), testimony, or even photographs. In addition, routine documentation procedures such as tagging, or initialling,

signing, and dating documents aides in confirming how, where, and when information was obtained. Although documents are not subject to chain-of-custody requirements that are as formal as those required for physical samples, documenting the chain-of-custody for documentary evidence aides in authentication. Thus, the key is good documentation. The discussion in Module 1, Obtaining and Developing Evidence, also addresses the importance of documenting information as evidence is collected.

2.3 CONCLUSIONS AND RECOMMENDATIONS

The following recommendations should be kept in mind when evaluating a case that involves technical issues or relies upon data to prove or refute key elements:

- Do not accept an environmental report as gospel simply because it was generated by large, national consulting firm. A person gathers and interprets the data, not a firm. Develop a confidence level with an individual and his/her knowledge and insist that this person perform or directly manage the project.

- In a hazardous waste project involving soil or ground water issues, always have a chemist and hydrogeologist examine the technical data and identify issues. There is no substitute for experts in these two disciplines.

- Require the consultant to submit supporting laboratory data sheets and field notes with a report.

- The greater the dollar volume of the work, the greater the motivation for direct data manipulation.

- Require that all work undergo *peer review.*

- Do not rely on computer models and graphics—think.

Expert Witness

RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

3. PREPARING THE EXPERT WITNESS

EPA

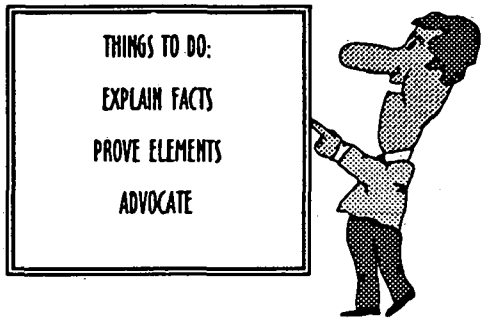
Module 3 Objectives

- **Understand the role of the expert witness**
- **Discuss techniques for preparing the expert witness for deposition and trial**
- **Review techniques for deposing and examining the opponent's expert witness**
- **Discuss "dos and don'ts" of providing expert witness support**
- **Delineate methods for assisting counsel at the deposition of the opponent's expert**

Notes:

Reasons for Expert Testimony

- **Explain factual issues to the court**
- **Prove essential elements of the case**
- **Provide an advocate for the government's position**



Notes:

Role of Expert Witness

- **Assist court in understanding technical issues**
- **Supply expert opinions**
- **Assist with evaluating the merits of the government's case, as well as the merits of the opponent's case**
- **Assist with pre-trial discovery**
- **Assist with settlement negotiation**

Notes:

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Pre-Trial Preparation

- **Start preparing early**
- **Simplify your case to a college freshman level**
- **Meet frequently**
- **Review technical information of all experts**

FROSH SCHEDULE

Geology 101

Biology 101

English 101

Notes:

Pre-Trial Preparation of Expert (Continued)

- **Develop strategy to deal with privilege issues**
- **Conduct necessary examinations, tests, and studies**
- **Prepare a written report of analyses and findings**
- **Assist in framing discovery requests and reviewing discovery requests**

Notes:

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Prepare the Expert for Deposition

- **Be prepared**
- **Limit talk**
- **Listen to the question**
- **Ensure expert has heard the question properly**
- **Provide expert with all technical material and ensure its review prior to deposition**

Notes:

Deposing and Examining the Defendant's Expert

- **Review all reports and literature that are likely to be prepared/relied upon by the expert**
- **Know the expert**
- **Have the expert identify/produce all information reviewed for the case**
- **Understand the expert's "formula" and how the expert arrived at his or her results**
- **Conduct a line-by-line review of documents produced by the expert**

Notes:

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Steps in Providing Pre-Trial Assistance to Counsel

- **Understand the litigation schedule**
- **Prioritize case work over other business**
- **Review all relevant work (colleagues and experts retained by the other side)**
- **Understand the case your attorneys are trying to make**
- **Understand your role, as well as the other expert's**
- **Identify areas of agreement and disagreement within the team**

Notes:

101

Steps in Providing Pre-Trial Assistance to Counsel (Continued)

- **List each key fact in your area of expertise**
- **Develop lists of facts you need your attorney to explore to fill in data gaps**
- **Develop proof of all key issues**
- **Develop a comprehensive presentation of your information**
- **Document your work**
- **Conduct a thorough search for documents you intend to rely on or use**

Notes:

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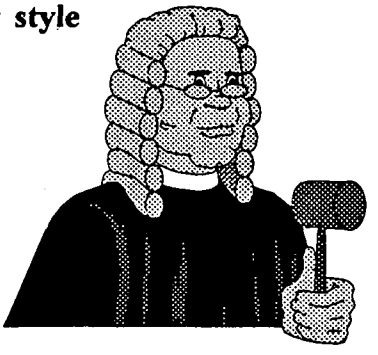
Assisting at the Deposition of the Opponent's Expert

- **Review the work of the opponent's expert**
- **Simplify the case**
- **Buttress your own testimony**
- **Identify inaccuracies and areas of deficiencies**

Notes:

Direct Testimony

- **Tell your story**
- **Respect the judge**
- **Answer questions in common English**
- **Use your normal teaching style**



Notes:

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RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

3. PREPARING THE EXPERT WITNESS

Background Materials

INSTRUCTOR NOTES
RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

3. PREPARING THE EXPERT WITNESS

Time: 1 hour

Objectives:

- Familiarize RCRA case development staff with the role of the expert witness in support of the government's case.
- Introduce government attorneys to the value of the expert witness in all phases of the litigation.
- Familiarize government attorneys with methods and techniques for preparing the expert witness for deposition and trial.
- Introduce government attorneys to techniques for deposing and examining the opponent's expert witness.
- Train RCRA technical staff in the basic "dos and don'ts" of providing expert witness support at deposition and trial.
- Introduce RCRA technical staff to methods of assisting counsel at the deposition of the opponent's expert.

Emphases:

- Role of the expert witness in environmental litigation.
- Techniques for the government attorney to utilize an expert witness to the fullest.
  - Expert witness support in pre-trial activities.
  - Preparation of expert witness for deposition and trial.
- Techniques for the attorney to depose and cross examine opposing parties' expert witness.
- Techniques for the government expert witness in preparing for deposition and trial.
- Ways to be an effective expert witness when deposed and cross-examined by opposing counsel.

Helpful Hints:

- Use the sample exercise to open up discussion on the pitfalls of expert witness practice. Use at the beginning and the end of the module if time permits.
- Draw on as many relevant real life experiences as you can and interact with your audience by asking them to comment.
- Provide hypothetical examples when appropriate, "what if . . . ?"
- Use overheads.

Bibliography:

Buckheit, Bruce. Expert Witness Practice. EPA material.

Danner, Douglas. 1983. *Expert Witness Checklists*. Lawyers Co-Operative Publishing Co. Rochester, N.Y., Bancroft-Whitney Co., San Francisco, CA.

U.S. Environmental Protection Agency (EPA). 1993 (March). *RCRA Practitioners Enforcement Workshop: Course Materials.*

EPA. No date. *RCRA Inspector Institute: Inspector's Addendum.*

3. PREPARING THE EXPERT WITNESS

3.1 INTRODUCTION

Reasons for Expert Testimony

- Explain factual issues to the court.
- Prove essential elements of the case.
- Provide an advocate for the government's position.

Experts and specialists have value and importance in environmental litigation. For three reasons, both counsel and experts should understand how the effective use of expert opinion and testimony can bolster the government's case, and perhaps lead to an early out-of-court settlement. First, the subject matter and field of knowledge needed in today's environmental litigation is often so complex or theoretical that only an expert or specialist in a specific field can thoroughly understand the factual issues involved. Second, it may be necessary to employ an expert to prove or disprove the essential elements of the case. Third, the heart of the litigation may be technical in nature, such as the appropriateness of a corrective action technology, and counsel must enlist a second expert as an advocate for its position.

With these reasons in mind, this course is designed to assist practicing attorneys and technical staff develop an understanding of the process and methods for preparing and providing expert assistance and testimony. This course provides background material that describes the law regarding expert opinion and its admissibility as well as identifies the role of both attorney and expert in this important practice. It also informs technical staff as to how preparation with legal proceeds and why it is important.

3.1.1 Law Relating to Expert Witness Practice

Federal Rules of Evidence

- **Rule 702**—A witness qualified as an expert by knowledge, skill, experience, training, or education may testify if scientific, technical, or other specialized knowledge will assist the trier of fact.
- **Rule 703**—The facts or data upon which the expert opinions are based may be derived from:
  - First hand observation
  - Presentation at trial
  - Presentation of data outside the court and other than by his or her own perception

The Federal Rules of Evidence, Rule 702, defines the appropriate subject matters of expert testimony to include all scientific, technical, or other specialized knowledge. The rule permits a witness to qualify as an expert by knowledge, skill, experience, or education, and makes clear that no formal schooling or training is necessary as a threshold to the witness' ability to testify as an expert. Under this rule, an expert may testify as to matters about which the trier of fact has insufficient personal knowledge to make the inferences necessary to arrive at a decision on the ultimate issues in dispute.

Federal Rule of Evidence, Rule 703, allows an expert to testify like any other witness as to facts of which he or she has personal knowledge, even if he or she was able to observe and assess the relevancy of those facts only because of his or her skills and experience. An expert may also offer opinions to those facts about which the jury itself has insufficient experience to form an intelligent conclusion.

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Expert testimony is advisory in nature. It is not necessary that the expert be absolutely certain of the facts upon which an opinion is based. It is usually sufficient that the expert testify that the particular result is within the range of reasonable probability according to generally accepted scientific principles. It is important to remember, however, that the expert's testimony may be excluded under the common law "opinion rule," if the court finds that the state of the art in the field is such that even an expert could not express a reasonable opinion, or if the court finds that sufficient facts have been introduced into evidence to form the basis for a reasonable opinion at the required level of probability.

Generally, to be admissible at common law, an expert's opinion must be capable of adding considerably to the jury's ability to resolve the issue in question. The subject matter must be one in which the average trier of fact is incapable of reasonably drawing necessary inferences from the facts introduced into evidence, and the particular witness must be qualified as an expert. Once qualified, the expert witness may be limited to testifying only within the expert's expertise.

The expert witness may state opinions either from first-hand knowledge of the facts of the occurrence which gave rise to the lawsuit, on facts presented at trial, through the testimony of other witnesses, or based upon hypothetical questions which contain necessary facts on which to form the basis of an opinion. Further, the expert may base opinions on otherwise inadmissible hearsay information provided that such information is of the type "reasonably relied upon" by experts in the particular field in forming inferences about the subject.

Factors to be considered when selecting an expert or arguing for or against the admissibility of a particular piece of expert testimony are:

- Is the expert's knowledge or experience useful to the finder of fact in resolving the problem?
- To what degree does an expert's particular qualifications allow formation of an intelligent opinion on the disputed issue than an average trier of fact could make alone?
- Will the expert's opinion interfere with the jury's duty to decide the case from the facts admitted into evidence?
- To what degree does the expert's opinion depend upon the ability to weigh the force and significance of the evidence?
- How credible and how sufficient are the facts, data, and analysis relied upon by the expert in formulating his opinion?
- What is the weight, in terms of appropriate probabilities rather than possibilities, of the expert's opinion on the disputed issue?

- To what degree does the expert's opinion consist of a judgment based on undisputed underlying facts?

- How sound is the expert's personal knowledge of the facts upon which the opinion is based?

An expert witness may be any person who has the knowledge, training and or qualifications necessary to aid the finder of fact. This may include Resource Conservation and Recovery Act (RCRA) inspectors or technical staff, as well as independent experts. In selecting an expert, all attributes must be assessed and consideration given to the opposition's perspective (e.g., expertise, objectivity).

3.1.2 Role of the Expert Witness

The role of an expert witness is to assist counsel, the judge and the jury with understanding those scientific or technical aspects of the case that are beyond the experience of the average lay person. Experts may do more than supply opinions. They may also provide certain facts, such as the results of special tests or experiments. In addition, they may assist with case evaluation, pre-trial discovery, and with settlement negotiations. Consideration of which role your experts may play will assist in making an informed decision to use any given expert at any given time. Case development staff should be cognizant of issues that may need expert input, particularly where an expert is needed to prove or provide evidence on a technical issue.

Role of Expert Witness

- Assist the court with understanding technical issues
- Supply opinions
- Assist with evaluating the merits of the government's case as well as the merits of opposing parties' case
- Assist with pre-trial discovery
- Assist with settlement negotiation

The opposing side is only entitled to the professional opinions of your expert. You should make it clear to your experts what their role is and instruct them not to form or offer professional opinions outside their area of expertise. Thus, you need not permit your expert hydrologist to offer an opinion as to whether a site presents an "imminent and substantial endangerment," an area which may involve the opinions of a toxicologist. However, if you use the interdisciplinary approach discussed below, your expert hydrologist (or more likely an overview expert) may be able to offer an opinion to the effect that based on what the toxicologist told him or her at the meeting and based on his or her own work relating to contaminant transport to the site, a threat to the environment is present.

3.2 EXPERT WITNESS PRACTICE—ATTORNEY

3.2.1 Pre-Trial Use of the Expert Witness

If you think you will need opinion testimony at any point in the case to help you explain complex technical issues in an understandable manner, or to establish any point of proof, you should retain the necessary experts at the outset of the case. An expert can be a valuable member of your litigation team by assisting with the following:

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- Helping to decide whether the case has merit.

- Educating counsel about the technical details involved in a case by:

  - Explaining the records
  - Recommending journals, articles, or treatises for counsel's study
  - Discussing strengths and weaknesses in the field.

- Formulating theories for recovery or defense and for anticipating theories likely to be advanced by the opposing party.

- Assisting with discovery by:

  - Formulating and answering interrogatories
  - Identifying documents to be requested from the opposing party
  - Evaluating information received from interrogatories and depositions of the opposing parties or their expert witness.

- Performing tests, examinations and studies.

- Facilitating settlement by virtue of the expert's reputation and prestige.

If the expert is reasonably expected to be called as a witness at the trial, the witness must be sufficiently qualified. The threshold test for qualifying as an expert is very low; but unless a person is identified as an expert he or she may be precluded from offering any opinion testimony at trial. Nearly all U.S. Environmental Protection Agency (EPA) technical employees should be able to qualify as an expert in some field. Failing to designate such employees as experts is a common error.

If the expert is likely to appear on the stand, the expert should show an appearance and demeanor with which the judge and jury can identify, and an ability to speak about the technical issues in the case in a way that is comprehensible to the lay person. In such cases, experts should be selected with these factors in mind.

3.2.2 Pre-Trial Preparation of the Expert

The following general and specific considerations set the stage for the effective use of expert testimony.

General Considerations

- **Start early.** When you are drafting the complaint, remember that the government will have to prove the central allegations of the case. Both the attorneys and the technical personnel should be thinking throughout the entire process about how the government will prove its case under the rules of evidence. As the plaintiff you should constantly be striving to simplify your case. Issues must be boiled down so that they appear to be no more complex than an introductory college course.

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- **Provide *all* technical information to *all* of your experts, including all of the information provided by the other side.** In very large cases you may have to rely on summaries of sampling results. However, the more removed from the original data your experts are, the greater opportunity for problems down the road. You may want to generate a set of "core documents," to be provided to all experts retained by the government. The "core documents" should contain all of the documents generated by either side that relate to the disputed issues in the case.

Pre-trial Preparation of Expert

- Start preparing early
- Simplify your case to a college freshman level
- Meet frequently
- Review technical information of all experts
- Develop a strategy to deal with privilege issue
- Conduct necessary examination, tests, and studies
- Prepare a written report of analyses and findings
- Assist in framing discovery requests and reviewing discovery requests

- **Meet early and frequently with your experts.** An interdisciplinary approach is strongly recommended. This approach entails bringing all the experts in different fields (in-house experts as well as outside consultants) together for a free ranging discussion of the issues in the case, including the studies, data and arguments advanced by your adversaries. Observing and participating in such a meeting helps you gauge the strength of your witnesses and your case. Since many of your experts' opinions are based on information and opinions provided by others, your case can be greatly strengthened since such "personal communication" can be relied on by the expert and often convey much more information than might be contained in a written report. Moreover, in such informal exchanges, experts tend to be more willing to criticize (and thereby allow correction of) work performed by their colleagues. This approach also allows you to better identify areas of weakness in the opponent's case and to develop rebuttal evidence if necessary. Finally, by involving the experts in a portion of the planning and development of the lawsuit, you may find that they are more willing to put in the long hours that are inevitably required as trial approaches.

- **Identify all of your testifying experts and obtain all documents *written or reviewed by* them in the course of reviewing the matter at hand.** Require frequent updates to avoid the "crunch" that inevitably occurs.

- **Develop an affirmative strategy for dealing with privilege issues, including preparation of a privilege log.** This area is very complex and cannot be addressed in a meaningful way in just a few sentences. However, you should keep in mind that it is unlikely that you will be able to appeal a discovery decision and that the courts vary widely in their handling of such issues. Accordingly, it is recommended that you assume and advise the technical staff that you cannot guarantee that any memos or reports written by them (even memos to you) will be protected from

Courts Differ on Privilege Rulings

One court may rule that the government can waive its deliberative (or governmental) privilege by filing the lawsuit and order all internal EPA memorandum to be turned over to the other side. Another court may rule that draft consent decrees exchanged by the parties in confidential settlement discussions must be turned over to third parties.

disclosure. In doing so, however, you should emphasize that you still need their honest opinions about the government's case and the opposition's case.

Specific Considerations

- **Assist with Case Evaluation.** Rely on your experts to evaluate the merits of the case and to point out unavoidable inconsistencies or inconclusive evidence in a case. This is particularly relevant for case development staff dealing with highly complex issues or gaps in evidence. Such a review can apply both to the government's case and the defendant's. The inconsistencies that are identified could affect your trial strategy, for example, if the expert uncovers inconsistencies in the opposing expert's previous work that directly contradicts what that expert is expected to maintain at trial. Your expert can also provide assistance in preparing the cross examination of an expert witness at deposition or trial by evaluating the opposing expert's work and identifying questionable conclusions, omissions, or methods and suggest means of attacking them based upon personal knowledge of the opposing expert's reputation.

- **Conduct Examinations, Tests, Studies.** By conducting necessary examinations, tests, or studies, the expert witness can instruct counsel in the various technicalities of the case. These tests, or studies should be conducted sufficiently in advance, and the expert should be prepared and capable of explaining the results and relevance of each. The expert should also have some opinion as to their validity and acceptance in the field. Again the expert should also examine opponents' studies and tests so that counsel can frame cross-examination accordingly.

- **Prepare Reports.** For the following reasons, it may be desirable for to have a written report of the expert's analysis and findings:

  - Counsel would have a formal report available as a ready reference source of the substance of the testimony that the expert is prepared to give at trial
  - The report provides a useful summary of all the experiments, tests, procedures and professional analysis performed in the course of the expert formulating opinions on disputed issues
  - The report allows the expert to refer to his own report should a significant time elapse between the time the research was conducted, conclusions were formulated, and the date of the trial itself
  - The report will serve as an aid in structuring the direct examination of your expert witness, as well as prepare your witness for the cross examination.

Be aware that these reports may be discoverable under the Federal Rules of Civil Procedures (FRCP), Rule 26(b)(4)—thereby giving opposing counsel a framework within which to prepare an effective cross-examination, and to discover any deficiencies in your expert's analysis and conclusions.

Federal Rules of Civil Procedures Rule 26(b)(4)

Rule 26(b)(4) provides for discovery of any matter, not privileged, which is relevant to the subject matter involved in the pending action.

- **Assist with Discovery Response.** Because of the expert's technical knowledge, your expert should be able to assist you in framing a discovery request, by knowing what to look and ask for. This may help you avoid wasting time and effort. In addition, by reviewing opposing counsel's discovery requests, the expert may be able to identify what aspects of the case or of his own work will likely be subjected to the greatest assault and on what grounds.

- **Assist with Settlement Negotiations.** By evaluating the case, the expert may indirectly influence your perception of the bargaining position, thus assisting with settlement negotiations. As you identify the merits of the case, its projected outcome, and potential benefits, you will feel more secure in your discussions with the opposing parties thereby projecting a stronger case.

3.2.3 Deposition

If you have properly prepared your case and worked closely with your experts, you should have little to fear and much to gain such as anticipating opposing counsel's litigation strategy, from having a mutual exchange of experts depositions. Expert depositions are not required under the Federal Rules of Civil Procedure. They are common practice throughout most of the country, but some judges will not order that expert depositions be had. Accordingly, if you feel that depositions would help your case, it is generally in your interest to secure an agreement of counsel early in the case, that depositions will be exchanged, before opposing counsel gets to think about it.

Preparing Your Expert for Deposition

- **Timing of Deposition. (Be Prepared.)** Because experts (and attorneys) are more diligent and creative as trial approaches, it is very difficult to assure that all work will be done and the experts will be ready at the time of the deposition. Notwithstanding the fact that an expert is entitled to rely on information he or she learns even in the courtroom just prior to his or her testimony and certainly should be able to prepare rebuttal testimony even after completion of his or her direct testimony, the purpose of discovery is to eliminate trial by ambush. At some point, well in advance of any discovery cutoff, you should ascertain from your opponent *and the court* how these competing interests will be balanced in your case. In many instances, if time permits, the court will require that all work be completed well in advance of trial. In other instances the court may permit expert depositions right up to and even after the start of trial. You should do everything possible to ensure that your experts are fully prepared as early as possible.

Preparing Your Expert for Deposition

- Be prepared
- Limit talk
- Listen to the question
- Ensure that your expert has heard the question properly
- Provide your expert with all technical material and ensure its review prior to deposition

If you are fortunate enough to be prepared early, you may want to push for a mandatory cutoff date for any new work by either side's experts. In the more normal situation, you should negotiate for completion of nearly all work prior to expert depositions, with

prompt production of results and an opportunity to re-depose witnesses relating to any work that is ongoing. You might be tempted to delay rebuttal work until the start of trial in order to avoid tipping your hand. However, in doing so you run a substantial risk that the testimony will be excluded if the court determines that you could readily have foreseen the need to perform the work and that the surprise will prejudice your opponents' ability to respond to your new work. In addition, with the current congestion in the Federal Court system, you may find that your ability to put on rebuttal testimony is severely limited.

- **Limit your expert's response to the question that is asked.** Probably the most common mistake made by experts during depositions is that they talk too much. You should advise your expert of this common tendency and remind him or her that the trial is the place to fully explain the issues. You do not want your witness to be uncooperative, but the witness need not go out of his or her way to ensure that opposing counsel understand all of the work (and the limitations of the work) that has been performed. Many times the question can be answered with a simple yes or no, rather than a long exposition.

- **Advise your expert to listen to the questions.** The witness should be advised to listen carefully to the question and answer only the question. The witness should also be encouraged to pause (perhaps long enough to repeat the question in his or her mind) before answering to reflect for one more moment on the "professional opinion" he or she is about to render and to allow you more time to object if necessary. Moreover, the witness should be encouraged to request frequent short breaks (not less than every half-hour or 45 minutes) so that the witness can maintain his or her concentration during the long deposition session. Most mistakes are made when witnesses are tired and do not hear the question properly. Remember, pauses do not show up in a transcript, mistakes do.

- **Ensure that your expert has heard the question properly.** The attorney's principal objective is to ensure that the transcript accurately reflects the witness' views. Thus, if you believe that the witness has not heard the question properly, you should correct the matter immediately, rather than waiting to file an affidavit after your opponent has used the transcript in his or her summary judgment motion. Counsel may question his or her own witness at a deposition; however as a general rule, counsel should only question his or her witness in a deposition to correct an error or ambiguity in the transcript (and only when he or she knows how the witness will answer the question).

- **Provide your witness with all technical material and ensure its review prior to deposition.** Familiarity with the technical literature of the case will provide your expert with the background and knowledge of underlying disputed issues thus enabling a more confident and authoritative demeanor.

Deposing and Examining the Defendant's Expert

At the deposition, your main objective is to find out exactly what the witness has done, what he or she may do in the period between the deposition and the trial, and to understand fully

every opinion the witness may have that has anything to do with the issues in the case. *This includes ALL of the bad news.*

Deposing and Examining the Defendants Expert

- Be prepared by reviewing all reports and literature that is likely to be prepared or relied upon by the expert
- Know who the expert is
- Have expert identify and produce all information that he or she reviewed for the case
- Understand the expert's "formula" and how the expert arrived at his or her results
- Conduct a line-by-line review of documents produced by the expert

- **Be Prepared.** Obtain a decent Expert Witness Report pursuant to F.R.C.P. Rule 26(b)(4). These reports are usually drafted to be of minimal utility, but at least they generally tell you the area of expertise of the witness and his or her general role in the case.

  Obtain all of the documents reviewed or prepared by the witness in connection with the case, as well as those documents that the witness will rely upon in the course of his or her testimony.

  To achieve this objective, an early case management order may help. You may jointly agree to exclude communications with counsel, except for data and/or analyses contained in such communications, but you should not be satisfied with receiving only the materials the witness will rely on at trial, since presumably the witness will not be relying on the least favorable information. A key tenet ought to be that all studies, etc. prepared in this case will be exchanged. The courts will frequently not allow the United States to withhold data because it is work product and we ordinarily do not even make a claim for data. Accordingly, it is usually in our interest to make sure that our opponents do not withhold damaging information under the "work product" doctrine by forcing mutual disclosure of all data, analyses, etc. reviewed by the expert.

  Receive information early.

  You should receive the bulk of this information several weeks before depositions commence so that you can go over it with your experts. Your experts should advise you on what additional information you should obtain at deposition so that they can fully understand the work reviewed or performed by your opponent's expert. They should also be able to explain to you what the opposing expert's approach is and suggest general lines of inquiry.

  Obtain a recent *curriculum vitae* for the witness including a list of publications.

  Copies of articles or studies not in journals or common circulation should also be obtained. You can usually find some useful information by reviewing prior relevant publications by experts.

- Obtain any reports or studies by our experts in this case that relate to the witness' subject area.

- Review all of this information personally. From your review of the information, you can develop an outline of general areas of inquiry and a list of admissions you think you can obtain from the witness. In developing this list, keep in mind any summary judgment motions you anticipate filing with an eye towards reducing the number of "facts that are in genuine dispute."

- **Inquire into the witness' background and prior work.** An expert may have "fudged" his or her resume in a way that undermines his or her credibility at trial, or, more likely, the witness' expertise may not be directly relevant to the issues in your case. Similarly, an expert who only works for industry can be shown to have a bias that may undermine his or her credibility. Where an expert has worked both for the government and industry, you may find testimony from an earlier case that is useful in your case. You may also achieve gains by forcing the expert to justify contradictions in his or her present views from those expressed earlier, but as explained below, once you have figured out that there is a contradiction, you may want to resist the temptation to fully "bore in" on the issue at the deposition and save it for trial.

- **Have the expert identify (and hopefully produce) everything he or she reviewed in the course of his or her activities on your case.** You should not be satisfied with the production of "all materials relied upon" since the expert could then ignore contradictory information without you knowing of his or her mental gymnastics. This inquiry should be specific enough for you to determine whether opposing counsel has only furnished his or her experts with the information that supports the theory that counsel is advocating. If the experts have only been provided selective information several opportunities are available depending on the specific circumstances, including providing the information to the expert and reconvening the deposition (since it is fairly likely that once you bring up the subject, the expert will review additional material before trial).

- **Determine what algorithms are being employed by the experts (yours and theirs) and identify the information that the expert must either know or assume to derive a result.** Once you have determined the witness' "formula" you should probe for the source and reliability for each of the terms that make up the formula. It is at this point that you can usually determine where the experts are diverging and focus your efforts on buttressing your support for the critical facts. "Working the formula" may involve a two phase approach: examination and line-by-line review of the expert's documents.

Determine Where the Experts Diverge and Find Support for the Critical Facts

For example, in hydrology the key factor where the experts differ may be an assumption about the rate of evaporation of groundwater, while in risk assessment, it may be the bioavailability of a compound.

- **Phase One—Examination**

  -- "Working the formula" may involve a two-phase approach. Engage the opposing expert in a free ranging discussion of his or her background, other investigations the expert may have undertaken in similar cases, how the expert usually does his or her work, what facts may be relevant generally to forming an opinion and how changes in those facts may alter the predicted results. This examination should include a description of the tools the expert uses, e.g. which groundwater model(s) does the expert normally use. Make the expert teach you more than you ever wanted to know about his or her field in general and this case in particular. Be extremely inquisitive and not let something go past you that you don't understand.

  -- Ask the witness to express his or her views in all areas relating to the case—even those outside of the scope of the witness testimony. Experts are not normally as combative as their counsel and may be willing to concede a number of fundamental facts that counsel would prefer to attempt to challenge. One of the chief benefits of expert depositions is the transcript citations that thereafter are attached to summary judgment motions, proposed stipulations and requests for admissions. At worst, opposing counsel will severely limit the scope of opinions that the witness may express at trial; your inquiry is not a concession that the person is an expert.

  -- Inquire into the expert's view of the work done by your expert and your expert's opinions. Do not be satisfied with general criticisms: ask the witness how he or she would correct the "mistakes" of your expert (the witness may be right). You really do want to know the "bad news" as well as the "good news."

  -- Inquire into precisely how the expert is using "environmental" jargon. When you probe into the details, you often find that the difference between the experts is not as large as it seems. In one case the opposing expert, who testified that the site did not present an "imminent and substantial endangerment", did agree that there was an ongoing release of hazardous chemicals that ought to be stopped as EPA was proposing. In his view an "imminent and substantial endangerment" occurred only in Bhophal-like emergencies.

  -- Focus on when the expert first formed his or her opinion, how certain the expert is of the opinion and whether he or she believes a reasonable expert could come to a contrary opinion.

- **Phase Two—Line-By-Line Review of the Documents**

  -- A line-by-line review of the documents produced by the experts is extremely tedious, but is unavoidable if our experts are to criticize or rely on the opponent's work. You should inquire to clarify how the measurements were conducted, what are the units that are reported, whether any of the data was ignored for any reason, how the witness evaluated the data and how it supports (or undercuts) his or her conclusions. Many experts consider data that contradicts their opinion to be "anomalous."

-- Where assumptions were made by the expert, be sure to determine the witness' support for the assumptions, his or her view as to the reasonable range of other values that might be assumed and how changing the assumption affects the outcome of the analysis. You may find that your expert's assumptions (and answers) are within their expert's range of reasonable assumptions.

-- Question the expert on the precise language of his or her 26(b)(4) report. These reports are usually drafted by counsel and the witness may not have even seen the report. Thus, the report may only be what the attorney hoped the witness would say at trial and the witness may not be willing to go nearly as far as his or her counsel had assumed. If you focus the witness' attention on the report before you obtain testimony on the report, the witness can more easily tailor his or her deposition testimony to the wishes of the client who retained him or her.

-- If you discover a major weakness in you opponent's analysis, you have to decide whether to confirm and clarify the weakness so that you can use it for summary judgment or simply to make a mental note of it and not alert the witness that you've figured him or her out. If you destroy an analysis too soon, you may find at trial that the witness has performed and entirely new analysis that either corrects the deficiency or attacks the problem from an entirely different direction. The key factors are the extent to which you believe the weakness can be corrected, the likelihood of a successful summary judgment motion and settlement prospects.

-- Establish whether the expert has any ongoing work or whether the expert anticipates performing any additional work. Do not be satisfied with the old dodge "that depends on what my counsel decides." You can inquire as to what work the expert thinks should be done to strengthen his or her testimony, increase the expert's certainty in his or her opinion, or resolve any issues raised by the government.

3.2.4 Preparation of the Expert for Trial

Most people underestimate the amount of mechanical work that must be done to lay the foundation for an expert's opinion. While, theoretically, the expert may rely on matters not in evidence, a far more compelling case is made if the court is shown, in small incremental steps, that the opinion follows naturally from the facts admitted into evidence in the case.

With this in mind, the witness should: have the ability, based on specialized knowledge, to draw inferences from facts which the finder of fact would not be competent to draw; based on knowledge of the facts, provide testimony that includes factual evidence as well as an expert opinion; provide opinions based on examinations or tests conducted; provide an expert opinion based on the facts as they are put into evidence at trial, with no personal knowledge; provide an opinion on otherwise impermissible hearsay information, provided that such information is of the type reasonably relied upon by experts in the particular field in forming inferences about the subject, and; assist counsel in formulating an effective cross-examination of the opposing expert. To effectively deliver all the above, the following techniques are proposed.

- **Teach the court.** Unless the court already has a background in the issues in controversy, you should have your expert teach the court the basics of the relevant science. The presentation should be gauged for a college freshman course and only hit the highest points of the science, but the witness should devote a significant amount of time to this general presentation. You want the court to trust your expert when it comes to the controversial issues. Having your expert be the court's "tutor" on non-controversial issues starts that process. Next, you want the court to understand the science well enough so that the judge can "see" what your expert is doing and "see through" what your opponent is doing. Opening with such general testimony will also help establish that your witness is an expert in the field. How much of this testimony is done before tendering the witness for *voir dire* is a judgment call based on the actions of your opponent and the reaction of the court. Ordinarily, it is recommended to try to elicit most of this type of testimony before proffering the witness as an expert in a particular field.

Teach the Court

For example, your expert can explain how groundwater modelling can be manipulated and show that his results are based on conservative real world data. Later, perhaps on cross-examination, you will show the clever manipulation by the defendants' expert.

- **Develop on outline of the testimony.** Work with your witness to develop the outline of testimony early on and revise it as the case develops. You do not want to find yourself a week from trial not being able to prove a critical point because your expert can't offer an opinion you assumed he or she could. It is often useful to have the witness develop the first draft of the testimonial outline. While you need to be flexible and tailor your examination based on what you hear from the Court during the examination, to the extent you stay with the outline on direct examination, you avoid surprising your witness. If you surprise your witness, your witness may surprise you.

- **Prompt the witness, but do not lead.** Direct testimony is really the witnesses' show. You are there principally to prompt the witness into the different areas of testimony and to handle the mechanics of introducing the evidence. You are not generally permitted to ask leading questions of your own witness. Accordingly, your questions are usually very general.

- **Simplify whenever possible.** Try to help the Court understand what the witness is trying to say in very simple terms. The Court is much more likely to accept something it thinks it understands, even if only in concept, than if the entire presentation goes right over its head. "Does the defendants' 'pump and dump' program actually remove all of the contamination from the groundwater?"

- **Try to make it interesting.** A short video or physical demonstration every once in a while will help the Court remember what you are trying to prove and can often explain the concept far more clearly than hours of testimony from the stand. You may wish to videotape a portion of your expert's testimony to permit him or her to demonstrate matters that are not easily shown in court.

Such taped testimony has a number of other significant advantages, including enhancing the credibility of the witness and diminishing your opponent's ability to cross-examine the witness. Ordinarily, you must furnish your opponent a copy of the tape in advance if you wish to have it introduced into evidence.

- **Simplify and keep track of exhibits.** Do not underestimate the difficulty associated with keeping track of large numbers of exhibits and getting them introduced. Try to keep things as simple as possible. Be sure to have someone at counsel table keeping track of your exhibits for you.

Prompt Witness but Don't Lead

Use questions such as, "Explain to the Court how . . ." or "Have you formed an opinion concerning . . . ?" Sometimes, however, you must direct the witness' attention to a specific area that he or she has forgotten or correct a mistake that he or she has made. There are ways of asking a very specific question without leading, e.g., "Can you explain whether or not . . ?" In addition, you can usually get away with a prefatory remark before you ask your question. "Now Dr. Smith, I would like to direct your attention to your earlier statement . . " or "Your honor, at this time I would like to move away from the regulatory issues and begin to address the health issues in this case." If you and the witness simply are not connecting, you can ask the court for permission to lead the witness for a minute or two "in the interests of time." Ordinarily, the Court will have figured out what your problem is and have mercy on you.

Trial—Examining the Opponent's Expert

The chances of an experienced expert witness breaking down on the stand under your withering cross examination are slim. It is more likely that an experienced witness will simply use any unartful questions you ask as a way of repeating and reinforcing his or her testimony. Try to pick out two or three areas in which you can be assured of modest success and perhaps one or two higher risk/higher reward areas.

- **Identify the areas where the witness agrees with your expert.** You may wish to open your cross examination by having the witness identify the areas where he or she agrees with your expert. This avoids a total shutout, enhances your expert's credibility and undercuts your opponent's efforts to confuse issues.

- **Walk the witness through his or her analytical process.** Assuming that you have discovered his or her "formula" during deposition, now is the time to "work the formula" by putting it up on a board and walking the witness through his or her analytical process. As you take the witness through his or her assumptions, you will dwell on those guesses for which the witness has neither hard data nor scientific expertise to guide him or her, such as the amount of rainfall that will fall on the site over the next twenty years or the bioavailability of a compound that has not been tested.

- **Refer to specifics when taking on the opponent's expert.** If you decide to attempt to take on an opponent's expert on any major issue, make sure you have at hand all of the documents you could possibly need to make your point. Remember, the witness will take any path you leave open in order to avoid damaging his or her client and some of the more experienced expert witnesses are very slippery. It is almost impossible to pin down an expert without referring to specifics. If your questioning is general in nature, the witness will almost invariably escape.

- **Be careful with a strong advocate for the opponent.** With an expert who is too strong an advocate for the client's litigation position (i.e., a con artist) you may want to let him or her paint himself or herself into a corner and later argue that he or she is an extremist. Remember, also, that if you "open the door" by asking the wrong question during cross examination, the court may allow testimony in areas you thought you had foreclosed.

Be careful of the strong advocate for the client

You may simply want to leave the witness alone and use rebuttal testimony by one of your experts to make the point.

- **Watch out for traps.** It is important that you do not ask a question that you do not know the answer to, but this does not mean that you need to explore all unknown areas at the deposition. During the deposition you might get a sense that if you posed a certain questions you might get a helpful response of a witness. If you ask it during the deposition and the response is truly damaging, opposing counsel will undoubtedly work with the witness to "fix" the response before trial. Thus, once you have gotten a sense of what the witness would probably say, if asked, you should consider moving on at the deposition to avoid tipping your hand. At trial you are taking some risks, but that is the nature of cross examination. To keep your risk of loss at a minimum, you may have to engage in a little belated discovery during the trial in order to predict what the answer will be. Take your time and creep up on the area of uncertainty so you can abandon the line of inquiry before it becomes too obvious to your adversary and the Court that you have landed in a trap. Do not move in for the kill until you are sure you have it.

- **When in doubt, punt.** Use your expert to rebut their expert rather than trying to take him or her apart yourself and leaving the Court with the perception that you failed.

- **Don't go after losing issues.** A stipulation that Geraghty and Miller are groundwater experts is better than a losing *voir dire* effort. Indeed you might stand up and stipulate at the outset that these persons are experts in a particular field to a) make points with the judge, b) throw off the other side's timing, and c) prevent them from impressing the judge with their "rock star's" credentials. Similarly, do not highlight the weaknesses of your case by attempting to knock down one of their strong points (and failing).

- **When in doubt *sit down and be quiet.*** Usually you can pick up the line of inquiry again on redirect or recross, after you have had an opportunity to talk it over with your expert.

3.2.5 Counsel's Summary Guide to Expert Testimony

- Be prepared.

- Try to anticipate opposing counsel's litigation strategy. Discovery and the pre-hearing exchange offer the most likely sources of information.

- Attempt to learn how the Presiding Officer/judge has ruled on similar fact patterns and issues.

- Does the Presiding Officer prefer to strictly follow the Federal Rules of Civil Procedure and Federal Rules of Evidence, rather than the more informal provisions found in the Administrative Procedures Act?

- Provide all technical information to all of your experts as soon as possible.

- Obtain all information reviewed by testifying experts.

- Understand the technical information that has some bearing on the action.

- Prepare your expert witnesses well in advance of any discussions with respondent.

  - Don't let your expert talk beyond answering the specific question asked.
  - Make sure the witness listens to the questions.
  - Counsel the witness to craft an answer carefully prior to answering a question.
  - Explain to the witness the test for qualifying as an expert.
  - Explain to the witness the disadvantages of overstating your case.

- Laying foundations for the expert's opinion requires a great deal of time and care.

- Introducing exhibits requires foundations.

- Use open-ended questions.

- Allow your expert witness to explain his or her answer.

- Volunteer case weaknesses.

- If your expert does not know an answer don't panic, rephrase the question.

- When testifying, use few notes.

- Carefully use gestures.

- Pace yourself and the witness.

- Cross examination should be brief.

- Before asking a question on cross examination, consider the following:

  - Has the witness hurt your case?
  - Is the witness important?
  - Is the witness credible?
  - If opposing counsel's witness gave testimony that won't hurt your case, then don't reopen.
  - What do you expect form the cross examination?
  - Weigh the risks of cross examining the witness.

- Lead the witness during cross examination.
- If you don't know the answer, don't ask unless you really need that piece of the puzzle.
- Avoid letting the witness explain an answer on cross examination.
- During cross examination, don't let the witness repeat testimony they gave during direct.
- On cross examination make it appear as if you and the witness are not in an adversarial mode. Don't argue.
- Avoid unnecessary questions on cross examination.
- Lay a proper foundation prior to questioning an expert's report.
- Be careful when trying to attack a witness as biased.
- Audio visual aids, such as charts, graphs, photographs can be useful tools.
- Evaluate whether you will require a translator.
- When making an objection make sure it is to protect or enhance the evidence you have presented. Objecting for the sake of objecting may annoy the judge.

3.3 EXPERT WITNESS PRACTICE—EXPERT

3.3.1 Your Role as an Expert

This section describes the various roles, you as an expert, may be expected to fill as a case proceeds through litigation. You may be needed for various purposes, e.g., assistance in discovery, technical advice to parties and their counsel, examinations, studies, and experimentation, and as an expert witness at the trial. Generally, counsel would not enlist your services if was not anticipated that the case may ultimately proceed to a trial on the merits and that you will be called to provide opinion testimony on one or more of the specialized issues in the case. Keep in mind that you are considered a consultant and advisor to counsel, but all decisions as to litigation strategy and trial tactics will remain with counsel.

If you are put on the witness stand, your role is to ultimately persuade the trier of fact, usually a judge, of your impartiality to both parties and to the issues in the case. Opposing counsel will question in full detail about any relationship you have, socially, professionally, or financially with any of the parties involved in the lawsuit. Your professional career and background may also be subjected to intense scrutiny, and you may be questioned at length in cross examination. It is therefore imperative, that before you agree to provide expert assistance in any manner, you reveal to counsel, any association, or experiences you may have had that might be used by opposing counsel to discredit you.

3.3.2 Pre-Trial Assistance

Steps in Providing Pretrial Assistance to Counsel

- Understand the litigation schedule
- Prioritize case work over other business
- Review all relevant work (Colleagues and experts retained by the other side)
- Understand the case your attorneys are trying to make
- Understand your role as well as the other expert's role and how you all affect the case
- Identify areas of agreement and disagreement within the team
- List each key fact in your area of expertise
- Develop lists of facts that you need your attorney to explore to fill in data gaps
- Develop proof of all key issues
- Develop a comprehensive presentation of your information
- Document your work
- Conduct a thorough search for documents you intend to rely on or use

As an expert, the scope of work you receive from counsel must be broad enough to allow you to properly form your opinions. For in-house experts, your management must reassign lower priority projects or otherwise ensure that you have sufficient time to do the job *properly*. Budgets are tight and there are many competing demands for your time. However, there is no room in a hotly contested lawsuit for hurriedly thought out and/or poorly executed technical work. Work with your lead counsel to develop a list of projects to be done, a time estimate and priority for each project and a schedule for completion of those projects. The lead counsel, or his or her designee, can help to ensure that you are provided adequate resources to do the job properly.

- **Understand the litigation schedule and what you will be expected to do during each phase of the lawsuit:**

  - Document Requests
  - Interrogatories
  - Request for Admissions
  - Fact Witness Depositions
  - Expert Witness Reports (Rule 26(b)(4) reports)
  - Expert Depositions
  - Discovery Cut-off date
  - Dispositive Motions
  - Pretrial Order
  - Trial
  - Post Trial Activities.

  Recognize that there will be periods of time when you will have to put other business aside and devote all of your attention to the case. In most cases these periods of intense activity usually occur:

  - Just prior to and during expert discovery
  - During settlement negotiations
  - About 6 weeks before trial
  - During trial.

  The setting of these dates is to a degree beyond the control of your counsel and they ordinarily will be modified several times during the course of the litigation. However, there will come a time when the established dates become firmer. The best way to

budget your time is to check with counsel regularly on key litigation dates and to advise counsel early of any extended periods when you will be unavailable.

- **Review all of the relevant work to date.** All relevant work includes the work performed by your colleagues on the government's trial team and by the experts retained by the opposing side. Be sure to identify to your counsel any work by either side that is of particular concern to you for any reason.

- **Understand the case.** Understand what the attorneys are trying to do and make sure that your counsel understands the technical aspects of the case, including the limitations inherent in the science. One of the best ways to ensure that this exchange of information takes place is an early meeting of all members of the litigation team with follow-up meetings every 6 months or so.

- **Understand each expert's role in the litigation team and how the various experts are expected to interrelate.** Be sure to identify early any additional expertise that is needed to put on the government's case.

- **Identify areas of agreement and disagreement within the team.** Identify to counsel the areas of agreement and disagreement within the government's litigation team and with the other side's experts. Where our experts disagree among themselves, try to isolate the source of the disagreement and determine whether it is important in the overall scheme of the case. If it is important, try to develop testing or analysis to resolve the issue.

- **Develop a list to emphasize strong points and minimize weaknesses.** List each key fact in your area of expertise, your support for your position with respect to that fact and the opposition's support for its position. With this list as guidance your attorney will attempt to develop a litigation strategy that emphasizes our strong points and minimizes our weaknesses. This list should help to isolate the key areas of contention and provide a focus for future testing and analysis. It will also be helpful for settlement purposes.

- **Develop lists of facts you need your attorney to explore to fill in data gaps.** Develop lists of facts or issues which the other side (or its experts) should concede and a list of facts and issues which you would like your attorney to explore in discovery to fill in gaps in your own data base.

- **Develop proof of all key issues.** Develop "proof" for all key issues in your case area and a list of the exhibits counsel should have admitted into evidence either before or during your testimony. There are cases where the issue comes down to a simple difference of opinion among experts. However, these cases are rare. Since the government usually has the burden of proving most issues, your counsel will not be satisfied by letting a case go to the court for decision based on a "toss of the coin" as to which party's expert is more impressive. We have the best chance of carrying our burden of proof if we have assembled a chain of documentary evidence in the nature of "building blocks" that rationally lead to the conclusion we wish the Court to adopt. Similarly, we can undercut our opponent's case if we can show that their experts' key assumptions are unsupported or (even better) contradicted by the facts of the case.

- **Develop a comprehensive presentation of your information.** Develop a presentation of your information that explains the applicable tenets of the underlying science, establishes the relevant facts as building blocks and then moves from those facts, by way of very small steps, to the ultimate conclusion. Where complex concepts are involved, try to develop simple explanations and/or physical demonstrations to assist the Court. Your counsel will also welcome your suggestions concerning in-court demonstrations, graphics and video tapes that will help present the most persuasive case to the court.

- **Document your work as you go along.** The court is interested in providing fairness to the litigants and has developed procedures to avoid unfair surprise at the trial. One of those procedures is the early release to the other side of anything you might want to rely on at a trial. In order to minimize the inevitable crush that occurs just prior to expert depositions and to avoid prejudice to our case if something cannot be found at the last minute, it is recommended that you keep a litigation file and document your work as you go along. If you look up a fact in a reference work, simply photocopy the frontispiece of the text and the relevant page, staple them together and drop them in your litigation file. Similarly, if you perform an analysis on your computer that you may wish to discuss at trial, print it and place a copy in your litigation file of materials to be turned over to the other side.

- **Conduct a thorough document search.** Pay particular attention to our obligation to produce to our opponents a copy of all materials relied upon or reviewed by you. Make sure your first search for such documents is thorough.

3.3.3 Deposition

The purpose of a deposition is distinctly different from the trial. It is not normally the occasion where you will undertake to affirmatively set out everything you know about the case. Rather, the purpose of the deposition is to provide the other side a *fair opportunity* to discover what knowledge the expert possesses and the professional opinions that have been formed with respect to the case.

Goals of Opposing Counsel

- Find out what work you have done
- Discover your opinions
- Undercut the government's case
- Limit your effectiveness at trial

Opposing counsel will have several goals. These include: 1) finding out what work you have done, 2) discovering your opinions, 3) undercutting the government's case, and 4) limiting your effectiveness at the trial. While you should cooperate with counsel in accomplishing the first two of these objectives you need not provide any assistance to opposing counsel in the latter two areas. To do all this you need to understand the process and follow a few simple guidelines.

- **Answer all questions put to you thoughtfully and truthfully.** The United States is a regular litigant in the Federal District Courts where nearly all of our cases are tried to the judge alone, rather than to a jury. For this reason, the long-term success of our environmental enforcement program depends, in large measure, upon establishing and maintaining our credibility with the federal judiciary. Moreover, nothing can be more

embarrassing and disruptive than having to respond to contradictory statements at trial. Thus, in addition to the obvious ethical issues, it is in your personal as well as the Government's interests for you to be scrupulously honest in your testimony.

- **Do not volunteer information beyond the scope of the question. When you do so, several things happen, almost all of them are bad.** First, you educate opposing counsel experts. They may then be able to find a way, unanticipated by you, to turn your statement against you. Second, If the fact or opinion you gratuitously offer is particularly damaging to their case they can then shift their theories or conduct rebuttal work to diminish its impact at trial. Third, there is always the possibility that the information you offer, while damaging to your opponents, is not as bad as your opponents had feared. Fear of the unknown (otherwise known as "litigation risk") is one of the motivating factors that drive litigants toward settlement.

  Note, however, that occasionally overboard exposure of the government's case does have some benefits. Sometimes where we are less than certain that a government expert's opinion can withstand attack, a useful strategy may well be to volunteer the opinion, even without prompting, and then question the opposing expert about the opinion. This "notice and comment" approach hopefully would enable us to correct our work before trial. Conversely, if we are convinced that our opponents cannot rebut our work and want to prod our opponent into considering settlement, government counsel may suggest letting them have it with both guns.

- **Do not evade questions in order to "hide the ball."** Such a tactic is contrary to your professional interest as well as the government's interest in that it threatens our credibility if at trial you are able to answer questions that you avoided in the deposition. Moreover, there is the very real possibility that your testimony will be excluded if you have unfairly "ducked" a question. Rather, the advice not to volunteer information is intended to remind you that there are varying degrees of technical competency among attorneys and even excellent attorneys can miss important points when they depose you. A poor examination of you in a deposition is a tactical advantage to the government.

  Do Not Evade Question

  Use your common sense to balance the competing interests and risks. Answer fairly the questions fairly put to you, but do not lightly throw away tactical advantage that may be available to the government because you believe the other side's lawyer is asking the wrong questions or because you want to get your story out. You will get your opportunity to say your piece in settlement discussion and/or at trial.

- **Be alert to defense counsel's other goals—minimizing the area of your expertise and undermining your credibility.** Think about these matters and discuss them with your counsel in advance of the deposition. Remember, you need not be *the* expert in a field to offer opinion testimony, neither need you be limited to areas within your formal training. For instance, an on-scene coordinator may have the right to offer professional opinion in any area within the scope of his employment, including risk assessment, risk management, hydrology, capping technologies, cost estimating, etc. Understand the legal test for allowing expert opinion and don't allow yourself to be painted with too broad or

too narrow a brush. Discuss with lead counsel in advance of your deposition the nature of the professional opinions you feel competent to offer so that you are not unduly restricted at trial and are not drawn into offering opinions outside of your area of expertise.

- **Do not offer an opinion during your deposition unless you have had sufficient opportunity to think about it.** While some answers are obvious and should be answered on the spot, remember that you are being asked for your professional opinion, not just for casual comment and that a lot may be riding on your response. Do not allow opposing counsel to rush you into forming an opinion on the spot.

Think about your opinions before expressing them

A good rule of thumb is not to offer a professional opinion in a deposition unless you would be prepared at that moment to offer the opinion at trial or put it in a memorandum to senior agency officials. If true, it is entirely appropriate to respond "I haven't formed an opinion on __" or "I would have to think about that for a while before I could form an opinion."

- **When expressing your opinion, remember that you are essentially dictating it to the court reporter, and it is only the written word that will survive.** A nod of the head or other physical gesture may or not be recorded and, if it is recorded, may be misinterpreted. In order to avoid being quoted out of context be sure to include the appropriate qualifiers each time you state an opinion.

- **Be on your guard at all times.** The informal format of a deposition can be deceiving. Remember that everything you say on or off the record will be used against you. Listen carefully to each question, pause to be sure you understand the question and to allow your counsel to object to the question and listen to any objection. Be especially cautious if opposing counsel attempts to paraphrase an earlier statement of yours—he or she may be trying to change your earlier statement slightly. You may ask the court reporter to read back your earlier statement.

- **Be sure you heard the question.** You may ask the court reporter to read back any question you are not sure you fully understand.

- **Answer only the question put to you.** If the question asked does not make sense to you simply say so to opposing counsel. Do not answer the question that should have been asked in place of the question that you were asked. In the written transcript it will appear that you, not opposing counsel, made an error.

- **You are in control of the deposition.** You control the pace of the deposition by the pace of your responses (it is hard for your opponent to mount a withering, rapid-fire assault if you are pausing for fire or ten seconds to consider your answers). Most mistakes are made when the witness is tired. You should ask for a short break anytime that you feel you are getting tired or losing your ability to concentrate. A three-minute break every 45 minutes will help keep you fresh.

Remain Alert

Take Frequent Breaks

- **Unless there is a real need to consult on a particular question before you answer it, the better practice is to consult with your attorney when there is no pending question.** You may consult with your attorney at any time even when there is a pending question. Simply state that you wish to consult with your attorney and do so.

- **If the question would require you to divulge information that you think may be privileged or confidential, discuss it with your attorney before answering the question.** For agency employees this would ordinarily include internal deliberative matters and the opinion of non-testifying experts. Before the deposition go over with your counsel which materials are being treated as privileged, so that you do not cause a waiver of any privilege claim by inadvertent disclosure.

- **Ask your attorney whether you should bring any materials, such as newly generated studies, additional material reviewed, etc., to the deposition.**

- **If your attorney requests or instructs you not to answer a question, please do so.** The purpose of the request is to ensure that the United States' rights can be preserved while we seek a ruling on a disputed record.

- **Promptly correct mistakes.** Usually an error in responding to a question at a deposition is of no major consequence if it is promptly corrected. If, at anytime you become uncomfortable about any answer you gave at the deposition, advise your attorney, he or she can correct the matter.

  During the deposition it is a fairly simple matter to simply correct the matter on the record "As I thought about it over lunch, it appeared to me that I made a mistake this morning...." Even later, a simple letter from counsel may serve to put things right. Early disclosure and correction is the best way to avoid undergoing a grueling cross-examination in which a simple mistake on your part is portrayed as a gross incompetence, perjury or worse.

Assisting at the Deposition of the Opponent's Expert

Assisting at the Deposition of the Opponent's Expert

- Review opponents work
- Simplify the case
- Buttress your own testimony
- Identify inaccuracies and areas of deficiencies

The primary goal of the deposition is to make sure that you and your counsel understand all of the work performed by your adversary. This includes the opponent's theory of the case, his or her method of analysis, his or her assumptions and exactly what is contained in every study or analysis—including the units associated with the reported results.

- **Review your opponent's work.** Once you have reviewed your opponent's work, make a list of everything you need to have clarified. At times, there will be typographical

errors etc.; make sure your counsel takes the witness through the details of each analysis or data set.

- **Try to simplify the case.** It is to the government's advantage to simplify the case as much as possible. You should develop a list of areas where you think your opponent will agree with you. Ordinarily this will include a number of fairly basic concepts which, to you, are so obvious that you don't normally even think about them. For example, you may think that a concession that "GC/MS is the accepted technique for analyzing PCBs" is fairly trivial. However, if we were forced to establish that principle at trial, we would have to expend considerable resources, and we would have allowed defendants to complicate the case and divert the court from the real issues.

- **Buttress your own testimony.** Many times you need to make an assumption which is neither controversial nor critical, but for which you have no proof. If you alert him or her to these areas, your counsel can simply ask your opponent what his best estimate of the particular factor is or whether the number you have selected is within the range of reasonable assumptions for that parameter.

  Similarly, by asking your opponent detailed questions about your work and conclusions, your counsel can help you to correct errors or identify areas that need additional support in advance of trial. Mistakes caught and corrected before trial are generally of no particular significance at trial. Let your counsel know which areas of your work are most likely to draw fire from your opposition.

- **Identify inaccuracies and areas of deficiency.** During the deposition, you can often detect what your counsel cannot—when an expert is trying to duck a question by responding with a lot of baloney. At a break you can suggest lines of questioning or even write out a question verbatim for your counsel to ask.

  Where you see areas of deficiency in your opponents work, point them out to counsel and develop lines of questioning to "nail down" the error or omission, hopefully without alerting your opponent to the fact that your have figured out where his or her work is weakest.

3.3.4 Trial

Direct Testimony

Direct Testimony
• Tell your story • Respect the judge • Answer questions in common English • Use your normal teaching style

This is your chance to tell your story. During your direct examination you are on center stage. Your attorney is only there to set the stage and to move things along. He or she will ask open ended "softball" questions that serve as an outline to move you from topic to topic and to reinforce certain points.

Understand the logistics involved in exchanging multiple copies of exhibits, blow ups of photos, extra copies of videos, etc. and start your preparation well in advance.

Your objective is to persuade the judge of the accuracy of your testimony. Remember that the judge has spent a career listening to witnesses attempting to convince him or her of a particular point and probably has a very finely tuned listening antenna. "Tell the truth, the whole truth, and nothing but the truth." Direct your testimony to the judge, whom you should refer to as "Your Honor", and be courteous. By following a few basic rules your testimony will be seen as credible and truthful.

- **Respect the judge.** If the judge gets the sense that you do not respect his or her authority, he or she is less likely to give much weight to your opinion. Be respectful, even if you disagree with what the judge is doing.

  However, you should not modify your testimony simply to please the court. You can disagree with the judge without arguing with him or her.

- **Answer the question in common English.** Without patronizing the court, use simple examples and common language to explain your point. Instead of, or along with, "this substance has discrete lead phases within a silicon oxide matrix", one could try "It's like a chocolate ship cookie your honor, where the chocolate chips are made of lead and the cookie is made of glass. These chips are currently in the cookie but can fall out if the cookie crumbles."

- **Use your normal teaching style.** Many experts are more comfortable explaining something standing up with an easel or pointer than sitting in a witness chair. You will probably be more convincing to the court if you adopt a style most comfortable to you. In bench trials, most judges do not mind if you move about from exhibit to exhibit at an easel rather than staying in the witness chair. However, you or preferably your attorney must ask the court's permission before you step down from the witness chair for any reason.

Cross-Examination

No competent attorney engages in cross-examination without a plan. You should assume that every question put to you is for a purpose. Again, his or her purpose may be to limit your testimony, to undermine your credibility with the court, or to get you to agree with him or her on some point.

- **Be cautious and careful.** Much like your deposition, during cross-examination you should be guided by a balanced, cautious approach. You do not wish to be perceived as extremely partisan and uncooperative, but you must be cautious and careful. If you don't know the answer to a question, say so. If you are not comfortable answering a hypothetical question that you can reasonably answer say so.

- **Never argue with the court and do not constantly spar with opposing counsel.** His or her comments and questions are not evidence that should be considered by the court. However, they are part of your opponent's efforts to persuade the court. Accordingly, it is entirely appropriate for you to occasionally "unload" on a question. "Yes, but as you

know, both the government's testing and the defendants' testing have shown dangerously high levels of toxic materials at the site."

- **Opposing counsel will be asking leading questions, in other words, questions that can be answered "yes" or "no."** If a "yes or "no" is the accurate response, leave it at that. Where a "yes" or "no" answer would be misleading, you should say so. Occasionally, you may answer "yes" or "no" with the appropriate explanation (i.e., yes, but...").

- **Be prepared if opposing counsel "opens the door."** At times, in cross-examination opposing counsel can make the mistake of "opening the door" by asking you questions relating to an area in which you were foreclosed from testifying on direct. Discuss this area in advance with your counsel, because if it occurs, and you recognize it, you can use one of your "sporadic long responses" to give your entire testimony in that area.

Be Careful on Cross Examination

Opposing counsel may ask, "If the material were non-toxic, wouldn't you agree that the site would not present an endangerment?" This question most likely was designed to show that you are much more of an advocate for the agency's position than an expert the court should trust. Most likely a "no" answer, or a strong hedge will get you into trouble. Yet, there may be dangers associated with a simple "yes" answer (issues of corrosivity, flammability, etc.) Assuming that our case is based on the toxicity of the material, the best answer is probably one that sounds like you are agreeing with your opponent, but which contains enough qualifying language to protect yourself and our case..." Yes, I would agree with you on that, all other factors being equal and leaving aside for the moment issues relating to corrosivity, flammability, and so on."

Redirect

Redirect is generally for damage control purposes only—listen very carefully to the questions on redirect and assume that your counsel is either trying to get you to recognize an error that you made (either in direct or cross-examination) or trying to get you to explain in greater detail an answer you gave in your cross examination to negate a point made by your opponent.

3.3.5 Witness' Guide to Expert Testimony

The following suggestions will aid the expert witness in giving testimony:

- Be prepared.

- Make sure that counsel explains why he or she has asked you to testify.

- Know the definition of an expert. Rule 702 defines an expert as any person who possesses specialized knowledge through knowledge, skill, experience, training, or education. Most likely you will be asked questions concerning the following:

  - Qualifications
  - Name, etc.

  - Business or occupation
  - Education
  - Training
  - Licenses
  - Professional association
  - Other background, teaching, consulting, writing
  - Expert at other trials
  - Experience in specialty.

- Review internal documents and refresh your memory prior to discovery and prior to trial.

- Make sure that you understand what is going to happen during pre-trial and through the appeals process.

- Make sure counsel understands the technical aspects of the case.

- Make sure that counsel is aware of the relative strengths and weaknesses in the testimony you will provide.

- You are telling a story to the trier of fact, usually the judge.

- When you testify, face the judge. He or she is the person that you have to persuade.

- Answer all questions honestly. If the question requires a yes or no answer. Answer "yes" or "no."

- Be on guard at all times, familiarity may breed disaster.

- Don't volunteer information.

- Phrase your answers in plain English. Technical jargon may confuse people and ultimately adversely impact the case, slow the process, and/or make it appear as if you have something to hide.

- Don't exaggerate.

- Avoid saying "I think" or I believe." Stay away from phrases like "To the best of my recollection" and absolutes like "always" and "never." If an answer requires some discussion about policy or practices, state the practice and indicate what you did on that occasion. Counsel who requires absolutes for answers is trying to trick you. The trier of fact will most likely be aware of this. Be wary of questions that begin "wouldn't you agree that..." If a question has two negatives say you don't understand the question. This can also be a trick question.

- If your answer is incorrect, correct the error immediately.

- Stop when the judge interrupts you.

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- Don't ask the judge for advice.

- Discuss the nature and scope of your professional opinions. You should feel comfortable with the questions you answer.

- If you don't have an answer, say you "have not formed an opinion," or "I need to think about the question."

EXERCISE

(Read the following fact pattern and discuss)

In 1982 you prepared a report that was considered privileged attorney work product. You identified specific contaminants and traced their pathways from industrial sources into the groundwater. In 1987 you were deposed, and today you were notified by counsel that you will be needed at trial in two weeks. Counsel asks that you bring any relevant written reports (including your 1982 report) or notes that you can gather, and meet with him to discuss the case the night before you are scheduled to testify. You agree to this, knowing that the day before your scheduled meeting you have a critical deadline to meet for another case that you are involved in. You have been warned by your supervisor that the deadline is firm.

Since you last worked on this case, you went back to school and obtained your Ph.D. in Hydrogeology. While at school you met the leading authorities in the field, who considered you a maverick in some of your theories. The defendant's hydrogeologist is a former close friend from graduate school. You haven't seen him for two years.

As the trial date approaches, you finally locate and quickly read the report you prepared in 1982 but are unable to find a copy of your deposition. You seem to recall that during the deposition you were uncomfortable about one of your conclusions, but can't seem to recall specifically what that conclusion may have been. You only remember that you decided against notifying counsel of your uncertainly after the deposition. Instead, you decided that whatever the issue was, it could be rectified should the case ever go to trial.

The day of the trial, you drag yourself into court having only spent one hour the night before with counsel because your 1½ year old son was rushed to the hospital emergency room after a failed attempt to climb safely out of his crib. By the time you got home and settled into bed it was 3 a.m.

Notorious for having little patience when you have little sleep, you are not tolerant of the judge's constant interruptions in your testimony for what seem to you to be inconsequential questions. Also, in an attempt to assist your counsel who is new to the agency, and who is unfamiliar with the technical aspects of your report, you decide to disregard his questions and tell the judge what you think he needs to know to understand the relevant science.

Similarly, on cross examination, you decide to elaborate on each of your answers so as to appear competent. Satisfied that opposing counsel made no significant points, you step down from the witness stand and go home.

Instructor Notes:

1. Don't count on attorney work product as privileged—report probably is discoverable.
2. Discuss which notes should be brought to the deposition.
3. Counsel didn't give adequate preparation time with trial two weeks away.
4. Counsel should have scheduled meeting with expert earlier than the night before.
5. Discuss—qualifications, advance degree, opinion changes, bias, friends with opponent, theory rather radical, as possible impeachment of credibility.
6. Not prepared—only have report—quickly read—did not review deposition.
7. In danger of having your credibility impeached, be accused of gross incompetency or perjury for failure to correct an error at deposition.

8. Didn't discuss case in detail with counsel the night before, does not know the government's case, other expert opinions, other technical documents, etc.

9. Tired and in danger of not paying attention.

10. Disrespectful of judge.

11. Doesn't listen to counsel on direct examination.

12. Not cautious or careful on cross-examination—Does not recognize inherent dangers in responding the way he has.

RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

4. IDENTIFYING SOLID AND HAZARDOUS WASTES

EPA

Module 4 Objectives

- **Become familiar with waste identification fundamentals**
- **Discuss important issues affecting waste identification**
- **Examine recent developments affecting this area of RCRA regulation**

Notes:

Determining Whether the Material Is A Solid Waste

- **Key term: "discarded"**
- **No statutory definition of term "discarded"**
- **Regulatory definition of discarded--(§ 261.2) abandoned, recycled, or inherently waste-like**
  - **Abandoned - Disposed of, burned or incinerated, or accumulated, stored, or treated before or in lieu of being disposed of, burned, or incinerated**
  - **Inherently waste-like - Certain dioxin F wastes and secondary materials fed to a halogen acid furnace**

Notes:

EPA Authority Over Hazardous Waste Recycling

- **Three court cases address "discard" and confirm that EPA has certain authority over hazardous wastes that are recycled:**
  - ***AMC* v. *EPA* (AMC I)**
  - ***API* v. *EPA***
  - ***AMC* v. *EPA* (AMC II).**

Notes:

Solid Waste: Statutory Jurisdiction

Enforcement Action	Solid Waste	Hazardous Waste
§ 3007	√	√
§ 3013	√	√
§ 7003		

Notes:

Recycled Materials (§ 261.2--Table 1)

	Use Constituting Disposal	Energy Recovery Fuel	Reclamation	Speculatively Accumulated
Spent Materials	√	√	√	√
Sludges (listed)	√	√	√	√
Sludges	√	√		√
Byproducts (listed)	√	√	√	√
Byproducts	√	√		√
Commercial Chemical Products	√	√		
Scrap Metal	√	√	√	√

Notes:

Exclusions From Definition of Solid Waste (§ 261.4)

- **Domestic sewage**
- **Industrial wastewater discharges subject to NPDES**
- **Irrigation return flows**
- **Nuclear materials or byproducts, as defined by AEA**
- **Pulping liquids reclaimed in a pulping liquid recovery furnace and reused in pulping**
- **Spent sulfuric acid used to produce virgin sulfuric acid**
- **Closed-loop recycling**

Notes:

Exclusions From Definition of Solid Waste (§ 261.4) (Continued)

- **Materials subject to insitu mining**
- **Certain wood preserving wastes**
- **Specified wastes recycled to coke ovens, tar recovery, or production of coal tar**
- **NWW splash condenser dross from treatment of K061 in HTMR units**

Notes:

Sham Recycling

- **Indications of sham recycling include:**
  - **Secondary material is ineffective or only marginally effective for the claimed use**
  - **Secondary material is used in excess of that necessary**
  - **Secondary material is not as effective as raw material it replaces**
  - **There are no records (e.g., financial) regarding the recycling transaction**
  - **Secondary material is not handled like a valuable commodity.**

Notes:

Burden of Proof (§ 261.2(f))

- **Is there a market for my materials?**
- **Did I meet the terms of exclusion?**
- **Do I possess onsite recycling equipment?**

RESPONDENT

Notes:

Hazardous Waste--Statutory Definition

- **§ 1004(5) definition:**

"...solid waste[s] which because of its quantity, concentration, or physical, chemical or infectious characteristics may...cause,...an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness or...pose a substantial...hazard to human health or the environment when improperly...managed. "

Notes:

Regulatory Definition

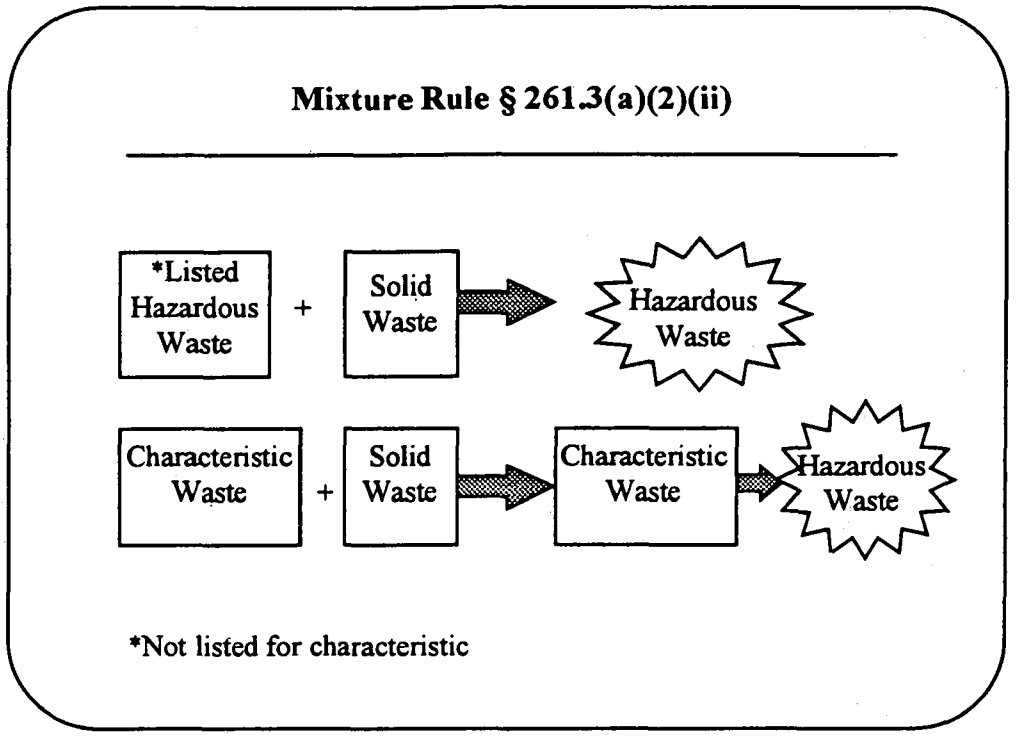
- **Characteristic wastes:**
  - **corrosivity (§ 261.22)**
  - **ignitability (§ 261.21)**
  - **reactivity (§ 261.23)**
  - **toxicity (§ 261.24)**

Notes:

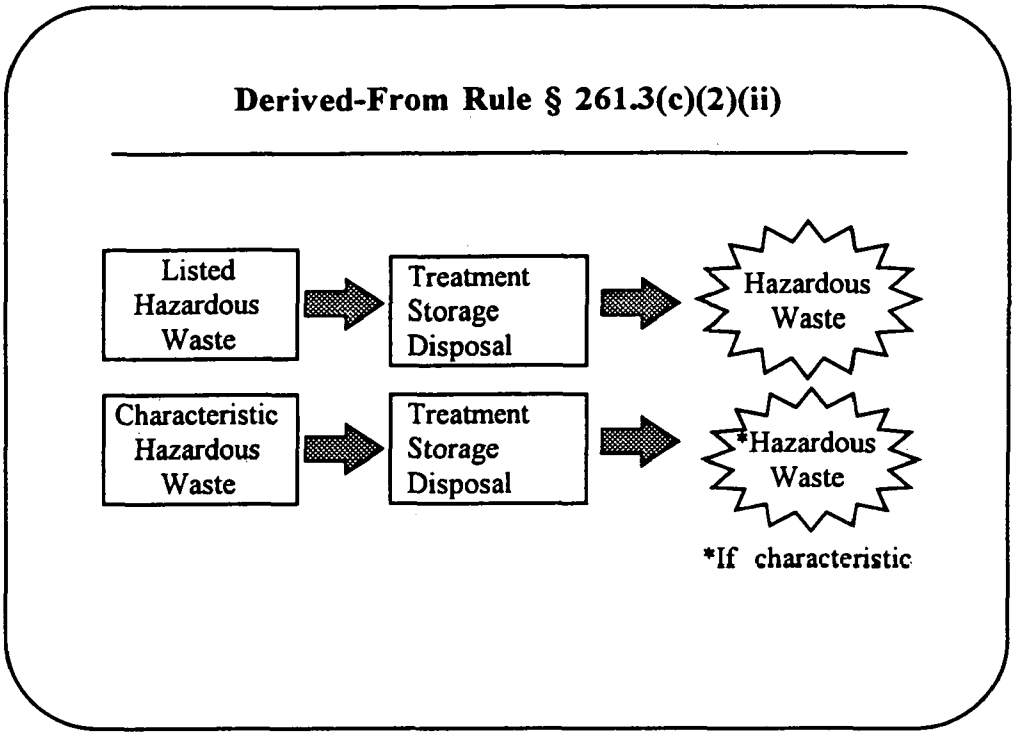
Regulatory Definition (Continued)

- **Listed wastes:**
  - **F wastes (§ 261.31--non-specific sources)**
  - **K wastes (§ 261.32--industry-specific sources)**
  - **P wastes (§ 261.33(e)--acutely hazardous commercial chemical products)**
  - **U Wastes (§ 261.33(f)--hazardous commercial chemical products)**

Notes:


Mixture Rule § 261.3(a)(2)(ii)
*Listed Hazardous Waste
+
Solid Waste
Hazardous Waste
Characteristic Waste
+
Solid Waste
Characteristic Waste
Hazardous Waste
*Not listed for characteristic

Notes:


Derived-From Rule § 261.3(c)(2)(ii)
Listed Hazardous Waste
Treatment Storage Disposal
Hazardous Waste
Characteristic Hazardous Waste
Treatment Storage Disposal
*Hazardous Waste
*If characteristic

Notes:

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Challenges to Derived-From and Mixture Rules

- ***Shell Oil* v. *EPA*** **(1991)--Vacated derived-from and mixture rules (12/6/91).**
- **EPA published an interim final rule reinstating rules (3/3/92); sunset provision April 28, 1993.**
- **1992 Appropriations Bill--Nullified sunset provision and established October 1, 1994, deadline for revisions.**
- **10/94--Citizen suits from generators and TSDF groups to enforce October 1, 1994, deadline. No final consent decree yet; will impose deadlines.**

Notes:

Reclaimed Products (§ 261.3(c)(2))

- **Materials that are reclaimed from a solid waste and are beneficially used are not solid wastes, unless burned for energy recovery or used in a manner constituting disposal.**
- **Waste material becomes more product-like than waste-like.**

Notes:

Contained-in Policy (OSWER Dir. 9481.00-6)

- **The regulated universe of hazardous waste includes contaminated media, such as soil or ground water, that contain hazardous waste.**
- **These "contained-in" wastes must be managed under full Subtitle C standards.**
- **The policy is codified for debris at § 261.3(f)(2).**
- **Regions determine on a case-by-case basis when the media no longer "contains" hazardous waste.**

Notes:

When Does a Material Become a Hazardous Waste? (§ 261.3(b))

1. **When a solid waste first meets the listing description**
2. **When a listed hazardous waste is first added to a solid waste**
3. **When a waste exhibits any hazardous waste characteristic**
4. **When a hazardous waste *exits* the production, storage, or transportation vessel or unit in which it was generated (e.g., product storage tank generates waste sludge)**

Notes:

When Does a Material Cease to Be a Hazardous Waste? (§ 261.3(d))

- **When it no longer exhibits a characteristic**
- **If listed, it has gone through the delisting process**

Notes:

Solid Wastes Excluded From Definition of Hazardous Waste (§ 261.4)

- **Household waste**
- **Agricultural wastes returned to the soil as fertilizers**
- **Certain wastes that fail the TC, including wood that fails only due to arsenic, and petroleum-contaminated media and debris**
- **Specific wastes from the extraction, beneficiation, and processing of ores and minerals**
- **Cement kiln dust**

Notes:

Solid Wastes Excluded From Definition of Hazardous Waste (§ 261.4)(Continued)

- **Fly ash, bottom ash, slag waste, and flue gas emission control waste, generated primarily from the combustion of coal or other fossil fuels**
- **Certain hazardous waste samples being sent to laboratories for hazardous waste determinations or treatability studies**
- **Other industry-specific wastes added via rulemakings**

Notes:

Municipal Waste Combustor Ash

- **May 2, 1994: Supreme Court overturns EPA's MWC policy**
- **February 3, 1995: EPA statutory interpretation--ash is subject to Subtitle C when it *exits* the combustion building**
- **Allows facility operators to mix bottom and fly ash within building before sampling.**

Notes:

Conditionally Exempt Small Quantity Generators (§ 261.5)

- **If CESQGs generate less than 100 kilograms of hazardous waste per month, they are conditionally exempt from Subtitle C regulation for that month.**
- **Wastes are still classified as hazardous waste, but are not subject to regulation as a hazardous waste.**
- **Solid waste and hazardous waste exclusions are important in determining how to "count" wastes towards the total.**

Notes:

Recyclable Materials (§ 261.6)

- **Hazardous wastes that are recycled**
- **Recyclable materials are subject to generator, transporter, TSD requirements prior to entering recycling unit**
- **If no storage prior to recycling, facility subject only to notification and manifest requirements**
- **Recycling units are not regulated, except for boilers and industrial furnaces.**

Notes:

Recyclable Materials (§ 261.6) (Continued)

- **Certain hazardous wastes recycled in certain ways are regulated under Part 266.**
- **Extent of regulation varies depending on material and recycling practice.**
- **Part 266 addresses use constituting disposal, precious metals recovery, spent lead-acid batteries, and boilers and industrial furnaces.**
- **Under § 261.6, certain recyclable materials are not subject to regulation under Subtitle C.**

Notes:

Applicable Oil Management Standards

Type Of Used Oil	Applicable STDs
Recycled oil, exhibits characteristics	Part 279
Mixed with listed hazardous waste	Parts 260 - 268
Mixed with a characterized waste or waste listed based on characteristic(s)	Parts 260 - 268 (Unless mixture no longer exhibits characteristic(s). In this case, regulated under Part 279.)

Notes:

Residues in Empty Containers (§ 261.7)

- **Hazardous waste remaining in "empty" container or inner liner removed from an empty container not subject to regulation**
- **"Empty" container**
  - **All wastes removed AND**
  - **Limits on amount of residue**
  - **Special requirements for acute hazardous waste**

Notes:

Universal Wastes (Part 273)

- **Many facilities generate small quantities of hazardous waste.**
- **Rule addresses hazardous waste batteries, unused, recalled pesticides, and mercury-containing thermostats--does not include fluorescent lights.**
- **Standards for universal waste handlers (e.g., generators, and facilities that store or accumulate wastes) based on two size categories--accumulate less/more than 5,000 kilograms.**

Notes:

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RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

4. IDENTIFYING SOLID AND HAZARDOUS WASTES

Background Materials

EPA

INSTRUCTOR NOTES
RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

4. IDENTIFYING SOLID AND HAZARDOUS WASTES

Time: 1.5 to 2 hours

Objectives:

- Discuss waste identification and related rules.

Emphases:

- Enhance understanding of:

  - When a waste is a solid waste
  - When a waste is a hazardous waste
  - Exemptions and exceptions
  - Hazardous waste recycling
  - Mixture and derived–from rules
  - Small quantity generators and exempt small quantity generators
  - Empty containers
  - Universal wastes

Helpful Hint:

- Case studies are interspersed throughout the text with answers to the exercises and provided in Appendix A without answers.

Appendix:

Appendix A—Solid and Hazardous Waste Exercises

Bibliography:

Lowrance, Sylvia. Memorandum from S. Lowrance, Director OSW, to Hazardous Waste Management Division Directors, Regions I-X, entitled Food Recycling, April 26, 1989.

Lowrance, Sylvia. Memorandum from S. Lowrance, Director OSW, to Jeff Zelikson, entitled Status of Contaminated Groundwater and Limitations on Disposal and Reuse, January 24, 1989.

Compendium Document 9441.1984(33) and (34), 9441.1985(15), 9441.1987(04), 9444.1987(18).

U.S. Environmental Protection Agency, 1993 (March). *RCRA Practitioners Enforcement Workshop: Course Materials.*

4. IDENTIFYING SOLID AND HAZARDOUS WASTES

The identification of a material as a solid waste is the fundamental first step in the Resource Conservation and Recovery Act (RCRA) cradle to grave regulatory system. After a material is determined to be a solid waste, it then may be classified as a hazardous waste. If a material is not a "solid waste," it cannot be a "hazardous waste." This module presents the regulatory framework for the definition of solid waste and the definition of hazardous waste. Exemptions from each definition, including those involving certain types of recycling, are discussed. In addition, case studies are presented at the end of each section.

4.1 SOLID WASTE

4.1.1 Statutory Jurisdiction and Case Law

The U.S. Environmental Protection Agency's (EPA) statutory jurisdiction over a material as provided in the RCRA definition of solid waste hinges on whether the material can be considered to be "discarded." The definition provided in Section 1004(27) is "...any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other *discarded* material including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities...." There is no statutory definition of "discarded"; 40 CFR 261.2 contains a regulatory definition. Case law has served to establish some interpretations and boundaries of the term. For purposes of the "imminent and substantial endangerment" enforcement authority provided to EPA under Section 7003, only the statutory definition of solid waste is relevant. For purposes of enforcement authority under Sections 3007 and 3013, the Agency only needs to have a reason to believe that the material is both a solid and a hazardous waste as defined in the statute. See the language in Section 261.1 (b)(2).

Three decisions by the D.C. Circuit Court address what constitutes "discard," at least in a recycling context. These decisions established that EPA has broad, albeit not unlimited, discretion to regulate recycling under RCRA. These decisions essentially establish that for statutory purposes a material can be a solid waste if it is "part of the waste disposal problem." The following list highlights these cases:

- ***American Mining Congress* v. *EPA (AMC I)*, 824 F.2d 1177 (D.C. Cir. 1987)**—The American Mining Congress (AMC) petitioned the U.S. Court of Appeals for the District of Columbia for review of EPA's 1985 rule, which, AMC asserted, claimed authority for the Agency to regulate secondary materials reused within an ongoing production process. The court held that EPA had overextended its authority by regulating in-process secondary materials, because materials designed for recycling in an ongoing continuous production process were not discarded. The decision specifically restricted EPA's ability to classify certain in-process streams in the petroleum refining and primary smelting industries as solid wastes (therefore barring their regulation as hazardous wastes). However, the decision did not affect the Agency's authority to regulate other recycling activities that closely resemble waste management.

- ***American Petroleum Institute* v. *EPA*, 906 F.2d 729 (D.C. Cir. 1990)**—The D.C. Circuit Court of Appeals narrowed its earlier decision regarding in-process recycling. At issue was a challenge to the portion of the Agency's 1988 First Third Land Disposal Restrictions (LDR) rule, which, in accordance with the "indigenous principle and the *AMC I* decision," exempted from LDR regulations electric arc furnace dust from steel production (K061) when the waste was to be reprocessed in the furnace that used it as a feedstock in a zinc recovery operation.

  In this case, the court granted petitioners a remand of the rule after finding that the hazardous wastes were "indisputably discarded" before reentering the furnace for zinc recovery. The decision further held that EPA could regulate K061 as a solid waste even after the materials reached the reclamation facility.

- ***American Mining Congress* v. *EPA (AMC II)*, 907 F.2d 1179 (D.C. Cir. 1990)**—AMC challenged a 1988 rule promulgated by EPA that listed six wastes from primary metal smelting and mineral processing as hazardous wastes. On the issue pertinent to this discussion, the court ruled in favor of EPA, stating that copper, lead, and zinc materials were properly regulated by EPA as solid wastes in light of the statutory definition under Section 1004 (27) and the decision in *AMC I*. The copper, lead, and zinc materials meet the definition of solid waste because they are managed in surface impoundments (and, thus, becomes part of the waste management problems) even though industry frequently recycles the materials back to the smelter at a later point. The court found that EPA had reasonably determined that materials placed in surface impoundments, where they are capable of posing a threat to human health and the environment, are discarded and, therefore, are solid wastes.

4.1.2 Regulatory Jurisdiction

A regulatory definition of "discarded" was promulgated on January 4, 1985 (40 CFR 261.2). A material is discarded if it is "abandoned," "recycled" or designated as "inherently waste-like." A material is "abandoned" if it is disposed of, burned or incinerated, or accumulated, stored, or treated (but not recycled) before or in lieu of being abandoned by being disposed of, burned, or incinerated. Only certain dioxin-containing F wastes and secondary materials fed to a halogen acid furnace have been designated inherently waste-like.

"Recycled" materials are regulated under certain circumstances. The regulatory status of materials being recycled is determined by looking at 1) the type of *secondary material* it is and 2) how that material is being handled. The theory behind the structure of the regulations is based on distinguishing between "production-like" activities (e.g., smelting of raw ore, which EPA does not have the jurisdiction to regulate) and "waste treatment-like" activities (e.g., incineration, which EPA has the jurisdiction to regulate). Secondary materials are regulated under Subtitle C if they meet the definition of solid waste and are hazardous.

4.1.3 Categories of Secondary Materials

The regulations describe five categories or types of secondary materials:

- **Spent material**—A material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without further processing (e.g., spent solvent that has picked up so much contamination that it must be redistilled before it can be used as a solvent again). (261.1(c)(1))

- **Sludge**—Any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility (e.g., bag house dust, wastewater treatment sludge) exclusive of the treated effluent from a wastewater treatment plant. (261.1(c)(2))

- **Byproduct**—A material that is *not* one of the *primary products* of a production process and is not solely or separately produced by the production process (e.g., distillation column bottoms). (261.1(c)(3))

- **Scrap metal**—Bits and pieces of metal parts (e.g., bars, turnings, rods, sheets, wire) or metal pieces that may be combined with bolts or soldering (e.g., radiators, scrap automobiles, railroad box cars) and that when worn can be recycled. The following are not scrap metal: residues from smelting or refining, liquid wastes containing metals, liquid metal waste or metal-containing waste with a significant liquid component (e.g., lead acid batteries). (261.1(c)(6))

- **Commercial chemical products**—Unused commercial chemical products listed in Section 261.33; any off-specification commercial chemical product or manufacturing chemical intermediate that if not off-specification would be listed; residue remaining in a container that has held the above; and residue or soil from cleanup of a spill of one of the above. Such products only include chemical substances manufactured or formulated for commercial or manufacturing use that consist of the commercially pure grade of the chemical, any technical grades of the chemical that are produced or marketed, and all formulations in which the chemical is the sole active ingredient. (261.33).

4.1.4 Categories of Handling or Recycling Practices

Secondary materials are solid wastes when recycled in four ways:

- **Used in a manner constituting disposal**—Applied to the land (e.g., dust suppression) or used to produce a product that is placed on the land

- **Burned for energy recovery, used to produce fuels, or contained in fuels**—Note: materials burned for both energy recovery and material recovery are considered to be solid wastes burned for energy recovery. As a general matter, burning of low energy hazardous wastes as alleged fuels is not considered to be burning for legitimate energy recovery.

- **Reclaimed**—Processed to recover a usable product or component, or regenerated

- **Accumulated speculatively**—Stored with less than 75 percent being recycled within 1 calendar year.

4.1.5 Exclusions from the Definition of Solid Waste

Table 1 in 40 CFR 262.2 lists materials that are not solid wastes:

- Characteristic byproducts or sludges being reclaimed
- Commercial chemical products being reclaimed or speculatively accumulated.

In addition, the regulations at 40 CFR 262.2(e) contain several other exclusions from the definition of solid waste including materials:

- Used or reused as an ingredient in an industrial process to make a product

- Used or reused as effective substitutes for commercial products, provided they have not been reclaimed

- Returned to the original process from which they are generated without first being reclaimed (must be used as a substitute for raw material feedstock).

These three exclusions **will not apply**, however, if the material is *used in a manner constituting disposal, burned for energy recovery, speculatively accumulated,* or is *inherently waste-like.*

In addition, 40 CFR Section 261.4 contains a set of specific exclusions from the definition of solid waste, including the following:

- Domestic sewage

- Industrial wastewater discharges that are point source discharges subject to Clean Water Act regulations

- Irrigation return flows

- Nuclear materials or byproducts, as defined by the Atomic Energy Act of 1954

- Pulping liquors reclaimed in a pulping liquor recovery furnace and reused in the pulping process (unless speculatively accumulated)

- Spent sulfuric acid used to produce a virgin sulfuric acid (unless speculatively accumulated)

- Secondary materials that are reclaimed and returned to the production process from which they are generated (i.e., closed-loop recycling)

- Spent wood-preserving solutions that have been reclaimed and are reused for their original intended purpose

- Wastewaters from the wood preserving process that have been reclaimed and are reused to treat wood

- EPA hazardous wastes K060, K087, K141-K145, K147 and K148, and any wastes from the coke byproducts process that exhibit the toxicity characteristic, when these materials are recycled to coke ovens, to the tar recovery process as a feedstock to produce coal tar, or mixed with coal tar prior to sole or refining (provided no land disposal from generation to the point of recycling)

- Nonwastewater splash condenser dross residue from the treatment of K061 in high temperature metals recovery units provided the material is shipped in drums and not land disposed before recovery.

Closed-loop recycling requires that the material being reclaimed to be returned to the original production process from which it was generated, only tank storage is used, the entire process through reclamation is closed (i.e., no or little chance for releases), and the reclamation does not involve combustion.

4.1.6 Sham Recycling

Persons claiming an exemption from the definition of solid waste on the basis of recycling must be able to demonstrate that their recycling practice is legitimate. Indications of "illegitimate" or "sham" recycling are:

- Where a secondary material is ineffective or only marginally effective for the claimed use

- When a secondary material is used in excess of the amount necessary

- Where the secondary material is not as effective as the raw material it is replacing

- Absence of records (such as financial) regarding the recycling transaction

- Secondary material is not handled in a manner consistent with its use as a valuable raw material.

The January 4, 1985, *Federal Register* (50 *FR* 638) contains language on sham recycling. In addition, a memorandum from Sylvia Lowrance to Hazardous Waste Management Division Directors, Regions I-X, dated April 26, 1989, and entitled F006 Recycling also contains valuable information on the topic. Both the Boiler and Industrial Furnace rule, 56 *FR* 7143 (February 21, 1991), and the March 16, 1983, *Federal Register* (enforcement guidance addressing burning hazardous waste a fuel) discuss sham recycling.

4.1.7 Burden of Proof With Regard to Recycling Claims

Respondents in actions to enforce RCRA Subtitle C who raise a claim that a certain material is not a solid waste, or is conditionally exempt from regulation (Section 261.5 for certain small quantity generators), have the burden of demonstrating that there is a known market or disposition for the materials and that the material meets the terms of the exclusion or exemption (40 CFR 261.2(f)). The respondent must provide appropriate documentation to demonstrate that the material is not a solid waste or is conditionally exempt. Owners/operators who claim that they are recycling must show that they have the necessary equipment to do so.

Case Study - Beacon Chemical Company

Beacon Chemical Company, located in Staten Island, is a formulator of specialty chemicals. The wastewater from reaction tank cleaning contains minimal amounts of reaction residues. Some of the chemicals used in the reaction are listed as commercial chemical products in 40 CFR 261.33. The wastewater is discharged to an offsite publicly owned treatment works (POTW) via the city sewer line.

Q: Is the wastewater a solid waste?

A: ***The wastewaters are discarded, but they are exempt from being considered solid waste because they are mixed with domestic sewage prior to discharge into the POTW (see 40 CFR 261.4(a)(1)(ii)). The exclusion applies at the point the wastewater is mixed with domestic sewage. Thus, if the wastewater were stored in an equalization basin prior to discharge to the POTW, the wastewater in the basin would be a solid waste and, if it were a hazardous waste, the equalization basin would be a hazardous waste management unit.***

Case Study - Kamakaze Kemical Company

Kamakaze Kemical Company purchases spent pickle liquor from ABC Steel. Kamakaze uses the spent pickle liquor as a raw material in its chemical manufacturing process where it serves as a reactant. The manufacturing process is proprietary. The spent pickle liquor is stored in tanks prior to use.

Q: Is the spent pickle liquor a solid waste?

A: ***The spent pickle liquor is not a solid waste. Under 40 CFR 261.2(e)(1)(i), materials are not solid wastes when they are recycled by being used or reused as ingredients in an industrial process to make a product, provided that the materials are neither being reclaimed nor speculatively accumulated (provided that it is a legitimate raw material).***

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Case Study - XYZ Corporation

The XYZ Corporation produces metal parts using a chrome electroplating process. No cyanides are used during production. The process generates a wastewater treatment sludge that has a very high chrome content that would be hazardous for chrome under the TC (D007). The sludge is pumped into 55-gallon containers and placed in a container storage area onsite. During the last 2 years, about 500 gallons of the sludge have been added to the container storage area every 6 months. The owner of XYZ is planning to ship the sludge to a recycler that operates a chrome recovery process. However, no shipments of sludge have been made to the recycler within the last 2 years. XYZ asserts that the sludge will be shipped to the recycler in the next year. The owner also claims that the sludge is not a solid waste under the RCRA regulations and, therefore, cannot be a hazardous waste. Thus, he believes that no storage permit is required for the container storage areas because he is not storing a hazardous waste.

Q: Is the waste a solid waste?

A: ***The waste is a solid waste. It is a listed sludge (F006) being reclaimed and, thus, is a solid waste. If the sludge had been characteristic only, it would be a solid waste due to speculative accumulation, because the electroplater has not sent 75 percent or more of the sludge for reclamation during a calendar year.***

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Case Study - Metals-R-Us

Metals-R-Us engages in a manufacturing process that results in a baghouse dust and a wastewater treatment plant sludge. Both wastes exhibit the characteristic of toxicity for lead. The baghouse dust is stored in a covered waste pile, while the treatment plant sludge is stored in an open waste pile with perimeter curbing.

Effective January 1, 1986, Metals-R-Us entered into a contract agreement with Marvin's Metals Recovery (MMR), Inc. to provide both of these materials to MMR in return for $2/ton, with MMR paying all shipping costs. MMR operates a lead recovery process in a nearby city.

During a recent facility inspection at Metals-R-Us, records were reviewed and the following facts established:

1. During calendar year 1986, there were 10 shipments of baghouse dust to MMR, with a total weight of 165 tons.

2. There were two shipments of waste treatment plant sludge during calendar year 1986—one of 2.5 tons and another of 4.3 tons.

3. There was no baghouse dust in storage on January 1, 1986, and an estimated 190 tons of dust were generated during the year. In addition, there were an estimated 140 tons of treatment plant sludge at the start of 1986.

Upon questioning, the plant engineer explained that, although the treatment plant sludge has sufficient lead content for MMR's reclamation process, the moisture content interferes with the process. They have been holding the sludge in the waste pile in hopes that it will dry sufficiently. The two 1986 shipments were sent for pilot test purposes.

Q: Is either material a solid waste?

A: ***The baghouse dust is not a solid waste. Sludges exhibiting a characteristic of hazardous waste are not solid waste when reclaimed. No speculative accumulation has occurred because more than 75 percent of the dusts were reclaimed during the calendar year.***

The treatment plant sludge is a solid waste. It is also a sludge exhibiting the characteristic of toxicity. Because it is accumulated speculatively rather than being reclaimed, however, it does not meet the provisions of 40 CFR 261.2(c)(3).

Case Study - Electric Arc Furnace Dust

Electric arc furnace baghouse dust (K061) containing high levels of lead, among other components, is sent to a cement kiln as an ingredient for cement in place of iron ore. The K061 contains lead in concentrations several orders of magnitude higher than the levels found in the iron ore. Prior to insertion into the cement kiln, the K061 is mixed with mill scale (a nonhazardous solid waste) to make the iron content more even. The cement processor receives a fee from the K061 generators for taking the waste.

Q: Is the baghouse dust sent to the cement kiln a solid waste?

A: ***The K061 generator may argue that the material is not a solid waste because it is being used as an ingredient in an industrial process to make a product or that it is an effective substitute for a commercial product under RCRA Section 261.2 (e). Because the lead concentration is so high in the K061, however, it must be mixed with mill scale before it can be used in the process. Essentially, the K061 is not an effective substitute for iron ore. In addition, the fact that the K061 generator must pay the cement kiln operator to take the K061 is another indication that the K061 is more waste-like than commodity-like. The K061 is classified as a solid and a hazardous waste.***

4.2 HAZARDOUS WASTE

4.2.1 Statutory Definition

RCRA Section 1004(5) defines a hazardous waste as:

"A solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical or infectious characteristics may (A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness or (B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed."

4.2.2 Regulatory Definitions

A solid waste is classified as a hazardous waste if:

- The solid waste exhibits one or more of the **characteristics** of hazardous waste described in Section 261.21-24 (i.e., corrosivity, ignitability, reactivity, and toxicity) or

- The solid waste is specifically **listed** in Section 261.31 (**"F" wastes** from non-specific sources), 261.32 (**"K" wastes** from specific sources), and 261.33 (**"P" and "U" wastes,** which are discarded commercial chemical products).

F Listed Solvents

For a spent chemical to meet the listing criteria, the chemical must have been used for its solvent properties (i.e., to dissolve or mobilize other constituents). It may also meet the listing criteria where it is a spent solvent mixture, provided the listed chemicals constitute 10 percent or more of any mixture or blend prior to use. For example, a mixture of 50 gallons of solvents will meet the listing criteria if it contains more than 5 gallons of F001, F002, F004, or F005. Mixtures containing F003 are only hazardous when comprising only F003 (i.e., no other listed solvents are in the mixture) or when they also contain 10 percent or more of non-F003 listed solvents. General examples of solvent use covered by the listings are degreasers and cleaners, diluents, extractants, and reaction and synthesis media. Chemicals that are used as reactants in a chemical reaction are not considered to be F-listed wastes. (See the December 31, 1985, *Federal Register* for a more detailed discussion of spent solvent mixtures.)

P and U Listed Wastes

"P" and "U" listings cover 1) only **unused** commercial chemical products (the most common materials covered are off-specification products) and 2) only those products that are generically identified using the name of a single listed constituent (i.e., sole active ingredient). Therefore, a discarded, unused mixture containing both toluene and benzene would not meet the listing; neither solvent acts as the sole active ingredient.

Mixture Rule

In addition to these two methods of hazardous waste classification, the RCRA regulations provide other ways for materials to be included in the regulated hazardous waste universe. The

"mixture rule" at Section 261.3(a)(2)(iii) and (iv) holds that if a hazardous waste is mixed with a solid waste, the resulting mixture is a hazardous waste unless:

- It is a mixture of a solid waste and a characteristic waste and the resultant mixture no longer exhibits a characteristic of hazardous waste;

- It is a mixture of a solid waste and a listed hazardous waste that was listed solely because it exhibits a characteristic, and the mixture no longer exhibits any characteristic of hazardous waste; or

- The mixture consists of wastewater, the discharge of which is subject to either Section 402 or 307 (b) of the Clean Water Act and any of the listed wastes described in Section 261.3(a)(iv)(A)-(B).

The intent of the mixture rule is to remove the incentive to dilute hazardous wastes with solid waste or create mixtures that do not fit the listing descriptions in order to avoid regulation. In addition, by keeping solid and hazardous waste streams separate, a smaller quantity of materials will be subject to regulation and that will require treatment in a hazardous waste facility.

Derived-From Rule

The "derived-from" rule (40 CFR 261.3(c)(2)) provides that any solid waste generated from the treatment, storage, or disposal of a hazardous waste, including any sludge, spill residue, ash, emission control dust, or leachate (but not including precipitation run-off) is a hazardous waste. In other words, treatment residues from a listed waste retain that listing code. If, however, the derived-from solid waste does not exhibit a characteristic and is not derived from or does not contain a listed hazardous waste, it ceases to be a hazardous waste, according to Section 261.3(d). Therefore, treatment residues from a characteristic waste are not classified as characteristic hazardous waste if the treatment was successful in eliminating the characteristic.

Materials that are reclaimed from solid wastes and that are beneficially used are not solid wastes and, thus, are not hazardous waste, unless they are burned for energy recovery or used in a manner constituting disposal. This means, for example, that a reclaimed solvent will not be classified as a hazardous waste; the material essentially is returned to product status and no longer regulated as a solid waste.

4.2.3 Contained-In Policy

EPA interprets its regulatory definition of hazardous waste to include contaminated media, such as soil or ground water, that contain hazardous waste. These "contained-in" wastes must be managed as if they were hazardous wastes, subject to all treatment, storage, and disposal requirements under RCRA Subtitle C, until they no longer exhibit a characteristic, no longer contain a hazardous waste, or are delisted. Regions determine when the media no longer "contain" hazardous waste on a case-by-case basis. A characteristic contaminated medium is considered not to contain the characteristic hazardous waste when it ceases to exhibit the

Status of Mixture and Derived-From Rules

The derived-from and mixture rules were challenged by numerous industries in a lawsuit filed by Shell Oil Company (*Shell Oil* v. *EPA*, 950 F.2d 741 (D.C. Cir. 1991)). On December 6, 1991, the D.C. Circuit Court ruled that EPA's 1978 proposed rule did not adequately provide notice of the derived-from and mixture rules and vacated the rules, remanding them to the Agency. At the invitation of the court, EPA published an interim final rule on March 3, 1992, which simultaneously removed and reissued the two rules on an interim basis. This action was done under Section 553(b)(3)(B) of the Administrative Procedures Act. The reissued provisions included a sunset provision that provided that the mixture and derived-from rules would remain in effect only until April 28, 1993.

EPA published a proposal containing several options for revising the two rules on May 20, 1992 (the initial proposed rule on concentration-based exemption criteria for exiting the RCRA universe). The short time frame imposed by the sunset provision and the technical issues in the May 20, 1992, proposed rule caused sufficient controversy to prompt the Congress to include several provisions addressing the derived-from and mixture rule in EPA's 1992 appropriations bill. Congress nullified the sunset provision by declaring that EPA could not promulgate any revisions to the rules before October 1, 1993, and by providing that the reinstated regulations could not be terminated or withdrawn until new revisions took effect. Congress also established a deadline of October 1, 1994, for the promulgation of modifications to the mixture and derived-from rules. This deadline is enforceable through citizen suits under RCRA.

EPA published a notice on October 30, 1992, removing the sunset provision. On the same day, EPA withdrew the hazardous waste identification rule that had been proposed on May 20, 1992. Meanwhile, several hazardous waste generators challenged the March 3, 1992, action that reinstated the derived-from and mixture rules with no changes (*Mobil Oil Corp.* v. *EPA*, 35 F.3d 579 (D.C. Cir. 1994)). EPA asserted that the 1992 appropriations act made the challenge moot, because neither the EPA nor the courts were allowed to terminate or withdraw the reinstated regulations before EPA revised them. In September 1994, the D.C. Circuit Court issued an opinion matching EPA's.

In October 1994, several generators and treatment, storage, and disposal facility groups filed citizen suits to enforce the October 1, 1994, deadline for revising the mixture and derived-from rules. The U.S. District Court for the D.C. Circuit has not entered a final consent decree settling the cases as of July 1995. The consent decree will establish a deadline for the proposal and promulgation of a final rule that amends the derived-from and mixture rules. EPA still intends to do this through the Hazardous Waste Identification Rule, rather than in a separate rulemaking.

characteristic.[1] It is important to note that the contained-in policy is not based on the mixture or derived-from rules.[2] The contained-in principle has been codified for contaminated debris at Section 261.3(f)(2).[3]

4.3 JURISDICTIONAL POINTS OF REFERENCE

4.3.1 When a Material Becomes a Hazardous Waste

A solid waste is classified as a hazardous waste when:

- It first meets the listing description
- A listed hazardous waste is first added to a solid waste
- A waste exhibits any hazardous waste characteristic.

1. See memorandum from Sylvia Lowrance to Jeff Zelikson dated January 24, 1989, entitled Status of Contaminated Groundwater and Limitations on Disposal and Reuse.

2. See *Chemical Waste Management* v. *EPA*, 869 F2d. 1526 (D.C. Cir. 1989), which upheld the contained-in principle as a valid EPA interpretation of its regulations and indicated clearly that the principle is not based on the mixture or derived-from rules.

3. See the preamble discussion in the August 8, 1992, *Federal Register* (57 *FR* 37225).

A hazardous waste generated in a product or raw material storage tank, transportation vehicle, pipeline, or a manufacturing process unit or an associated non-water-treatment manufacturing unit is not subject to regulation as a hazardous waste **until it exits the unit in which it was generated.** This provision does not apply if the unit is a surface impoundment or if the waste remains in the unit more than 90 days after the unit ceases to be operated for manufacturing or for storage of transportation of product or raw materials, per Section 261.4(c).

4.3.2 When a Material Ceases To Be a Hazardous Waste

A material ceases to be classified as a hazardous waste when it no longer exhibits any characteristic of hazardous waste, and, in the case of a listed hazardous waste, a waste that contains a listed hazardous waste, or a waste that is derived-from a listed hazardous, it also has been delisted according to the procedures in Sections 260.20 and 260.22. A waste that contains a listed waste ceases to be hazardous once it no longer contains that waste.

4.3.3 Solid Wastes That Are Excluded from the Definition of Hazardous Waste

Solid wastes that are not classified as hazardous wastes per 40 CFR 261.4 include, but are not limited to:

- Household wastes
- Solid wastes generated by growing crops or raising animals that are returned to the soil as fertilizers
- Certain wastes that fail the toxicity characteristic (TC), including discarded wood and wood products that would otherwise be hazardous only due to failing the TC for arsenic, and petroleum-contaminated media and debris
- Specific wastes from the extraction, beneficiation, and processing of ores and minerals
- Cement kiln dust
- Fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste, all of which are generated primarily from the combustion of coal or other fossil fuels
- Certain hazardous waste samples being sent to laboratories for hazardous waste determinations or treatability studies
- Other industry-specific wastes.

The regulatory status of ash from municipal waste combustors (MWC) has long been a controversial point. A memorandum from the EPA Administrator to all regional administrators, dated September 18, 1992, and entitled Exemption for Municipal Combustion Ash From Hazardous Waste Regulation Under RCRA Section 3001(i), explained the rationale behind EPA's policy on municipal waste combustor ash. Section 3001(i) provides that "...a resource recovery facility recovering energy from the mass burning of municipal solid waste shall not be deemed to be treating, storing, disposing of, or otherwise managing hazardous waste...." EPA held that the title of Section 3001(i), Clarification of Household Waste Exclusion, showed congressional

intent to build on the regulatory framework it had earlier established (i.e., household wastes are excluded from regulation under Subtitle C). EPA asserted in the May 19, 1980, *Federal Register* notice that the household waste exclusion carried through to the ash, because Congress had intended to exclude **waste streams** generated by consumers at the household level. EPA also pointed out in the February 18, 1992, policy that Section 3001(i) provides that a resource recovery facility will not be deemed to be **disposing of** hazardous waste. Because, ash is generally the only waste produced by MWCs for disposal, EPA concluded that Congress arguably intended that MWC ash not be regarded as a hazardous waste. This opinion was not shared by various litigants and courts.

EPA's policy of exempting MWC ash from Subtitle C was nullified by the Supreme Court on May 2, 1994. In response, EPA issued a draft sampling guidance document on June 23, 1994, and published a notice of statutory interpretation on February 3, 1995. EPA interprets the statute at Section 3001(i) to mean that the ash is subject to Subtitle C when it exits the combustion building (i.e., "resource recovery facility"), following the combustion and air pollution control processes. Delaying the sampling of the ash stream until **after** it has exited the combustion building will allow facility operators to mix bottom ash and fly ash (the more hazardous component) in the combustion building, which could result in fewer ash wastestreams being classified as characteristically hazardous. EPA noted in the February 3, 1995 interpretation notice that if the fly ash and the bottom ash are generated as two entirely separate wastestreams outside the combustion building, the two streams must be evaluated separately.

4.4 CONDITIONALLY EXEMPT SMALL QUANTITY GENERATORS (§ 261.5)

Generators of no more than 100 kilograms of hazardous waste a month are conditionally exempt from Subtitle C for that month. However, generators that accumulate more than 1,000 kilograms of waste at any time become subject to all applicable Subtitle C requirements for **all** of the accumulated waste. A conditionally exempt small quantity generator (CESQG) may treat or dispose of the waste onsite or must ensure delivery to certain types of facilities, including facilities authorized to operate under Subtitle C, facilities authorized by a state to accept municipal or industrial waste, a recycling facility, or a universal waste handler or destination facility subject to Part 273. CESQGs who mix their waste with used oil destined to be burned for energy recovery are subject to regulation under the Part 279 regulations for management of used oil.

The following case studies focus on what materials count toward a generator's monthly hazardous waste quantity. The amount of waste generated monthly determines the relevant category of generator and, hence, the applicable regulations.

Case Study - A Small Manufacturing Plant

A small manufacturing plant produces 1,000 gallons per month of spent acid and 5 gallons per month of spent F001 listed solvent. The pH of the spent acid is 2, and the acid does not exhibit any characteristics of hazardous waste other than corrosivity. The acid is piped directly from a production unit to a tank in which the acid is neutralized to a pH of 7. The waste is then disposed of. The spent solvent is stored onsite and picked up by a solvent recycler every 3 months.

Q: Will this generator be regulated as a full generator, a small quantity generator, or a conditionally exempt small quantity generator?

A: ***None of the acid is counted because it is never subject to substantive regulation. The production unit (§ 261.4(c)), the pipeline, and the neutralization unit (§ 264.1(g)(6)) are all exempt units, the waste is never stored or accumulated, and after neutralization the waste is no longer hazardous. The solvent is counted because it is accumulated onsite and would be subject to § 262.34, which is considered substantive regulation. Thus, this generator generates 5 gallons of waste a month that are counted and stores onsite a maximum of 15 gallons. This is equivalent to approximately 18 kg/month of waste generated, or a total of 54 kg stored or accumulated. The generator is a conditionally exempt small quantity generator.***

Case Study - Dry Cleaner

A dry cleaner uses perchloroethylene in its cleaning process. The dry cleaning system is constructed so that the used or spent cleaning solvent flows directly from the cleaning unit to a continuous distillation unit and the reclaimed solvent flows directly back to the cleaning unit. The spent solvent flows through two filters before entering the distillation unit. The distillation unit processes a total of 3,000 kgs per month of spent solvent (500 kg total solvent runs through the unit six times per month) and the dry cleaner adds 200 kgs per month of new solvent to the system. Once every 3 months the dry cleaner replaces the filters and throws them away. They each weigh 5 kg.

Q: What wastes must the dry cleaner count toward his generator determination?

A: ***Only the filters are counted toward the generator determination. Section 261.5(c) states that waste that is not subject to regulation or that is subject only to §§ 262.11, 262.12, 262.40(c), and 262.41 (i.e., not subject to substantive regulation) is not included in the quantity determination. The spent solvent is not subject to regulation because it is managed in a closed-loop process and, thus, is not included in the quantity determination.***

Q: Will this generator be regulated as a full generator, a small quantity generator, or a conditionally exempt small quantity generator?

A: ***The generator will be regulated as a conditionally exempt small quantity generator, in the months that the filters are replaced.***

Q: What would the answers to #1 and #2 be if the dry cleaner accumulated the spent solvent in 55-gallon drums for less than 90 days before the solvent was placed into the distillation unit?

A: ***In this case, the spent solvent would be counted because it is accumulated onsite by the generator under the provisions of § 262.34 and, thus, is subject to substantive regulation. The recycling process is no longer closed-loop.***

Case Study - Automobile Repair Shop

An automobile repair shop uses a solvent mixture for cleaning that consists of 50-percent toluene and 50-percent carbon tetrachloride. The shop generates 99.9 kg per month of spent solvent, which is stored onsite in a tank. Once a year, on January 1, a solvent recycler pumps out the tank.

Q: **Will this generator be regulated as a full generator, a small quantity generator, or a conditionally exempt small quantity generator?**

A: ***The generator will be regulated as a conditionally exempt small quantity generator from January through October because he stores less than 1,000 kg and as a small quantity generator during November and December (§ 261.5(g)(2)) because he is storing more than 1,000 kg.***

Q: **Could the generator legally have the tank pumped out every 2 years?**

A: ***The generator could not legally have his tank pumped out every 2 years unless he obtained a permit for storage of hazardous waste.***

Section 261.5(g)(2) states that if a conditionally exempt generator accumulates more than 1,000 kg of hazardous waste onsite, the waste becomes subject to the Part 262 regulations for small quantity generators. This generator reaches 1,000 kg on approximately October 31. Section 261.5(g)(2) also states that the 180-day onsite storage period begins when the wastes exceed 1,000 kg. Thus, this generator must have his wastes removed from his shop by the end of April of the following year (180 days from October 1). Section 262.34(f) indicates that if the generator accumulates waste onsite for more than the 180 days, he is an operator of a storage facility and is subject to Part 264 or 265. In order to legally store this waste past the end of April, this generator would have to have interim status or a permit for storage.

4.5 RECYCLABLE MATERIALS (§§ 261.6 and 266)

Hazardous wastes that are reclaimed to recover a usable product are called recyclable materials. Handlers of recyclable materials are subject to the requirements for generators, transporters, and storage facilities prior to the introduction of the material into the recycling unit. If a facility recycles hazardous wastes without storing them prior to recycling, the facility only is required to notify under Section 3010 and to comply with the manifest requirements for owners and operators of hazardous waste management facilities. The actual recycling unit is not regulated, except for boilers and industrial furnaces burning hazardous waste for energy recovery. The residues from the exempt unit may be classified as hazardous, however, if they exhibit characteristics or were derived-from listed wastes.

Certain hazardous wastes recycled in certain ways are regulated under special provisions in Part 266 and the extent of regulation varies for each material. These wastes are:

- Recyclable materials used in a manner constituting disposal (waste-derived products) essentially must meet the LDR treatment standards, including fertilizers produced for the general public use that contain recyclable materials. Products in which the recyclable materials have undergone a chemical reaction in the course of producing the products so as to become inseparable by physical means are not subject to regulation if the products meet applicable LDR standards.

- Recyclable materials from which precious metals are reclaimed.

- Spent lead-acid batteries that are being reclaimed.

- Hazardous wastes burned in boilers and industrial furnaces for energy recovery.

A special section of the RCRA regulations, Part 279, contains provisions relating to the management of used oils. Part 279 includes regulations for generators, used oil collection and aggregation points, transporters and transfer facilities, used oil processors and re-refiners, used oil burners, and used oil fuel marketers.

In addition, under Section 261.6, certain recyclable materials are not subject to regulation under Subtitle C. These include industrial ethyl alcohol that is being reclaimed, used batteries returned to the manufacturer, scrap metal, and several other specific fuels produced from the refining of oil-bearing hazardous wastes along with normal process streams at petroleum refining facilities.

4.6 RESIDUES OF HAZARDOUS WASTE IN EMPTY CONTAINERS (§ 261.7)

Under Section 261.7, any hazardous waste remaining in either an "empty" container or an inner liner removed from an empty container is not subject to regulation as a hazardous waste. To meet the definition of "empty," all wastes must have been removed that can be removed using the practices commonly employed to remove materials from that type of container **and** no more than 1 inch of residue remains on the bottom **or** no more than 3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to 110 gallons in size (or no more than .3 percent by weight if more than 110 gallons).

A container that has held an acute hazardous waste is "empty" if it has been triple rinsed using a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate, and the container has been cleaned by another method that has been shown in the scientific literature or by a test conducted by the generator to achieve equivalent removal or, in the case of a container, the inner liner that prevented contact of the commercial chemical product or intermediate with the containers has been removed.

Case Study - National Barrels, Inc.

National Barrels, Inc. (NBI), reconditions drums and resells them. NBI claims that it is not a hazardous waste facility, but an EPA inspector determined that NBI handled hazardous waste. Under which of the following scenarios does NBI handle hazardous waste?

Q: Company A sends NBI empty drums that held chemical products.

A: ***There is not enough information to determine whether the residues in the drum are hazardous wastes because we do not know what chemical products were in the drums, how the drums were emptied, or if they were cleaned prior to being sent to NBI.***

Q: Company B sends NBI empty drums that held vanadium pentoxide, acetone, methanol, lead, or nickel cyanide. NBI triple rinses each drum as part of the reconditioning process.

A: ***Under 40 CFR 261.33(c), residues in drums that held commercial chemical products listed in § 261.33(e) are hazardous wastes unless the drums are triple rinsed or decontaminated by another method that has been shown to achieve equivalent removal. Both vanadium pentoxide and nickel cyanide are listed in § 261.33(e), and the drums have not been cleaned prior to arrival at NBI. Therefore, the residues in the drums are hazardous wastes. (See Compendium Document 9441.1985(15).)***

Q: Company C uses product acrylonitrile in its manufacturing process. Company C empties and triple rinses the drums that contained product acrylonitrile prior to sending them to NBI.

A: ***Because acrylonitrile is listed in § 261.33(f), rather than in § 261.33(e), Company C is not obligated to triple rinse the drums in order to demonstrate they are empty, unless triple rinsing is the commonly employed practice for emptying drums containing acrylonitrile (see § 261.7(b)). The containers were rinsed prior to being sent to NBI and, therefore, are empty. The containers are not considered hazardous wastes.***

Q: Company D uses product benzene in its paint manufacturing process. The benzene is pumped from 55-gallon drums into the paint batch tanks. The drums are then sent to NBI. According to NBI, the drums have an inch of benzene residue in them, so they are empty under 40 CFR 261.7(b)(1).

A: ***Under 40 CFR 261.7(b)(1), a container is empty if all wastes are removed that can be removed using common practices. If additional benzene can be removed by Company D by pouring or pumping it out of the drums, then the drums are not empty, and NBI is handling a hazardous waste. See Compendium Document 9441.1984(34).***

4.7 UNIVERSAL WASTES (40 CFR Part 273)

Part 273 provides special, reduced management standards for certain universally generated wastes, including hazardous waste batteries, pesticides, and mercury-containing thermostats.[4] These materials often are generated in small quantities by a wide range of residential, commercial, and industrial facilities, making their collection and recycling difficult. These rules are intended to encourage the recycling and recovery of the recyclable components within these

4. Promulgated May 11, 1995; 60 *FR* 25492.

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wastes, primarily by making the accumulation of these materials less burdensome than for other hazardous wastes.

Currently, the rules cover all types of hazardous batteries; generators and handlers of spent lead acid batteries may elect to continue regulation under Part 266, Subpart G if preferred. The pesticides covered by the rule include unused recalled pesticides and stocks of other unused pesticide products that are collected and managed as part of a waste pesticide collection program. To be included in the rule, the pesticide must be classified as a discarded hazardous waste. FIFRA regulations still apply to those pesticides that do not meet the applicability provisions of the universal waste rule.

The management standards for universal wastes are specified for small quantity handlers of universal waste (those generators or consolidation points that accumulate less than 5,000 kilograms total) and for large quantity handlers of universal waste (those generators or consolidation points that accumulate more than 5,000 kilograms total). Universal waste handlers accumulate universal wastes, but do not treat, recycle, or dispose of the waste. The standards for small quantity handlers of universal waste include common sense containment requirements, labeling/marking requirements, accumulation time limits, employee training, response to release provisions, and instructions for offsite shipments and exports. Manifesting is not required when the shipment is going to another universal waste handler, a destination facility for universal wastes, or a foreign destination. The management standards for large quantity handlers of universal waste are similar, except that notification to EPA is required, the personnel training requirements are slightly more rigorous, and the handlers are required to keep records of their shipments of universal wastes.

Transporters of universal waste are required to follow Department of Transportation (DOT) requirements and are prohibited from transporting the waste to a place other than another universal waste handler, a destination facility, or a foreign destination. A destination facility is a facility that treats, disposes of, or recycles a particular category of universal waste. These facilities are subject to all of the provisions for treatment, storage, and disposal facilities.

Case Study - Company A

Company A generates waste methanol in part of its pharmaceutical manufacturing operations. The facility then reclaims the methanol onsite to a minimum of 99.5-percent purity. The reclaimed methanol is then sent to Company B, which uses the methanol in various manufacturing processes. Before use, however, Company B often further reclaims the methanol for a number of reasons (e.g., there is too much color for direct use).

Q: What is the status of the methanol sent to Company B?

A: ***The methanal was restored to 99.5-percent purity; if this is an acceptable industry standard (i.e., if virgin methanol is sold at this purity), then the methanol is considered a reclaimed product and is no longer classified as a solid waste. The case may be better supported if there are other customers of the methanal who do not need to further reclaim the methanol before it can be used.***

Case Study - Ewing Oil Company

Ewing Oil Company is in the business of exploration, development, and production of crude oil. Solvents such as methylene chloride are used to clean well drilling equipment. JR claims that the spent solvent is exempt from the hazardous waste regulations under 40 CFR 261.4(b)(5) because it is a waste associated with the exploration, development, or production of crude oil.

Q: Do you agree?

A: ***As usual, JR is trying to avoid the law. The exemption covers wastes* uniquely *associated with the exploration, development, and production of crude oil, natural gas, or geothermal energy. Solvents are not uniquely associated with these industries and, therefore, are not eligible for the exclusion. See Compendium Documents 9441.1984(33) and 9441.1987(04).***

Case Study - Columbus Chemicals, Inc.

Columbus Chemicals, Inc., produces aniline from phenol and ammonia. Several times during each production shift distillation column bottoms are tested at the in-house laboratory to determine whether they have the properties required for recycle back into the process. Spent and excess sample materials are discarded via the laboratory sinks.

Several organic waste streams at the plant are treated at an activated sludge treatment facility. The effluent from the treatment facility is disposed of via deep well injection. The waste streams entering the treatment plant and their annual flows are as follows:

- Sanitary wastewaters—2,000,000 gal
- Oxidizer water from the production unit (nonhazardous)—15,000,000 gal
- Rinsewater from emergency showers and equipment washdown (assumed nonhazardous)—500,000 gal
- Laboratory wastewater—150,000 gal

Q: Is the mixed wastewater a hazardous waste?

A: ***Yes, the laboratory wastewater is a hazardous waste. It is a mixture of a listed hazardous waste (K083, a toxic waste) and solid waste (the wastewater).***

This scenario meets all the requirements for exclusion of the waste stream under the mixture rule provisions of § 261.3(a)(2)(iv)(E), except for one. The wastewater effluent is not subject to regulation under Section 402 or 307(b) of the Clean Water Act. (The clue leading to that conclusion is the fact that the effluent is disposed of via deep well injection.)

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Case Study - Westar Refining

Westar Refining generates a process wastewater that flows to an API separator. At the API separator, the oil layer at the surface is skimmed off, sludges settle out and are pumped off the bottom of the separator unit, and the wastewater is discharged to a surface impoundment prior to discharge through a National Pollutant Discharge Elimination System (NPDES) outfall into the Hudson River. The oil is stored in a holding tank prior to land treatment. The sludges are placed in a settling pond, where further sedimentation occurs prior to disposal at the Foreversafe Landfill, a permitted Subtitle C facility.

Q: Are any of these wastes (the oil, the sludge, or the wastewater) solid wastes?

A: ***All of the wastes are solid wastes. The oil is discarded by being stored prior to placement on the land. The sludge is treated prior to disposal in a landfill. The wastewater is not excluded from being considered a solid waste (§ 261.4(a)) until it passes through the NPDES discharge point.***

Q: Are any of these wastes hazardous wastes? If yes, what EPA identification number should be assigned to them?

A: ***The oil is not a hazardous waste unless it exhibits a characteristic of hazardous waste. The sludge is a listed waste, K051. The wastewater is not a hazard waste unless it exhibits a characteristic.***

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Case Study - Gro-Green Lawn Mower Company, Speedy Dry Cleaners, Rite-Well Ink, Inc.

For each of the following situations, determine whether the waste is a solid waste and a hazardous waste.

Q: **The Gro-green Lawn Mower Company uses a solvent-based paint on its lawn mowers. Painting is done in a water-wall paint spray booth and generates a waste. The separated solvent/paint sludge from this waste stream is placed in drums and sent to the D-Zolve Treatment and Disposal plant, which has a RCRA permit. The sludge contains solvent mixtures containing more than 10 percent of a listed solvent (e.g., methylene chloride).**

A: ***The sludge is a solid waste because it is being discarded by being treated prior to disposal. The sludge may not be a hazardous waste. If the sludge is from used paint containing solvent, it is not a spent solvent waste regardless of the percentage of the solvent in the sludge. The listing for spent solvents in F001-F005 is for solvents used for their solvent properties, not for solvents that happen to be components of chemical formulations. On the other hand, if a listed solvent was used to clean the spray booth, then all of the waste generated (i.e., used paint drippings, solvent) from the booth is a listed "F" waste under the mixture rule. Note that under the revised definitions of spent solvents, solvent mixtures containing 10 percent or more of listed solvents F001, F002, F004, or F005 prior to use are hazardous wastes when spent. See the December 31, 1985,*** **Federal Register** ***and Compendium Document, May 2, 1986. However, the waste must always be checked to determine whether it meets any of the hazardous waste characteristics.***

Q: **Gro-green also generates spent 1,1,1-trichloroethane from parts cleaning operations that is also sent to D-Zolve for disposal.**

A: ***The spent solvent is both a solid waste and a hazardous waste (F002). It is a solid waste because it is being discarded by being disposed of. It is a listed hazardous waste because the spent solvent meets the listing for F002.***

Q: **Speedy Dry Cleaners uses tetrachloroethylene (perc) in its dry cleaning processes. Speedy filters spent tetrachloroethylene using cartridge filters and recovers the solvent. The filter cartridges are disposed of offsite.**

A: ***EPA considers the spent filter cartridges to be solid wastes because they are disposed of and hazardous wastes because perc is an F002 waste and the filters are derived from the treatment of F002 waste. Solvent listings include the sludge or residue from the recovery of solvents, and filter cartridges are considered to be residue. See Compendium Document 9444.1987(18). It is also important to test the solvents under the TCLP to determine whether they meet the D039 characteristic.***

Q: **Rite-well Ink, Inc., formulates printing inks. Filter cartridges are used to remove suspended solids and residues from the ink and the filters are sent to an offsite disposal facility. The residues on the filter cartridges contain more than 10 percent toluene by weight. Toluene is used as a constituent in the ink formulation.**

A: ***The filter cartridges are solid wastes. It is not clear whether they are hazardous wastes. They are not a listed waste. Because toluene was used as an ingredient, rather than as a solvent, the waste does not meet the definition of waste F005. The waste also is not a commercial chemical product (U220) because the toluene was used in an industrial process. The waste also does not meet the description of waste K086, ink formulation waste. The waste might be ignitable or TC and, therefore, a characteristic waste, but that information is not provided.***

Case Study - PROCHEMCO

PROCHEMCO generates a vent gas stream from its organic production process. The vent gas stream contains the following components:

- Methyl ethyl ketone—20% (by volume)
- Methanol—20%
- Methyl ether—20%
- Nitrogen—40%

The temperature of this gas stream is 240F°. This stream is burned in a fume incinerator.

Q: Is this gas stream considered a solid waste?

A: ***Gas streams are not covered by the definition of solid waste because they are not "contained" (see RCRA § 1004(27)). Also, EPA has determined that the burning of gaseous wastes in fume incinerators is covered by the Clean Air Act rather than the Resource Conservation and Recovery Act. If the gas stream were condensed to a liquid, that liquid might be a hazardous waste due to the characteristics of ignitability or toxicity. Furthermore, in a February 10, 1984, FR notice, (49 FR 5314), EPA stated that "gaseous emissions which are condensable to liquids at STP can be subject to regulation under RCRA.***

Q: Is it a hazardous waste? If yes, what EPA identification number should be assigned to it?

A: ***Because the waste stream is not a solid waste, it cannot be a hazardous waste.***

Appendix A

Solid and Hazardous Waste Exercises

Solid Waste

Case Study - Beacon Chemical Company

Beacon Chemical Company, located in Staten Island, is a formulator of specialty chemicals. The wastewater from reaction tank cleaning contains minimal amounts of reaction residues. Some of the chemicals used in the reaction are listed as commercial chemical products in 40 CFR 261.33. The wastewater is discharged to an offsite publicly owned treatment works (POTW) via the city sewer line.

Q: Is the wastewater a solid waste?

Case Study - Kamakaze Kemical Company

Kamakaze Kemical Company purchases spent pickle liquor from ABC Steel. Kamakaze uses the spent pickle liquor as a raw material in its chemical manufacturing process where it serves as a reactant. The manufacturing process is proprietary. The spent pickle liquor is stored in tanks prior to use.

Q: Is the spent pickle liquor a solid waste?

Case Study - XYZ Corporation

The XYZ Corporation produces metal parts using a chrome electroplating process. No cyanides are used during production. The process generates a wastewater treatment sludge that has a very high chrome content that would be hazardous for chrome under the TC (D007). The sludge is pumped into 55-gallon containers and placed in a container storage area onsite. During the last 2 years, about 500 gallons of the sludge have been added to the container storage area every 6 months. The owner of XYZ is planning to ship the sludge to a recycler that operates a chrome recovery process. However, no shipments of sludge have been made to the recycler within the last 2 years. XYZ asserts that the sludge will be shipped to the recycler in the next year. The owner also claims that the sludge is not a solid waste under the RCRA regulations and, therefore, cannot be a hazardous waste. Thus, he believes that no storage permit is required for the container storage areas because he is not storing a hazardous waste.

Q: Is the waste a solid waste?

Case Study - Metals-R-Us

Metals-R-Us engages in a manufacturing process that results in a baghouse dust and a wastewater treatment plant sludge. Both wastes exhibit the characteristic of toxicity for lead. The baghouse dust is stored in a covered waste pile, while the treatment plant sludge is stored in an open waste pile with perimeter curbing.

Effective January 1, 1986, Metals-R-Us entered into a contract agreement with Marvin's Metals Recovery (MMR), Inc., to provide both of these materials to MMR in return for $2/ton, with MMR paying all shipping costs. MMR operates a lead recovery process in a nearby city.

During a recent facility inspection at Metals-R-Us, records were reviewed and the following facts established:

1. During calendar year 1986, there were 10 shipments of baghouse dust to MMR, with a total weight of 165 tons.

2. There were two shipments of waste treatment plant sludge during calendar year 1986—one of 2.5 tons and another of 4.3 tons.

3. There was no baghouse dust in storage on January 1, 1986, and an estimated 190 tons of dust were generated during the year. In addition, there were an estimated 140 tons of treatment plant sludge at the start of 1986.

Upon questioning, the plant engineer explained that, although the treatment plant sludge has sufficient lead content for MMR's reclamation process, the moisture content interferes with the process. They have been holding the sludge in the waste pile in hopes that it will dry sufficiently. The two 1986 shipments were sent for pilot test purposes.

Q: Is either material a solid waste?

Case Study - Electric Arc Furnace Dust

Electric arc furnace baghouse dust (K061) containing high levels of lead, among other components, is sent to a cement kiln as an ingredient for cement in place of iron ore. The K061 contains lead in concentrations several orders of magnitude higher than the levels found in the iron ore. Prior to insertion into the cement kiln, the K061 is mixed with mill scale (a nonhazardous solid waste) to make the iron content more even. The cement processor receives a fee from the K061 generators for taking the waste.

Q: Is the baghouse dust sent to the cement kiln a solid waste?

Hazardous Waste

Case Study - A Small Manufacturing Plant

A small manufacturing plant produces 1,000 gallons per month of spent acid and 5 gallons per month of spent F001 listed solvent. The pH of the spent acid is 2, and the acid does not exhibit any characteristics of hazardous waste other than corrosivity. The acid is piped directly from a production unit to a tank in which the acid is neutralized to a pH of 7. The waste is then disposed of. The spent solvent is stored onsite and picked up by a solvent recycler every 3 months.

Q: Will this generator be regulated as a full generator, a small quantity generator, or a conditionally exempt small quantity generator?

Case Study - Dry Cleaner

A dry cleaner uses perchloroethylene in its cleaning process. The dry cleaning system is constructed so that the used or spent cleaning solvent flows directly from the cleaning unit to a continuous distillation unit and the reclaimed solvent flows directly back to the cleaning unit. The spent solvent flows through two filters before entering the distillation unit. The distillation unit processes a total of 3,000 kgs per month of spent solvent (500 kg total solvent runs through the unit six times per month) and the dry cleaner adds 200 kgs per month of new solvent to the system. Once every 3 months the dry cleaner replaces the filters and throws them away. They each weigh 5 kg.

Q: What wastes must the dry cleaner count toward his generator determination?

Q: Will this generator be regulated as a full generator, a small quantity generator, or a conditionally exempt small quantity generator?

Q: What would the answers to #1 and #2 be if the dry cleaner accumulated the spent solvent in 55-gallon drums for less than 90 days before the solvent was placed into the distillation unit?

Case Study - Automobile Repair Shop

An automobile repair shop uses a solvent mixture for cleaning that consists of 50-percent toluene and 50-percent carbon tetrachloride. The shop generates 99.9 kg per month of spent solvent, which is stored onsite in a tank. Once a year, on January 1, a solvent recycler pumps out the tank.

Q: Will this generator be regulated as a full generator, a small quantity generator, or a conditionally exempt small quantity generator?

Q: Could the generator legally have the tank pumped out every 2 years?

Recyclable Materials

Case Study - National Barrels, Inc.

National Barrels, Inc. (NBI), reconditions drums and resells them. NBI claims that it is not a hazardous waste facility, but an EPA inspector determined that NBI handled hazardous waste. Under which of the following scenarios does NBI handle hazardous waste?

Q: Company A sends NBI empty drums that held chemical products.

Q: Company B sends NBI empty drums that held vanadium pentoxide, acetone, methanol, lead, or nickel cyanide. NBI triple rinses each drum as part of the reconditioning process.

Q: Company C uses product acrylonitrile in its manufacturing process. Company C empties and triple rinses the drums that contained product acrylonitrile prior to sending them to NBI.

Q: Company D uses product benzene in its paint manufacturing process. The benzene is pumped from 55-gallon drums into the paint batch tanks. The drums are then sent to NBI. According to NBI, the drums have an inch of benzene residue in them, so they are empty under 40 CFR 261.7(b)(1).

Universal Wastes

Case Study - Company A

Company A generates waste methanol in part of its pharmaceutical manufacturing operations. The facility then reclaims the methanol onsite to a minimum of 99.5-percent purity. The reclaimed methanol is then sent to Company B, which uses the methanol in various manufacturing processes. Before use, however, Company B often further reclaims the methanol for a number of reasons (e.g., there is too much color for direct use).

Q: What is the status of the methanol sent to Company B?

Case Study - Ewing Oil Company

Ewing Oil Company is in the business of exploration, development, and production of crude oil. Solvents such as methylene chloride are used to clean well drilling equipment. JR claims that the spent solvent is exempt from the hazardous waste regulations under 40 CFR 261.4(b)(5) because it is a waste associated with the exploration, development, or production of crude oil.

Q: Do you agree?

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Columbus Chemicals, Inc., produces aniline from phenol and ammonia. Several times during each production shift distillation column bottoms are tested at the in-house laboratory to determine whether they have the properties required for recycle back into the process. Spent and excess sample materials are discarded via the laboratory sinks.

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- Laboratory wastewater—150,000 gal

Q: Is the mixed wastewater a hazardous waste?

Case Study - Westar Refining

Westar Refining generates a process wastewater that flows to an API separator. At the API separator, the oil layer at the surface is skimmed off, sludges settle out and are pumped off the bottom of the separator unit, and the wastewater is discharged to a surface impoundment prior to discharge through a National Pollutant Discharge Elimination System (NPDES) outfall into the Hudson River. The oil is stored in a holding tank prior to land treatment. The sludges are placed in a settling pond, where further sedimentation occurs prior to disposal at the Foreversafe Landfill, a permitted Subtitle C facility.

Q: Are any of these wastes (the oil, the sludge, or the wastewater) solid wastes?

Q: Are any of these wastes hazardous wastes? If yes, what EPA identification number should be assigned to them?

Case Study - Gro-Green Lawn Mower Company, Speedy Dry Cleaners, Rite-Well Ink, Inc.

For each of the following situations, determine whether the waste is a solid waste and a hazardous waste.

Q: The Gro-green Lawn Mower Company uses a solvent-based paint to paint its lawn mowers. Painting is done in a water-wall paint spray booth and generates a waste. The separated solvent/paint sludge from this waste stream is placed in drums and sent to the D-Zolve Treatment and Disposal plant, which has a RCRA permit. The sludge contains solvent mixtures containing more than 10 percent of a listed solvent (e.g., methylene chloride).

Q: Gro-green also generates spent 1,1,1-trichloroethane from parts cleaning operations that is also sent to D-Zolve for disposal.

Q: Speedy Dry Cleaners uses tetrachloroethylene (perc) in its dry cleaning processes. Speedy filters spent tetrachloroethylene using cartridge filters and recovers the solvent. The filter cartridges are disposed of offsite.

Q: Rite-well Ink, Inc., formulates printing inks. Filter cartridges are used to remove suspended solids and residues from the ink and the filters are sent to an offsite disposal facility. The residues on the filter cartridges contain more than 10 percent toluene by weight. Toluene is used as a constituent in the ink formulation.

RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

5. NEW AND UPCOMING DEVELOPMENTS

Module 5 Objectives

- **Become familiar with recent and upcoming developments in the RCRA program**
- **Discuss:**
  - **Status of activity**
  - **Content of rule or policy**
  - **Enforcement implications of rule or policy**

Notes:

Subpart CC

- **Final Rule promulgated December 6, 1994 (59 FR 62896); effective December 5, 1995**
- **Generators and TSDFs using tanks, surface impoundments, containers, and miscellaneous units to manage volatile organic-containing hazardous waste must install volatile organic emissions controls**
- **Specific exemptions**

Notes:

Subpart CC (Continued)

- **Rule establishes inspection schedules; reporting required for interim status facilities**
- **All facilities initially will have interim status**
- **Permit modifications will occur at the time of permit renewal**

Notes:

Land Disposal Restrictions

- *Chemical Waste Management, Inc.* v. *EPA*
  - Treatment standards may exceed characteristic
  - Standards must result in destruction and removal of hazardous constituents
  - Restrictions on the management of de-characterized wastes

Notes:

LDR: EPA Response to Remand

- **Interim final rule: deactivation treatment standard for ignitable and corrosive wastes (5/24/93; 58 *FR* 29860)**
  - **Imposes specific restrictions on the land disposal of decharacterized D001 and D002**

Notes:

LDR: EPA Response to Remand (Continued)

- **Phase II LDR rule (9/19/94; 59 *FR* 47982)**
  - **New treatment standards**
  - **Universal treatment standards**

Notes:

LDR: EPA Response to Remand (Continued)

- **EPA proposed the Phase III LDR rule (3/2/95; 60 *FR* 11702)**
  - **Decharacterized wastewaters**
- **Implications of LDR rulemakings**

Notes:

Hazardous Waste Identification Rule

- **To be proposed early fall 1995**
- **Self-implementing system establishing risk-based exit levels from hazardous waste classification for process wastes**
- **Applies to listed wastes, or wastes that have been mixed with, derived from, or contain listed hazardous wastes**

Notes:

HWIR--Procedures for Claimant

- **Must prepare and follow sampling and analysis plan**
- **May claim constituent(s) not present in waste and, therefore, testing not necessary**
- **Must provide notification and certification that waste meets exemption levels**
- **Where exit levels capped by detection limits, waste must meet LDR standards**
- **Technology-based LDR treatment standards capped by the risk-based exit levels**

Notes:

Revised Combustion Standards

- **By 9/20/95, settlement agreement requires EPA to propose new standards for cement kilns, incinerators, and lightweight aggregate kilns**
- **Key component Combustion Strategy**
- **Issued under RCRA and CAA**
- **Impose MACT standards, with national risk check, for dioxins and furans, heavy metals, PM, HCl, Cl_2, CO, and total hydrocarbons**

Notes:

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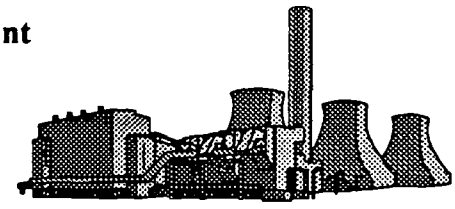
Revised Combustion Standards (Continued)

- **Implementation plan provides broad flexibility to states**
- **National risk check will allow permits to be issued to RCRA-regulated units**
- **RCRA/CAA rule; states to decide how permit-writing and compliance/enforcement resources should be allocated**
- **Coordination important**



Notes:

Revisions in the Definition of Solid Waste

- **Proposed rule revising recycling regulations due out in late 1996**
- **States, through ASTSWMO, actively working with EPA in developing strategy for changing regulations**
- **Report issued in September 1994, entitled *Re-engineering RCRA for Recycling***

Notes:

Key Points of EPA's Strategy

- **Clarify jurisdiction of RCRA with regard to recycling by distinguishing between manufacturing-like processes and waste management-like processes**
- **Refine management standards to encourage recycling**
- **Evaluate implementation needs for EPA and states**
- **Evaluate mineral processing industry and petroleum refining industry separately**

Notes:

Supplemental Environmental Projects (SEPS)

- **OECA issued new policy issued on May 3, 1995**
- **Definition**
  - **Environmentally beneficial project**
  - **In settlement of an enforcement action**
  - **Not otherwise legally required to perform**

Notes:

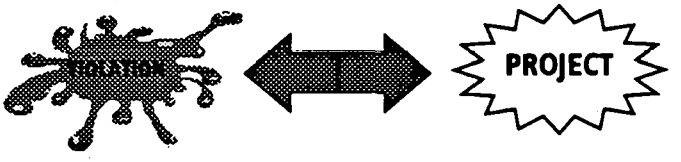
SEPs (Continued)

- **Goal of Policy**
  - **Obtain environmental and public health protection and improvements not otherwise available without the incentives of the policy**
  - **Encourage environmental justice and pollution prevention**

Notes:

Guidelines for SEPS

- **Must have adequate nexus (relationship between violation and project)**
- **Project must advance objectives of the environmental statute that is basis of the enforcement action**
- **EPA cannot manage or control funds set aside for completion of SEP**
- **Third party performance not allowed**



Notes:

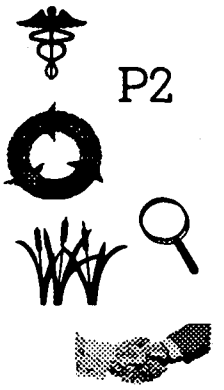
Guidelines for SEPS (Continued)

- **SEP cannot be something EPA is required to do; SEP cannot provide funds to perform an activity already funded by Congress**
- **Type and scope of project must be specified in the settlement agreement**

Notes:

CATEGORIES OF SEPs

- **Public health**
- **Pollution prevention**
- **Pollution reduction**
- **Restoration and protection**
- **Assessments and audits**
- **Compliance promotion**
- **Emergency planning and preparedness**



EPCRA

Notes:

Penalty Mitigation Procedures

- **Determine gravity and economic components of penalty using RCPP**
- **Recover 100% of economic benefit plus 10%, or 25% of gravity, whichever is greater**
- **Use PROJECT to determine net-present, after-tax cost of SEP project, including calculation of benefit of SEP project to respondent**

Notes:

Penalty Mitigation Procedures (Continued)

- **Evaluate project against factors to determine mitigation percentage**
  - **Benefits to public or environment**
  - **Innovativeness**
  - **Environmental justice**
  - **Multimedia impacts**
  - **Pollution prevention approach**

Notes:

Penalty Mitigation Procedures (Continued)

- **Allow up to 80% of SEP costs in mitigation of gravity component**
- **May allow up to 100% of SEP costs in mitigation for small businesses, government agencies, and non-profits**
- **May allow up to 100% of SEP costs in mitigation if pollution prevention project**
- **Settlement must include stipulated penalties for noncompliance**

Notes:

Audit Policy

- **Published on April 3, 1995; became effective on April 18, 1995**
- **Agency-wide policy**
- **Provides incentives for companies that voluntarily evaluate compliance and disclose violations**

Notes:

Provisions of Audit Policy

- **EPA will eliminate gravity component of the penalty if seven conditions met**
- **EPA will eliminate 75% of gravity if most, but not all, seven conditions met**
- **EPA will not recommend to DOJ that criminal charges be brought against companies that voluntarily audit and disclose, as long as there is no pattern of noncompliance**

Notes:

Seven Conditions of Policy

- **Voluntary self-policing**
- **Voluntary disclosure**
- **Prompt correction**
- **Remediation of imminent and substantial endangerment**
- **Remediation of harm and prevention of repeat violations**
- **No lack of appropriate preventive measures**
- **Cooperation**

Notes:

Other Audit Policy Provisions

- **EPA has discretion to collect gravity component in appropriate cases (criminal conduct, imminent or substantial endangerment).**
- **EPA will not request a voluntary environmental audit report to trigger a civil or criminal investigation.**

Notes:

Audit Policy Implications

- **EPA will examine state audit privilege and penalty immunity laws to determine whether additional federal enforcement is necessary**
- **Additional enforcement may be necessary if state policies/laws make it difficult to obtain information necessary to satisfactorily recover penalties, establish criminal liability, and provide for prompt return to compliance**

Notes:

Small Business Policy

- **OECA issued interim policy June 13, 1995; became effective that day**
- **Final policy will be issued after receipt and consideration of public comments**
- **Policy's intent is to promote environmental compliance among small businesses by providing incentives for participation in compliance assistance programs and encouraging the prompt correction of violations**

Notes:

Applicability

- **Applies to small businesses (person, corporation, partnership, or other entity that employs 100 or less on a company-wide basis)**
- **Applies to all civil judicial and administrative enforcement actions under EPA programs, except for corrective action and the Public Water System Supervision Program under Safe Drinking Water Act**
- **Settlement policy**

Notes:

Criteria for Elimination or Mitigation of Penalty

- **Good faith effort to comply as demonstrated by receiving compliance assistance**
- **First violation of a particular requirement**
- **Violation has not caused serious harm, imminent and substantial endangerment, or significant health, safety, or environmental threat**
- **No criminal activity**
- **Violation corrected within specified period**

Notes:

Mitigation Discretion

- **Eliminate the civil settlement penalty if all five criteria met**
- **Waive up to 100% of gravity if business meets all five criteria, but needs longer than 180 days for non-P2 or 360 days for P2 remedies**
- **Discretion to use media-specific policies to refrain from filing an enforcement action seeking penalties or mitigate penalty if business does not meet criteria but has made a good faith effort to comply**

Notes:

Other Factors

- **Violations detected through traditional enforcement means remain fully enforceable.**
- **Business is subject to all applicable enforcement measures if violations are not remedied within agreed upon time period.**
- **Policy does not limit EPA or states discretion to use information obtained by compliance assistance as evidence in subsequent enforcement action.**

Notes:

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RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

5. NEW AND UPCOMING DEVELOPMENTS

Background Materials

EPA

INSTRUCTOR NOTES
RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

5. NEW AND UPCOMING DEVELOPMENTS

Time: 2 hours

Objectives:

- Familiarize RCRA case development staff with recent and upcoming developments in the RCRA program, including:
  - Organic Air Emission Standards for Tanks, Surface Impoundments, and Containers (40 CFR Part 264/265, Subpart CC)
  - Land Disposal Restrictions (40 CFR Part 268)
  - Hazardous Waste Identification Rule (HWIR)
  - Upcoming Revised Combustion Standards
  - Definition of Solid Waste
  - New Supplemental Environmental Project (SEP) Policy
  - New Interim Audit Policy
  - New Small Business Policy.

Emphases:

- Status of activity.
- Summary of rule or policy.
- Enforcement implications of rule or policy.

Helpful Hints:

- This module functions more as an update, since enforcement implications are not clear in all cases. New policies have important enforcement and penalty implications.

Bibliography:

Organic Air Emission Standards for Tanks, Surface Impoundments, and Containers; Final Rule (40 CFR Part 264/265, Subpart CC) (59 *FR* 62896; 12/6/94).

LDR Rulemakings (40 CFR Part 268): Interim Final Deactivation Treatment Standards for Ignitable and Corrosive Wastes (58 *FR* 29860; 5/24/93); Phase II LDR Treatment Standards (59 *FR* 47982; 9/19/94); Phase III LDR Proposed Rule (60 *FR* 11702; 3/2/95).

Interim Revised EPA Supplemental Environmental Projects Policy, 5/3/95, EPA/OECA.

Interim Policy Statement and Request for Comment: Self-Disclosure Incentives Policy (60 *FR* 16875; 4/3/95).

Interim Policy on Compliance Assistance for Small Business, 6/13/95, EPA/OECA.

5. NEW AND UPCOMING DEVELOPMENTS

5.1 INTRODUCTION

This module provides an overview of several new and upcoming developments within the Resource Conservation and Recovery Act (RCRA) program. These developments include several new rules and policies each. The rules and policies addressed include the following:

- Organic Air Emission Standards for Tanks, Surface Impoundments, and Containers (40 CFR Part 264/265, Subpart CC)
- Land Disposal Restrictions (40 CFR Part 268)
- Hazardous Waste Identification Rule (HWIR)
- Upcoming Revised Combustion Standards
- Definition of Solid Waste
- New Supplemental Environmental Project (SEP) Policy
- New Interim Audit Policy.

For each rule or policy, the module presents a discussion of the status of the action, a summary of the major provisions of the rule or policy, and enforcement implications to the extent they are clear.

5.2 40 CFR PARTS 264/265 SUBPART CC: ORGANIC AIR EMISSION STANDARDS FOR TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS

5.2.1 Status

Final Rule promulgated December 6, 1994 (59 *FR* 62896). Effective Date: December 5, 1995 (extended on 5/19/95, 60 *FR* 26828).

5.2.2 Requirements

Generators of hazardous wastes and hazardous waste treatment, storage, and disposal facilities using tanks, surface impoundments, containers, and miscellaneous units (i.e., those units subject to 40 CFR Subpart X requirements), for the management of volatile organic-containing hazardous waste after December 6, 1995, must install volatile organic emissions controls. The new regulations do not apply to: RCRA exempt units; units holding existing wastes to which no new waste is added; satellite accumulation containers; small containers (< 0.1 m^3); closed tanks or containers; and units used for management of mixed radioactive wastes or for onsite remedial activities.

The regulations are applicable to units receiving hazardous wastes having a volatile organic concentration greater than 100 ppmw at the *point of origination*. This may be determined through sampling and analysis or knowledge. The regulations continue to apply to all downstream units receiving the hazardous waste until the organics are treated or destroyed:

- To an average volatile organic (VO) concentration of < 100 ppmw;
- To an average VO concentration at the point of treatment that is less than the exit concentration limit for the process;
- Through treatment (for multiple hazardous waste streams) where the organic reduction efficiency for the process is ≥ 95 percent and the average VO concentration is < 50 ppmw;
- Through treatment where the actual organic mass removal rate is ≥ the required mass removal rate for the process; or
- By biological treatment where the organic reduction efficiency and the organic biodegradation efficiency are ≥ 95 percent or where the actual organic mass biodegradation rate is ≥ required mass biodegradation rate for the process.

The regulations stipulate specific design criteria for the organic emissions control technologies. Inspection schedules are established, and reporting is required for interim status facilities.

5.2.3 Implications

All facilities initially will have interim status. Permit modifications will occur at the time of permit renewal. A permit document is under development by the Permits and State Programs Division. An implementation document is under development by the Office of Air Quality Planning and Standards and a compliance and enforcement checklist is under development by the Office of Enforcement and Compliance Assurance (OECA).

5.3 LAND DISPOSAL RESTRICTIONS (40 CFR Part 268)

5.3.1 Status

Court Remand of Third LDR Rulemaking

On September 25, 1992, the U.S. Court of Appeals ruling in *Chemical Waste Management, Inc. et al.* v. *EPA* (976 F. 2d 2), took several actions regarding land disposal restriction (LDR) treatment standards promulgated under the LDR Third Rulemaking. Three major provisions of the court's ruling (from 60 *FR* 11705, 3/2/95) are:

- LDR treatment standards may be set at levels more stringent than those at which wastes are identified as hazardous

- Standards must result in destruction and removal of hazardous constituents as well as their characteristic property. Therefore, dilution is permissible as a method of treatment only for those wastes with hazardous constituent concentrations that do not pose a risk to human health and the environment

- Characteristic wastes that are diluted and lose their characteristic may not be managed in centralized wastewater land disposal units (i.e., Subtitle D surface impoundments or Class I underground injection wells) unless it can be demonstrated that hazardous constituents are reduced or destroyed to the same extent as they would be under other LDR treatment standards.

EPA Rulemakings in Response to Court Remand

On May 24, 1993 (58 *FR* 29860), the U.S. Environmental Protection Agency (EPA) promulgated an interim final rule reestablishing the deactivation treatment standard for ignitable and corrosive wastes. This standard had been vacated (eliminated) by the court. The interim final rule avoided a complete ban on land disposal of these wastes pending further action by the Agency.

On September 19, 1994 (59 *FR* 47982), EPA promulgated the Phase II LDR treatment standards, which among other provisions, establishes universal treatment standards and prohibits the injection of high total organic carbon (TOC) ignitable (D001) and toxicity characteristic (TC) organic pesticide wastes (D012-D017) into underground injection wells unless treated to meet all applicable treatment standards or a no migration petition has been approved for the well.

On March 2, 1995 (60 *FR* 11702), EPA proposed the Phase III LDR rule to address the decharacterized wastewaters portion of the court's remand of the Third rulemaking.

5.3.2 Requirements

Interim Final Rule

Effective August 9, 1993, land disposal of decharacterized ignitable wastes (D001, not including high TOC ignitable) and corrosive wastes (D002) was prohibited unless the wastes are managed:

- In systems whose discharge is subject to Clean Water Act (CWA) regulation,
- In Class I deep wells regulated under the Safe Drinking Water Act, or
- By zero dischargers that engage in CWA-equivalent treatment before land disposal.

Phase II Final Rule

The rule established treatment standards for:

- Newly listed wastes from coke and coke by-products (K141-K145, K147-K148)
- Newly listed wastes from chlorotoluenes production (K149-K151)
- Newly Identified organic TC wastes (D018-D043)

In addition, Universal Treatment Standards (UTS) for wastewater and nonwastewater forms of over 200 constituents were created. The UTS provide a single concentration limit for a specific constituent. While the constituents of concern in listed wastes remain the same, all standards have been revised to match the UTS.

The rule prohibits the dilution of high TOC ignitable and TC Pesticide wastes that are to be injected into Class I Deep Wells. Generators and facilities that managed organic TC wastes in system other than those regulated under CWA, those engaged in CWA-equivalent treatment prior to land disposal, or those injecting in Class I deep injection wells must monitor or otherwise

determine the presence of underlaying hazardous constituents "reasonably expected to be present." Hazardous constituents present in decharacterized waste must be treated to meet UTS.

Finally, recycling provisions were revised. The "closed-loop" recycling provision at 40 CFR 261.2(e)(1)(iii) was broadened to exclude from the definition of solid waste residues from secondary processes that are reinserted into the process without reclamation, as was the variance provision at 40 CFR 260.30(b).

5.3.3 Implications

With promulgation of UTS, a treatment, storage, and disposal facility managing several hazardous wastes with similar constituents therein needs to achieve the universal standard for those similar constituents. (Previously, constituent concentration standards had varied from waste to waste.) Generators may continue to use knowledge of the waste to determine whether a waste meets the universal treatment standards.

The notification statement under 40 CFR 268.9(d) has been revised to allow for the possibility that decharacterized wastes may require addition treatment for underlying constituents. A new certification was added at 40 CFR 268.7(b)(5) that contains similar language. Notifications need only list those underlying constituents present in the waste as generated, prior to mixing with other wastes.

5.4 HAZARDOUS WASTE IDENTIFICATION RULE

5.4.1 Status

Proposed rule scheduled to be published late summer/early fall of 1995.

5.4.2 Summary

The HWIR will establish constituent-specific exit levels for low-risk solid wastes that are classified as hazardous because they are listed, or have been mixed with or derived from, or contain listed wastes. In essence, the rule establishes a risk-based "floor" for hazardous waste listings. The rule applies to process wastes; a separate rule is being developed to address environmental media. To establish many of the exit levels, EPA used a risk assessment approach that evaluated potential exposure pathways, both direct and indirect, from a variety of sources, such as waste piles and surface impoundments. EPA's risk assessment approach included both environmental and human receptors. Some of the exit levels are based on an alternative risk analysis. In some cases, analytical detection limits cap the risk-based levels. Wastes for which the exit levels are limited by analytical detection limits must meet additional requirements to be eligible for exit.

This rule, as proposed, will be self-implementing; generators must properly notify the applicable environmental agency, meet other administrative requirements, and comply with the ongoing conditions of the exemption.

The HWIR also contains proposed changes to some of the numerical treatment standards in the LDR program. The rule proposes to cap technology-based treatment standards with the risk-based exit levels established according to the multi-pathway risk analysis.

Finally, the rule contains EPA's tentative response to a petition for rulemaking submitted by the Chemical Manufacturer's Association and EPA's tentative response to the recommendations made by the Dialogue Committee on Hazardous Waste Identification. The committee was chartered in July 1993 under the Federal Advisory Committee Act (FACA).

In order to obtain the exemption from the RCRA regulations, the claimant must prepare and follow a sampling and analysis plan that includes all of the constituents in Appendix X to the proposed rule, unless the claimant can document that a constituent(s) should not be present in the waste. There are several conditions that must be met in order to assert that a constituent(s) is not present in a waste. The plan must describe the sampling procedures and locations sufficient to characterize the entire waste stream for which the exemption is claimed. The plan also must identify the analytical methods to be used.

In instances where the exit level is capped by analytical detection limits, the claimant must achieve compliance with all LDR treatment standards, regardless of whether the waste is intended for land disposal, before the exemption from regulation as a hazardous waste can be obtained.

Prior to managing any waste as exempt, the claimant must send notification of the exemption claim and a certification that all requirements for the exemption claim have been met to the Director.

5.4.3 Implications

This rule will add a critical element to the RCRA hazardous program, in that it will provide a means, other than delisting, for wastes to exit the universe of regulated hazardous wastes. The rule is self-implementing, but generators making claims regarding wastes must provide documentation that the wastes meet all exemption criteria. Enforcement staff will use documentation and certifications to track compliance.

5.5 REVISED HAZARDOUS WASTE COMBUSTION STANDARDS

5.5.1 Status

Settlement agreement requires that by September 20, 1995, EPA must:

- For cement kilns, issue a proposed rule addressing particulate matter, dioxin and furans, and other standards;
- For incinerators, issue a proposed rule addressing all standards;
- For lightweight aggregate kilns (LWAKs), issue a proposed rule addressing particulate matter, dioxin and furans, and metals.

Note that the agreement also requires that by December 15, 1998, EPA initiate a rulemaking for industrial boilers that addresses particulate matter, dioxin and furans, and metals.

5.5.2 Summary

The proposed rulemaking to upgrade the emissions standards for cement kilns, LWAKs, and incinerators is a key component of the Agency's Combustion Strategy, which calls for "more rigorous controls on combustion facilities based on an assessment of available technologies and current science," including risk assessment methodologies. It is being driven by the settlement agreement noted above, which resulted from litigation of the 1991 Boilers and Industrial Furnace regulations.

The proposed rule will be issued pursuant to both RCRA and Clean Air Act (CAA) authority to avoid duplicative or inconsistent regulations of the same set of facilities. The rule will impose a national set of technology-based emission standards for incinerators, cement kilns, and LWAKs, using the maximum achievable control technology (MACT) provisions of the 1990 CAA Amendments. These standards will address dioxins and furans, heavy metals (mercury, lead, cadmium, antimony, arsenic, beryllium, and chromium), particulate matter, hydrochloric acid, chlorine gas, carbon monoxide, and total hydrocarbons. The implementation program envisioned is a coordinated program for regulating and permitting these hazardous waste units under the authority of both RCRA and the CAA in a manner that provides broad implementation flexibility to the states.

MACT-based standards impose maximum achievable control technology on existing facilities, while new facilities must meet the emissions levels achieved in practice by the "best controlled similar source." This rule will also implement the enhanced monitoring provisions of the CAA Amendments, by requiring some continuous emission monitoring (CEM), probably for particulate matter and HCl/Cl_2, and allowing the use of CEM for other compounds (e.g., metals). In addition, the Office of Solid Waste will conduct a national risk check on the proposed standards to demonstrate that such standards meet RCRA's protectiveness standards. This risk check will allow permits to be issued to RCRA-regulated units because the RCRA protectiveness standard is satisfied.

5.5.3 Implications

This rule will change the standards applicable to cement kilns, incinerators, and LWAKs, and has the potential to alter the manner in which permit limits are developed. These potential changes have implications for permitting these facilities, monitoring compliance, and developing enforcement actions. Since the proposal appears likely to incorporate to the new standards into both the air and RCRA programs, implementation may be achieved under the authority of RCRA or the CAA. This will allow the states to decide which permit writing and compliance/enforcement resources should be allocated to address each particular facility. By necessity, however, such an approach places a premium upon inter-program coordination both at the federal and state level.

5.6 DEFINITION OF SOLID WASTE

5.6.1 Status

EPA issued a report in September 1994, entitled *Re-engineering RCRA for Recycling*. The report proposes tailored management controls for different categories of hazardous waste recyclers. The agency plans to revise and streamline RCRA requirements for onsite recycling and to further clarify which materials need full management as RCRA hazardous waste. EPA plans to issue a proposed rule in late 1996. Input from states, industry, and environmental groups will be considered during development of the proposed rule.

5.6.2 Summary

EPA worked with the Association of State and Territorial Solid Waste Management Officials (ASTSWMO) to develop the above-referenced report. EPA and the states (through ASTSWMO) have developed a detailed strategy for addressing jurisdictional issues related to recycling and for streamlining requirements for recycling activities regulated under RCRA. EPA essentially formed two teams: one focuses primarily on jurisdiction, while the other examines requirements for recyclers. EPA (HQ and Regions II, V, and IX) and the states plan to:

- Clarify RCRA jurisdiction by determining which recyclable materials are excluded from RCRA management (those materials destined for more processing rather than disposal, where recycling resembles manufacturing more than waste management). EPA plans to clarify/revise generic in-process exclusions that may be applied to several industries, as well as tailor exclusions for specific industries, such as petroleum refining and mineral processing.

- Revise current management standards for regulated recycling in such a way that recycling will be encouraged, but environmental protection maintained. The revised management standards will be tailored to different kinds of recycling to address the varying practices and materials associated with different industries.

- Examine implementation needs relating to the new rulemaking, such as training needs, information management needs, and state authorization issues.

Within this effort, there is a major focus on making the definition of solid waste easier to read and understand. EPA is considering eliminating the need to classify secondary materials according to the regulatory definitions (e.g., spent material, byproduct, scrap metal).

5.6.3 Implications

The revisions will encourage recycling, but also will establish more specific details in the definition of solid waste regulations, an already complicated rule. The regulations should help to more easily distinguish sham recycling. In addition, most of the options being reviewed include relaxed requirements for onsite recycling.

5.7 NEW POLICY FOR SUPPLEMENTAL ENVIRONMENTAL PROJECTS

5.7.1 Status

Interim policy issued on May 3, 1995, from Steven Herman, Assistant Administrator for the Office of Enforcement and Compliance Assurance; replaces February 12, 1991, Policy on the Use of Supplemental Environmental Projects in EPA Settlements." This policy is to be used in all enforcement actions filed after the effective date and in all pending cases in which the government has not reached agreement in principle with the violator on the specific terms of a SEP.

5.7.2 Summary

A SEP is an environmentally beneficial project that a violator agrees to undertake in settlement of an enforcement action, but which the violator is not otherwise legally required to perform. In other words, the violator already has agreed to correct the violation via some other means (consent agreement, final order); the SEP provides environmental benefits beyond those achieved by merely returning to compliance. A violator's motivation in agreeing to conduct a SEP is the potential for reducing a significant portion of the gravity component of the penalty.

The new policy more clearly defines a SEP, establishes guidelines to ensure that SEPs are within EPA's legal authority, redefines nexus (relationship of proposed SEP project to the violation), and adds two categories of projects which may qualify as SEPS. The new policy provides step-by-step procedures for calculating the cost of a SEP and the percentage of that cost, based on an evaluation of five factors, which may be applied as a mitigating factor in establishing an appropriate settlement penalty.

All proposed projects must have adequate nexus. The project must remediate or reduce the probable overall environmental or public health impacts or risks to which the violation at issue contributes, or the project must be designed to reduce the likelihood that similar violations will occur in the future. SEPS are likely to have an adequate nexus if the primary impact of the project is at the site where the violation occurred or at a different site in the same ecosystem or within the immediate geographic area (within a 50-mile radius of the site). In addition, a proposed project must advance at least one of the declared objectives of the environmental statutes that are the basis of the enforcement action.

EPA or any other federal agency cannot manage or control funds that are set aside for performance of a SEP. Nor can EPA manage or administer the SEP. EPA may provide oversight to ensure that the SEP is implemented according to the provisions of the settlement. Furthermore, the project can not be something that EPA itself is required by its statutes to do. A project may not provide EPA with additional resources to perform an activity for which Congress has specifically appropriated funds. For example, if EPA has developed a compliance assistance brochure, a SEP may not directly or indirectly provide additional resources to revise, copy, or distribute the brochure. It is also important to note that, because of legal concerns and the difficulty of ensuring that a third party implements the project as required, performance of a SEP by a third party is not allowed.

Finally, the type and scope of each project must be clearly specified in the signed settlement agreement. In other words, the "what, where, and when" of a project must be detailed in the settlement agreement.

There are seven categories for SEPs. These include:

- **Public Health**—Provides diagnostic, preventative and/or remedial components of human health care which is related to the actual or potential damage to human health caused by the violation (e.g., medical examinations of potentially affected persons, epidemiological studies, rehabilitation therapy).

- **Pollution Prevention**—Reduces the generation of pollution through "source reduction," i.e., any practice which reduces the amount of any hazardous substance, pollutant or contaminant entering any waste stream or otherwise being released into the environment, prior to recycling, treatment, or disposal (e.g., project redesign, raw material substitution, improvements in inventory control)

- **Pollution Reduction**—Results in decrease in the amount and/or toxicity of any hazardous substance, pollutant or contaminant entering any waste stream or otherwise being released into the environment by an operating business or facility by a means which does not qualify as "pollution prevention" (e.g., "out-of-process" recycling, improved control technology)

- **Environmental Restoration and Protection**—Goes beyond repairing the damage caused by the violation to enhance the condition of the ecosystem or immediate geographic area adversely affected (e.g., restoration of a wetland, purchase and management of a watershed area by the respondent to protect a drinking water supply)

- **Assessments and Audits**—Includes pollution prevention assessments, site assessments, environmental management system audits, and compliance audits, if they are not otherwise available as injunctive relief. A pollution prevention assessment is a review of specific processes and operations to determine where there may be potential opportunities to reduce the use, production, and generation of toxic and hazardous materials. A site assessment is conducted to identify environmental or health impacts relating to a site. An environmental management system audit is an independent evaluation of a party's environmental policies, practices and controls to identify the need for improvements. An environmental compliance audit is an independent evaluation of a respondent's compliance status with environmental requirements; generally compliance audits are acceptable as SEPS only when the respondent is a small business, because large businesses often routinely conduct compliance audits as good business practice.

- **Environmental Compliance Promotion**—Provides training or technical support to other members of the regulated community to encourage compliance with regulatory requirements, avoid committing a violation, or encourage facilities to go beyond compliance by reducing the generation, release or disposal of pollutants beyond legal

requirements (e.g., seminars, publications for other members of the regulated community)

- **Emergency Planning and Preparedness**—Provides assistance to a responsible state or local emergency response or planning entity (e.g,, computers and software, HAZMAT equipment, training). These are only available as non-cash assistance and require that there are EPCRA or CERCLA §103 violations alleged in the complaint.

As mentioned previously, a proposed SEP can be used to mitigate the gravity component of a respondent's penalty. First, the Agency must follow the penalty policy to calculate the economic and gravity components of the penalty. Second, EPA calculates the net-present after-tax cost of the SEP; a recently developed software package, PROJECT, is used to calculate the cost of the SEP. Finally, EPA must evaluate the benefits to the respondent of the SEP, based on specific factors to determine what percentage of the net-present after-tax cost will be considered in determining an appropriate final settlement penalty.

In general, if a settlement includes a SEP, the penalty should recover, at a minimum, the economic benefit of noncompliance plus 10 percent of the gravity component, or 25 percent of the gravity component only, whichever is greater. EPA has some discretion with regard to recovery of economic benefit from municipalities, government agencies, and nonprofit organizations.

EPA believes that if a project generates a profit, the respondent probably will implement the project on its own and should not be provided a reduction in the penalty. The PROJECT model is used to facilitate evaluation of the cost of a proposed SEP. If the PROJECT model reveals that a project has a negative cost, this means that it represents a positive cash flow to the respondent. Because the project is profitable to the respondent, the project would not be acceptable as a SEP. There are three types of costs that may be associated with performance of a SEP (which are entered into the PROJECT model): capital costs (e.g., equipment, buildings); one-time nondepreciable costs (e.g., removing contaminated materials, purchasing land, developing a compliance promotion seminar); and annual operation costs or savings (e.g., labor, chemicals, water, power, raw materials). In addition, the number of years that annual operation costs or savings will be expended in performing the SEP must be specified.

After the net present value (cost) of the proposed project is determined, EPA uses five factors to calculate the percentage by which the gravity component should be mitigated. These factors include: benefit to the public or environment at large, innovativeness, environmental justice, multimedia impacts, and pollution prevention. As a general guideline, the final mitigation percentage should not exceed 80 percent of the SEP cost. For small businesses, government agencies, and non-profit organizations, this percentage may be set as high as 100 percent. For any respondent, if the project is a pollution prevention project, the mitigation percentage may be as high as 100 percent. A lower mitigation percentage may also be appropriate if the government must allocate significant resources to monitoring and reviewing the implementation of a project. The stipulated penalty depends on the respondent's/defendant's demonstration of good faith, the amount of allocated funds spent, and completion of the project itself.

If a SEP is not completed satisfactorily, the respondent will be required, pursuant to the terms of the settlement document, to pay stipulated penalties for its failure. The stipulated penalty depends on the respondent's/defendant's demonstration of good faith, the amount of allocated funds spent, and completion of the project itself.

The settlement agreement should accurately and completely describe the SEP, including descriptions of the actions to be taken by the respondent/defendant, appropriate oversight methods, responsibilities for costs, and submission of a final report. Any publication of the SEP or its results by the respondent/defendant should state that the project was undertaken as part of a settlement of an enforcement action.

5.7.3 Implications

The SEP policy provides a useful tool for respondents and EPA enforcement staff to develop creative, environmentally-beneficial means for "going beyond compliance." Enforcement staff must carefully specify conditions and schedules for project implementation in the settlement agreement.

5.8 AUDIT POLICY

5.8.1 Status

EPA published the Voluntary Environmental Self-Policing and Self-Disclosure Interim Policy Statement on April 3, 1995. The policy became effective as an interim policy on April 18, 1995, but commenters were allowed to provide comments until June 2, 1995, to allow for improvements and refinements in the future.

5.8.2 Summary

The audit policy is an Agency-wide policy aimed at providing incentives for companies that evaluate their own operations for compliance, then voluntarily disclose and correct violations. The policy was developed through a nine-month public process that involved representatives from industry, states, environmental groups, and the general public.

The policy provides incentives to companies that conduct internal self-evaluations and voluntarily disclose and promptly correct violations. The interim policy defines voluntary disclosure as those violations not required to be reported by law. In some cases, companies may be required to sign a compliance agreement to correct all violations as expeditiously as possible. The policy includes seven conditions for reducing civil penalties

In return for voluntarily identifying, disclosing, and correcting violations, EPA will eliminate the gravity component of the penalty. EPA also may reduce the gravity component by up to 75 percent for companies that meet most, but not all, of the seven conditions in the policy. In addition, EPA will not recommend to the Department of Justice that criminal charges be brought against companies that meet the conditions for disclosing and correcting violations, as long as the company has not engaged in a pattern of noncompliance. EPA will continue to recover any economic benefit that companies have gained from noncompliance.

The seven conditions for reducing civil penalties and not making criminal referrals include:

1. **Voluntary self-policing**—Regulated entity discovers a violation through a voluntary environmental audit or voluntary self-evaluation

2. **Voluntary disclosure**—Regulated entity fully and voluntarily discloses the violation in writing to all appropriate federal, state and local agencies as soon as it is discovered and prior to 1) the commencement of a federal, state, or local agency inspection, investigation or information request, 2) notice of a citizen suit, 3) legal complaint by a third party, or 4) the regulated entity's knowledge that the discovery of the violation by a regulatory agency or third part was imminent

3. **Prompt correction**—Regulated entity corrects the violation either within 60 days of discovering the violation, or as expeditiously as possible, if more time is needed

4. **Remediation of imminent and substantial endangerment**—Regulated entity expeditiously remedies any condition that has created or may create an imminent and substantial endangerment to human health or the environment

5. **Remediation of harm and prevention of repeat violations**—Regulated entity implements appropriate measures to remedy any environmental harm due to the violation and to prevent a recurrence of the violation

6. **No lack of appropriate preventive measures**—The violation does not indicate that the regulated entity has failed to take appropriate steps to avoid repeat or recurring violations

7. **Cooperation**—Regulated entity cooperates as required by EPA and provides such information as is reasonably necessary and required by EPA to determine the applicability of the policy

EPA preserves in this policy the discretion to collect the gravity component of the penalty in appropriate cases. These cases may include instances where a violation involves criminal conduct or imminent and substantial endangerment. At the same time, EPA has the flexibility to reduce the gravity element by up to 75 percent for good faith efforts to disclose and promptly comply even in those cases.

An important component of the policy is that EPA will not request a voluntary environmental audit report to trigger a civil or criminal investigation. For example, EPA will not request an audit in routine inspections. Once the Agency has reason to believe a violation has been committed, EPA may then seek through an investigation or enforcement action any information relevant to identifying violations.

5.8.3 Implications

EPA will scrutinize enforcement more closely in states with an audit privilege and/or penalty immunity law. EPA may find it necessary to increase federal enforcement where audit privilege

and penalty immunity laws prevent a state from obtaining 1) information needed to establish criminal liability, 2) facts needed to establish the nature and extent of a violation, 3) appropriate penalties for imminent and substantial endangerment or from recovering economic benefit, 4) appropriate sanctions or penalties for criminal conduct and repeat violations, or 5) prompt correction of violations, and expeditious remediation of those that involve imminent and substantial endangerment. EPA will work with states to address any concerns and ensure that federal requirements are satisfied.

5.9 SMALL BUSINESS POLICY

5.9.1 Status

The Interim Policy on Compliance Incentives for Small Businesses was issued on June 13, 1995, by Steven Herman, Assistant Administrator for the Office of Enforcement and Compliance Assurance. The interim policy became effective the day it was issued. It will be finalized after receipt and consideration of public comments. The policy supplements but does not supplant the August 12, 1994, Enforcement Response Policy for Treatment of Information Obtained Through Clean Air Act Section 507 Small Business Assistance Programs.

5.9.2 Summary

The policy is one of the 25 regulatory reform initiatives announced by President Clinton on March 16, 1995, and implements in part, the Executive Memorandum on Regulatory Reform (60 *FR* 20621; April 26, 1995). According to the policy, EPA will exercise its discretion, under applicable media-specific policies (e.g., RCRA Civil Penalty Policy), to refrain from initiating an enforcement action seeking civil penalties, or to mitigate civil penalties, whenever a small business makes a good faith effort to comply with environmental requirements and where there is no criminal behavior and no significant health, safety or environmental threat. In addition, EPA is creating special incentives for small businesses who take the initiative to identify and correct environmental violations by requesting compliance assistance pursuant to the five criteria identified below.

This policy builds upon the foundation provided in the Clean Air Act Amendments of 1990, which require that states establish Small Business Assistance Programs (SBAPs) to provide technical and environmental compliance assistance to stationary sources. In August of 1994, EPA's air enforcement program issued a policy which provided that an authorized or delegated state program may, consistent with federal requirements, either: 1) assess no penalties against small businesses that voluntarily seek compliance assistance and correct any revealed violations within a limited period of time, or 2) keep confidential information that identifies the names and locations of specific small businesses with violations revealed through compliance assistance, where the SBAP is independent of the state enforcement program. With this new June 1995 small business policy, the Agency is adopting a similar policy for water, toxics, hazardous waste, and other media programs.

This policy applies to facilities owned by small businesses. A small business is a person, corporation, partnership, or other entity who employs 100 or fewer individuals (on a company-wide basis). The policy applies to all civil judicial and administrative enforcement actions taken

under the authority of EPA's environmental programs, except for corrective action programs and the Public Water System Supervision Program under the Safe Drinking Water Act. This policy is to be used for settlement purposes and is not intended for use in pleading or at hearing or trial.

The criteria for eliminating or mitigating the settlement penalty against small businesses are:

1. The small business has made a good faith effort to comply with applicable environmental requirements as demonstrated by receiving compliance assistance from a non-confidential government or government-supported program that offers services to small businesses (such as a SBAP or state university), and the violations are detected during compliance assistance.

2. This is the small business's first violation of this requirement (has not received warning letter, notice of violation, field citation, etc., within the past 5 years for that requirement). The policy does not apply if the facility has a history of violations over the past 5 years, even if this is the first violation of this particular requirement.

3. The policy does not apply if the violation has caused actual serious harm to public health, safety, or the environment, or the violation may present an imminent and substantial endangerment, or the violation presents a significant health, safety or environmental threat.

4. The violation does not involve criminal conduct.

5. The business corrects the violation within the corrections period set forth in the policy.

Small businesses may take up to 90 days following detection to correct the violation, or to take substantial steps to correct the violations (e.g., apply for permits, secure financing). For violations that cannot be corrected within 90 days, the correction period may be extended for an additional 90-day period, but the business must enter into a written agreement that establishes a schedule. The schedule may extend for an additional 180 days (i.e., up to 1 year from the date of detection) if necessary, where the small business corrects the violation by implementing pollution prevention measures. Any corrections period longer than 180 days should be incorporated into an enforceable order.

EPA will exercise its enforcement discretion to eliminate or mitigate civil settlement penalties as follows:

1. EPA will eliminate the civil settlement penalty if a small business satisfies all five of the criteria listed above.

2. If a business meets all five criteria, but needs a longer corrections period than provided by criterion 5, EPA will waive up to 100 percent of the gravity component, but may seek the full amount of economic benefit.

3. If a small business has not met all the criteria above, but has otherwise made a good faith effort to comply, EPA has discretion to refrain from filing an enforcement action seeking

civil penalties or to mitigate its demand for penalties to the maximum extent appropriate (policies generally recognize good faith efforts, where there is a documented inability to pay) under the appropriate penalty policy (e.g., RCPP).

Violations detected through federal, state, or local enforcement inspections remain fully enforceable. In addition, a business is subject to all applicable enforcement response policies for all violations that had been detected through compliance assistance and were not remedied within the corrections period. Finally, the policy does not limit EPA or a state's discretion to use information on violations revealed through compliance assistance as evidence in subsequent enforcement actions.

EPA will defer to state actions in delegated or approved programs that are generally consistent with the guidelines set forth in the policy. Furthermore, EPA does not require SBAPs to provide to EPA the names of specific violating businesses that were identified during compliance assistance efforts. EPA recommends, however, that whenever an agency provides a corrections period to a small business, the agency should inform the appropriate EPA Region or state of its action, to ensure that federal and state responses are consistent.

5.9.3 Implications

Enforcement case development officers will need to pay particular attention to the structure and size of companies to ensure that policy is applied only to "small businesses" that meet the criteria set forth in the policy. Furthermore, EPA will need to confirm that state policies concerning compliance assistance programs and subsequent enforcement actions are consistent with the federal policy.

State/Federal
Enforcement Responsibility

RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

6. STATE/FEDERAL LEGAL RESPONSIBILITIES IN RCRA ENFORCEMENT

EPA

Module 6 Objectives

- **Discuss State authorization under RCRA and its effect on RCRA enforcement**
- **Become familiar with the authorization process**
- **Differentiate EPA's responsibilities in unauthorized states and authorized states for both base program requirements and HSWA revisions**
- **Discuss state and EPA enforcement responsibilities**

Notes:

State Authorization Process

- **State program must be comparable to federal program:**
  - **Consistent with the federal program and programs in other states**
  - **Statutes and regulations equivalent in stringency**
  - **Adequate enforcement**
  - **Public access to information**
  - **State must submit application for authorization (40 CFR 271)**

Notes:

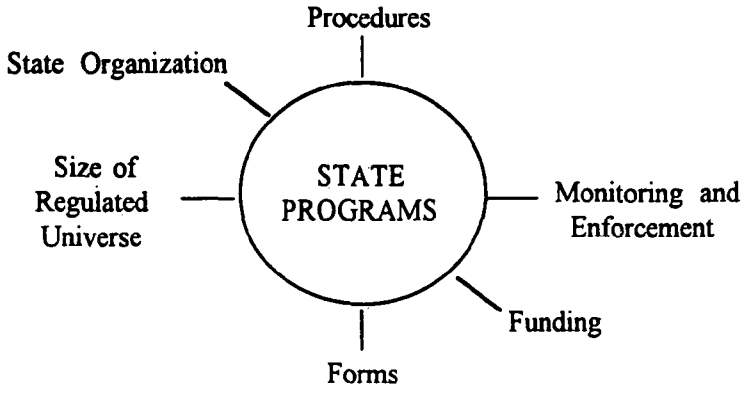
State Authorization Process

- **Application must include the following elements:**
  - **Governor's request for program approval**
  - **Applicable state statutes and regulations**
  - **Documentation of public participation**
  - **Program description**
  - **Attorney General's statement**
  - **Memorandum of Agreement**

Notes:

State Authorization Process

- **Program description details the contents of state hazardous waste program, including:**



Notes:

State Authorization Process

- **Attorney General's Statement**
  - **A written statement demonstrating that state laws provide adequate authority to carry out the program.**
  - **The statement includes references to statutes, regulations, and judicial decisions.**

Notes:

State Authorization Process

- **Memorandum of Agreement**
  - Although authorized state assumes primary responsibility, EPA retains some responsibilities and oversight powers
  - Outlines responsibilities, oversight powers, and level of coordination
  - Must be consistent with annual state/EPA agreement and program grants

Notes:

State Authorization Process

- **Before approving an application, the Administrator must be satisfied that the state program:**

- ☑ **Is equivalent to and no less stringent than the federal program**
- ☑ **Is consistent with the federal program**
- ☑ **Is enforceable.**

Notes:

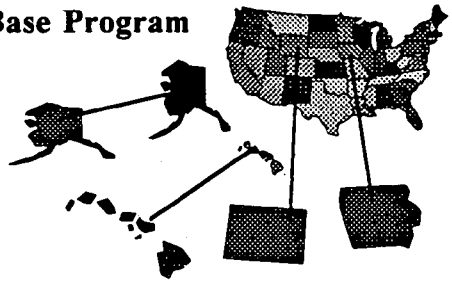
State Authorization Process

- **Once approved by EPA, federal requirements are superseded by state requirements.**
- **After approval, state programs may be:**
  - **Withdrawn**
  - **Voluntarily transferred back to EPA**
  - **Revised: Initiated by state or required by EPA.**

Notes:

Base Program Authorization

- **Highlighted states are not authorized for Base Program**
- **Virgin Islands, American Samoa, Northern Marianna Islands, and Puerto Rico are also not authorized for Base Program**



Notes:

State Authorization Process

- **State program revisions: Authorization is dynamic.**
- **When new, more stringent federal requirements are promulgated, state is required to revise program within:**
  - **1 year if no statutory changes are required or**
  - **2 years if statutory changes are necessary.**
- **States are not required to adopt new federal requirements that are less stringent than existing federal or state requirements.**

Notes:

HSWA Authorization

- **Pre-HSWA--changes take effect when adopted by state**
- **HSWA requirements take effect in authorized states at same time as in nonauthorized states.**
- **EPA implements HSWA requirements in authorized states until the state is authorized.**

Notes:

HSWA Authorization (Continued)

- **EPA may allow state to assist in HSWA implementation prior to authorization.**
- **Once authorized, state law supersedes federal HSWA requirements.**
- **Non-HSWA requirements remain unenforceable in authorized states until adopted and authorized.**

Notes:

Non-HSWA Authorization Example

- **Permit Modification Rule**
  - **Rulemaking revising 40 CFR 270.42, the procedures for modifying permits**
  - **Rule not required by HSWA; not immediately effective in authorized states**
  - **Changes made procedures "less stringent"; states not required to adopt rule**

Notes:

Non-HSWA Program Authorization Example

- **Mixed Waste Regulation**
  - **Clarified scope of EPA regulation of "mixed" radioactive/hazardous waste in 1986**
  - **Clarification not required by HSWA and not immediately effective in authorized states**
  - **Scope of federal program was increased; states required to adopt change**

Notes:

HSWA Authorization Example

- **HSWA required rules regulating BIFs**
- **EPA promulgated BIF rule under HSWA; effective 1991**
- **BIF rule immediately effective in states on its effective date; enforced by EPA**
- **Once state adopts BIF rule, state can assist enforcement (e.g., inspections and enforcement under state law)**
- **Once state authorized for BIF, state leads enforcement**

Notes:

HSWA Authorization Example

- **Corrective Action**
  - **HSWA requires RCRA permits to include corrective action provisions for SWMUs.**
  - **SWMU corrective action is more stringent and required to be adopted by authorized states.**
  - **Revises pre-HSWA permitting rule; responsibility divided prior to state HSWA authorization:**
    - **–State: Regulated units**
    - **–EPA: SMWUs.**

Notes:

HSWA Authorization Example

Toxicity Characteristics (TC) Rule

- **Adds new constituents to the TC; revises test for determining toxicity (TCLP)**
- **Required by HSWA; nationally effective**
- **Broadens federal scope; states must adopt**
- **Revises pre-HSWA rule; divides responsibility prior to state HSWA authorization**
  - **State: EP wastes**
  - **EPA: TC wastes**

Notes:

HSWA Authorization

- **Each RCRA rulemaking explains whether new rule is a HSWA or a base program revision**
- **Requirements imposed pursuant to HSWA: Table 1, 40 CFR 271.1(j)**
- **Self-implementing HSWA provisions: Table 2, 40 CFR 271.1(j)**

Notes:

EPA Enforcement

- **Non-HSWA requirements**
  - **Not enforceable in authorized state until adopted, then enforceable by the state as state law**
  - **Once state is authorized, federally enforceable**
  - **Federally enforceable in nonauthorized states**
- **HSWA requirements**
  - **Federally enforceable in authorized and nonauthorized states**
  - **Enforced as state law in authorized state when adopted and authorized**

Notes:

EPA Enforcement

- **EPA retains federal HSWA and non-HSWA enforcement authority even in authorized states (through MOA and overfiling)**

Notes:

EPA Enforcement

- **EPA may enforce all aspects of approved state program, including more stringent requirements.**
  - **More stringent: Requirements affecting same facilities regulated under federal program but subjecting them to additional or more stringent requirements.**
- **EPA may not enforce any aspect of an authorized state program that is not approved or is broader in scope.**
  - **Broader in scope: Regulates facilities not included under federal program.**

Notes:

Proposals for Change

- **Expedited state authorization process in proposed rules:**
  - **Draft Contaminated Media Rule**
  - **Draft Land Disposal Restrictions Phase IV Rule**
- **National Environmental Performance Partnership System**

Notes:

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RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

6. STATE/FEDERAL LEGAL RESPONSIBILITIES IN RCRA ENFORCEMENT

Background Materials

EPA

INSTRUCTOR NOTES
RCRA FRACTITIONERS ENFORCEMENT WORKSHOP

6. STATE/FEDERAL LEGAL RESPONSIBILITIES IN RCRA ENFORCEMENT

Time: 1 hour and 15 minutes

Objectives:

- Discuss concept of state authorization.
- Provide an overview of the authorization process.
- Differentiate EPA's responsibilities in unauthorized states and authorized states for both base program requirements and HSWA revisions.
- Discuss state and EPA enforcement responsibilities.

Emphasis:

- Understand the delineation of responsibility between the states and EPA in enforcing RCRA.

Helpful Hint:

- The exercise should be used as a forum for open exchange of ideas and approaches. Students should be given 10 minutes to think about their responses to the different scenarios. The remaining 20 minutes should be used for discussion.

Bibliography:

U.S. Environmental Protection Agency (EPA). 1993 (March). *RCRA Practitioners Enforcement Workshop: Course Materials.*

EPA. No date. *RCRA Inspector Institute: Inspector's Addendum.*

6. STATE/FEDERAL LEGAL RESPONSIBILITIES IN RCRA ENFORCEMENT

6.1 INTRODUCTION

The Resource Conservation and Recovery Act (RCRA) program is administered primarily by authorized state agencies that have been delegated both permitting and enforcement authority under Section 3006 of RCRA, 42 U.S.C. § 6926. However, the U.S. Environmental Protection Agency (EPA) retains oversight and enforcement responsibilities in authorized states.

EPA's role in the enforcement process in an authorized state varies depending on the requirement being enforced and its statutory source (i.e., depending on whether the requirement is imposed under the authority of the Hazardous and Solid Waste Amendments of 1984 [HSWA] or not). In this scheme, to sort out the overlapping federal and state enforcement roles, the state authorization process must be understood, as well as the statutory source for the requirements enforced by the agencies.

The purpose of this module is to lay the framework for understanding RCRA state authorization and its effect on RCRA enforcement.

6.2 STATE AUTHORIZATION

Most of the states in the nation have been delegated the authority to implement the base RCRA program "in lieu of" the federal program. This base program authorization provides the authority essential to implement the RCRA program, both in permitting and enforcement.

In order to obtain base program authorization under Section 3006(b) of RCRA, a state must establish that its program:

- Is equivalent to the federal program (i.e., at least as stringent and broad in scope as the federal program)
- Is consistent with the federal program and the programs applicable in other states
- Provides adequate enforcement.

6.2.1 State Authorization Application

Any state that seeks authorization for its hazardous waste program must submit an application to EPA for review and approval. The standards and requirements for authorization are found in 40 CFR Part 271.

The application submitted by the state must include the following elements:

- A letter from the Governor requesting program approval (40 CFR 271.5)
- Copies of applicable state statutes and regulations (40 CFR 271.5)
- Documentation of public participation activities (40 CFR 271.5)
- Program description (40 CFR 271.6)

- Attorney General's statement (40 CFR 271.7)
- Memorandum of Agreement (40 CFR 271.8).

The first three elements are self-explanatory, the following discussion focuses on the contents of the program description, Attorney General's statement, and Memorandum of Agreement.

Program Description (40 CFR 271.6)

The program description is an important element of the state authorization application. The program description provides the details of the hazardous waste program that the state proposes to administer in place of the federal program. Contents of the program description include:

- State organization for implementing the program (e.g., which agency will be responsible for implementing the program, how many staff members are available, how will staff be trained, will coordination be required with other agencies, how coordination will be achieved?)

- Monitoring and enforcement program (e.g., how will violators be identified, how will violations be classified, how will inspections be targeted?)

- Procedures (e.g., permitting, administrative, judicial)

- Costs for implementing program and available funding

- Size of regulated universe (i.e., generators, transporters, disposal facilities)

- Copies of permit forms, application forms, and reporting forms to be used by the state.

Attorney General's Statement (40 CFR 271.7)

A state seeking to assume the responsibility for RCRA implementation must demonstrate that the laws of the state provide adequate authority to carry out all aspects of the state program. This demonstration is made in the form of a statement from the state's Attorney General on a state agency's independent counsel. The statement includes references to the statutes, regulations, and judicial decisions that the state relies on in administering its program.

Memorandum of Agreement (40 CFR 271.8)

Although a state with an authorized program assumes primary responsibility for administering RCRA, EPA still retains some responsibilities and oversight powers. The memorandum of agreement (MOA) between the state and EPA outlines the nature of these responsibilities and oversight powers, and the level of coordination between the state and EPA in operating the program.

The MOA includes provisions for:

- Specifying frequency and content of reports that the state must submit to EPA.
- Coordinating compliance monitoring and enforcement activities between the state and EPA.
- Joint processing of permits for those facilities that require a permit from both the state and EPA under different programs.
- Specifying the types of permit applications that will be sent to EPA for review and comment.

The MOA is a dynamic instrument to coordinate activities and identify cooperative understandings between the state and EPA, which change over time. The MOA also must be consistent with annual state/EPA agreement and program grants. The annual state/EPA agreement cannot override the MOA, therefore, the MOA may require amending if the two documents are not in agreement.

6.2.2 State Program Approval (40 CFR 271.20 - 271.23)

Before approving an application, the Administrator must be satisfied that the state program:

- Is equivalent to and no less stringent than the federal program. The state program must adopt regulatory and statutory requirements that are at least equivalent to (Section 3006(b)), and no less stringent than (Section 3009), those implemented and enforced under the Subtitle C program at the federal level. This does not mean that the state program cannot differ from the federal program; it can be more stringent and/or extensive than the federal program.

  The state program must:

  - Control all the hazardous wastes regulated under 40 CFR Part 261 and adopt a list of hazardous wastes and a set of characteristics for identifying hazardous waste. The state is not required to have a delisting mechanism, though it may be authorized for delisting if the state so chooses. (40 CFR 271.9)
  - Cover all generators, transporters, and TSDs covered by the respective 40 CFR regulations and provide standards equivalent to those in 40 CFR. (40 CFR 271.10)
  - Use the federal manifest format. (40 CFR 271.10)
  - Require permits for facilities required to obtain a permit under 40 CFR Part 270 and prohibit the operation of any hazardous waste management facility without a permit or interim status. (40 CFR 271.13)
  - Have legal authority to implement permitting procedures. (40 CFR 271.14)

- Is consistent with the federal program and other authorized state programs (Section 3006(b)). For example, the state program must not 1) impede, restrict, or ban free movement of hazardous waste across state borders, 2) prohibit management (treatment,

storage, or disposal) of hazardous waste without basis in human health or environmental protection, and 3) use alternative state manifest system. (40 CFR 271.4)

- Is enforceable. RCRA requires that state programs contain adequate authority to monitor and enforce all the requirements developed under Subtitle C. Required monitoring provisions include procedures to evaluate information submitted by facilities for possible enforcement, inspection procedures, access authority, and information gathering procedures to ensure admissibility of evidence in court. Required enforcement provisions include injunctive relief, civil penalty authorities, criminal remedies, and public participation in enforcement. (40 CFR 271.15 - 271.16)

- Provides for availability of information. States must make information available to public and EPA to the same extent as under federal law. (40 CFR 271.17)

As part of the approval process, the state is required to give public notice and take comment prior to submitting an application for EPA approval. After receipt of the state's *complete* application, EPA has 90 days to make a tentative decision whether or not to grant authorization to the state program. The tentative determination is published in the *Federal Register* and a public hearing is held. The public is allowed 30 days for comment. (40 CFR 271.20)

Within 90 days of the *Federal Register* notice, EPA is required to make a final determination taking into account any comments submitted. The final determination also is published in the *Federal Register.*

After approval, state programs may be:

- Withdrawn. Approved state programs are continually subject to review. If EPA determines that a state program no longer complies with the appropriate regulatory requirements, program approval may be withdrawn. For example, failure to issue permits that conform to regulatory requirements, failure to inspect and monitor activities subject to regulation, failure to comply with the terms of the MOA, or failure to take appropriate enforcement action are reasons that EPA may withdraw a program. (40 CFR 271.22 - 271.23)

- Voluntarily transferred back to EPA. In some cases, states with approved programs may voluntarily transfer the program back to EPA (e.g., financial reasons). Prior to transferring responsibilities back to EPA, the state must provide notice to EPA and EPA must provide notice to affected parties. (40 CFR 271.23)

6.2.3 State Program Revision (40 CFR 271.21)

Once a state has obtained base program authorization, the authorization process does not end. Program revisions may be initiated by the state or required as a result of changes in the federal program.

As federal statutory or regulatory authority is modified or supplemented, revision of the state program is often necessary. Authorized states are required to modify their programs to

adopt those new federal requirements that are more stringent or broader in scope than the prior requirements and to apply for authorization to enforce the new requirements through state program revision applications.

When the federal requirements change, authorized states have 1 to 2 years to modify their programs, depending on whether state statutory amendments are required. However, the deadline can be extended upon a showing that the state has made a good faith effort to meet the deadline but was unable to do so.

If a state revises its program, it must notify EPA and submit modified application documents. In reviewing the proposed modifications, EPA applies the same standards used in reviewing the state's initial base program application. The revisions become effective upon approval of EPA, following public notice and comment.

In this system, the delegation process is incremental, and the elements of the program for which a state is authorized frequently change.

6.3 APPLICABLE REQUIREMENTS

The changing nature of the RCRA program complicates the determination of what requirements apply to a facility, as well as which agency may enforce the requirements. The question is relatively easy to answer in the few states not yet authorized to implement RCRA. In unauthorized states, the federal requirements apply and are fully enforceable by EPA. As new requirements are promulgated, they are immediately federally enforceable on their effective date.

In an authorized state, however, a facility is subject to requirements for which the state is authorized under RCRA, as well as requirements that the state has adopted but for which it is not yet authorized. These state-adopted but not yet federally authorized requirements are enforceable by the state agency as a matter of law.

In addition to the requirements adopted and imposed by the authorized state, a facility may also be subject to newly promulgated federal RCRA regulations that have not yet been adopted by the state. Certain newly promulgated federal requirements are directly enforceable by EPA on the federal effective date, while others are not enforceable until adopted by the authorized state. Whether a particular requirement is federally enforceable prior to state authorization is determined by whether or not the requirement was promulgated pursuant to the HSWA, P.L. 98-616.

When RCRA was amended by HSWA, Congress altered the manner in which new requirements take effect in authorized states. Prior to HSWA, changes in the federal program did not take effect in an authorized state until the state program was revised. With the addition of Section 3006(g) in 1984, new requirements imposed pursuant to the authority of HSWA are immediately applicable in authorized states upon the federal effective date.

Each authorized state is still required to adopt new HSWA requirements, but until it does so, those requirements are enforceable by EPA as a matter of federal law. Newly promulgated

requirements that are not imposed pursuant to HSWA remain unenforceable in an authorized state until adopted by the state.

It is not immediately apparent which regulations are adopted pursuant to HSWA and which are non-HSWA requirements. Generally, the best way to determine the statutory basis of the requirement is to review the preamble to the federal rulemaking, which appears in the *Federal Register* notice announcing the final promulgation of the rule. Each preamble discusses whether or not a requirement is adopted pursuant to HSWA and sets out the effective date and federal enforceability of each requirement in light of its HSWA or non-HSWA status. Regulatory requirements imposed pursuant to HSWA are also set out in Tables 1 and 2 of 20 CFR § 271.1(j).

6.4 FEDERAL ENFORCEMENT IN AN AUTHORIZED STATE

EPA has consistently maintained that it retains the authority to take enforcement action in an authorized state, not only to enforce HSWA requirements, but to enforce violations of the requirements of the authorized state program. With one recent exception, where the Agency's authority has been challenged, EPA has prevailed.[1]

This authority is recognized in the MOA under which each authorized state program and EPA operate. Where EPA takes action in an authorized state, it must give prior notice to the state, both under the terms of the MOA and under Section 3008(a)(2) of RCRA, 42 U.S.C. 6928(a)(2).

The most common situation in which EPA takes action in an authorized state is one in which EPA is enforcing HSWA requirements. For example, the state may have taken action on base program violations, such as the operation of a landfill without a permit or interim status. However, the same conduct by the facility may violate the land disposal restrictions, which are imposed pursuant to HSWA. If the state has not yet adopted the land disposal restrictions, EPA is likely to bring its own independent enforcement action to enforce those requirements.

The Agency is not precluded from enforcing the HSWA requirements, even where there may have been a final resolution of the state base program action. In these circumstances, EPA is clearly not estopped from enforcing requirements, which are distinct from those imposed by the state in its action. See *In the Matter of Cypress Aviation, Inc., and the City of Lakeland*, RCRA Docket No. 89-04-R (Initial Decision September 24, 1991), pages 14 through 16.

1. See *Wyckoff* v. *EPA*, 796 F.2d 1197, 1199-1201 (9th Cir. 1986) (upholding EPA's authority to issue orders under Section 3013 of RCRA within an authorized state); *United States* v. *Environmental Waste Control, Inc.*, 710 F. Supp. 1172, 1184-1187, 1195-1201 (N.D. Ind. 1989) (discussion of EPA's authority and res judicata and collateral estoppel defenses); *United States* v. *Environmental Waste Control, Inc.*, 698 F. Supp. 1422, 1435-38 (N.D. Ind. 1988); *United States* v. *Rogers*, 685 F. Supp. 201, 203 (D. Minn. 1987); *United States* v. *Conservation Chemical Co. of Ill.*, 660 F. Supp. 1236, 1244-1245 (N.D. Ind. 1987); but see *In re The Beaumont Company*, Docket No. RCRA-III-238 (October 20, 1994) (ALJ's decision that federal action is partially barred under doctrine of res judicata due to prior state adjudication, now on appeal to EAB).

Apart from the direct enforcement of HSWA requirements, as a matter of enforcement discretion, EPA's authority to take action in an authorized state is exercised in limited circumstances. Under the MOA with the state, EPA may take the enforcement lead at the request of the state (e.g., where facilities have repeatedly frustrated state enforcement efforts).

Similarly, on its own initiative or at the request of a state, EPA may take the enforcement lead in cases that may establish national precedent or in cases that are otherwise of regional or national significance (e.g., where coordinated action is needed to address violations committed by a company operating in more than one state).

EPA may also take action where it determines that the state has failed to take timely and appropriate enforcement action. This is the situation generally referred to as "overfiling."

EPA's authority to act in this circumstance is again recognized in the MOA under which EPA and each state operate. EPA may choose to act where the state has not obtained an adequate penalty or, more importantly, where EPA is not satisfied that adequate compliance has been obtained. *Contra In re The Beaumont Company* Docket No. RCRA-III-238 (October 20, 1994) (on appeal to the Environmental Appeals Board).

Cases overfiled based upon a finding that a state failed to take timely and appropriate action are far less common than federal actions taken in cooperation with the state. However, overfiled cases generate controversy out of proportion to their numbers.

EPA may enforce as federal requirements all aspects of an approved state program, including more stringent requirements. Requirements that are considered more stringent are those that affect the same facilities regulated under the federal program but subject them to additional or more stringent requirements.

EPA may not enforce any aspect of an authorized state program that is not approved or is broader in scope. Requirements that are considered broader in scope are those that regulate facilities or wastes not included under the federal program.

6.5 PROPOSED CHANGES

There are several proposals to change the state authorization process and the state/federal relationship. First, two proposed rulemakings would expedite the state authorization process, relying to some degree on certification by the state Attorney General. These include:

- **Draft Contaminated Media Rule**—Proposes an expedited approval process, with after-the-fact review of implementation.

- **Draft Land Disposal Restrictions Phase IV Rule**—Proposes to add new streamlined procedure for state program approval for less significant changes under Phases II, III, and IV.

The National Environmental Performance Partnership System also proposes changes to the state/federal relationship. This May 17, 1995, agreement aims to scale back federal oversight of state environmental programs in all media.

State/Federal Relationship Problem Set

Rett Nelson

Scene I(a)

You are a U.S. EPA staff attorney who has just been assigned a new RCRA administrative enforcement action. The draft complaint just showed up in your mailbox, and the RCRA enforcement specialist has already left two messages in your voice mail "in-box" asking about the status of your review (it is getting near to the end of the quarter). You have leafed through the complaint. The first thing you notice is a lot of citations to state regulations in the findings of violation part of the complaint. You are concerned, because you barely know the federal regulations, let alone the state regulations. You return the enforcement specialist's call; you ask to see her file on the case, and promise to get back to her the next day.

The violation seems to stem from the facility's failure to provide financial assurance for closure. Factually, there doesn't seem to be any question that the violation occurred. The facility admitted in a letter that it did not comply with 40 CFR §265.143. But the facility is located in a state whose program was "authorized" after the date of the facility's admission.

You look up 40 CFR §265.143. It allows the facility to choose from five options in meeting the financial assurance requirement: closure trust fund, surety bond guaranteeing payment to a closure trust fund, closure letter of credit, closure insurance, and financial test and corporate guarantee for closure.

You look up the current state regulations. It only allows 2 of the 5 options (surety bond and letter of credit), but is otherwise similar to the federal regulation.

You want penalties for past violations and compliance with the current regulations. What regulations do you cite? Any enforcement problems?

Scene I(b)

Same situation. The state regulations also include several waste codes that are not included in the federal program. Your draft complaint includes references to these waste codes in the findings of violation.

Should you include those waste codes in your complaint?

Scene II

Two years later. You filed your administrative complaint, citing the proper regulations in the complaint. Respondent has come into compliance by obtaining a surety bond, but you are still arguing over the penalty amount. Because you were so thorough in the initial filing of the

compliant, Respondent's attorneys never raised a state authorization issue in their answer or in any subsequent discussions.

At this point, the state's pending application to revise its approved regulations, including the financial assurance regulations, is approved by U.S. EPA. Now four of the five financial assurance options (all but the financial test) are available to the facility.

Any enforcement problem?

Scene III

Six months later. You sign a Consent Agreement and Final Order (CAFO) with the Respondent. The CAFO requires the Respondent to provide financial assurances and to pay a penalty. After the CAFO is signed, the state enacts a wholesale revision to the current state program, revoking all previous state hazardous waste statutes and regulations. U.S. EPA has not yet approved the state revision. Following the state action you receive word that the Respondent has allowed its surety bond to lapse. Respondent is thus in violation again.

You are hopping mad. The state is even angrier, though, and insists on taking action right away. The usual U.S. EPA practice is to refer CAFO violations to the Department of Justice to seek enforcement of the terms of the CAFO.

What do you do?

RCRA Permits and Enforcement

RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

7. RCRA PERMITS: RELATIONSHIP TO ENFORCEMENT

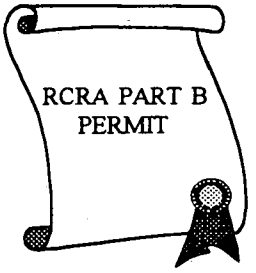
Module 7 Objectives

- **Understand procedures for conducting inspection of permitted facility**
- **Examine need for coordination between the permit writer and the compliance/ enforcement staff**
- **Review State/EPA relationship in the permitting process and how it effects enforcement**

Notes:

Permits

- **Permits identify administrative and technical performance standards.**
- **After issuance, attention focuses on tracking compliance and enforcing permit conditions.**



Notes:

Permitted Facility Inspections

Pre-Inspection Activities

- **Define scope of inspection**
- **Discuss facility with permit writer**
- **Review documents**

Notes:

Permitted Facility Inspections

- **Document Review:**
  - **Permit**
  - **Site-specific conditions**
  - **Referenced attachments**
  - **Organize permit information**

Notes:

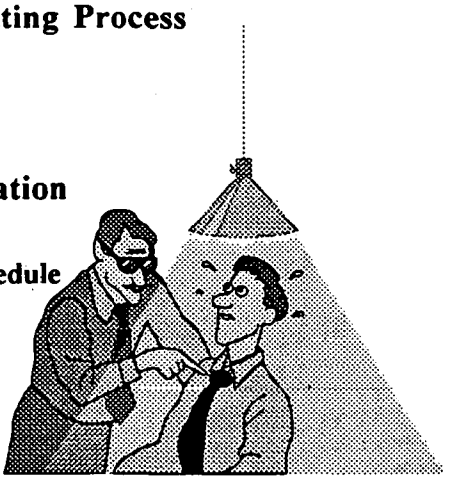
Permitted Facility Inspections

- **Document Review (continued):**
  - Administrative orders and consent decrees
  - New RCRA regulations
  - Other: Inspection reports, relevant guidance materials, and past communications between facility and EPA
- **Past inspection reports identify problem areas**

Notes:

Permit Enforcement

- **Actions During Permitting Process**
  - Notice of Violation
  - Notice of Deficiency
- **Enforcement Coordination**
  - Unreported unit
  - Permit compliance schedule



Notes:

Permit Enforcement

- **Enforcement Actions at Permitted Facility**
  - **Informal Action**
  - **Notice of Violation**
- **EPA or state may issue NOV**

Notes:

Permit Enforcement

- **Enforcement Actions at Permitted Facility (continued)**
  - **Formal Action**
    - **--Administrative action**
    - **--Civil action**
    - **--Criminal action**

Notes:

Permit Enforcement

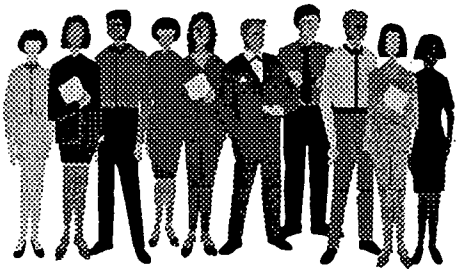
Enforcement Strategy

- **EPA policies and guidelines**
- **Threshold requirements**
- **Other factors (e.g., case history, desired remedy)**
- **Special procedures for parallel proceedings**

Notes:

Team Approach

Permit Writer and Compliance/Enforcement Staff
- **Permit Application Review**
- **Permitted Facility Inspection**



Notes:

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Team Effort (continued)

- **Other EPA Personnel**
- **State Personnel**
  - **Dual Permit**
  - **Inspection**

Notes:

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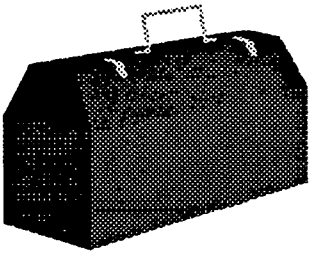
Corrective Action Cases

- **Corrective Action Tools**
  - **Permit**
  - **Enforcement Action**



Notes:

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RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

7. RCRA PERMITS: RELATIONSHIP TO ENFORCEMENT

Background Materials

EPA

INSTRUCTOR NOTES
RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

7. RCRA PERMITS: RELATIONSHIP TO ENFORCEMENT

Time: 1.5 to 2 hours

Objectives:

- Delineate procedures for conducting inspection of permitted facility.
- Present need for coordination between permit writer and compliance/enforcement staff in reviewing permit and monitoring compliance of permitted facility.
- Discuss state/EPA relationship in permit process and compliance monitoring/enforcement.

Emphases:

- Permit as key enforcement tool
- Value of team approach

Helpful Hints:

- The text is very generic. It may be useful to develop region-specific examples to illustrate the concepts presented in the text.
- Additional information on permitted facility inspections is presented in the RCRA Inspection Manual and the RCRA Technical Case Development Guidance Document.

Bibliography:

U.S. Environmental Protection Agency (EPA). 1993 (March). *RCRA Practitioners Enforcement Workshop: Course Materials.*

EPA. No date. *RCRA Inspector Institute: Inspector's Addendum.*

7. RCRA PERMITS: RELATIONSHIP TO ENFORCEMENT

7.1 INTRODUCTION

Permits identify facility-specific administrative and technical performance standards. The permit is the key to implementing and enforcing the regulations established under Resource Conservation and Recovery Act (RCRA) Subtitle C.

The permit process consists of five steps:

1. Submitting the permit application
2. Conducting an administrative review of the permit application
3. Preparing the draft permit
4. Taking public comments and finalizing the permit
5. Modifying, maintaining, and terminating the permit.

RCRA permits can be issued by the U.S. Environmental Protection Agency (EPA) or an authorized state. In many instances, it is issued by both parties—the state issuing the permit for pre-Hazardous and Solid Waste Amendments (HSWA) provisions and EPA issuing the portion of the permit addressing HSWA provisions. The joint role of EPA and states in issuing permits will continue until the state is authorized to implement HSWA.

After the permit is issued, attention is focused on tracking compliance with the technical and administrative requirements defined in the permit and enforcing the permit provisions. Periodically, each facility is inspected to determine whether it has altered its operation or is noncompliant with permit conditions. Operational modifications or failure to comply with permitting requirements can result in:

- Issuance of an enforcement action to bring the facility into compliance with the permit conditions

- Changes to the facility's permit status, including:

  - Modification of permit conditions
  - Revocation and reissuance of the permit
  - Termination of the permit.

7.2 PERMITTED FACILITY INSPECTIONS

Section 3007(a) of RCRA authorizes EPA to inspect any facility that handles hazardous waste for the purpose of regulatory development or enforcement of RCRA. The purpose of an inspection is to ascertain the compliance status of a facility, the extent of any noncompliance, and the potential for or extent of any release. An inspection may be conducted to address a specific enforcement concern or be part of EPA's routine compliance/oversight activities.

7.2.1 Pre-Inspection Activities

As with any facility inspection, the scope of a permitted facility inspection should be defined to form a basis for pre-inspection activities. For example, routine compliance inspections generally will be broader in scope than a review of facility compliance with deadlines in the RCRA permit and will entail a detailed evaluation of all RCRA-related activities at the facility. Conversely, the latter will have a much narrower scope and will require less pre-inspection planning.

Prior to inspecting a permitted facility, the inspector must gather pertinent sources necessary to become familiar with the site. The first, and perhaps most important source, is the expertise of other staff members (state and EPA) familiar with the site. Enforcement officials and permit writers familiar with the permitted facility may assist in determining the major areas of interest at the facility, such as past compliance problems.

The inspector should be prepared to spend time reviewing pertinent documents. The documents that need to be reviewed will depend on the focus of the inspection. For a general compliance inspection at a permitted facility, the inspector should begin by reviewing the permit.

The permit (inclusive of all referenced attachments) contains most of the site-specific conditions and requirements that a facility must meet to be in compliance. In general, permits are written to track closely with Part 264 regulations, but the placement of permit conditions may have been altered depending on the style of the permit writer (e.g., all reporting requirements may be organized in one section of the permit). If conditions of the facility permit are inconsistent with the Part 264 regulations, the permit may serve as a shield (i.e., protect the facility from enforcement actions). The permit may also contain state requirements that are broader in scope or more stringent than federal requirements. Inspectors are encouraged to discuss the permit with the permit writer.

The permit may reference the facility's Part A or Part B permit application and incorporate specific portions by reference. Referenced sections of these documents are then considered enforceable permit conditions. The inspector, therefore, cannot rely solely on the body of the permit, but must also review the referenced attachments. If the content of the facility permit differs from the facility's Part A or Part B permit application, the permit takes precedence.

In some cases, facilities have been issued more than one RCRA permit. For example, the state may have issued one permit and EPA another to cover provisions for which the state lacks authority (e.g., corrective action for solid waste management units). Under these circumstances, the EPA permit will cover only the HSWA requirements. Nonetheless, the facility has to comply with both state and federal requirements. Federal inspectors may coordinate with state inspectors to conduct a complete review of the facility. The EPA inspector may focus on the HSWA requirements, while the state inspector addresses the state-imposed requirements.

Due to the voluminous nature of RCRA permits, the inspector should organize the information contained in the permit into a useful format to facilitate the inspection. For example, information can be organized into checklists or factsheets. EPA's RCRA Inspection Manual presents information on the development of checklists and factsheets.

Other documents that should be reviewed include:

- Administrative orders and consent decrees: Orders and consent decrees contain specific provisions with which the facility must comply. If inconsistencies arise between the permit and order/consent decree, the latter takes precedence.

- New RCRA regulations to which the facility may be subject: In some instances, permits will not have been modified to reflect new regulations. Many regulations are self implementing, however, and do not require specific permit language to be enforceable (e.g., land disposal bans). Also, new hazardous waste listings may affect other facility waste streams, subjecting them to regulation.

- Past inspection reports (these can be particularly useful in identifying problem areas within a facility), relevant guidance materials, and past communications between EPA and the facility.

The permit writer or enforcement official should be able to assist the inspector in determining whether other documents, beyond those contained in the permit, may be useful in arriving at a complete picture of the facility.

7.2.2 Inspection Procedures

The procedures for conducting the inspection at the permitted facility are the same as for other facilities. For additional information, refer to the RCRA Inspection Manual.

7.3 PERMIT ENFORCEMENT: WHEN A VIOLATION IS DISCOVERED

Enforcement actions may be used during permit application review and after permit issuance.

7.3.1 Enforcement Actions During the Permitting Process

In some instances, enforcement action needs to be taken during the permitting process. The two most common enforcement actions during this process are:

- Notice of violation (NOV), which is sent to a facility owner/operator as notification that a Part B permit application has not been received within the time frame specified in the Part B call letter and is used to set a deadline for appropriate response before further enforcement is pursued

- Notice of deficiency (NOD), which is a specialized form of the NOV that is sent to an owner/operator to describe and request information that is missing or deficient in a permit application.

Enforcement staff also may become involved in the permitting process during other situations, including the following:

- An unreported unit is discovered during a routine inspection.
- A compliance schedule is developed for a permit.
- An enforcement action is needed in response to a permitting problem (e.g., if an appropriate response is not received for an NOV or NOD).

7.3.2 Enforcement Actions at a Permitted Facility

Once the permit is issued, requirements for compliance with RCRA are defined. Enforcement actions may be initiated for noncompliance with any aspect of the permit. Such actions can be either informal or formal. Note that because the permit identifies the obligations imposed in the facility and shields the facility from enforcement actions based on other (i.e., non-permit) requirements, the permit can hinder enforcement actions if it is poorly drafted or not comprehensive.

Informal Actions

An informal action (e.g., NOV) is a warning letter notifying a facility that it has violated one or more RCRA provisions and requiring compliance within a specified time frame. Not all informal actions are NOVs; some states do have penalties associated with NOV (e.g., Idaho).

Generally, the state where the facility is located issues the NOV, even when EPA discovers the violation. The state provides copies of the NOV to EPA. EPA will issue an NOV if the state requests or if the state is not authorized to take the desired enforcement action (e.g., violation is for SWMU corrective action and state is not authorized for this HSWA provision).

EPA tracks compliance with the NOV, regardless of the issuing agency. EPA may work with the state to ensure that compliance is "timely and appropriate."

Formal Administrative Actions

If a facility does not comply with an EPA-issued NOV within the specified time frame, EPA will initiate a formal enforcement action, such as an administrative order or filing an administrative complaint. If EPA is not satisfied with the state's action or the facility's response, EPA may take additional action to enforce the order.

EPA is authorized to issue four types of administrative orders under RCRA. EPA considers the nature of the compliance problem, remedy sought, and type of facility when choosing the type of order to issue:

- 3008(a) Compliance Orders: Issued when the facility subject to RCRA has violated one or more statutory or regulatory provisions. The primary purpose of this type of order is to bring the violator into compliance with RCRA. The order may require immediate compliance or may include a compliance schedule.

- 3013 Monitoring, Analysis, Testing, and Reporting Orders: Issued to obtain information from a site owner or operator regarding a known or suspected release of hazardous waste. Before issuing the order, EPA must have reason to believe that 1) hazardous waste has been or may have been released at the site and 2) hazardous waste present at the site does or may present a substantial hazard to human health or the environment. Section 3013 orders impose specific testing, monitoring, analytical, and reporting requirements for the purpose of characterizing the alleged release. This type of order, however, cannot require the owner/operator to undertake corrective action.

- 7003 Imminent and Substantial Endangerment Orders: Requires a responsible party to abate an imminent and substantial endangerment to human health or the environment. EPA must have reason to believe that the respondent's handling, storage, treatment, transportation, or disposal of solid or hazardous waste may present an imminent and substantial endangerment. This is a complex determination and the standard is generally higher than for any other administrative order.

- 3008(h) Corrective Action Orders: Issued when EPA has reason to believe that there is or has been a release of hazardous waste from an interim status facility. The purpose of the order is to require the responsible party to take corrective action to clean up or abate the release. Note that EPA may also require corrective action in a permit, and any violation of such requirements is subject to administrative or judicial enforcement.

An administrative order is a legally binding order. The procedures for issue an administrative order vary by the type of order. Some orders are issued unilaterally; others provide the respondent with an opportunity to request a hearing before the order is effective. Administrative orders also may be issued as consent orders. Although administrative orders are legally binding, a recalcitrant violator may be taken to court to obtain a judicial order requiring compliance.

Civil Judicial Actions

In addition to formal and informal administrative enforcement actions, EPA can initiate civil judicial proceedings under RCRA. RCRA civil actions involve a trial in Federal District Court. Attorneys from the Department of Justice (DOJ) handle RCRA civil cases for EPA; therefore, these cases frequently are called civil referrals. The DOJ also defends appeals from EPA enforcement actions filed in Federal District Court.

In general, EPA initiates civil actions for two reasons:

- To obtain a judicial order (i.e., injunction) requiring one or more of the following: 1) compliance with any RCRA requirement, 2) abatement or cleanup of a release of hazardous waste presenting an imminent and substantial endangerment, or 3) compliance with an outstanding administrative order

- To obtain a judicial order imposing monetary penalties for 1) violating RCRA or 2) violating an outstanding administrative order.

Criminal Judicial Actions

EPA also has the authority to seek criminal penalties, including fines and prison terms, for certain serious, intentional violations of RCRA. Procedures for criminal actions under RCRA are similar to criminal prosecutions under other federal laws. The types of activities defined as criminal under RCRA are given in Section 3008(d). The Office of Criminal Investigations within the National Enforcement Investigations Center is responsible for investigating allegations of criminal misconduct. The U.S. Attorney's Office is primarily responsible for prosecuting the case, with the assistance of a DOJ attorney.

Selecting the appropriate enforcement tool to address a RCRA compliance problem is essentially a judgment call, although a number of factors should be considered in making this decision, including:

- Consistency with EPA policies and guidelines
- Threshold requirements for each enforcement tool
- Case history of compliance/noncompliance, desired remedy, procedural complexity of available enforcement tools, threat of human or environmental exposure, willfulness of the violation, need to compel long-term conduct, etc.
- Special procedures for parallel proceedings (i.e., simultaneous administrative/civil and criminal enforcement actions) on separate tracks to prohibit information exchange, which are time consuming and resource intensive.

In addition to formal enforcement actions, EPA has the ability to terminate a permit for noncompliance by the permittee.

7.4 COORDINATION BETWEEN PERMIT WRITER AND ENFORCEMENT STAFF

Ideally, the compliance/enforcement staff and permit writer work together to monitor compliance at facilities that have applied for or received a permit. If the facility's permit application is being reviewed, the permit writer and the application will usually be valuable sources of information on the facility, and the permit writer may have information needs that the inspector can fulfill during an inspection (e.g., verifying completion of modifications to the facility which the permit applicant has stated have been made in amendments to the permit application). If a facility has received a permit, the permit writer and permit are valuable information sources, and the permit imposes site-specific requirements subject to enforcement and should be evaluated during the inspection. In either case, the permit writer may be able to identify suspected problem areas at a facility.

Enforcement staff also may assist the permit writer by initiating an administrative order to address a problem if the permit is delayed or to pursue corrective action more rapidly than is possible through the permitting process.

On occasion, development of successful enforcement actions and permits depends on the cooperation from numerous individuals to review reports and interpret data in disciplines with which the permit writer and enforcement personnel may not be experienced. For example, permit development often requires a review of a hydrogeologic study. Additionally, the person preparing a § 7003 order may need assistance in developing an Endangerment Assessment report that describes environmental fate and transport of contaminants, identifies toxicological properties and hazards, and evaluates risk. When faced with unfamiliar issues, the permit writer and enforcement officer should obtain technical support from individuals experienced in the applicable area.

7.5 *ROLES FOR PERMIT OVERSIGHT AND ENFORCEMENT*

Because of the state authorization process, the state in which the facility is located generally is responsible for compliance monitoring, including permitted facilities. EPA may take the lead in conducting inspections when such is requested by the state or at facilities that are:

- Owned or operated by federal, state, or local governments
- Operated under non-authorized state programs
- Selected facilities for an oversight inspection
- Operating under EPA-issued permit conditions, such as those for which the state is not authorized (e.g., corrective action).

EPA must notify an authorized state of an upcoming inspection, and the state can decide whether or not to have a state inspector accompany the EPA inspector.

7.6 CORRECTIVE ACTION CASES

EPA frequently can pursue corrective action through the requirements of the permit when it is issued. In some cases, it is preferable to pursue corrective action through an enforcement action, for example, when:

- A facility is exempt from a RCRA permit (e.g., delisted waste).
- A permit cannot be issued in a timely manner to address corrective action needs.
- A permit application is late or deficient.

As discussed earlier, Section 3008(h) of RCRA establishes the authority and the guidelines to pursue corrective action when a release has occurred at an interim status facility.

The agency (authorized state or EPA) issuing the corrective action permit conditions should be responsible for monitoring compliance. Because EPA does not delegate authority for Section 3008(h), EPA is responsible for oversight of corrective action orders.

Environmental Justice

RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

8. ENVIRONMENTAL JUSTICE

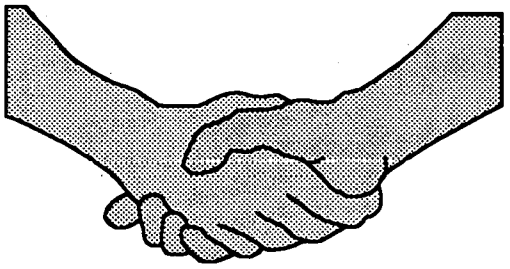
Module 8 Objectives

- **Discuss the history of environmental justice and national efforts to address related concerns**
- **Become familiar with efforts at the state level to address environmental justice**
- **Define and describe environmental justice concerns and enforcement issues**
- **Review EPA headquarters workplans that focus on environmental justice activities**
- **Identify and discuss regional environmental justice activities**

Notes:

Environmental Justice

"Fair treatment of people of all races, income, and culture with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies."



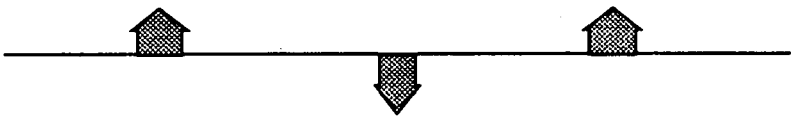
Notes:

"Fair Treatment"

"No person or group of people should shoulder a disproportionate share of the negative *environmental impacts resulting* from the execution of this country's domestic and foreign policy programs."

Notes:

Early History of Environmental Justice Movement



1983: GAO report states that 3 out of 4 RCRA facilities in Region IV are in minority communities

Notes:

History (Continued)

1992: *National Law Journal* report alleges EPA discrimination in RCRA enforcement

1994: President Clinton issues Executive Order 12898 holding 11 agencies accountable for environmental justice

1995: Environmental Justice Strategies due to the President

Notes:

1982: Warren County, NC

- **PCB landfill to be sited in Warren County:**
  - **Scientifically questionable location**
  - **Water table 5 - 10 feet below surface**
  - **Community 84% African-American**
  - **63.7% of Warren County's population**
  - **24.2% of North Carolina's population**

Notes:

1983: GAO Report

- **Inspired by Warren County controversy**
- **Found that 3 out of 4 hazardous waste facilities in Region IV were located within predominately African-American communities**

Notes:

1987 & 1994: United Church of Christ

- **Communities with hazardous waste landfills= 2Xs the minority population**
- **3 of 5 largest landfills are in African-American and Hispanic-American communities**
- **Conclusion: Race most significant factor in hazardous waste landfill sitings**

Notes:

1992: The *National Law Journal* Report

- **Penalties allegedly 506% higher at RCRA sites with greatest white population than at sites with greatest minority population (average fines of $335,566 versus $55,318)**

Notes:

EXECUTIVE ORDER 12898

- **Directed federal agencies to develop an Environmental Justice Strategy that identifies and addresses disproportionate negative impacts of programs and policies on minority and low-income populations by March 24, 1995**

Notes:

Enforcement, Compliance Assurance, and Regulatory Reviews

- **Identification of environmental justice communities**
  - GIS data
  - Census data
  - Health statistics
- **Development of innovative settlements**
  - Supplemental environmental projects
- **Education of communities on regulations**

Notes:

Exposure Concerns:
Lead, Air, & Water

- **Lead poisoning continues to be great concern for low-income, minority children**
- **Higher percentages of minorities live within nonattainment areas under the CAA**
- **Native American, African-American, and Asian/Samoan populations consume greater quantities of fish potentially contaminated with PCBs, dioxins, furans, and lead**

Notes:

RCRA-Specific Concerns

- **Environmental justice concerns with RCRA primarily involve:**
  - **Siting**
  - **Permitting issues**
  - **Corrective action**
  - **Enforcement issues**
- **EPA proposed rule on public participation in RCRA permitting recently published**
- **Incorporation of environmental justice concerns into RCRA corrective action priority setting methods**

Notes:

Environmental Justice Enforcement Targeting

- **Oversiting in disadvantaged communities**
- **Disproportionate exposure**
- **Non-participation in decision making**

Notes:

EJ Enforcement Targeting (Continued)

- **Target enforcement initiatives on:**
  - **High-risk areas (e.g., highly populated industrialized areas)**
  - **Specialized industries where environmental justice is a concern**

Notes:

Targeting Tools

- **Environmental justice evaluations/analyses:**
  - **Checklists**
  - **Risk equations**
  - **Computer programs**

Notes:

Evaluation Parameters

- **GIS data**
- **Census data**
- **Health statistics**
- **Multimedia release data**
- **Minority composition**
- **Economic status**
- **Potential risk**

Notes:

Community Involvement/Outreach

- **Barriers to participation**
  - **Lack of awareness**
  - **Rights under RCRA and other regulations**
  - **Permitting/monitoring/enforcement processes**
  - **Lack of communication**
  - **Language barriers**
  - **Limited information dissemination**
  - **No community organization**

Notes:

Environmental Justice in OECA

- **Established Environmental Justice Coordinating Council (EJCC)**
  - Represents major offices in OECA
  - Assists in developing agency-wide strategic plan
  - Promotes EJ through enforcement activities at all levels
- **Named full-time Environmental Justice Coordinator**

Notes:

EJCC Activities

- **EJCC-produced documents**
  - **OECA draft strategy outline**
  - **Potential project lists**
  - **Draft OECA workplans**

Notes:

OCEA Workplan Highlights

- **EJ targeting exercises with other agencies**
- **EJ criteria in SEP cost determination**
- **EJ goal implementation within litigation**
- **EJ community outreach and mediation**

Notes:

Regional Workplan Highlights

- **Region I: EJ-related SEPs in settlements**
- **Region II: Translation of public notices into foreign languages for EJ communities**
- **Region V: Interagency partnerships to address EJ concerns**
- **Region VI: Development of computer EJ analysis methodology**
- **Region IX: Identification and prioritization of affected EJ communities**

Notes:

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RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

8. ENVIRONMENTAL JUSTICE

Background Materials

8. ENVIRONMENTAL JUSTICE

8.1 INTRODUCTION

Many minority, low-income communities have raised concerns about the disproportionate burden of health consequences they suffer from the siting of industrial plants and waste dumps, as well as from exposure to pesticides or other toxic chemicals at home and on the job. Their primary concerns are that environmental programs do not adequately address these disproportionate exposures.

In accordance with President Clinton's Executive Order 12898 (discussed in the next section), the U.S. Environmental Protection Agency (EPA) is addressing these concerns by assuming a leadership role in environmental justice initiatives and developing an environmental justice strategy to enhance environmental quality for all U.S. residents. The Agency looks to assure, through its policies, programs, and activities, that no segment of the population, regardless of race, color, national origin, or income, bears disproportionately high and adverse human health and environmental effects.

Environmental justice concerns first gained public attention in 1982, when a small, low-income, and predominantly African-American community in Warren County, North Carolina, was selected as a polychlorinated biphenyl (PCB) landfill disposal site. (The community was 84 percent African-American and comprised nearly two-thirds of the total African-American population in the state.) Despite a National Association for the Advancement of Colored People's (NAACP) request for an injunction on the basis of racial discrimination and numerous protests, the landfill opened as planned.

As a direct result of this event, Walter Fauntroy requested that the General Accounting Office (GAO) examined hazardous landfill sitings in eight southern states to determine the extent to which minority communities were disproportionately exposed to environmental contamination. GAO published its findings in a 1983 report that concluded that three out of every four landfills in the eight states studied were located in predominately African-American neighborhoods.

The link between race and hazardous landfill sitings was further confirmed by a 1987 study conducted by the United Church of Christ's (UCC) Commission on Racial Justice. According to the UCC report, three out of every five African-Americans and Hispanic Americans lived in communities with uncontrolled toxic waste sites. The study concluded that race is the strongest determining factor in the siting of hazardous waste facilities.

A 1992 issue of *National Law Journal*, dedicated solely to environmental justice concerns, reported on variations in Resource Conservation and Recovery Act (RCRA) penalties between white and minority communities. The journal reported that RCRA sites in areas with whites comprising the largest portion of the population were required to pay penalties 506 percent higher than sites in areas with largest minority populations. The average penalty was $335,566 in the white areas and only $55,318 in the minority areas.

Because the concept of environmental justice is still somewhat new to the Agency, the majority of its efforts to date have been in outreach and education for both Agency employees

and the public. The Agency is also developing strategies and analyzing data to determine how this concept fits into future compliance assurance, compliance monitoring, and enforcement activities.

8.1.1 Definition of Environmental Justice

Environmental justice has been a growing concern for more than 10 years, yet no one definition has been universally adopted. Nevertheless, EPA's Office of Environmental Justice has developed a definition that is generally accepted across the Agency, as well as by many other groups. This definition defined environmental justice as:

> The fair treatment of people of all races, income, and cultures with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment implies that no person or group of people should shoulder a disproportionate share of the negative environmental impacts resulting from the execution of this country's domestic and foreign policy programs.

8.1.2 Executive Order 12898

In response to the nationwide allegations of environmental injustice, President Clinton issued Executive Order 12898 on February 11, 1994. This Executive Order, entitled Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, required all federal agencies to develop an environmental justice strategy by March 24, 1995. The strategy must identify and address "disproportionately high and adverse human health or environmental effects of (an agency's) programs, policies, and activities on minority populations and low-income populations."

EPA's environmental justice strategy is based on two goals:

- No segment of the population, regardless of race, color, national origin, or income, as a result of EPA's policies, programs, and activities, suffers disproportionately from adverse human health or environmental effects, and all people live in clean, healthy, and sustainable communities.

- Those who live with environmental decisions—community residents, state, tribal, and local governments, environmental groups, businesses—must have every opportunity to participate in decisionmaking. An informed and involved community is a necessary and integral part of the process to protect the environment.

This strategy includes five environmental justice mission topics: 1) public participation, accountability, partnerships, outreach, and communication with stakeholders, 2) health and environmental research, 3) data collection, analysis, and stakeholder access to public information, 4) American Indian, Alaska Native, and indigenous environmental protection, and 5) enforcement, compliance assurance, and regulatory reviews.

The fifth mission topic—enforcement, compliance assurance, and regulatory reviews—cites the strategic enforcement of environmental statutes as one of four objectives. Through this

objective, minority and low-income communities suffering from excessive environmental hazards will be a focus of EPA's enforcement and compliance assurance activities. Enforcement efforts will include the identification of communities bearing incommensurate negative impacts through the use of current demographic information, media program data, and health statistics. Enforcement and compliance assurance programs, along with innovative enforcement action settlements (e.g., supplemental environmental projects) that will decrease future exposures, will be designed to meet the needs of affected communities.

To achieve the objectives of its environmental justice strategy, EPA is:

- Ensuring that environmental justice is part of all Agency programs, policies, and activities
- Identifying methodologies, research, and data needed to identify and evaluate populations at disproportionately high environmental or human health risks, as well as ensuring that these needs are considered in developing the overall federal research program
- Ensuring that compliance monitoring inspections and enforcement actions have a multimedia focus to address exposures by minority and low-income populations
- Promoting outreach, communication, and partnerships with stakeholders to ensure sufficient stakeholder access to training, information, and education.

8.2 STATE ENVIRONMENTAL JUSTICE LEGISLATION

In addition to federal efforts to address environmental justice concerns, many state legislatures are actively attempting to reduce or eliminate this problem. As of September 1994, for example, 12 states had introduced either legislation or resolutions addressing environmental justice issues. Three of these laws were enacted and three resolutions passed (see Exhibit 8-1).

Both the laws and resolutions enacted and those considered but not adopted reflect the broad interest of the states in environmental justice. These initiatives suggest that states will consider and, perhaps, adopt additional environmental justice legislation over the next several years.

8.3 ENVIRONMENTAL JUSTICE CONCERNS

8.3.1 Lead

Lead poisoning continues to be a large concern for low-income, minority groups despite government bans on various lead-based products. Three million tons of old lead remain in homes and buildings around the country in the form of paint and pipes and have the largest impact on minority children. Lead exposure can and does occur through multiple pathways (e.g., air, water) and has known physiological and neurobehavioral effects. While data indicate that all socioeconomic and ethnic groups have children with high blood lead, a higher percentage of African-American children have unacceptable levels compared to white children. For both African-American and whites, as income levels rise, blood lead lowers. Exhibit 8-2 provides additional data on the blood lead levels of African-American and white children by income level.

Exhibit 8-1. Overview of State Environmental Justice Legislation/Resolutions

State Legislation/ Resolution (date)	Summary of Provisions
Arkansas Act 1263 (4/93)	Establishes a rebuttable presumption that prohibits the construction or operation of any high-impact, solid waste management facility (e.g., solid waste landfill; solid or commercial hazardous waste incinerator; commercial hazardous waste treatment, storage, or disposal facility) within 12 miles of an existing facility. Presumption may be overcome where no other site is available because of geological conditions or the facility provides incentives to the host community (e.g., employment, contributions to infrastructure, compensation to adjacent landowners, subsidization of community services).
Florida House Bill 1369 (5/94)	Creates Environmental Equity and Justice Commission (EEJC) to assess the magnitude of disproportionate environmental impacts imposed upon minorities and low income communities. The EEJC must submit a preliminary report addressing specified environmental justice concerns to the state legislature by December 31, 1995, subsequently hold three public hearings, and incorporate all findings into a final report. The EEJC may prepare model legislation if necessary.
Louisiana Act 767 (6/93)	Provides for fairness in the decisionmaking process of the Department of Environmental Quality (DEQ). Requires the DEQ to hold three public hearings to gather public comments regarding environmental justice.
Michigan House Resolution No. 662 (9/94)	Acknowledges the right of all Americans to live in a pollution-free environment and expresses support for the passage of Senate Bill S. 1841 in the U.S. Congress. Senate Bill S. 1841 would prohibit discrimination on the basis of race, color, or national origin in programs and activities related to occupational and other exposure to hazardous waste substances.
Tennessee House Joint Resolution No. 146 (5/93)	Outlines a hypothetical Environmental Justice Act of 1993 and calls upon the Departments of Health and Human Services, Agriculture, and Environment and Conservation to analyze the proposed act and report findings to the legislature.
Virginia House Joint Resolution No. 529 (2/93)	Documents the state's desire to ensure that discrimination and the disproportionate exposure of minorities to the emissions of solid waste facilities does not occur in Virginia. Requests that a joint legislative audit and review commission study the siting, monitoring, and cleanup of solid and hazardous waste facilities, emphasizing ways in which they have affected minority communities. This report will be submitted to the Department of Waste Management, the Governor, and 1995 legislative session of the General Assembly.

Source: Hacker, Barton. 1994 (September) *Environmental Justice: Legislation in the States.* Center for Policy Alternatives.

Exhibit 8-2. Percentage of Children with Unacceptably High Blood Lead Levels

Race	Income Level		
	< $6,000	$6,000 – $15,000	> $15,000
African-American	68%	54%	38%
White	36%	23%	12%

To address the concerns associated with lead exposure, EPA is developing a risk communication campaign aimed directly at lead. For example, the Office of Water has published several pamphlets addressing lead contamination and measures to take that may reduce exposures. These pamphlets are targeted not only at homeowners but also at residents of large housing projects or other buildings in which low-income populations may be housed. One pamphlet discusses ways residents can reduce lead exposure by flushing household taps prior to drinking the water. The pamphlet explains that flushing will only increase monthly water bills by 25 cents per month. It also suggests that the flushed water can be used for other purposes, such as watering plants or washing floors or other items.

EPA is also gathering and analyzing available data on sources emitting or discharging lead through multiple pathways. While not specifically an environmental justice-oriented activity, it does incorporate demographic data, such as income level and population by age group, and could be used to identify areas of environmental justice concern.

8.3.2 Air Pollution

Air pollution is obviously an urban problem and, because a large proportion of the U.S. minority populations resides in urban environments, it is only logical that they receive more exposure to air pollutants. A study conducted by Argonne National Laboratory on the demographics of areas designated by EPA as non-attainment areas under the Clean Air Act determined that higher percentages of African-Americans and Hispanic-Americans compared to whites live in non-attainment areas for particulate matter, carbon monoxide, ozone, sulfur dioxide, and lead (see Exhibit 8-3). EPA's extensive efforts to improve air quality in non-attainment areas under the Clean Air Act Amendments should bring significant benefits to racial minority groups.

Exhibit 8-3. Percentage of Total Whites, African-Americans, and Hispanic Americans Living in Non-Attainment Areas for Air Pollutants

Air Pollutant	Whites (%)	African-Americans (%)	Hispanic-Americans (%)
Particulate matter	14.7	16.5	34.0
Carbon monoxide	33.6	46.0	57.1
Ozone	52.5	62.2	71.2
Sulfur dioxide	7.0	12.1	5.7
Lead	6.0	9.2	18.5

8.3.3 Water

As mentioned earlier, a GAO report indicated that racial and ethnic minorities are more likely to live near a commercial waste treatment facility or an uncontrolled hazardous waste site than the general population. Such facilities and sites are likely to be sources of ground water or surface water contamination through storm water runoff and leachate, thus exposing those minorities to potential exposure through drinking water. In addition, consumption of fish can be a significant route of exposure for certain pollutants, such as PCBs, dioxins, furans, and lead. A recent survey indicated that Native Americans consumed 36 percent more fish than whites, and African-Americans consumed 13 percent more fish than whites.

8.3.4 RCRA-Specific Environmental Justice Concerns

RCRA-specific environmental justice concerns primarily involve siting and permitting issues and corrective action. EPA is currently taking steps to eliminate, or further control, the environmental justice concerns associated with such matters.

On June 2, 1994, EPA published the proposed rule RCRA Expanded Public Participation and Revisions to Combustion Permitting Procedures in the *Federal Register* (59 *FR* 28680). The proposed rule amends the existing RCRA regulations governing the permitting of hazardous waste management facilities by expanding the opportunities for public involvement. The proposed rule will allow the public to participate earlier in the permitting process and at key permitting milestones. The Agency believes the proposed rule presents significant opportunities to be responsive to environmental justice concerns. The recommended measures in the rule help enhance the level of public participation in the combustion permitting process by providing minority and low income populations a greater voice in decisionmaking and an opportunity to influence the federal and state officials who grant the permits.

When siting RCRA facilities, the Agency historically has focused solely on geological factors and has not considered environmental justice issues. This approach has been taken because the siting issues most relevant to environmental justice (e.g., permissable use, density) are addressed under local zoning laws, for which EPA exercises no control. The proposed rule will significantly change the current siting process to help ensure that environmental justice matters are given full consideration in any siting activity. Changes in the process will include:

- Requiring the facility to conduct a meeting with the community before it submits its permit applications
- Calling for the permitting agency to provide public notice when it receives an application, as well as before a trial burn takes place
- Enabling the permitting agency to require a facility to maintain an information repository (only in certain situations).

The Agency hopes to publish the final rule in fall 1995.

As for corrective action, EPA is currently examining whether priority setting methods adequately consider environmental justice concerns. For example, environmental justice concerns are being incorporated into the Agency's new Hazardous Waste Identification Rule-Contaminated Media rulemaking. The rule would allow regulators to require collection of demographic data for areas surrounding sites. In addition, EPA is evaluating whether the National Correction Action Prioritization System, which is used to rank RCRA corrective action sites, adequately considers environmental justice concerns. The system currently enables site rankings to include environmental justice considerations.

8.4 ENVIRONMENTAL JUSTICE AND ENFORCEMENT ISSUES

8.4.1 Targeting of Concerns

The following elements contribute to situations of environmental discrimination: oversiting of facilities in disadvantaged communities, disproportionate exposure of sensitive populations, and lack of public participation in decisionmaking processes. These elements serve to identify situations with possible environmental justice concerns. To address the issue of environmental justice, inspections should target high-risk areas, such as densely populated industrialized communities. Enforcement initiatives should focus on high-risk areas as well or in specialized industries where environmental justice is a potential issue.

Environmental justice evaluations serve as useful tools in enforcement targeting. These evaluations can take the form of checklists, computerized methodologies and risk equations (which often involve mapping programs), census data, and release information. Industrial facilities are ranked according to potential health and environmental impacts and often researched for historical noncompliance in media programs (see Section 8.5). Scoring systems for numerous parameters (e.g., economic status, population, minority composition, potential risk) are evaluated to identify potential priority enforcement targets. Rankings may be misleading, depending on criteria and methodology, and should not be the sole basis for determining whether a site presents a potential environmental justice concern. For example, an unpopulated area including wetlands in an evaluation could receive a zero (0 = no environmental justice concern) from an environmental justice index, although a neighboring minority community could be affected directly.

8.4.2 Community Involvement/Outreach

The lack of public participation in decisionmaking is a primary concern in environmental justice cases. If this problem can be rectified, many environmental justice concerns can be prevented. Community involvement and outreach efforts empower populations who lack sufficient resources to understand their rights under environmental regulations, mobilize efforts, and take appropriate actions. Barriers that prevent low-income, minority communities from taking an active role in environmental and human health protection usually stem from lack of education, awareness, and organization. For a community to be effective, citizens must know the facts and when to use them, as well as clearly communicate information to others.

Facilities are often blamed for negative environmental impacts based on perception rather than fact. People are usually aware of polluting industries in their neighborhoods, but they may not realize that these facilities are permitted to discharge within permit limits. Most communities

do not have, or know how to obtain, information regarding a facility's permits and compliance records. More important, they are not familiar with, nor do they understand, the legislation that regulates these facilities. Knowledgeable enforcement staff can assist communities in accessing/ interpreting technical information, such as Toxics Release Inventory (TRI) data, and explain citizens' rights under RCRA (e.g., public participation during permitting processes).

Effective communication poses another barrier to the involvement of minority groups in decisionmaking. Public notices, facility records, and training materials in English are of little value to minorities who do not speak or understand English. Language, however, is not the only barrier to information dissemination—media such as newspapers and television may be luxuries that low-income, minorities cannot afford. Other forms of media (e.g., free church bulletins, community bulletin boards, flyers) may reach targeted audiences more effectively.

8.5 EPA HEADQUARTERS WORKPLANS

The Office of Enforcement and Compliance Assistance (OECA) created an Environmental Justice Coordinating Council (EJCC) run by a full-time Environmental Justice Coordinator. Major offices within OECA provide representatives to the EJCC charged with the development of the agency-wide strategic plan. As of the *FY 1994 Enforcement Accomplishments Report*, the EJCC produced the following documents for use within EPA: 1) OECA draft strategy outline, 2) potential project lists describing the office's goals and objectives, and 3) draft OECA workplans, which provide detailed project descriptions, relationships to goals set forth, and key efforts. Representatives to the EJCC also provide input for the development of OECA's portion of the EPA-wide strategic plan.

8.5.1 Purpose of Environmental Justice Workplans

Under the direction of Executive Order 12898, OECA has developed environmental justice project workplans. The purpose of these workplans is twofold: 1) to ensure and promote environmental justice in OECA compliance programs, policies, and activities and 2) to ensure and promote environmental justice in OECA enforcement programs, policies, and activities. According to the workplans, the broad goal of the projects is to "achieve environmental protection for all so that no segment of the population, regardless of race, national origin, or income bears disproportionately high and adverse effects of environmental pollution."

8.5.2 Examples of Environmental Justice Projects

The OECA environmental justice project workplans include policy reviews, special initiatives to decrease the impact of hazardous waste exports, coordination of agency efforts, and outreach services. One project undertaken that affects the RCRA Enforcement Division and other OECA divisions is the review of supplemental environmental project (SEP) policies to ensure the integration of environmental justice considerations. Key efforts include evaluation of cases to determine the presence of environmental justice concerns, implementation of environmental justice concerns when considering penalty reductions using the revised SEP policy, and inclusion of environmental justice as a factor to calculate the percentage of the SEP cost applied to mitigate the penalty as calculated by the penalty policy.

Another all-division OECA environmental justice project seeks to guarantee equal protection in environmental law. This project links efforts with the Department of Justice to recognize current cases in which environmental justice goals can be implemented. To successfully achieve this project goal, a workgroup consisting of the Department of Justice, the Office of Civil Rights, and other environmental justice representatives must be established.

More specific to the RCRA Enforcement Division is a joint effort among headquarters, the regions, and states in targeting candidates for enforcement actions. The project is aimed at reducing the effects of exported hazardous waste from U.S. companies to countries lacking effective environmental protection programs. Implementation activities for this project include stringent enforcement of hazardous waste export laws, data base development, and joint participation in targeting exercises with the Department of Transportation and Customs.

The Office of Regulatory Enforcement, in addition to the projects highlighted previously, has developed enforcement guidance documents focused on the identification of environmental justice cases and the need for integration of environmental justice issues in litigation packages and consent decrees. These documents are currently in draft form.

The Enforcement Capacity and Outreach Office of OECA has established a pilot program to address community involvement and outreach efforts. The program will address various environmental justice topics, such as citizens rights and regulatory processes, community involvement in permitting decisions, and training in data interpretation and enforcement/ compliance monitoring activities.

8.6 EXAMPLES OF REGIONAL ENVIRONMENTAL JUSTICE ACTIVITIES

The regions have taken an active role in integrating environmental justice concerns into their policies and practices, including RCRA inspection and enforcement activities. Most projects are components of the regions' environmental justice action strategies required under Executive Order 12898, with attention to the special needs and situations of minority communities within their jurisdiction.

8.6.1 Region I

Recognition of environmental justice issues in daily practices has been deemed a necessity by Region I, illustrated through its 1993 environmental justice policy statement and implementation framework. To address environmental justice concerns, program staff must have adequate information to target and prioritize their activities. Region I created a data base that provides program staff with data to target communities for environmental justice consideration. Tools for targeting communities are essential for effectively addressing environmental justice concerns.

Several action items from Region I's Office of Solid Waste and Emergency Response's Environmental Justice Implementation Plan Progress Report focus on RCRA inspections and enforcement actions. Environmental justice has been incorporated into the region's inspection targeting matrix. Region I has conducted 18 RCRA program inspections in environmental justice areas from May 1, 1994, through December 31, 1994. Enforcement actions have been prioritized

and targeted based on environmental justice impact analysis data, and settlements have included SEPs. For example, an administrative complaint was issued against three Massachusetts Highway Department (MHD) facilities, one located in an environmental justice community, for RCRA violations. Settlement included a $100,000 penalty, $5 million SEPs, and $20 million on audits and remediation activities in all MHD facilities.

8.6.2 Region II

Recognizing the importance of community participation in RCRA permitting and corrective actions, Region II established a program for the translation of public notices into the native language of local residents. In addition to traditional media, the region is placing notices in foreign newspapers. Ten RCRA sites located within Region II are undergoing environmental justice evaluations for prioritization of permit and corrective action activities in the following geographic areas: Buffalo and the Bronx, New York; Ponce, Puerto Rico; and Newark, New Jersey.

8.6.3 Region III

Region III's RCRA program is participating in the region's multimedia enforcement initiative to use demographic analysis as one of the criteria in the multimedia screening and site selection process for targeting enforcement actions. The region has also drafted a RCRA facility evaluation form to incorporate environmental justice into its priority setting for RCRA corrective action. Specific environmental justice areas of concern in the region include Chester, Pennsylvania; Baltimore, Maryland; and the Anacostia River Watershed in Washington, DC.

8.6.4 Region IV

Region IV's environmental justice activities have focused on combustion facilities and implementation of guidance on environmental justice in siting, permitting, public involvement, and corrective action. As part of this activity, the region has been selecting key facilities with upcoming major decision points that may include environmental justice. The region is also developing a place-based environmental justice initiative in Alabama. The initiative includes regional participation in determining compliance of stationary sources and compliance inspections of significant air emitters located in environmental justice areas.

In addition, the region is providing financial and technical assistance to Native American Tribes for the RCRA Subtitle D program. The region is funding several tribes that have ongoing projects. Tribes in the program include:

- The Eastern Band of Cherokee, which received money to fund a full-time solid waste coordinator to continue a recycling and public outreach program

- The Seminole Tribe, which received funding to hire a solid waste manager to implement recommendations from the tribe's solid waste management plan

- The Miccosukee Tribe, which received funding to develop and operate a recycling program

- The Choctaw Tribe, which received funding to prepare a solid waste management plan.

8.6.5 Region V

Southeast Chicago and its multiple pollution problems are the focus of Region V's Southeast Chicago Environmental Initiative Action Plan. The initiative includes a framework to address the high concentration of disposal sites and industrial facilities located within low-income, minority communities. A partnership between EPA, Chicago's Department of Environment, and the Illinois EPA was formed to address tougher enforcement of environmental regulations.

8.6.6 Region VI

The Office of Planning and Analysis in Region VI published a computer-assisted environmental justice index methodology, which provides an overview of the Environmental Justice Analysis System. The analysis system serves as a tool for enforcement targeting and facility permitting concerned with environmental justice.

Using the Environmental Justice Index, calculated from five variables, the analysis system ranks sites that may be of environmental justice concern. The following three parameters are considered the essential variables in the equation: population, percent minority, and percent of economically stressed households in the study area. Sites are ranked on a scale from 0 to 100; the higher the rank, the greater the potential concern. Region VI uses this computer methodology in conjunction with a noncompliance search in all media programs, which is conducted with a computerized risk screening methodology using census information and TRI data to rank facilities under evaluation. Sites that receive high scores in the various criteria are targeted for enforcement activities.

8.6.7 Region VII

Region VII is upgrading its geographic information systems (GIS) with socioeconomic data, such as background, family size, and proximity to Superfund and RCRA facilities, to target RCRA compliance inspections in areas that the region has deemed to be potential environmental justice problem areas. This program is based on geographic pilots, including the current pilot in St. Louis/East St. Louis area. The region is also using socioeconomic data to identify environmental justice areas to help prioritize corrective actions. A RCRA corrective action facility located in such an area will be considered as a higher priority facility in the corrective action prioritization and planning process.

8.6.8 Region VIII

Region VIII is making environmental justice a primary issue in its multimedia workgroup. The workgroup is identifying high-minority and/or low income communities in the region and then identifying major emitters in those areas. The data gathered by the workgroup will be used

to target specific industrial sectors for inspection and better target enforcement and compliance assistance activities.

8.6.9 Region IX

Region IX has initiated a multimedia environmental justice assessment project to identify low-income, minority communities through GIS and 1990 census data and overlay the information with emission and release sources. Data will allow the region to prioritize its efforts among affected communities. An important component of this project is outreach within the region to collect and analyze information, as well as consider future recommendations.

8.6.10 Region X

Region X designated an Indian Coordinator to increase technical assistance to Native American tribes in the northwest. To date, the coordinator has conducted workshops and organized tribal conferences to discuss environmental justice issues. The region is also using contractors (referred to as circuit riders) to conduct outreach and technical assistance to tribes and Native Alaskan villages. These circuit riders visit tribes to learn about their current needs and issues and to deliver information on sound solid waste management.

RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

9. RCRA CIVIL AND CRIMINAL ENFORCEMENT: "TOOLS OF THE TRADE"

Module 9 Objectives

- **Become familiar with basic RCRA tools:**
  - **Inspections and information gathering authorities**
  - **Administrative orders**
  - **Civil actions**
  - **Criminal proceedings**
  - **Suspension or revocation of permits**

Notes:

Inspections and Information Gathering

- **§ 3007 allows EPA to inspect and gather information for developing regulations or enforcing RCRA provisions:**
  - **Any person who handles, or handled, hazardous waste**
  - **Relating to management of hazardous waste**
  - **May inspect and obtain samples**
  - **Enforceable with penalties up to $25,000 per day of noncompliance.**

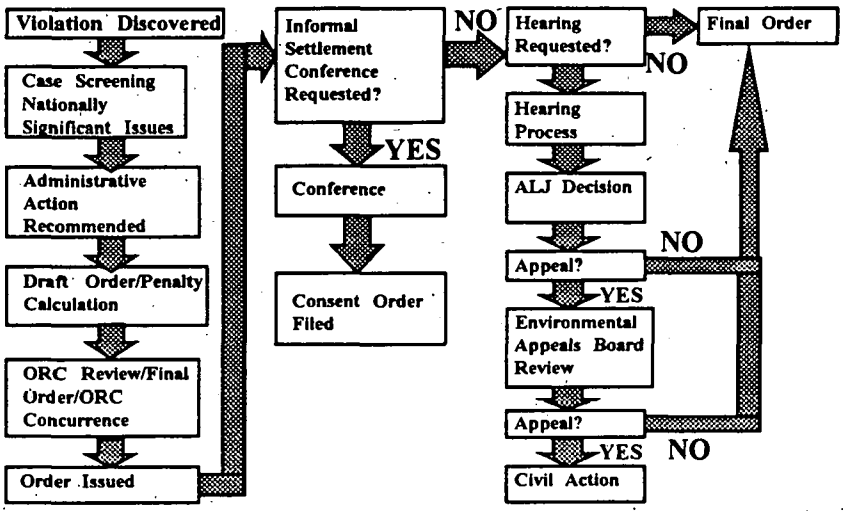
Notes:

Administrative Enforcement

- **EPA is authorized to issue administrative orders under RCRA.**
- **A final administrative order is legally binding.**
- **Procedures for issuance vary by the type of order:**
  - **Unilateral**
  - **Consent.**
- **Violator may be taken to federal court to enforce order.**

Notes:

Administrative Enforcement Flow Chart:



Notes:

Civil Enforcement

- **EPA initiates civil actions to obtain:**
  - **Injunctions requiring:**
    - **Compliance with RCRA requirements**
    - **Remediation of a release of hazardous waste**
    - **Compliance with administrative orders**
  - **Monetary penalties for:**
    - **Violating RCRA**
    - **Violating administrative orders.**

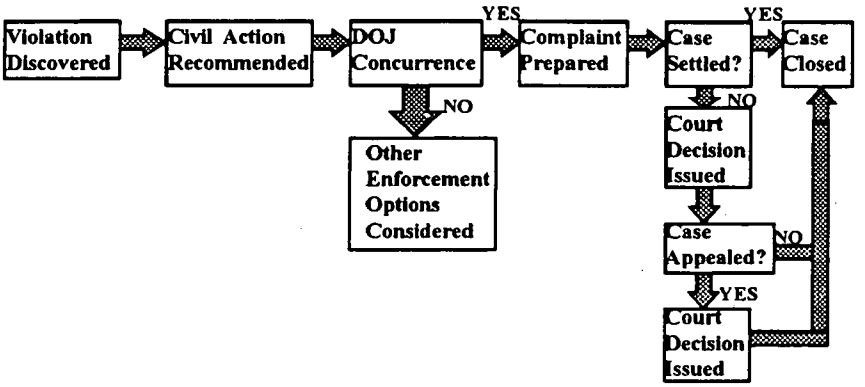
Notes:

Civil Enforcement

- **General Procedures**
  - **Executive Order 12778, "Civil Justice Reform," 57 *FR* 3640 (January 20, 1992) procedures must be followed.**
  - **Federal Rules of Civil Procedures and Evidence apply.**

Notes:

Civil Enforcement Flow Chart:



Notes:

Enforcement Strategy

- **Selecting the appropriate enforcement tool**
  - **Case screening procedures**
  - **EPA policies and guidelines**
  - **Threshold requirements for enforcement tool**
  - **Other factors (e.g., case history, desired remedy)**
  - **Special procedures for parallel proceedings**

Notes:

Comparison of Administrative and Civil Enforcement

ADMINISTRATIVE	CIVIL
• Handled within EPA	• DOJ represents EPA in the litigation
• No formal litigation report required	• Formal *litigation report* required
• *Simpler* and quicker process	• Often takes longer to conclude
• Easier to settle	• Greater publicity; regulated community may take more seriously
• Executive Order 12778 does not apply	• Must comply with Executive Order 12778
• Enforced in federal court; more steps needed to obtain contempt order	• Can be enforced *through the* court's contempt authority
• *Not recommended* for recalcitrant violators	• More effective against recalcitrants

Notes:

Overview of RCRA Compliance Monitoring and Enforcement Authorities

	Information Gathering	Compliance with Statute, Regs, or Orders	Civil Penalties	Remediation	Criminal Penalties
Authority	§3007 §3013 §9005	§3008(a) §7002 §9006	§3008(a) §3008(g) §3008(h)(2) §3013(e) §7003(b) §9006	§3008(a) §3008(h) §7003	§3007(b)(2) §3008(d)

Notes:

§3008(a)

"whenever. . . the Administrator determines any person has violated or is in violation of any requirement of this subchapter, the Administrator may issue an order assessing a civil penalty for any past or current violation, . . .or the Administrator may commence a civil action. . . for appropriate relief, including a temporary or permanent injunction."

Notes:

§3008(a) (Continued)

- **Administrative or judicial actions**
- **Violations of RCRA Subtitle C, RCRA regulations, authorized state regulations, permit**
- **Penalties of up to $25,000 per day of noncompliance for each violation**
  - **Based on "seriousness of violation" and "any good faith efforts to comply"**
- **1990 RCRA Civil Penalty Policy**

Notes:

§3008(h)

"Whenever... the Administrator determines there is or has been a release of hazardous waste into the environment from a facility authorized... under section 6925(e)... the Administrator may issue an order requiring corrective action or such other response [as]... necessary to protect human health or the environment..."

Notes:

§3008(h) (Continued)

- **Administrative action**
  - Consent order
  - Unilateral order
- **Judicial action**
- **Sanctions**
  - Revocation or suspension of interim status
  - Penalties for violation of order

Notes:

§3013

"If the Administrator determines, upon receipt of any information, that:

- **The presence of any hazardous waste...or**
- **The release of any such waste...**

may present a substantial hazard to human health or the environment, he may issue an order requiring the owner or operator of such facility or site to conduct such monitoring, testing, analysis, and reporting... as the Administrator deems reasonable..."

Notes:

§3013 (Continued)

- **Administrative order**
- **May apply to previous owner**
- **Monitoring, testing, analytical, and reporting proposal**
- **EPA can conduct monitoring**
- **Enforcement:**
  - **Judicial penalties of $5,000 for each day of violation**

Notes:

§7003

"upon receipt of evidence that the past or present handling,...of any solid waste or hazardous waste may present an imminent and substantial endangerment...the Administrator may bring suit...to restrain such person,...to order such person to take such other action as may be necessary, or both....The Administrator may also...take other action including...issuing such orders as may be necessary to protect public health and the environment."

Notes:

§7003 (Continued)

- **Judicial or administrative actions**
- **Notice to local government agencies and posted at site**
- **Public participation**
- **Enforcement**
  - **Judicial action**
  - **Penalties up to $5,000 per day**

Notes:

§3008(d)--Criminal Penalties

- **§ 3008(d) defines criminal acts as knowingly:**
  - **Transporting hazardous waste to an unpermitted facility**
  - **Violating permit requirement or interim status standards**
  - **Falsifying or omitting information from RCRA documents or records**
  - **Transporting hazardous waste without a manifest**
  - **Exporting hazardous waste without consent of receiving country.**

Notes:

§3008--Criminal Enforcement

- **§ 3008(e) establishes "knowing endangerment." Defendant must have knowingly:**
  - **Transported, treated, stored, disposed of, or exported hazardous waste**
  - **Committed one or more violations of § 3008(d)**
  - **Placed another person in imminent danger of death or serous bodily injury.**
- **Term "knowing" or "knowingly" means intentionally or willfully.**

Notes:

Suspension, Revocation, and Termination of Permits

- **Permits may be terminated for:**
  - **Noncompliance with any condition of the permit;**
  - **Failure to disclose or misrepresenting relevant facts in permit application; or**
  - **A determination that the permitted activity endangers human health or the environment.**

Notes:

Enforcement Strategy

- **New Enforcement Response Policy**
  - **Classifies RCRA violations and violators**
  - **Defines "timely and appropriate" response**
  - **Establishes enforcement response goals**

Notes:

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RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

9. RCRA CIVIL AND CRIMINAL ENFORCEMENT: "TOOLS OF THE TRADE"

Background Materials

EPA

INSTRUCTOR NOTES
RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

9. RCRA CIVIL AND CRIMINAL ENFORCEMENT: "TOOLS OF THE TRADE"

Time: 1.5 to 2 hours

Objectives:

- Review basic applications and requirements of administrative and judicial enforcement tools.
- Discuss advantages and disadvantages of different enforcement approaches.
- Examine inspection and information gathering authorities.

Emphases:

- Civil and administrative enforcement and relief under § 3008(a) and (g)
- Criminal enforcement under § 3008(d)
- Corrective action under § 3008 (h)
- Monitoring, testing and analysis under § 3013
- Imminent and substantial endangerment actions under § 3007
- Inspection and information gathering under § 3007(a)

Bibliography:

U.S. Environmental Protection Agency. 1993 (March). *RCRA Practitioners Enforcement Workshop: Course Materials.*

9. RCRA CIVIL AND CRIMINAL ENFORCEMENT: "TOOLS OF THE TRADE"[1]

9.1 RCRA § 3008(a) CIVIL ENFORCEMENT

9.1.1 RCRA § 3008(a)

Resource Conservation and Recovery Act (RCRA) § 3008(a), 42 U.S.C. § 6928(a), provides in pertinent part that:

> (1) Except as provided in paragraph (2), whenever on the basis of any information the Administrator determines that any person has violated or is in violation of any requirement of this subchapter, the Administrator may issue an order assessing a civil penalty for any past or current violation, requiring compliance immediately or within a specified time period, or both, or the Administrator may commence a civil action in the United States district court in the district in which the violation occurred for appropriate relief, including a temporary or permanent injunction.

9.1.2 What Can Be Enforced Under RCRA § 3008(a)

Under RCRA § 3008(a), the U.S. Environmental Protection Agency (EPA) can take enforcement action to address violations of:

- **RCRA Subtitle C** (RCRA §§ 3001-3039b, 42 U.S.C. §§ 6901-6939b)
- **EPA's regulations implementing RCRA Subtitle C** (40 CFR Parts 260-271)
- **Hazardous waste regulations of a state which has been authorized by EPA** to administer such regulations in lieu of the EPA regulations (see RCRA § 3006, 42 U.S.C. § 6926)
- **Terms of a RCRA permit** issued by EPA and/or an authorized state under RCRA § 3005(a), 42 U.S.C. § 6925(a), and 40 CFR Part 270 (or analogous state authorities).

Actions to enforce RCRA Subtitle C under RCRA 3008(a) may be brought administratively or judicially.

9.1.3 Judicial Enforcement

Procedures

Judicial cases must be referred to the Department of Justice (DOJ). Before cases can be referred, a litigation Report must be prepared by the Office of Regional Counsel (ORC), including input from the regional program office and other relevant technical support. If DOJ

1. This module was originally written by Mary Coe, Associate Regional Counsel, U.S. EPA Region III.

accepts the referral, DOJ will coordinate with ORC to prepare a complaint. The procedures implementing Executive Order 12778, Civil Justice Reform, (57 *FR* 3640; January 20, 1992) must be followed.

The complaint will be filed by DOJ, through the appropriate U.S. Attorney's Office (i.e., in the district in which the violation occurred). Relief sought may include penalties and/or injunctive relief. In filing and pursuing such an action, the Federal Rules of Civil Procedure and Evidence apply. Any appeals are to the appropriate U.S. Court of Appeals.

Advantages of Judicial Enforcement

The advantages of bringing a judicial enforcement action include the following:

- The ability to immediately seek a contempt order from the District Court, if the Consent Decree is violated
- A federal court may be inclined to award larger penalties
- Greater publicity; often, the regulated community takes judicial actions more seriously because of the Justice Department's involvement
- DOJ's attorneys are skilled litigators
- More effective against recalcitrants and likely noncompliers than administrative enforcement.

Disadvantages of Judicial Enforcement

However, judicial enforcement also poses some disadvantages. These include:

- The need to prepare a litigation report
- The need to coordinate the litigation with DOJ
- Often takes longer to obtain results
- Need to comply with Executive Order 12778.

9.1.4 Administrative Enforcement

Typical Process for Preparing and Issuing RCRA Administrative Complaints

In most regions, the process of preparing and issuing a RCRA administrative complaint includes the following:

- Facility Inspection; Inspection Report prepared
- RCRA program office develops case, drafts proposed administrative complaint, refers draft complaint to ORC for review

- ORC reviews, comments, returns draft complaint to RCRA Program
- RCRA program revises draft complaint, submits final complaint for concurrence by Program and ORC
- Complaint is signed by appropriate regional official (check Delegations Manual) and issued.

Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation or Suspension of Permits (40 CFR Part 22)

Administrative enforcement under RCRA § 3008(a) is governed by the Consolidated Rules of Practice set forth at 40 CFR Part 22. 40 CFR § 22.13 provides specifically that:

> If the complainant has reason to believe that a person has violated any provision of the Act, or regulations promulgated or a permit issued under the Act, he may institute a proceeding for the assessment of a civil penalty by issuing a complaint under the Act and these rules of practice. If the complainant has reason to believe that:
>
> (a) A permittee violated any term or condition of the permit, or
>
> (b) A permittee misrepresented or inaccurately described any material fact in the permit application or failed to disclose all relevant facts in the permit application, or
>
> (c) Other good cause exits for such action, he may institute a proceeding for the revocation or suspension of a permit by issuing a complaint under the Act and these rules of practice. A complaint may be for the suspension or revocation of a permit in addition to the assessment of a civil penalty.

Note: 40 CFR § 22.13 does not say anything about compliance orders.

Procedures Under 40 CFR Part 22

Exhibit 9-1 lists the procedures specified under 40 CFR Part 22 and the corresponding regulatory citations.

Advantages of Administrative Enforcement

The advantages of administrative enforcement actions include:

- Administrative actions are handled entirely in-house (no need for DOJ concurrence or litigation report; in most cases, no need for headquarters involvement, either)
- **Usually** quicker process than judicial

Exhibit 9-1. Procedures Under 40 CFR Part 22

Procedural Component	Requirement
The Players and their Roles	Complainant, Respondent, Regional Administrator, Regional Judicial Officer, Presiding Officer, Administrative Law Judge, Administrator, Environmental Appeals Board, Regional Hearing Clerk, Intervenors (40 CFR §§ 22.03, 22.04, and 22.11).
Filing of Pleadings and documents; service; form of pleadings and documents	40 CFR § 22.05
Originals to Regional Hearing Clerk	True and correct copies to Presiding Officer, Complainant, Respondent and any other Parties (e.g., intervenors) (40 CFR 22.05).
Certificates of service	A certificate of service shall accompany each document filed or served (40 CFR 22.05).
Service of complaint	Personal service or service by certified mail. Other service: personal or certified or first class mail (40 CFR 22.05).
Computation and extensions of time	40 CFR § 22.07
Ex-parte contacts	40 CFR § 22.08
Complaint: issuance; amendment; withdrawal	40 CFR §§ 22.13, 22.14
Answer to Complaint	40 CFR § 22.15
Designation of Presiding Officer	40 CFR § 22.21
Order Setting Prehearing Procedures	Prehearing conference (40 CFR § 22.19(a)) Status Reports Prehearing exchange (40 CFR § 22.19(b)) Discovery (40 CFR § 22.19(f))
Default Order	40 CFR § 22.17
Accelerated decision; decision to dismiss	40 CFR § 22.20
Informal settlement; Consent Agreement and Order	40 CFR § 22.18
Hearings	Schedule (40 CFR § 22.21) Evidence (40 CFR § 22.22) Objections and offers of proof (40 CFR § 22.23) Burden of presentation and proof (40 CFR § 22.24)
Proposed Findings of Fact, Conclusions of Law	40 CFR § 22.26
Initial Decision	40 CFR § 22.27
Motion to Reopen Hearing	40 CFR § 22.28
Appeal of Initial Decision	40 CFR § 22.30. Appeals are heard by the newly-created Environmental Appeals Board, effective March 1, 1992. See 57 *FR* 5320 (February 13, 1992).

Exhibit 9-1. Procedures Under 40 CFR Part 22 (continued)

Procedural Component	Requirement
Final Order	40 CFR § 22.31
Motion to Reconsider Final Order	40 CFR § 22.32
Supplemental Rules for RCRA	40 CFR § 22.37

- Often easier to settle
- Executive Order 12778 does not apply.

Disadvantages of Administrative Enforcement

Disadvantages associated with administrative actions include:

- ALJs historically have awarded lower penalties than federal court judges
- Less deterrent effect than judicial enforcement
- Must go to federal court to enforce against violations of the settlement agreement; more steps to obtain contempt order
- Less effective against recalcitrants and likely noncompliers than judicial enforcement.

9.1.5 Civil Sanctions Under RCRA § 3008(a)

Penalties

Statutory and Regulatory Limitations on Penalties

Section 3008(a)(3) of RCRA provides, in pertinent part, that:

> Any penalty assessed in the [compliance] order shall not exceed $25,000 per day of noncompliance for each violation of a requirement of [RCRA Subtitle C]. In assessing such a penalty, the Administrator shall taken into account the seriousness of the violation and any good faith efforts to comply with applicable requirements.

Section 3008(c) of RCRA provides that:

> If a violator fails to take corrective action within the time specified in a compliance order, the Administrator may assess a civil penalty of not more than $25,000 for each day of continued noncompliance with the order.

Section 3008(g) of RCRA provides, in part, that:

> Any person who violates any requirement of [RCRA Subtitle C] shall be liable to the United States for a civil penalty in an amount not to exceed $25,000 for each such violation. Each day of such violation shall, for purposes of this subsection, constitute a separate violation.

40 CFR § 22.14(c) provides that:

> The dollar amount of the proposed civil penalty shall be determined in accordance with any criteria set forth in the Act relating to the proper amount of a civil penalty and with any civil penalty guidelines issued under the Act.

Thus, the following points are noteworthy:

- The statutory maximum civil penalty for violations of RCRA is $25,000 per violation, per day
- In assessing a civil penalty in a RCRA judicial or administrative case, EPA must consider the seriousness of the violation and any other good faith efforts to comply
- When assessing penalties in RCRA administrative cases, EPA must comply with any "civil penalty guidelines" issued under RCRA
- In judicial cases, the amount of the penalty to be imposed is committed to the informed discretion of the court.

1990 RCRA Civil Penalty Policy

EPA issued a revised RCRA Civil Penalty Policy in October 1990. (See separate module on RCRA Civil Penalty Policy.)

Compliance Orders and Injunctive Relief

As noted earlier, RCRA § 3008(a) provides, in part, that whenever EPA determines that a person has violated or is in violation of any requirement of RCRA Subtitle C, EPA may issue an administrative order requiring compliance immediately or within a specified time (in addition to imposing penalties), or EPA may commence a civil action seeking appropriate relief, including a temporary or permanent injunction.

If a person violates an administrative compliance order issued under RCRA § 3008(a), EPA may assess a civil penalty of not more than $25,000 for each day of continued noncompliance with the order, and may suspend or revoke any permit issued to the violator. See RCRA § 3008(c), 42 U.S.C. § 6928(c).

Termination of Permit (42 U.S.C. § 3008(a)(3) and (c); 40 CFR § 270.43; 40 CFR Part 124)

EPA may institute an administrative proceeding for the termination of a permit by issuing a notice of intent to terminate under 40 CFR § 124.5(d) and otherwise following the procedures described in 40 CFR Part 124, Subpart A. The permittee or any other interested person may request an evidentiary hearing for reconsideration of, or to contest, such permit termination using the procedures set forth in 40 CFR Part 124, Subpart E.

40 CFR § 270.43 sets forth the following causes for terminating a permit during its term (as well as for denying an application for permit renewal):

- Noncompliance with any condition of the permit
- Failure in the application or during the permit issuance process to disclose fully all relevant facts, or misrepresentation of any relevant facts at any time; and
- A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination.

Revocation or Suspension of Interim Status (42 U.S.C. § 3008(a)(3), (c) and (h); 40 CFR Part 22)

EPA may institute an administrative proceeding to revoke or suspend interim status by filing a complaint and otherwise following the procedures set forth in 40 CFR Part 22. The grounds for revocation or suspension of interim status are set forth in 40 CFR § 22.13, as follows:

- Violation of any term or condition of "the permit" (i.e., of interim status standards set forth in 40 CFR Part 265 or analogous authorized state regulations)
- Misrepresentation of, inaccurate description of, or failure to disclose any material fact in the permit application; and
- Other good cause.

9.1.6 EPA's Revised Enforcement Response Policy

The principal agency guidance on enforcement of RCRA Subtitle C is the 1995 Revised Enforcement Response Policy (ERP) (Revised ERP), which is to be released in summer 1995, and replaces the version dated December 21, 1987. The ERP sets forth a scheme for classifying facilities that violate RCRA, provides guidance on timely and appropriate enforcement responses and describes conditions for EPA enforcement action in authorized states.

As stated in the 1987 Revised ERP,

> ...[t]he goal of the RCRA compliance monitoring and enforcement program is the attainment and maintenance of a high rate of compliance within the regulated community by establishing a comprehensive inspection program and by taking timely, visible and effective enforcement actions against serious violators.

The 1987 Revised ERP provides enforcement response guidance on *civil* actions—both judicial and administrative—pursuant to RCRA § 3008(a) (and authorized state program analogues). While not initially applicable to actions under RCRA §§ 3008(h), 3013 or 7003, the 1987 Revised ERP does apply when orders, decrees or other judgments issued under such authorities are violated.

9.1.7 EPA Enforcement of RCRA Subtitle C in Authorized States

Section 3008(a)(2) of RCRA, 42 U.S.C. § 6928(a)(2), provides that:

> In the case of a violation of any requirement of [RCRA Subtitle C] where such violation occurs in a state which is authorized to carry out a hazardous waste program under Section 3006, the Administrator shall give notice to the state in which such violation has occurred prior to issuing an order or commencing a civil action under this section.

EPA has interpreted this to mean that it has authority to take independent action to enforce provisions of a state's authorized program as well as to enforce provisions of the base program or the Hazardous and Solid Waste Amendments (HSWA) for which a state has not yet received authorization. The courts have agreed. See *T&S Brass and Bronze Works, Inc.*, 681 F. Supp. 314 (D.S.C. 1988), *aff'd* 865 F.2d 1261 (4th Cir. 1988); *Wyckoff Company* v. *EPA*, 796 F.2d 1197 (9th Cir. 1986); *United States* v. *Environmental Waste Control Inc.*, 710 F. Supp. 1172 (N.D. Ind. 1989); *aff'd* Nos. 89-1865 and 89-2197 (7th Cir., October 31, 1990); *United States* v. *Environmental Waste Control, Inc.*, 698 F. Supp. 1422 (N.D. Ind. 1988); (*United States* v. *Conservation Chemical Co. of Illinois*, 660 F. Supp. 1236 (N.D. Ind., April 23, 1987); *United States* v. *Rogers*, 685 F. Supp. 201 (D. Minn. 1987); *In re Municipal and Industrial Disposal Company*, RCRA Appeal No. 87-4 (CJO, November 1, 1988); *In re CID-Chemical Waste Management of Illinois, Inc.*, RCRA Appeal No. 87-11 (CJO, August 18, 1988)).

The 1987 Revised Enforcement Response Policy provides that states authorized to administer their own hazardous waste programs under RCRA § 3006 have the primarily responsibility for ensuring compliance with RCRA. However, it is EPA's policy to take enforcement action in an authorized state when:

- The state asks EPA to do so and provide justification based on unique case-specific circumstances
- The state fails to take "timely and appropriate" enforcement action (see *In re Cyclops*, Docket No. RCRA V-W-85-R-002 (September 24, 1985))

- The state is not authorized to take the action; or
- A case could establish a legal precedent.

EPA may also consider overfilling an enforcement action if it believes a state's enforcement response was inadequate (e.g., where noncompliance continues).

9.2 RCRA § 3008 CRIMINAL ENFORCEMENT

9.2.1 Background: The "Knowledge" Element

There are two criminal enforcement provisions in RCRA Subtitle C: Section 3008(d), 42 U.S.C. § 6928(d) ("knowing violations" of RCRA); and Section 3008(e), 42 U.S.C. § 6928(e) ("knowing endangerment"). In addition, Section 3008(f), 42 U.S.C. § 6928(f) defines some of the terms used in Section 3008(e).

Both of the criminal enforcement provisions require *knowledge* as an element. How is knowledge defined?

The government has argued, quite successfully, that the majority of RCRA criminal offenses are "general intent" crimes, that is, the government need show only that the *violative acts were intentional.* Under this standard, the government is **not** required to show that the defendant knew that his or her act was unlawful, or had knowledge of specific laws or regulations. The government must prove that the defendant knew of the factual conduct that constituted that violation.

To date, there have been only a handful of reported decisions involving the criminal enforcement provisions of RCRA. Generally, the cases have held, consistent with general intent statutes, that knowledge of specific laws and regulations may be inferred and need not be proved. However, there has been some disagreement regarding whether knowledge of the existence or absence of a permit is required in cases involving transport to a facility without a permit (RCRA § 3008(d)(1)) or disposal without a permit (RCRA § 3008(d)(2)(A)). See *United States* v. *Speach*, 968 F.2d 795 (9th Cir. 1992) and *United States* v. *Hayes International Corp.*, 786 F.2d 1499 (11th Cir. 1986) (knowledge of absence of a permit is an element of RCRA § 3008(d)(1)); *United States* v. *Johnson & Towers, Inc.*; 741 F. 2d 662 (3d Cir. 1984), *cert. denied sub. nom. Angel* v. *United States*, 469 U.S. 1208 (1985) (knowledge of absence of permit is an element of RCRA § 3008(d)(2)(A)); *United States* v. *Hoflin*, 880 F.2d 1033 (9th Cir. 1989) and *United States* v. *Laughlin*, 768 F. Supp. 957 (N.D.N.Y. 1991) (knowledge of absence of a permit not an element of RCRA § 3008(d)(2)(A).

A few cases hold that a defendant must have knowledge that the substances involved in the alleged violations of RCRA are harmful or hazardous, but not that they are listed or characteristic RCRA hazardous wastes. See *United States* v. *Hoflin*, 880 F.2d 1033 (9th Cir. 1989), *cert. denied*, 110 S. Ct. 1143 (1990); *United States* v. *Dee*, 912 F.2d 741 (4th Cir. 1990); *United States* v. *Baytank (Houston) Inc.*, 934 F.2d 599 (5th Cir. 1991); *United States* v. *Sellers*, 926 F.2d (5th Cir. 1991) (dicta).

9.2.2 RCRA § 3008(d) "Knowing Violations"

RCRA § 3008(d), 42 U.S.C. § 6928, provides that:

Any person who:

(1) *knowingly transports* or cause to be transported any hazardous waste identified or listed under this subtitle to a *facility which does not* have a permit under this subtitle, or pursuant to title I of the Marine Protection, Research, and Sanctuaries Act (86 Stat. 1052),

(2) knowingly *treats, stores, or disposes* of any hazardous waste identified or listed under this subchapter

(A) without a permit under this subchapter or pursuant to title I of the Marine Protection, Research, and sanctuaries Act (86 Stat. 1052); or

(B) in knowing violation of any material condition or requirements of such permit; or

(C) in knowing violation of any material condition or requirements of any applicable interim status regulations or standards;

(3) *knowingly omits material* information or *makes any false material statement* or representation in any application, label, manifest, record, report, permit, or other document filed, maintained, or used for purposes of compliance with regulations promulgated by the Administrator (or by a state in the case of an authorized state program) under this subchapter;

(4) *knowingly generates, stores, treats, transports*, disposes of, exports, or otherwise handles any hazardous waste or any used oil not identified or listed as a hazardous waste under this subchapter (whether such activity place before or takes place after the date of the enactment of this paragraph) and who knowingly destroys, alters, conceals, or fails to file any record, application, manifest, report, or other document required to be maintained or filed for purposes of compliance with regulations promulgated by the Administrator (or by a state in the case of an authorized state program) under this chapter;

(5) *knowingly transports without a manifest*, or causes to be transported without a manifest, any hazardous waste or any used oil not identified or listed as a hazardous waste under this subchapter required by regulations promulgated under this subchapter (or by a state in the case of a state program authorized under this subchapter) to be accompanied by a manifest; or

(6) *knowingly exports a hazardous waste* identified or listed under this subchapter (A) without the consent of the receiving country or, (B) where there exists an

international agreement between the United States and the international agreement between the United States and the government of the receiving country establishing notice, export, and enforcement procedures for the transportation, treatment, storage, and disposal of hazardous wastes, in a manner which is not in conformance with such agreement; or

(7) knowingly stores, treats, transports, or causes to be transported, disposes of, or otherwise *handles any used oil* not identified or listed as a hazardous waste under this subchapter—

(A) in knowing violation of any material condition or requirement of a permit under this subchapter; or

(B) in knowing violation of any material condition or requirement of any applicable regulations or standards under this chapter;

shall, upon conviction, be subject to a fine of not more than *$50,000 for each day* of violation, or *imprisonment* not to exceed two years (five years in the case of a violation of paragraph (1) and (2)), or both. If the conviction is for a violation committed after a first conviction of such person under this paragraph, the maximum punishment under the respective paragraph *shall be doubled* with respect to both fine and imprisonment.

9.2.3 RCRA § 3008(e) "Knowing Endangerment" and RCRA § 3008(f) "Special Rules"

RCRA § 3008(e), 42 U.S.C. § 6928(e), provides that:

Any person who knowingly transports, treats, stores, disposes of, or exports any hazardous waste identified or listed under this chapter in violation of paragraph (1), (2), (3), (4), (5), (6) or (7) of subsection (d) of this section who knows at the time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more *than $250,000* or imprisonment for not more *than fifteen years, or both.* A defendant that is an organization shall, upon conviction of violating this subsection, be subject to a fine of not more *than $1,000,000.*

RCRA § 3008(f), 42 U.S.C. § 6918(f), provides that, for the purposes of subsection (e) of this section:

(1) A person's state of mind is knowing with respect to-

(A) his conduct, if he is aware of the nature of his conduct;

(B) an existing circumstance, if he is aware of believes that the circumstance exists; or

(2) In determining whether a defendant who is a natural person knew that his conduct placed another person in imminent danger of death or serious bodily injury—

(A) the person is responsible only for actual awareness or actual belief that he possessed; and

(B) knowledge possessed by a person other than the defendant but not by the defendant himself may not be attributed to the defendant;

Provided, that in proving the defendant's possession of actual knowledge, circumstantial evidence may be used, including evidence that the defendant took affirmative steps to shield himself from relevant information.

(3) It is an affirmative defense to a prosecution that the conduct charged was consented to by the person endangered and that the danger and conduct charged were reasonably foreseeable hazards of-

(A) an occupation, a business, or a profession; or

(B) medical treatment or medical or scientific experimentation conducted by professionally approved methods and such other person had been made aware of the risks involved prior to giving consent.

The defendant may establish an affirmative defense under this subsection by a preponderance of the evidence.

(4) All general defenses, affirmative defenses, and bars to prosecution that may apply with respect to other federal criminal offenses may apply under subsection (e) of this section and shall be determined by the courts of the United States according to the principles of common law as they may be interpreted in the light of reason and experience. Concepts of justification and excuse applicable under this section may be developed in the light of reason and experience.

(5) The term "organization" means a legal entity, other than a government, established or organized for any purpose, and such term includes a corporation, company, association, firm, partnership, joint stock company, foundation, institution, trust, society, union, or any other association persons.

(6) The term "serious bodily injury" means-

(A) bodily injury which involves a substantial risk of death;

(B) unconsciousness;

(C) extreme physical pain;

(D) protracted loss or impairment of the function of a bodily member, organ, or mental faculty.

9.2.4 Policies and Procedures

Candidates for Criminal Enforcement

Prosecutors look for cases that demonstrate *knowledge/intent* and *harm* even though "harm" is not technically an element of Section 3008(d) violations.

Classic cases involve: Midnight dumping, falsification of records, reports, manifests or land disposal restriction (LDR) notices/certifications.

Other classic elements: Defendant's prior involvement with regulatory agencies; specialized knowledge.

EPA's criminal program seeks to *prosecute individuals* (rather than just corporations) where possible. Individuals can be given prison sentences—a greater deterrent than monetary fines. See, for example, *United States* v. *Dee*, 912 F.2d 741 (4th Cir. 1990) (upheld conviction of three individual civilian employees of U.S. Army for violations of RCRA § 3008(d)(2)(A)).

Parallel Proceedings

Occasionally, in the course of a RCRA civil investigation or proceeding, one discovers possible criminal conduct by the subject of the investigation or proceeding. Conversely, in the course of a RCRA criminal investigation or proceeding, one may discover conditions or activities that call for a civil investigation or proceeding.

A classic example is where an on-going criminal violation of RCRA is causing harm to public health or the environment and should be addressed quickly by injunctive relief.

When circumstances involving *both civil and criminal conduct* arise, it can raise difficult procedural, policy and due process issues. For instance:

- Where both civil and criminal enforcement attorneys are developing cases, to what degree may the two attorneys share information?

- Where the civil and criminal enforcement attorneys both seek to interview or obtain testimony from the same witness, might the testimony, in the civil deposition "preview" the governments case to the defense, or create two sets of contradictory testimony?

- Must a civil investigator give *Miranda* warnings to a witness being interviewed if it is possible or likely that the information could later be shared with a criminal investigator?

To address these and other issues, EPA and DOJ have developed guidance on when to proceed with **civil** enforcement, when to select criminal enforcement and when it is permissible to enter into so-called "parallel proceedings." These guidances are:

- "Guidelines on Investigative Procedures for Parallel Proceedings" (June 1989)
- "Procedures for Requesting and Obtaining Approval of Parallel Proceedings" (June 15, 1989)
- "Supplement to Parallel Proceedings Guidance and Procedure for Requesting and Obtaining Approval of Parallel Proceedings" (July 18, 1990)
- "Land and Natural Resources Division Dir. No. 5-87, Guidelines for Civil and Criminal Parallel Proceedings" (October 13, 1987)

Copies of these guidance documents may be obtained from EPA's Office of Criminal Enforcement or the Environmental Crimes Section at DOJ.

According to the above-referenced DOJ guidance:

- As a general rule, when both civil and criminal action are possible for a single statute, *a criminal proceeding should generally be brought and resolved before a civil action.* The rationale for this includes:
  - Speedy trial act considerations
  - More substantial deterrent and punitive effects of criminal sanctions
  - Courts may reduce criminal sentences if civil penalties have already been imposed
  - Conviction in a criminal case can be used as collateral estoppel in a subsequent civil case on the same issue.
- Exceptions to the general rule:
  - Where ongoing civil violations present such a threat to public health or the environment that immediate injunctive relief is necessary.
  - Where defendant's assets are in danger of dissipation
  - Where there is only a marginal relationship between the civil and criminal violations
  - Cases where the statute of limitation period for civil enforcement is about to expire
- Information developed by or obtained by criminal investigators should be shared with civil enforcement attorneys only in accordance with F.R. Crim. Pro. 6(e).

  Rule 6(e) bars federal prosecutors from disclosing *matters occurring before the grand jury* to anyone except under narrowly defined circumstances. In *United States* v. *Sells*

Engineering Inc., 463 U.S. 418, the Supreme Court held that rule 6(e) bars federal prosecutors from disclosing grand jury material to DOJ civil attorneys when the civil attorneys are using the information for purposes other than assisting the criminal case. Therefore:

- To the extent possible, evidence should be obtained by criminal investigators by methods other than grand jury subpoena, such as searches and interviews

- Prior to presentation to the grand jury, investigators should summarize or segregate evidence obtained up to that time; track all evidence obtained independently of the grand jury

- If information is **not** subject to Rule 6(e), criminal enforcement team may share such information with civil team

- When Rule 6(e) **does** apply, only federal prosecutors and supervisory attorneys may share grand jury information. Can only share with other DOJ civil attorneys or EPA civil attorneys and investigators provided that such sharing is necessary to assist the prosecutor in enforcing criminal law and meets certain notification requirements of Rule 6(e)(3)(B). With court permission, information on violations of state criminal laws may be disclosed to state criminal enforcement personnel

- Any other disclosure of grand jury information may be only on a showing of "particularized need" any per court order under Rule 6(e)(3)(C)(i)

- What constitutes "matters occurring before the grand jury" is complex, unsettled

- Evidence obtained through civil or administrative discovery or inspections may be shared with federal and state criminal prosecutors. The flow of information from *civil to criminal is not covered by Rule 6(e).* However, the following rule applies:

  - There must have been a good faith civil or administrative basis for the discovery

  - Administrative inspection must have been "objectively reasonable" (i.e., supported by administrative probable cause; limited to normal administrative scope; authorized by voluntary consent, administrative search warrant or "scheme of pervasive regulation")

  - Advise DOJ section chief, before sharing, how above two elements are satisfied

  - Evidence obtained through civil or administrative inquiries other than formal discovery or compulsive means may be shared regardless of good faith, so long as these has been no deception

- *Miranda* warnings are unnecessary during civil discovery

- *Miranda* warnings only required for "custodial interrogation." Civil investigation is not custodial

- If a deponent asks about the possibility of criminal liability, civil attorney should respond: "The United States is free to choose civil, criminal or administrative enforcement and any decision to take one type of action does not preclude another types of action"

- If a witness asks other questions about self-incrimination, right to counsel, etc. tell the witness he/she is free to consult his/her own attorney.

Double Jeopardy: *United States* v. *Halper*

Another matter to consider when a violation could be addressed by *either* civil or criminal enforcement is the risk of "double jeopardy."

In *U.S.* v. *Halper*, 109 S. Ct. 1892 (1989), the Supreme Court held that under the double jeopardy clause, a defendant who already has been punished in a criminal prosecution may not be subjected to an additional civil sanction to he extent that such second sanction may not fairly be characterized as remedial, but only deterrent or retribution. *Id.* at 1902. Thus, *Halper* bars the United States from seeking punitive damages (or civil penalties that are punitive) from a defendant in a *civil* action if that defendant has already been convicted for the same conduct in a previous *criminal* prosecution.

Although *Halper* directly applies to a civil proceeding which follows a criminal prosecution its principles also apply when the civil action precedes the prosecution. See *U.S.* v. *Mayers*, 827 F.2d 1126 (11th Cir. 1990), *cert. denied*, 111 S. Ct. 178 (1990); *U.S.* v. *Adolfo Ayala Sanchez*, No. M-90-020 (S.D. Tex. 1990).

Note the following points regarding double jeopardy:

- No double jeopardy if state action follows a federal action (or vice versa); "dual sovereign"

- If state enforcement is "tool of federal enforcement," "dual sovereign" concept may not work. Problem for authorized states (e.g., state civil action followed by EPA criminal action). (In such case, argue penalties go to state; state law enforces state standards; try to separate the two.)

- Try to tie the civil penalty to compensation

- Argue that the harm caused by the defendant is impossible to quantify; penalty equals liquidated damages. Some courts have bought this. Halper seems to accept this

- Permit revocation may be considered remedial, not punitive

- A defendant who previously agreed to pay civil penalties under a settlement with EPA can't raise a *Halper* double jeopardy claim if the defendant knew a criminal investigation was pending. *U.S.* v. *Marcus Schloss & Co., Inc.*, 724 F. Supp. 1123 (S.D. N.Y. 1989)

- Play up the factors in our RCRA Civil Penalty Policy ("potential for harm" and "economic benefit").

9.3 RCRA § 3008(h) CORRECTIVE ACTION AT INTERIM STATUS FACILITIES

9.3.1 RCRA § 3008(h)

RCRA Section 3008(h) provides, in part, that:

> (1) Whenever on the basis of any information the *Administrator determines* that there is or has been a *release of hazardous waste into the environment* from a facility authorized to *operate under section 3005(e)* of this title, the Administrator may issue an order *requiring corrective action* or such other response measure as he deems necessary to *protect human health or the environment* or the Administrator may commence a *civil action* in the United States district court in the district in which the facility is located for appropriate relief, including a *temporary or permanent injunction.*
>
> (2) Any order issued under this subsection may include a suspension or revocation of authorization to operate under section 3005(e) of this title, shall state with reasonable specificity the nature of the required corrective action or other response measure, and shall specify a time for compliance. If any person named in an order fails to comply with the order, the Administrator may assess, and such person shall be liable to the United States for, a civil penalty in an amount not to exceed $25,000 for each day of noncompliance with the order.

9.3.2 Elements of RCRA § 3008(h)

The discussion below addresses the key elements of § 3008(h):

- "Whenever on the basis of any information *the Administrator determines...*"

  - Administrator's authority has been delegated to Regional Administrators and Assistant Administrator for Solid Waste and Emergency Response. (See Delegation No. 8-31 March 6, 1986.) Check Regional Delegations Manual for sub-delegations.)

  - Information can be obtained from various sources, e.g., sample data, inspection reports, photographs, facility records, permit applications state records, corroborated informant's tips or citizen complaints. Consider utilizing RCRA § 3007 information requests

- Civil referrals under RCRA § 3008(h) should include a separate written "Determination of Release."

- *"...that there is or has been a release...into the environment..."*

  - Term "release" not defined in the statute; use the CERCLA definition: "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment." 42 U.S.C. § 9601(22). The exemptions in the CERCLA definition do not apply

  - Term "environment" not defined. Legislative history makes it clear that Section 3008(h) is not limited to any particular medium. H. Rep. No. 1133, 98th Cong., 2nd Sess. 111-112 (1984)

  - Not necessary to have actual sampling data to show a release. May rely on other information (e.g., cracked dike of surface impoundment)

  - No minimum amount of hazardous waste or constituents required for a release.

- *"...of a hazardous waste..."*

  - Term "hazardous waste" is not limited to regulatory definition, i.e., wastes listed or identified in 40 CFR Part 261. Definition includes hazardous waste as more broadly defined in the statute (RCRA § 1004(5)). The definition also includes "hazardous constituents." See H. Rep. No. 1133, 98th Cong. 2d Sess. 111-112 (1984); *U.S.* v. *Environmental Waste Control, Inc.*, 710 F. Supp. 1172 (N.D. Ind. 1989), *aff'd*, 917 F.2d 327 (7th Cir. 1990), *cert. denied*, 111 S. Ct. 1621 (1991); *U.S.* v. *Clow Water Systems*, 701 F. Supp. 1345 (S.D. Ohio, 1988)

  - "Hazardous constituents" are substances listed in 40 CFR Part 261, App. VIII

- *"...from a facility..."*

  - For the purpose of RCRA § 3008(h), EPA uses the definition of "facility" applied in the context of corrective action at permitted facilities). There, the term is defined as "all contiguous property under the control of the owner or operator seeking a permit under RCRA Subtitle C of RCRA." This definition is taken from the proposed corrective action regulations ("proposed Subpart S Rule"), 55 *FR* 30798, 30874. This definition was upheld in the context of RCRA § 3004(u) in *United Technologies Corp.* v. *EPA*, 821 F.2d 714 (D.C. Cir. 1987)

  - Unlike Section 3004(u), Section 3008(h) broadly authorizes corrective action for any release from a "facility." It does **not** require (as Section 3004(u) **does**) a finding that the release came from a "solid waste management unit" (SWMU).

- Once a *release* is determined to originate from *within a facility*, the *scope of remediation* under Section 3008(h) is *not limited by the facility boundaries*. Section 3004(v) of RCRA, 42 U.S.C. § 6924(v), provides that EPA may issue orders requiring corrective action for *releases that have crossed the facility boundary* if the permission of the owner of the affected property can be obtained.

- *"...authorized to operate under Section 3005(e)..."*

  - This requirement has been interpreted to include:

    1. Facilities which have fully qualified for interim status under RCRA § 3005(e) and 40 CFR § 270.10 (or authorized state equivalent);

    2. Facilities which have not fully qualified for interim status under RCRA § 3005(e) and 40 CFR § 270.10 (or authorized state equivalent), but which could have (because they were "in existence" on the effective date of regulations which made them subject to RCRA permitting requirements) and should have (because they continued to treat, store or dispose of hazardous waste after such date); and

    3. Facilities which had interim status, but such interim status has been terminated under 40 CFR Part 22 (administrative termination), Section 3005(c), Section 3005(e)(2) and (3) (the "loss of interim status" [LOIS] provisions) or Section 3008(h)(2). (Note: RCRA § 3008(h) does *not* apply to a facility which lost its interim status because of a final decision to grant or deny a RCRA permit under 40 CFR Part 124.)

  - Note that facilities which were issued state permits after November 1, 1984 (enactment of HSWA), but have not yet received the "federal portion" of the permit are treated as interim status facilities for the purposes of RCRA Section 3008(h).

  - Also note that a facility may be "authorized to operate under RCRA § 3005(e)" not only while it is actively operating, but also while it is in the process of closing or even after closure (i.e., closure itself does not terminate interim status).

- *"...corrective action or such other response..."*

  - Containment, stabilization, source control (Interim Measures [IM])

  - Studies to characterize the nature and extent of contamination, assess exposure and health and environmental effects (RCRA Facility Investigation [RFI])

  - Identification and evaluation or remedies (Corrective Measures Study [CMS])

  - Design and Construction of selected remedy; implementation (Corrective Measures Implementation [CMI]).

- *"...as [the Administrator] deems necessary to protect human health or the environment..."*

  - Consider quantity and concentration of hazardous waste or constituents; extent of contamination; properties of the hazardous wastes or constituents; transport and fate of hazardous constituents; actual and potential exposure pathways; human and environmental receptors; effects of exposure; other factors

  - Lesser showing of threat to human health or environment needed for investigations or studies than for actual remediation.

9.3.3 Procedures

Under Section 3008(h), EPA can issue *administrative orders* or commence a *civil judicial action* for corrective action.

Administrative Orders

The regions most often rely on administrative action, rather than judicial action, and on consent orders, rather then unilateral orders, to enforce RCRA § 3008(h). Administrative orders requiring corrective action are subject to the "Rules Governing Issuance of and Administrative Hearings on Interim Status Corrective Action Orders," 40 C.F.R. Part 24. These rules were upheld in *Chemical Waste Management, Inc.* v. *U.S. Environmental Protection Agency*, 873 F.2d 1477 (D.C. Cir. 1989).

Consent Orders

The region typically notifies the facility that the region is seeking corrective action at the facility pursuant to RCRA § 3008(h). The region encloses with the notification letter a copy of the "Corrective Action Plan," OSWER Directive No. 9902.3-2A (May 13, 1994) and invites the facility owner/operator to meet with the region to discuss EPA's proposal for corrective action.

Usually the region will seek to negotiate a Consent Order with the facility owner/operator for performance of the "investigatory phase" of corrective action (i.e., the RFI and CMS). The RFI/CMS is the RCRA analogue to CERCLA's Remedial Investigation and Feasibility Study (RI/FS). The region may also seek performance of so-called IM to address releases that pose an imminent threat to human health or the environment.

During or shortly after the first meeting, the region provides the facility owner/operator with a draft Consent Order. The facility owner/operator is given 60 days after receipt of the draft Consent Order to negotiate and sign a final Consent Order. This 60-day negotiation period may be extended in certain limited circumstances pursuant to formal regional procedures.

If a final Consent Order is not signed within the 60-day negotiation period (or extended period) the region will most likely issue a unilateral order. However, the region may also refer the matter to the Department of Justice for judicial action or use response authorities under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Once the RFI/CMS stage of corrective action has been completed, the region selects, on the basis of the RFI and CMS Reports and any other relevant information, a proposed Corrective Measure for the facility. The selection of the proposed Corrective Measure is announced in a "Statement of Basis" (similar to CERCLA's Proposed Plan), which is made available to the public for comment for a 30-day period.

After review of public comments, the region makes a "Final Determination" regarding selection of the Corrective Measure and announces such determination along with a "Response to Comments" (similar to the issuance of a CERCLA Record of Decision). See "Guidance on RCRA Corrective Action Decision Documents: The Statement of Basis, Final Decision and Response to Comment," OSWER Directive No. 9902.6 (February 1991).

After the Final Determination, the region usually attempts to negotiate a second Consent Order with the facility owner/operator requiring implementation of the Corrective Measures. If such an agreement is not reached, the region, once again, may issue a unilateral order requiring performance of the Corrective Measures, refer the matter to DOJ for judicial action to compel that result, or resort to CERCLA authorities (if applicable).

Unilateral Orders

In most cases, if the region is unable to negotiate an acceptable consent order under RCRA § 3008(h), it will issue a unilateral order in accordance with the procedures of 40 C.F.R. Part 24.

Rules Governing Issuance of an Administrative Hearing on Interim Status Corrective Action Orders (40 C.F.R. Part 24)

The rules governing administrative hearings on interim status corrective action orders issued under RCRA Section 3008(h) (40 CFR Part 24) are quite different from those governing the administrative assessment of penalties and revocation or suspension of permits under RCRA Section 3008(a) (40 CFR Part 22). The Part 24 rules establish a two-tiered set of procedures for administrative hearings on unilateral RCRA § 3008(h) orders. These procedures are generally less formal than those established by Part 22. Exhibit 9-2 provides an overview of Part 24 provisions.

Exhibit 9-2. Overview of 40 CFR Part 24

Regulatory Provision	Overview and/or Cite
General (40 CFR Part 24, Subpart A)	
Scope of rules (40 CFR § 24.01)	Apply to issuance of administrative orders under RCRA § 3008(h) and administrative hearings on such orders, except that the procedures of 40 CFR Part 22 apply to any order issued pursuant to RCRA § 3008(h) which: (1) Is contained within an administrative order that includes claims under RCRA § 3008(a) (2) Includes a suspension or revocation of interim status; and/or (3) Seeks penalties under RCRA § 3008(h)(2) for non-compliance with an order under RCRA § 3008(h).
Issuance of initial orders; decision on final orders and orders on consent (40 CFR § 24.02)	A unilateral order is referred to in Part 22 as "initial administrative order"; A unilateral order which has become effective after hearing and issuance of a final decision by the Regional Administrator, or after 30 days from issuance if no hearing is requested, is referred to as a "final administrative order"; A Consent Order is referred to as a "final administrative order on consent"; Who may issue an initial administrative order; Contents of initial administrative order.
Maintenance of docket and official record	40 CFR § 24.03
Filing and Service of Orders, decisions and documents	40 CFR § 24.04
Response to the initial order; request for hearing (40 CFR § 24.05)	Initial administrative order becomes a final administrative order 30 days after service unless respondent files a response and requests a hearing within such time. Response/request for hearing may include a statement indicating whether the procedures of 40 CFR Subpart B or Subpart C should apply.
Designation of Presiding Officer (40 CFR § 24.06)	Informal Settlement Conference (40 CFR § 24.07) Respondent may request; will not affect Respondent's obligation to timely request a hearing.
Selection of appropriate hearing procedures	40 CFR § 24.08

Exhibit 9-2. Overview of 40 CFR Part 24 (continued)

Regulatory Provision	Overview and/or Cite
Hearing on Orders Requiring Investigations or Studies (40 CFR Part 24, Subpart B)	
Where the unilateral order directs the Respondent to undertake: (1) an **RFI or CMS**; and/or (2) **Interim Measures** which are neither costly not technically complex and are necessary to protect human health and the environment prior to development of a permanent remedy, the hearing procedures in **40 CFR Part 24, Subpart B** (in addition to the generally applicable provisions of Subparts A and D), are employed for any hearing requested by the Respondent.	
Qualifications of Presiding Officer; ex parte discussion of proceeding (40 CFR § 24.09)	Presiding Officer may be either the Regional Judicial Officer (See 40 CFR § 24.04(b)) or attorney employed by the Agency who has no prior connection with the case, including the performance of any investigative or prosecuting functions. restrictions on *ex parte* contacts.
Scheduling the hearing; prehearing submissions by the Respondent (40 CFR § 24.10)	Date and time for hearing. At any time up to 5 business days before the hearing the Respondent may submit for inclusion in the administrative record information and argument supporting Respondent's position on the facts, law and appropriate relief.
Hearing; oral presentations and written submissions (40 CFR § 24.11)	Presiding Officer to conduct in fair and impartial way, avoid delay and redundancy, maintain order; EPA must introduce administrative record and be prepared to summarize basis for order; Respondent has reasonable opportunity to address relevant issues, present its views through legal counsel or technical advisors; Presiding Officer may allow technical or legal discussions and interchanges between parties (but not direct examination or cross-examination); Presiding Officer may address questions to Respondent's or EPA's representatives; Where the Respondent can demonstrate that through no fault of its own certain documents supportive of its position could not have been submitted **before** the hearing (per 40 CFR § 24.10(b)), it may submit them at hearing. Presiding Officer may grant petitioner leave to respond to such submissions. Presiding Officer may order either party to submit additional information either at or after the hearing.
Summary of hearing; Presiding Officer's recommendation (40 CFR § 24.12)	A written summary of the proceedings must be prepared and signed by the Presiding Officer as soon as practicable after the hearing; Presiding Officer prepares and files with the Regional Administrator a recommended decision based on the administrative record and the parties representations at hearing; Recommended decision must address all material issues of fact or law properly raised by the respondent, and recommend that the order be modified, withdrawn or issued without modification; If any contested relief provision in the order is not supported by a preponderance of the evidence in the record, Presiding Officer must recommend that the order be modified on terms supported by the record or withdrawn; Parties may file with the Clerk comments on the recommended decision within 21 days of service of recommended decision. Comments transmitted to Regional Administrator for consideration in reaching final decision.

Exhibit 9-2. Overview of 40 CFR Part 24 (continued)

Regulatory Provision	Overview and/or Cite
Hearing on Orders Requiring Corrective Measures (40 CFR Part 24, Subpart C)	
If the unilateral order requires the Respondent to undertake specified corrective measures (other than certain limited interim measures), either alone or in conjunction with an RFI or CMS, the procedures in 40 CFR Part 24, Subpart C govern. Subpart C makes more formal provision than the Subpart B for submission of evidence and argument before and at hearing and affords the respondent an opportunity (not available under Subpart B) to pose written questions on disputed factual matters to EPA.	
Qualifications of Presiding Officer; *ex parte* discussions of the proceeding (40 CFR § 24.13)	Same as Subpart B (40 CFR § 24.09), except that *ex parte* discussion restriction extends to any Agency staff member who performs a prosecutorial or investigative function in any factually related proceeding (or any representative of such person)
Scheduling the hearing; prehearing submissions by the parties (40 CFR § 24.14)	Presiding Officer establishes schedule for submission by Respondent of a memorandum with supporting affidavits and exhibits stating Respondent's position, submission of a response by EPA and a public hearing; Public hearing generally to be scheduled within 45 days of the order; Respondent may file a request (at least 21 days before hearing) for permission to submit written questions (no more than 25) to EPA concerning issues of material fact in the order; Presiding Officer may direct EPA to respond to designated questions. Presiding Officer may delete or revise questions for reasons including irrelevance, redundancy, unnecessary or undue burden. Presiding Officer transmits questions to EPA. EPA must respond within 14 days of service unless granted extension; Presiding Officer may order either party to submit additional information before, at or during the hearing; Presiding Officer may issue subpoenas for the attendance and testimony of persons, production of documents (but only as an adjunct to Presiding Officer's authority to ask questions and clarify factual matters in dispute; not for purposes of direct or cross-examination). Presiding Officer may allow Respondent to submit additional information at least 5 business days before hearing. Location of hearing.
Hearing; oral presentations and written submissions by the parties (40 CFR § 24.15)	Presiding Officer to conduct in fair and impartial way, avoid delay, maintain order; Presiding Officer shall permit oral statements on behalf of respondent and EPA; Presiding Officer may address questions to parties at hearing; Apart from questions by Presiding Officer, no direct or cross-examination allowed; EPA shall introduce order and administrative record and summarize basis for order. Respondent may respond; response may include new documents if respondent can demonstrate that, through no fault of its own, such documents could not have been submitted before hearing. Agency may rebut. Presiding Officer may allow respondent to respond to any such rebuttal. Presiding Officer may grant petitioner leave to respond to submissions made by Respondent under 40 CFR § 24.14(e).

Exhibit 9-2. Overview of 40 CFR Part 24 (continued)

Regulatory Provision	Overview and/or Cite
Transcript or recording of hearing (40 CFR § 24.16)	Hearing to be transcribed stenographically or tape recorded. Available for inspection/copying; Transcript/recording and all post-order submittals filed with clerk become part of administrative record.
Presiding Officer's recommendation (40 CFR § 24.17)	Presiding Officer files with Regional Administrator recommended decision based on administrative record as soon as practicable after hearing. Recommended decision must address all material issues of fact or law properly raised by respondent and must recommend that the order be modified, withdrawn or issued without modification; If any contested relief provision in order is not supported by a preponderance of the evidence in the record, Presiding Officer shall recommend that the order be modified on terms supported by the record, or withdrawn; Parties may file with the Clerk comments on the recommended decision within 21 days of service of recommended decision. Comments transmitted to Regional Administrator for consideration in reaching final decision.
Post-Hearing Procedures (40 CFR Part 24, Subpart D)	
Final Decision (40 CFR § 24.18)	Regional Administrator signs or modifies recommended decision, issues as final decision. Final decision must indicate factual or legal basis for modification or recommended decision.
Final Order (40 CFR § 24.19)	If Regional Administrator does not adopt portions of initial order or requires modification, signatory official on unilateral order shall modify order in accordance with final decision and file/serve. If Regional Administrator finds unilateral order appropriate as issued, final decision shall declare the initial unilateral order to be a final order, effective upon service of final decision. If Regional Administrator declares initial unilateral order must be withdrawn, signatory official on initial unilateral order shall file and serve withdrawal of order, with or without prejudice.
Final Agency/Action	The final decision and final administrative order are final agency actions effective for filing and service. Not appealable to the Administrator.

Judicial Action

Under Section 3008(h), EPA may initiate a civil judicial action to compel appropriate relief, including a temporary or permanent injunction, or to enforce a Section 3008(h) administrative order. Generally, a civil judicial action may be preferable to issuance of an administrative order in the following situations:

- Where a person is not likely to comply with an order or has failed to comply with a Section 3008(h) order

- Where a person's conduct must be stopped immediately to prevent irreparable injury, loss or damage to human health or the environment

- Where long-term, complex and costly response measures will be required. (Because compliance problems are more likely to arise during implementation of these actions than while carrying out a simple, short-term action, it may be better to have the matter already before the court for ease of enforcement.)

Other factors that could be considered include the value of a favorable decision as precedent and the need to deter noncompliance by other potential targets for EPA enforcement action under Section 3008(h).

A request to file a civil judicial action must be referred by the Assistant Administrator for Enforcement and Compliance Monitoring to the Department of Justice.

9.3.4 Sanctions

Revocation or Suspension of Interim Status

RCRA Section 3008(h)(2) provides in part that "[a]ny order issued under the subsection may include a suspension or revocation of authorization to operate under Section 3005(e)" (emphasis added). The procedures governing the administrative suspension of authorization to operate under RCRA § 3005(e) (i.e., interim status) are set forth at 40 CFR Part 22.

Civil Penalties for Violation of Section 3008(h) Order

RCRA Section 3008(h)(2) provides further that:

> If any person named in an order fails to comply with the order, the Administrator may assess, and such a person shall be liable to the United States for, a civil penalty in an amount not to exceed $25,000 for each day of noncompliance with the order.

9.3.5 Comparison of RCRA § 3008(h) to RCRA § 3004(u)

Section 3008(h) is not the only "corrective action" provision in RCRA Subtitle C. RCRA Section 3004(u), 42 U.S.C. § 6924(u), provides that:

> [A] permit issued after November 8, 1984 ... shall require, corrective action for all releases of hazardous waste or constituents from any solid waste management unit at a treatment, storage, or disposal facility seeking a permit under this subchapter, regardless of the time at which waste was placed in such unit.

Both RCRA § 3008(h) and RCRA § 3004(u) authorize EPA to require corrective action to address releases of hazardous wastes and hazardous constituents at or from a facility (or, in accordance with RCRA § 3004(v), "beyond the facility boundary"). However, they differ in several important respects:

- RCRA § 3004(u) corrective action may be required only at facilities which have a RCRA operating or post-closure permit. RCRA § 3008(h) may be used at facilities which are "authorized to operate under [RCRA § 3005(e)]." *In other words, RCRA § 3004(u) is the "permitting" corrective action; RCRA § 3008(u) is the "Interim Status enforcement" corrective action.*

- RCRA § 3004(u) corrective action requirements may be *imposed only by permit* and *challenged via a permit appeal* under the procedures in 40 CFR Part 124 (and, ultimately, the Administrative Procedure Act); RCRA § 3008(h) corrective action requirements may be imposed via administrative order (on consent or unilaterally) or judicial action. Such corrective action requirements may be challenged via the procedures in 40 CFR Part 24 (for unilateral orders) or in the context of defending against a RCRA § 3008(h) judicial action.

- Corrective action under RCRA § 3004(u) can only be required *for releases from "solid waste management units"* (SWMUs). The term SWMU is defined in the proposed Subpart S corrective action rule (55 *FR* 30,798) (July 27, 1990) as "any discernible unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid and/or hazardous wastes." (On the other hand, if a release cannot be attributed to a SWMU, the "omnibus authority" of RCRA § 3005(c)(3), 40 CFR § 270.32(b)(2), can be used to address such release "as necessary to protect human health and the environment." See *In re: LCP Chemicals - North Carolina, Inc.*, RCRA Permit Appeal No. 90-40 (Feb. 14, 1991); *In re: American Cyanamid Co.*, RCRA Permit Appeal No. 88-22 (October 31, 1989); *In re: Amerada Hess Corp.*, RCRA Appeal No. 88-10 (August 15, 1989). Corrective action under RCRA § 3008(h) is *not limited to releases from SWMUs;* it may be required for releases anywhere at or from a facility, into the environment.

- Modifications to corrective action requirements in a permit under RCRA § 3004(u) may be made only in accordance with the procedures for a permit modification in 40 CFR 270.41 and 42. Modifications to corrective action requirements in an order under RCRA § 3008(h) can be made by consent of the parties (if permitted by the terms of the order) or by issuance of another order (on consent or unilaterally).

- Corrective action requirements imposed via permit under RCRA § 3004(u) are subject to the *public participation* requirements of the RCRA permitting regulations (see 40 CFR § 124.10-.19). There are no statutory or regulatory requirements for public participation in the issuance of orders for corrective action under RCRA § 3008(h). However, Agency guidance sets forth public participation requirements for the selection of corrective measures (generally after the RFI/CMS stage and before the CMI state). See "Guidance on RCRA Corrective Action Decision Documents: The Statement of Basis, Final Decision and Response to Comments," OSWER Directive No. 9902.6 (February 1991).

RCRA § 3008(h) should be utilized where corrective action is needed at an "interim status" facility, but the facility is not seeking a permit (i.e., the owner/operator intends to close the

facility rather than obtain a RCRA operating permit and a post-closure permit is not required) or a permit is not expected to be issued in the near future. If an interim status facility is about to be issued a permit (operating or post-closure), it may make sense to wait and seek corrective action through the permit rather than via RCRA § 3008(h). If corrective action is required at an interim status facility under RCRA § 3008(h) prior to issuance of the permit, the region will have to decide at the time of permit issuance whether to incorporate the terms of the Section 3008(h) order into the permit (either directly or by reference) and terminate the order, or require the respondent/permittee to comply with the separate terms of both the order and the permit. (See "Coordination of Corrective Action Through Permits and Orders" (Aug. 10, 1989)).

Regulations implementing RCRA § 3008(h) (in addition to RCRA § 3004(u) and other authorities, as appropriate) address facilities that are ineligible for listing on the Superfund National Priorities List ("NPL"), 40 CFR Part 300, App. B, under the "RCRA/NPL deferral policy." See *FR* 21057 (June 10, 1986); "EPA Proposal to Keep Some, Drop Other NPL Waste Sites Subject to Corrective Action Under RCRA Subtitle C," 51 *FR* 23978 (June 24, 1988); "EPA Policy Statement on Determining Unwillingness for Sites Subject to RCRA Subtitle C Corrective Action on NPL," 53 *FR* 30005 (August 9, 1988); and "EPA Addition to Policy Statement on NPL Determinations for Sites Unable to Pay for RCRA Subtitle C Corrective Action," 53 *FR* 30002 (August 9, 1988).

9.4 RCRA § 3013 MONITORING, ANALYSIS AND TESTING

9.4.1 RCRA § 3013(a) Authority of Administrator

If the Administrator determines, upon receipt of any information, that:

(1) the *presence* of any hazardous waste at a facility or site at which hazardous waste is, or has been, stored, treated, or disposed of, or

(2) the *release* of any such waste from such facility or site

may present a *substantial hazard to human health or the environment*, he may issue an order requiring the owner or operator of such facility or site to conduct such monitoring, testing, analysis, and reporting with response to such facility or site as the Administrator deems reasonable to ascertain the nature and extent of such hazard.

9.4.2 Elements of RCRA § 3013(a)

The key elements of RCRA § 3013(a) are discussed below:

- *"upon receipt of any information ..."*
  - Information upon which a reasonable person would base a decision or take action must be gathered or presented before issuance of an order under § 3013

- Appropriate sources of information include laboratory analysis of samples; observations recorded in the course of an inspection; citizens' complaints; state or federal agency records indicating the type and quantity of waste likely to be found on site; information received pursuant to requests made under RCRA § 3007 and/or CERCLA § 104; other comparable sources of information.

- *"...that the presence of any hazardous waste..."*

  - Unlike RCRA § 3008(h), RCRA § 3013 *does not* require EPA to demonstrate an actual release of hazardous waste from a facility; it is enough for EPA to show that the *presence* of hazardous waste may present a substantial hazard to human health and the environment. Thus, RCRA § 3013 can be used in the absence of definite evidence of a release, where the mere threat of release presents a substantial hazard, e.g., where it is difficult, if not impossible, to ascertain, without extensive sampling, analysis, and monitoring, that a release actually occurred

  - The term "hazardous waste" as used in RCRA Section 3013 means the statutory definition set forth in RCRA § 1004(5), 42 U.S.C. § 6903(5), and not the narrower regulatory definition in 40 CFR § 260.10 and 261.3. See 40 CFR § 261.1(b).

  - A Section 3013 order may be used to develop the factual background necessary to support a 3008(h) action.

- *"...or release of [any hazardous] waste..."*

  - Section 3013 may also be used where there is evidence of an actual release of hazardous waste

- *"...at a facility or site at which hazardous waste is, or has been, stored, treated or disposed..."*

- *"...may present a substantial hazard to human health or the environment..."*

  - Congress used the words "may present" in RCRA § 3013, rather than "is presenting"

  - EPA need show only that there is a possibility or potential of a substantial hazard to human health or the environment, rather than to show that the hazard actually exists

  - Factors to be considered in determining that the presence or release of hazardous wastes may present a "substantial hazard" include:

    -- Likelihood of a release of hazardous wastes

    -- Manner of release of the hazardous waste from the site (i.e., through ground water, surface water, air, etc.)

-- Characteristics of the waste discharged or threatening to be discharged

-- Quantity of the waste discharged or threatening to be discharged

-- Current or potential uses of the portion of the environment affected.

-- Potential for exposure to humans and the environment

-- Other related factors.

– "May present a substantial hazard" is a lower standard than "may present on imminent and substantial endangerment" under RCRA § 7003.

- *"...[the Administrator] may issue an order..."*

– Only administrative orders may be issued under RCRA § 3013, though a judicial action may be filed to compel compliance with an administrative order requiring investigations, monitoring, etc. under RCRA § 3013

- *"...requiring the owner or operator of such facility or site..."*

– RCRA § 3013 orders may be issued to the present owner or operator under RCRA § 3013(a). Orders may also be issued to previous owners or operators in certain circumstances, as described in RCRA § 3013(b).

- *"...to conduct such monitoring, testing, analysis, and reporting with respect to the facility as the Administrator deems reasonable to ascertain the nature and extent of such hazard."*

– Under RCRA § 3013, EPA may require only the conduct of monitoring, testing, and analysis and reporting. Unlike RCRA § 3008(h) and § 7003, it may not be used to require actual cleanup or other remediation. However, information obtained under RCRA § 3013 may be used as a basis for a second order (or a judicial action) seeking such cleanup or remediation under RCRA § 3008(h) or § 7003.

9.4.3 RCRA § 3013(b) Previous Owner and Operators

RCRA § 3013(b) provides that:

> In the case of any facility or site not in operation at the time a determination is made under subsection (a) of this section with respect to the facility or site, if the Administrator finds that the owner of such facility or site could not reasonably be expected to have actual knowledge of the presence of hazardous waste at such facility or site and of its potential for release, he may issue an order requiring the most recent previous owner or operator of such facility or site who could reasonably be expected to have such actual knowledge to carry out the actions referred to in subsection (a) of this section.

RCRA § 3013(b) authorizes the issuance of an order against a prior owner or operator under certain circumstances. Conditions precedent to issuance of a RCRA § 3013 order to a prior owner or operator are:

1. The facility or site must be one which is not "in operation" at the time a determination is made under subsection (a), and

2. The present owner or operator of the facility or site "could not reasonably be expected to have actual knowledge of the presence of hazardous waste at such facility or site **and** of its potential for release."

The term "in operation" should be interpreted so as to allow EPA to gather information concerning potentially hazardous sites from those in the best position to provide that information. A facility is not "in operation" if it has been abandoned or is not otherwise being actively operated as a hazardous waste facility by the current owner or operator.

If the present owner could reasonably be expected to have knowledge of both the presence of hazardous waste and its potential for release, RCRA § 3013(b) prohibits the issuance of an order to the previous owner or operator. A reasonable expectation that an individual has knowledge of the presence of hazardous waste on his land and its potential for release can be based on evidence showing the use of the facility during the period of ownership/operation.

9.4.4 RCRA § 3013(c) Proposal

RCRA § 3013(c) provides that:

> An order under subsection (a) or (b) of this section shall require the person to whom such order is issued to submit to the Administrator within 30 days from the issuance of such order a proposal for carrying out the required monitoring, testing, analysis, and reporting. The Administrator may, after providing such person with an opportunity to confer with the Administrator respecting such proposal, require such person to carry out such monitoring, testing, analysis, and reporting in accordance with such proposal as the Administrator deems reasonable to ascertain the nature and extent of the hazard.

An order requiring respondent to submit a monitoring, testing, analytical, and reporting proposal should include the following elements:

- A recitation of the information and facts upon which the order is based

- An assertion of the threat or potential threat to human health and/or the environment

- A statement of the goals of the sampling, analysis, and monitoring program which respondent must propose

- A notice to respondent of the general areas of concern which must be addressed in the proposal which respondent must submit

- In the case of a unilateral order, a notice that respondent may submit, in writing, any legal or technical defenses, objections, or contentions which he may desire to make

- A notice to respondent that he is entitled to confer with EPA regarding the proposal which respondent must submit

- Information regarding the name, address, and telephone number of the appropriate EPA official whom the respondent may contact

- In the case of a consent order, a provision such as:

> Respondent agrees to implement the requirements of the work plan set forth below for carrying out investigative activities including monitoring, testing, analysis, and reporting at the facility. This work plan has been developed jointly by EPA and Respondent. EPA and Respondent agree that incorporation of this work plan in the instant Order satisfies the requirement under § 3013(c) that Respondent submit a proposal and that EPA provide an opportunity for Respondent to confer regarding such proposal.

- A statement that EPA has the right to approve any proposed changes or modifications made after the initial approval has been given to the proposal

The effect of a § 3013 order includes the following:

- Preparation of a submission for work proposal within 30 days (a request for a conference with EPA does not alter this 30-day period)

- An order does not in and of itself authorize the respondent to do any sampling, analysis, or monitoring. Such activities should be conducted only after EPA has approved respondent's proposal. Of course, any party may sample at, analyze, or monitor its own property at any time, but if it does so in advance of EPA approval, the results may not be acceptable to EPA.

- EPA must review respondent's submission and give written notice of whether EPA has approved the proposal or whether specified modifications are necessary.

9.5 RCRA § 3013(d) MONITORING, ETC., CARRIED OUT BY ADMINISTRATOR

RCRA § 3013(d) provides that:

> (1) If the Administrator determines that no owner or operator referred to in subsection (a) or (b) of this section is able to conduct monitoring, testing, analysis, or reporting satisfactory to the Administrator, if the Administrator deems any such

action carried out by an owner or operator to be unsatisfactory, or if the Administrator cannot initially determine that there is an owner or operator referred to in subsection (a) or (b) of this section who is able to conduct such monitoring, testing, analysis, or reporting, he may:

(A) conduct monitoring, testing, or analysis (or any combination thereof) which he deems reasonable to ascertain the nature and extent of the hazard associated with the site concerned, or

(B) authorize a state or local authority or other person to carry out any such action

and require, by order, the owner or operator referred to in subsection (a) or (b) of this section to reimburse the Administrator or other authority or person for the costs of such activity.

(2) No order may be issued under this subsection requiring reimbursement of the costs of any action carried out by the Administrator which confirms the results of an order issued under subsection (a) or (b) of this section.

(3) For purposes of carrying out this subsection, the Administrator or any authority or other person authorized under paragraph (1), may exercise the authorities set forth in section 6927 of this title.

Situations which may require the use of § 3013(d) authority include the following:

- Where no owner or operator is able to conduct the required monitoring, testing, or analysis satisfactorily
- Where testing conducted by an owner or operator is determined to be unsatisfactory
- Where it cannot be determined initially whether there is an owner or operator able to conduct the required monitoring and testing

Once EPA or some other authorized person has performed activities consistent with RCRA § 3013(d), an order may be issued to require reimbursement. A reimbursement order should be directed to the present owner or operator or the most recent previous owner or operator who could reasonably be expected to have actual knowledge of the hazardous waste. No reimbursement order can be issued where EPA's activities merely confirm the results the respondent had compiled under a RCRA § 3013(a) or RCRA § 3013(b) order (i.e., where the Agency has conducted its testing in the belief that the respondent's results were inaccurate or unreliable, only to find that the Agency's subsequent tests confirm the owner/operator's test results).

9.6 RCRA § 3013(e) ENFORCEMENT

RCRA § 3013 provides that:

> The Administrator may commence a civil action against any person who fails or refuses to comply with any order issued under this section. Such action shall be brought in the United States district court in which the defendant is located, resides, or is doing business. Such court shall have jurisdiction to require compliance with such order and to assess a civil penalty of *not to exceed $5,000* for each day during which such failure or refusal occurs.

Referrals of civil actions under RCRA § 3013(e) should follow the format used for other civil actions.

EPA must have a complete record of the information forming the basis for its decisions, including (if appropriate) documentation of the opportunity afforded the respondents to confer regarding the required proposal. The following documents should be included:

- Information EPA relied upon to issue the § 3013 order, to modify respondent's proposal, or to conduct its own monitoring, analysis, or reporting
- Copies of all relevant correspondence between EPA and the respondent
- Written records of conferences and telephone conversations between EPA and respondents
- Any information which substantiates a claim for reimbursement
- A copy of EPA's response to respondent's proposal.

9.7 RCRA § 7003 IMMINENT HAZARD ("IMMINENT AND SUBSTANTIAL ENDANGERMENT") ACTIONS

9.7.1 RCRA § 7003 Authority of Administrator

RCRA § 7003 (a), 42 U.S.C. § 6983 (a), provides that:

> Notwithstanding any other provision of this chapter, upon receipt of evidence that the past or present handling, storage, treatment, transportation or disposal of any solid waste or hazardous waste may present an imminent and substantial endangerment to health or the environment, the Administrator may bring suit on behalf of the United States in the appropriate district court against any person (including any past or present generator, past or present transporter, or past or present owner or operator of a treatment, storage, or disposal facility) who has contributed or who is contributing to such handling, storage, treatment, transportation or disposal to restrain such person

from such handling, storage, treatment, transportation, or disposal, to order such person to take such other action as may be necessary, or both.

A transporter shall not be deemed to have contributed or to be contributing to such handling, storage, treatment, or disposal taking place after such solid waste or hazardous waste has left the possession or control of such transporter if the transportation of such waste was under a sole contractual arrangement arising from a published tariff and acceptance for carriage by common carrier by rail and such transporter has exercised due care in the past or present handling, storage, treatment, transportation and disposal of such waste.

The Administrator shall provide notice to the affected state of any such suit. The Administrator may also, after notice to the affected state, take other action under this section including, but not limited to, issuing such orders as may be necessary to protect public health and the environment.

9.7.2 Elements of RCRA § 7003(a) Actions

The key elements of § 7003 are discussed below:

- *"Upon receipt of evidence..."*

  - The region must have all the evidence necessary to demonstrate that the respondent has handled, treated, stored, transported, or disposed of a solid or hazardous waste, and that such activity has resulted in a condition that may present an imminent and substantial endangerment to health or the environment before a RCRA § 7003 order may be issued.

  - Appropriate sources of evidence: Observations recorded in the course of an inspection or investigation; information received pursuant to requests made under RCRA § 3007, RCRA § 3013, or CERCLA § 104(e); laboratory analysis of samples; citizens' complaints other supporting information.

  - Evidence must be sufficiently probative and reliable to enable a reasonable person to conclude that issuance of a RCRA § 7003 order is appropriate.

- *"...that the past or present handling, storage, treatment, transportation or disposal of any solid waste or hazardous waste..."*

  - RCRA § 7003 may be used to address an imminent and substantial endangerment which may be presented by *past*, as-well as *present*, activities. RCRA § 7003 applies to *inactive*, as well as *active*, facilities. See *United States* v. *Northeastern Pharmaceutical and Chemical Company*, 810 F.2d 726, 739-41 (8th Cir. 1986); *United States* v. *Price*, 688 F.2d 204, 214 (3rd Cir. 1982); *United States* v. *Ottati & Goss*, Inc., 630 F. Supp. 1361, 1400 (D.N.H. 1985); *United States* v. *Bliss*, 667 F. Supp. 1298, 1313 (E.D. Mo. 1987).

- Unlike RCRA § 3008(h) and RCRA § 3013, RCRA § 7003 applies to endangerment posed by *solid* waste as well as *hazardous* waste. The terms solid waste and hazardous waste refer to their statutory definitions in RCRA § 1004(5) and (27); they are not limited to the more narrow regulatory definitions in 40 CFR § 260.10 and § 261.2 and .3. See 40 CFR § 261.6(b); 50 *FR* 627 (January 4, 1985). See also *Comite pro Rescate de la Salud* v. *Puerto Rico Aqueduct and Sewer Authority*, 888 F.2d 180 (1st Cir. 1984), *cert. denied*, 494 U.S. 1029 (1990); *Lincoln Properties, LTD* v. *Higgins*, 36 ERC 1228, 23 Envtl. L. Rep. 20,665, 1995 WL 217429 (E.D. Cal. 1993)

- *"...may present an imminent and substantial endangerment to health or the environment..."*

  - "May present" indicates that Congress did not intend to require that the evidence demonstrate that an imminent and substantial endangerment to public health or the environment definitely exists. The term "may" is "expansive language" which is "intended to confer upon the courts the authority to grant affirmative equitable relief to the extent necessary to eliminate any risk posed by toxic wastes". *United States* v. *Price*, 688 F.2d 204, 213-14 (3d Cir. 1981).

  - A finding of imminent and substantial endangerment only requires a finding that harm is *threatened*; actual harm or injury need not be shown. *Dague* v. *City of Burlington*, 935 F.2d 1343, 1356 (2nd Cir. 1991).

  - The threat or risk of harm must be *imminent and substantial* for EPA to act under RCRA § 7003, but the harm itself need not be imminent or substantial. For example, EPA could act if there exists an imminent and substantial threat that contaminants might be introduced into a water supply, even though any harm that would be caused by such introduction would be manifested after a period of latency. An endangerment need not be immediate in order to be imminent. An endangerment is imminent if *factors giving rise to it are present*, even though the harm may hot be realized for years. *United States* v. *Conservation Chemical Corp.*, 619 F. Supp. 162, 194 (W.D. Mo. 1985).

  - An endangerment is **substantial** if there is some reasonable cause for concern that someone or something may be exposed to a risk of harm by a release or a threatened release of a hazardous substance if remedial action is not taken. *Id.* at 194.

    Injunctive relief under § 7003 may be denied "where risk of harm is remote in time, completely speculative in nature, or de minimis in degree: *United States* v. *Reilly Tar & Chemical Corp.*, 546 F. Supp. 1100, 1009 (D. Minn. 1982) (quoting H.R. Rep. N. 1185, 93rd Long., 2nd Sess. 35-36) (holding that injunctive relief may be used to supplement response actions under other authorities where evidence indicates potential imminent and substantial endangerment).

  - The endangerment may be to **either** health **or** the environment. The term "environment" is not defined in RCRA. "However, it presumably encompasses the

air, soil, and water, including groundwater." *Lincoln Properties, LTD.* v. *Higgins*, 36 ERC 1228, 23 Envtl. L. Rep. 20,665, 1995 WL 217429 (E.D. Cal. 1993).

- Factors to consider when determining whether an imminent and substantial endangerment exists: Nature and amount of the hazardous substance; the potential of exposure to humans or the environment to the substance; the known or suspected effect of the substance on humans or that part of the environment subject to exposure to the substance.

- The nature of the endangerment and the basis for the finding that such endangerment is imminent and substantial should be set forth in the order. The evidence supporting the finding of imminent and substantial endangerment may be compiled into a single, concise document constituting the "endangerment assessment."

- "...the Administrator may bring suit...against any person (including any past or present generator, past or present transporter or past or present owner or operator of a treatment, storage or disposal facility) who has contributed or who is contributing to such handling, storage, treatment, transportation or disposal...or order such person to take such action as may be necessary, or both."

  - **Judicial Enforcement** — Although a resulting judicial order or consent decree can be quickly enforced if violated, referring the case to Department of Justice and filing the necessary legal papers may ultimately delay the initiation of remedial activities

  - **Administrative Enforcement** — Administrative orders are relatively speedy. The general rule is that an administrative order, whether issued unilaterally or on consent, is appropriate absent some indication that the respondent will not comply with its terms.

  - The term "persons" includes:

    -- Any *past or present*, generator, transporter, or owner/operator of a TSD

    -- Any person *who has contributed or is contributing* to handling, storage, treatment, transportation or disposal of a solid or hazardous waste which may present an imminent and substantial endangerment. "[T]he relevant legislative history supports a broad, rather than a narrow construction of the phrase 'contributed to'." *United States* v. *Aceto Agricultural Chemicals Co.*, 872 F.2d 1373, 1383-84 (8th Cir. 1989)

    A person need not have been negligent to be liable; liability is strict.

  - Elements of an order include:

    -- A statement of the statutory basis for the order

-- A statement of the agency's authority to issue the order and the liability that may be incurred if the respondent fails to comply (i.e., notice of civil penalties)

-- A specific determination supported by findings or reference to a separate endangerment assessment that states that the Agency has determined that an imminent and substantial endangerment may exist

-- A finding that the substances are solid or hazardous wastes

-- Statements as to the liability of the respondents (i.e., that the respondent is or has been engaged in the activities described in RCRA § 7003)

-- A compliance schedule that clearly sets forth the tasks to be performed, the time frames for performance, and the quality and performance standards for tasks

-- A statement that EPA has authority to be on site during work, to obtain split samples and other information generated, and to stop work if an emergency arises

-- Health and safety procedures to be followed

-- If the order is unilateral, notice that respondent has an opportunity to confer with EPA. Agency policy is to offer respondents an opportunity to confer with the Agency concerning both the appropriateness of the order and its applicability to respondent. The administrative record on which the decision was based to issue the § 7003 order should be made available to respondent. The presiding Agency official should compile a written summary of any conferences.

-- Notice of the effective date of the order, ordinarily within 10 to 14 days of receipt by respondent

-- Provision exempting EPA from liability for damages, even if the damages occurred pursuant to the EPA enforcement order

-- Notice of a public comment period for consent orders

-- A statement of EPA's authority to take additional enforcement action if respondent does not comply with the terms of the order.

- *"The Administrator shall provide notice to the affected state of any such suit..."*

  – There is no statutory period of time in which such notice must be given. Normal practice is to provide written notification to the state at least one week before the federal action. Where a more rapid response in necessary, an abbreviated notice

period or even a telephone call will satisfy the notice requirement; however, written confirmation should follow any oral notice.

- Notification should be directed to the director of the state agency having jurisdiction over environment protection in the affected state, unless the state has designated another person to receive the notice.

- An "affected state" is a state in which the conduct or condition which may present an imminent and substantial endangerment is occurring or is located, and/or in which the response activity required by the proposed order will be taken. More than one state may be an "affected state" (i.e., where a facility is located near the border of one state and the wastes may have migrated from the facility into another state).

9.7.3 RCRA § 7003(b) Violations

RCRA § 7003(b) provides that:

Any person who willfully violates, or fails or refuses to comply with any order of the Administrator under subsection (a) of this section may, in an action brought in the appropriate United States district court to enforce such order, be fined not more than $5,000 for each day in which such violation occurs or such failure to comply continues.

9.7.4 RCRA § 7003(c) Immediate Notice

RCRA § 7003(c) provides that:

Upon receipt of information that there is hazardous waste at any site which has presented an imminent and substantial endangerment to human health or the environment, the Administrator shall provide immediate notice to the appropriate local government agencies. In addition, the Administrator shall require notice of such endangerment to be promptly posted at the site where the waste is located.

9.7.5 RCRA § 7003(d) Public Participation in Settlements

RCRA § 7003(d) provides that:

Whenever the United States or the Administrator proposes to covenant not to sue or to forbear from suit or to settle any claim arising under this section, notice, and opportunity for a public meeting in the affected area, and a reasonable opportunity to comment on the proposed settlement prior to its final entry shall be afforded to the public. The decision of the United States or the Administrator to enter into or not to enter into such Consent Decree, covenant or agreement shall not constitute a final agency action subject to judicial review under this chapter or subchapter II or chapter 5 of Title 5.

9.8 RCRA § 3007(a) INSPECTION AND INFORMATION-GATHERING

9.8.1 RCRA § 3007(a)

Section 3007(a) of RCRA, 42 U.S.C. § 6927(a), grants EPA (and authorized states) certain inspection and information-gathering authorities. Specifically, that section provides that:

> For purposes of developing or assisting in the development of any regulation or enforcing the provisions of this chapter, any person who generates, stores, treats, transports, disposes of, or otherwise handles or has handled hazardous waste shall, upon request of any officer, employee or representative of the Environmental Protection Agency, duly designated by the Administrator, or upon request of any duly designated officer, employee or representative of a state having an authorized hazardous waste program, furnish information relating to such wastes and permit such person at all reasonable time to have access to, and to copy all records relating to such wastes. For the purposes of developing or assisting in the developing of any regulation or enforcing the provisions of this chapter, such officers, employees or representatives are authorized:
>
> (1) to enter at reasonable times any establishment or other place where hazardous wastes are or have been generated, stored, treated, disposed of, or transported from;
>
> (2) to inspect and obtain samples from any person of any such wastes and samples of any containers or labeling for such wastes.
>
> Each such inspection shall be commenced and completed with reasonable promptness. If the officer, employee or representative obtains any samples, prior to leaving the premises, he shall give to the owner, operator or agent in charge a receipt describing the sample obtained and if requested a portion of each such sample equal in volume or weight to the portion retained. If any analysis is made of such samples, a copy of the results of such analysis shall be furnished promptly to the owner, operator, or agent in charge.

9.8.2 Important Features of RCRA § 3007(a)

Important features of RCRA § 3007(a) authority include the following:

- The purposes of access/information gathering are limited to *development of RCRA regulations* and *enforcing RCRA*.
- Access/information may be obtained only from persons who *generate, store, treat, transport, dispose of or handle (or have handled) hazardous wastes.*
- Authority may only be exercised by a duly designated officer, employee or representative of EPA or an authorized state.

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- Access/information must relate to "such wastes."

- May obtain information relating to such waste; have access to and copy records; enter any establishment or place where hazardous wastes are or have been generated, stored, treated, disposed of or transported from; inspect and obtain samples of such wastes, containers and labels.

- Owner/operator must be given a receipt for samples taken and an opportunity to take split samples.

- Copies of any analytical results must be furnished to owner/operator.

9.8.3 Use of CERCLA § 104(e) Information-Gathering Authorities in RCRA Enforcement Contexts

The information-gathering authority under CERCLA is set forth in Section 104(e), 42 U.S.C. § 9604(e).

In certain circumstances, it may be appropriate and advantageous to rely on CERCLA § 104(e), in tandem with or in lieu of RCRA § 3007(a), to obtain information for a RCRA enforcement action. In some respects, CERCLA's information-gathering authority is broader than that of RCRA Exhibit 9-3 provides a brief comparison. TSCA Section 11 also provides EPA with extremely broad inspection authority and has, on occasion, been utilized to develop information leading to the filing of enforcement actions under other media.

Exhibit 9-3. Comparison of CERCLA & RCRA Information-Gathering Authorities

RCRA	CERCLA
Purpose	
RCRA § 3007(a) may be used only for the purpose of developing or assisting in the development of any regulation or enforcing the provisions of RCRA.	CERCLA § 104(e) may be used only for the purposes of determining the need for response, or choosing or taking any response action under CERCLA, or otherwise enforcing CERCLA. The right to enter and inspect property and obtain samples may be exercised only if there is a reasonable basis to believe there may be a release or threat of release of hazardous substances or may be release or threat of release of hazardous substance or pollutant or contaminant.
Recipient	
Under RCRA § 3007(a), EPA may seek information from any person who generates, stores, treats, transports, disposes of, or otherwise handles or has handled hazardous waste.	Under CERCLA § 104(e), EPA may seek information from any person who has or may have information relevant to the matters described in "Type of Information," below.
Type of Information	
Under RCRA § 3007(a), EPA may seek information "relating to" the generation, storage, treatment, transportation, disposal and handling of hazardous waste.	Under CERCLA § 104(e), EPA may obtain information or documents relating to: (A) the identification, nature and quantity of materials which have been or are generated, treated, stored, or disposed or at a vessel or facility; (B) the nature or extent of a release or threatened release of a hazardous substance or pollutants or contaminant at or from a vessel or facility; and (C) **information relating to the ability to pay for or to perform a cleanup.**
Property Which EPA May Enter, Inspect and Sample	
Under RCRA § 3007(a), EPA may enter, at reasonable times, any establishment or other place where hazardous wastes are or have been generated, stored, treated, disposed of, or transported from; EPA may inspect and obtain samples of any such wastes and any containers or labeling for such wastes.	Under CERCLA § 104(e), EPA may enter, inspect and obtain samples from any vessel, facility, establishment, or other place or property: (A) where any hazardous substance or pollutant or contaminant may be or has been generated, stored, treated, disposed of, or transported from; (B) from which or to which a hazardous substance or pollutant or contaminant has been or may have been released; (B) from which or to which a hazardous substance or pollutant or contaminant has been or may have been released; (C) where such release is or may be treated; and (D) where entry is needed to determine the need for response or the appropriate response or to effectuate a response action under CERCLA, **as well as any vessel, facility, establishment, place, property, or location which is adjacent thereto.** EPA is also authorized to inspect and obtain samples from any location of any suspected hazardous substance or pollutant or contaminant, and of any containers or labels for suspected hazardous substances or pollutants or contaminants.

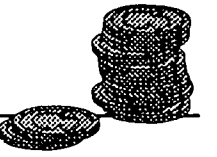
Exhibit 9-3. Comparison of CERCLA & RCRA Information-Gathering Authorities (continued)

RCRA	CERCLA
Requestor	
RCRA § 3007(a) information-gathering authorities may be exercised by any officer, employee or representative of EPA duly designated by the Administrator, and any duly designated officer, employee or representative of an authorized state.	CERCLA § 104(e) information-gathering authorities may be exercised by an officer, employee, or representative of the President, duly designated by the President, and any duly designated officer, employee or representative of state or political subdivision under a contract or cooperative agreement with EPA under CERCLA § 104(d)(1). **Note:** Most information-gathering authorities under RCRA § 3007(a) and CERCLA § 104(e) have been delegated to the Regional Administrator, some with Headquarters consultation requirements. Some Regional Administrators have further delegated these authorities. Check your Headquarters and Regional Delegations Manuals.
Enforcement	
RCRA § 3007(a) information requests may be enforced under RCRA § 3008(a) and (g). Failure to comply with such a request may result in appropriate injunctive relief and the imposition of a civil penalty up to $25,000 per day of noncompliance.	CERCLA § 104(e) information requests may be enforced **by issuance of an administrative compliance order directing compliance** under CERCLA § 104(e)(5)(A). The order may be issued after notice and opportunity for consultation as is reasonably appropriate under the circumstances. In addition, a request for information or order requiring compliance with such a request under CERCLA § 104(e) may be enforced judicially under CERCLA § 104(e)(5)(B); the court may order injunctive relief and/or a civil penalty of up to $25,000 per day of noncompliance for unreasonable failure to comply.

RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

10. BANKRUPTCY FOR RCRA ATTORNEYS

Module 10 Objectives

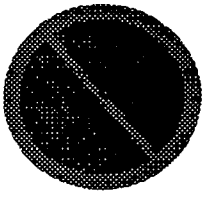


- **Become familiar with substance and procedure of bankruptcy proceeding**
- **Discuss impact of bankruptcy proceedings on environmental enforcement cases and cost recovery actions**
- **Understand framework for identifying and addressing bankruptcy issues**
- **Identify resources that can be used to address bankruptcy issues**

Notes:

Most Important Concepts of the Class

- **A bankruptcy proceeding DOES NOT shield the owner or operator of a regulated facility from the obligation to comply with RCRA requirements.**
- **Bankruptcy IS NOT an excuse for failure to comply with environmental requirements.**



Notes:

Chapter 7 -
The Liquidation Chapter

- **Assets of debtor (if any) sold and distributed to creditors**
- **Role of the trustee and attorney for estate**
- **No asset cases (individuals)**
- **Trustee's duties**
  - **Sell tangible assets**
  - **If lien exceeds value of asset, may allow secured creditor to obtain title through foreclosure**
  - **Investigate and collect on intangible claims**
  - **Generally does NOT operate debtor's business**

Notes:

Chapter 11 -
the Reorganization Chapter

- **Debtor allowed to pay off creditors at less than 100%**
- **Debtor continues operations during and after bankruptcy**
- **No trustee, unless appointed by court for cause**
- **Unsecured creditors committee**
- **Examiner**
- **Disclosure statement and plan of reorganization**

Notes:

The Automatic Stay of 11 U.S.C. Section 362

- **Broad stay of litigation, lien enforcement, and other actions**
- **Applies AUTOMATICALLY upon filing of any bankruptcy proceeding**
- **Designed to preserve the status quo upon bankruptcy filing and allow orderly handling of claims against debtor**
- **Halts ongoing litigation and prohibits new litigation and enforcement of liens, without bankruptcy court approval**

Notes:

Major Exceptions to Automatic Stay
(Important to Government)

- **Actions by a governmental unit to enforce police or regulatory powers and to enforce related nonmonetary judgments (such as injunctions) are NOT subject to the stay.**
- **This exception does NOT allow enforcement of monetary judgments or efforts to obtain possession or control over property of debtor; these actions are stayed.**

Notes:

Filing a Proof of Claim

- **Government must file proof of claim in order to share in the distribution of the assets of the bankruptcy estate.**
- **Bar date (deadline for filing proof of claim)**
  - **Chapter 7: Fast! 90 days after first meeting of creditors. Meeting occurs 20 to 40 days after filing of bankruptcy petition.**
  - **Chapter 11: Fixed by order of bankruptcy court. May be in initial bankruptcy notice or in plan of reorganization.**

Notes:

Relevant Factors in Deciding Whether to File a Proof of Claim

- **Nature and size of EPA's claim**
- **The size of the bankruptcy estate and nature and size of other claims against the debtor**
- **Other considerations**

Notes:

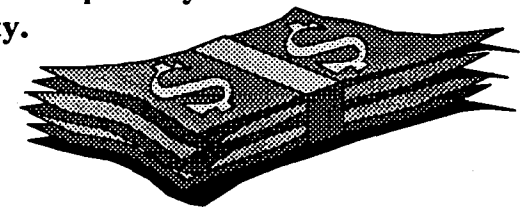
Priority of EPA Claims-Penalties

- **When does a penalty claim arise for bankruptcy purposes?**
- **Pre-petition conduct: Penalties are generally paid with or after unsecured claims.**
- **Post-petition conduct: Much more favorable! Penalties are generally considered administrative expenses, which are paid before all other claims except secured claims.**

Notes:

EPA Claims -
Response Costs

- **When were response costs incurred?**
- **Pre-petition costs: Response costs are generally paid with unsecured claims.**
- **Post-petition costs: Response costs incurred by EPA are treated as administrative expenses! It is more difficult for private parties to obtain priority because of their joint liability.**



Notes:

The Bankruptcy Discharge

- **In bankruptcy, *debts* are usually discharged.**
- **Effect of the discharge: The debt is no longer enforceable against the debtor.**
- **What is a debt?**
  - **Debt is liability on a claim.**
  - **Claim is any right to payment, *or* any right to an equitable remedy for breach of performance if such breach gives rise to a right to payment in the alternative.**

Notes:

Abandonment of Property

- **Abandonment of property allowed when property is burdensome or of inconsequential value and benefit to the estate**
- **If allowed, property no longer considered property of the bankruptcy estate; becomes the property of the debtor or party with an interest in it**
- **Effect: Response costs incurred no longer have administrative priority because they no longer benefit the bankruptcy estate**

Notes:

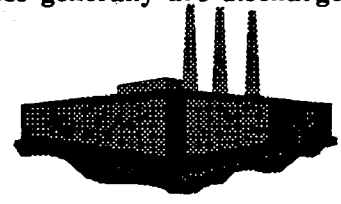
Relevant Factors in Deciding Whether to Oppose Motion to Abandon Contaminated Property

- **Extent of unencumbered assets in bankruptcy estate available to fund response actions**
- **Nature of environmental threat**
- **Value of the property**
- **Conditions to abandonment**

Notes:

Discharge of Penalties

- **Discharge of penalties depends on whether the debtor is an individual or a corporation.**
- **Individuals: Penalties against individuals generally are NOT discharged.**
- **Corporations**
  - **Chapter 7: Penalties are not discharged.**
  - **Chapter 11: Penalties generally are discharged.**



Notes:

Discharge of Response Costs

- **Discharge of response costs depends on the following factors:**
  - **The extent to which the claim for response costs is considered to have arisen**
  - **Whether the debtor is an individual or corporation**
  - **Whether the debtor continues to own the contaminated property after bankruptcy.**

Notes:

Discharge of Response Costs (Continued)

- **Whether claim for response costs has arisen is determined by the "fair contemplation of the parties" test.**

Notes:

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RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

10. BANKRUPTCY FOR RCRA ATTORNEYS

Background Materials

10. BANKRUPTCY FOR RCRA ATTORNEYS

10.1 INTRODUCTION

This module, which consists of the document *A Bankruptcy Primer for the Regional Attorney* (U.S. EPA, February 1994) prepared by the National Bankruptcy Lead Region Workgroup, provides an overview of the Bankruptcy Code[1] as it relates to enforcement, cost recovery, and other proceedings under environmental statutes, including the Resource Conservation and Recovery Act (RCRA). The module suggests factors to be considered by regional attorneys in evaluating whether the U.S. Environmental Protection Agency (EPA) should pursue collection of costs or penalties against debtors who are liable or potentially liable parties under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or owners and operators of facilities regulated under other environmental statutes or to otherwise participate in a debtor's bankruptcy case.

Appendix A to this module presents a roster of the current Workgroup members, who also serve as the regional bankruptcy contacts. Appendices B and C provide several proposed model documents prepared by the Workgroup that may help regional attorneys handle bankruptcy matters. Appendix D presents a comprehensive outline and case summary on environmental enforcement and the bankruptcy laws prepared by the Department of Justice (DOJ).

This module is intended exclusively for use by EPA employees. It does not constitute rulemaking by the Agency and may not be relied upon to create a right or benefit, substantive or procedural, enforceable at law or in equity, by any person. The Agency may take action at variance with this module. In addition, this module does not constitute EPA guidance. EPA is in the process of drafting proposed guidance addressing the participation of EPA in bankruptcy cases. EPA has previously issued guidance relating to bankruptcy matters entitled Guidance Regarding CERCLA Enforcement Against Bankrupt Parties, OSWER Directive #9832.7 (May 24, 1984) and the Revised Hazardous Waste Bankruptcy Guidance, OSWER Directive #9832.8 (May 23, 1986). These guidance documents may be outdated, however.

10.2 THE BANKRUPTCY PROCESS

It has been recognized that there is a conflict between the policies and goals reflected in the Bankruptcy Code and the environmental statutes, in particular the Comprehensive Response, Compensation, and Liability Act, 42 U.S.C. § 9601 et seq. (CERCLA). "The conflict begins at a basic level, since the goal of CERCLA - cleaning up toxic waste sites promptly and holding liable those responsible for the pollution - is at odds with the premise of bankruptcy, which is to allow debtors a fresh start by freeing them of liability" (*In re Combustion Equipment Associates, Inc.*, 838 F.2d at 37 (2nd Cir. 1988)).

CERCLA and the Bankruptcy Code also differ significantly in timing. One of CERCLA's goals is the quick cleanup of hazardous waste sites without the delays associated with litigation over the Agency's choice of a response action (42 U.S.C. § 9613(h)). In contrast, litigation is

1. Bankruptcy Reform Act of 1978, Pub. L. No. 95-598, 92 Stat. 2549 (1978) (codified as amended at 11 U.S.C. §§ 101-1330).

accelerated under the Bankruptcy Code, and the bankruptcy court may seek to estimate contingent or unliquidated liabilities, including liabilities arising under CERCLA (11 U.S.C. § 502(c)).

In order to evaluate how EPA should proceed in light of a particular bankruptcy case, a brief overview of the bankruptcy process is in order. It is important to note that the Bankruptcy Code is a comprehensive statutory scheme that is intended to override certain provisions of law that would otherwise apply in the absence of bankruptcy (*United States* v. *LTV Corporation (In re Chateaugay)*, 944 F.2d 997 (2nd Cir. 1991)). The types of bankruptcies most frequently encountered in environmental cases are those filed under Chapters 7 and 11 of the Bankruptcy Code; therefore, the following discussion is limited to these types of bankruptcy cases.

10.2.1 Chapter 7—The Liquidation Chapter

In a Chapter 7 bankruptcy case, the debtor liquidates, the assets of the debtor are sold, and the proceeds are distributed to creditors in accordance with the priority scheme set forth in the Bankruptcy Code.

The Trustee

A trustee is appointed in every Chapter 7 case.[2] The United States Trustee appoints Chapter 7 trustees from a panel comprising qualified individuals who are willing to serve (11 U.S.C. § 701). Usually, the individuals selected to serve on the panel are local attorneys practicing in the bankruptcy area. Chapter 7 trustees are appointed on a rotational basis as the cases are filed.

The Chapter 7 trustee presides over the Section 341 meeting,[3] which may be scheduled as many as 2 months after the bankruptcy case is filed. Sometimes, the Chapter 7 trustee will be involved in a case prior to the Section 341 meeting; however, his/her first exposure to a case is usually at the 341 meeting.

Once a Chapter 7 bankruptcy is filed, the trustee must be consulted on matters involving property of the bankruptcy estate, such as access and related issues.

No Asset Cases

Many Chapter 7 cases are no asset cases. Individual debtors are permitted to exempt certain property from the bankruptcy estate and, often, there are no assets left after allowed exemptions. In these types of cases, the trustee files a report of no distribution at the conclusion of the

2. When the Chapter 7 trustee is first appointed he/she is the "interim trustee" (11 U.S.C. § 701). At the Section 341 meeting (Footnote 3, below), creditors may elect their own trustee. If no trustee is elected, the "interim trustee" becomes the "trustee" (11 U.S.C. § 702).

3. Section 341 of the Bankruptcy Code provides that a meeting of creditors must be held in every bankruptcy case within a reasonable time after the order for relief has been entered. The filing of a voluntary bankruptcy petition constitutes an order for relief (11 U.S.C. § 301). Bankruptcy Rule 2003 provides that the meeting of creditors shall be held not less than 20 nor more than 40 days after the order for relief.

Section 341 meeting and, for all intents and purposes, the case is over.[4] The trustee is paid a small fee for his or her services in a no asset case.

Liquidation and Distribution in Asset Cases

In cases where assets need to be administered[5] or where further investigation is warranted, the case remains open. The Chapter 7 trustee typically hires an attorney[6] (in some instances, the trustee hires himself/herself or his/her law firm) to represent the bankruptcy estate. The trustee's fees and attorney's fees are paid as administrative expenses from unencumbered assets recovered by the estate.[7] If no assets are recovered, the trustee gets paid only the small fee as in any other no asset case, and the trustee's attorney does not get paid at all.[8] In some respects, every Chapter 7 case is a contingency fee case for the professionals involved.

To administer a case, the Chapter 7 trustee must rely upon the debtor to provide information and documentation. The Bankruptcy Code requires the debtor to cooperate with the trustee (11 U.S.C. § 521 and Bankruptcy Rule 4002).

In liquidating the estate, the trustee will first sell through auction or private sale tangible assets, such as equipment, office furniture and machinery, inventory, or real property. If property is subject to a lien, the trustee must determine whether the value of the property exceeds the amount of the lien. If it does not, the trustee will often consent to relief from the automatic stay of 11 U.S.C. § 362 to allow the secured creditor to obtain title to the property through foreclosure. The trustee may also abandon the property or choose not to administer it. If the trustee believes that there is equity in the property over the amount of the lien, he/she may, with court approval, sell it free and clear of liens, with all valid liens to attach to the proceeds of the

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4. A no asset case may remain open after the report of no distribution has been filed to deal with matters other than liquidation of assets, such as objections to discharge.

5. Only an individual debtor may exempt property from property of the bankruptcy estate (11 U.S.C. § 522). Because a corporation is not entitled to exempt property in a corporate Chapter 7 bankruptcy, any corporate property having value must be liquidated by the Chapter 7 trustee. If the value of the corporate property is marginal and the cost of liquidation would exceed any dividend to creditors, the trustee may abandon the property. Creditors may be notified of such abandonment in accordance with Section 554. More often, a trustee will simply not administer the property, and it will be deemed abandoned to the debtor upon closing of the case (11 U.S.C. § 554(c)).

6. Professionals employed by the trustee must be "disinterested," may not hold or represent an interest adverse to the estate, and must be approved by the bankruptcy court (11 U.S.C. § 327).

7. Compensation paid to trustees is limited to a percentage of funds disbursed by the trustee to creditors (15% of the first $1,000, 6% of the next $2,000, and 3% of any amount over $3,000) (11 U.S.C. § 326). The terms upon which attorneys and other professionals may be compensated must be approved by the court when they are employed (11 U.S.C. § 328). Usually, attorneys are paid on an hourly basis at standard hourly rates for services rendered to the trustee. Fee applications must be filed and heard after notice to creditors and other parties in interest before such fees can be paid from the estate (11 U.S.C. § 328).

8. Under certain circumstances, a trustee may assess expenses against property subject to a lien of a secured creditor. 11 U.S.C. § 506(c) allows the trustee to recover from property reasonable, necessary costs and expenses of preserving or disposing of such property to the extent of any benefit to the secured creditor.

sale. The property is then sold with a clear title, and the secured creditor is paid from the proceeds. The Bankruptcy Code requires court approval of such sales after notice and hearing (11 U.S.C. § 363).

The trustee will also investigate intangible claims such as preference claims,[9] fraudulent transfer claims,[10] and accounts receivable and seek to liquidate these claims. This will often involve litigation. Sometimes the only assets in a case are intangible claims. The trustee will not know whether funds will be available for distribution to creditors until the litigation is concluded.

Operation of the Debtor's Business in Chapter 7

A Chapter 7 trustee only will seek to operate the business of the debtor in very limited circumstances. For example, the trustee may want to operate the debtor's business to complete work in progress so that he/she then may sell the goods produced as an asset of the bankruptcy estate. To operate the debtor's business in a Chapter 7 case, the trustee must obtain authorization from the bankruptcy court (11 U.S.C. §§ 704 and 721) by demonstrating that continued operation for a limited period is in the best interest of the estate and consistent with the orderly liquidation of the estate.

Converted Cases

When a Chapter 11 case is converted to Chapter 7, a Chapter 7 trustee is appointed. If the Chapter 11 case had a trustee, the same person often will be reappointed as the Chapter 7 trustee. Converted cases present some unique issues relating to property of the estate and the priority of claims. Converted cases are further complicated if a reorganization plan was confirmed under Chapter 11 prior to conversion to Chapter 7.

10.2.2 Chapter 11—The Reorganization Chapter

In a Chapter 11 case, the debtor offers a solution to its financial problems through a plan of reorganization, which allows the business to continue operating pending the administration of the bankruptcy case. When the bankruptcy court confirms the debtor's plan, the debtor emerges from bankruptcy as a new entity, free from debts that were discharged upon confirmation of the reorganization plan.

The Debtor in Possession

In a Chapter 11 reorganization, the debtor retains possession and control of its assets and continues to operate its business as a debtor in possession (11 U.S.C. § 1107). A trustee may be appointed in a Chapter 11 case only upon the request of a party in interest or the United

9. Certain transfers made by the debtor on the eve of bankruptcy to a creditor on an antecedent debt may be recovered by the trustee as preferential transfers under Section 547 of the Bankruptcy Code.

10. Transfers made by the debtor within 1 year of the bankruptcy filing with the intent to defraud creditors or made while insolvent for less than a reasonably equivalent value may be recovered by the trustee as fraudulent transfers pursuant to Section 548 of the Bankruptcy Code.

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States Trustee for cause such as fraud, dishonesty, incompetence, or gross mismanagement of the debtor's affairs by its current management or if such appointment would be in the best interest of creditors (11 U.S.C. § 1104).

Other Parties

The United States Trustee may appoint a committee of unsecured creditors, usually comprising creditors willing to serve and holding the largest unsecured claims against the debtor (11 U.S.C. § 1102). The committee may hire professionals, including attorneys and accountants, whose fees will be paid as a Chapter 11 administrative expense (11 U.S.C. §§ 1103 and 503). In some cases, the committee is very active and will negotiate with the debtor on numerous issues, including the contents of the plan of reorganization. In other cases, the committee may be inactive or nonexistent. While a government unit may not serve on the committee in most cases, the United States has served as an ex officio member in some cases.[11]

Typically, the court will appoint an examiner in a Chapter 11 case (11 U.S.C. § 1104) if there is not sufficient evidence to warrant the appointment of a trustee but the court is not comfortable with allowing the debtor to continue to operate without some oversight. The duties of an examiner differ from those of the trustee. The examiner's authority is much narrower and his/her primary role is to investigate the activities of the debtor and report to the court (11 U.S.C. § 1106).

Plan of Reorganization

The debtor's goal in a Chapter 11 case is to formulate a plan of reorganization that will be acceptable to its creditors and confirmed by the court. In the plan, the debtor essentially restructures its liabilities and offers a solution to its financial problems.

Parties other than the debtor have the right to file a reorganization plan and to seek confirmation. The debtor has an exclusive right to file a plan within the first 120 days after the bankruptcy case is filed, however (11 U.S.C § 1121).

To be confirmed, a plan of reorganization must, among other things, offer creditors at least as much as they would have received if the case were liquidated under Chapter 7 (11 U.S.C. § 1129(a)(7)). In addition, the plan must be feasible (i.e., it is not likely to be followed by liquidation or the need for further financial reorganization) (11 U.S.C. § 1129(a)(11)).

Confirmation also requires each class of creditors holding claims that are impaired under the plan to accept the plan or the plan must be subject to "cram-down." A claim is considered "impaired" if under the plan it will not be paid in full or if the legal, contractual, or equitable terms are otherwise altered (11 U.S.C. § 1124). A plan may be crammed-down (i.e., confirmed over the objection of an impaired class of creditors) if it does not discriminate unfairly and is fair and equitable with respect to each class of impaired claims (11 U.S.C. § 1129(a)(7) and (b)(1)).

11. By definition, a "governmental unit" is not a "person" with limited exception and, therefore, not eligible to serve on the creditors' committee (11 U.S.C. §§ 1102(b)(1) and 101(41)).

Confirmation binds the debtor and all creditors to the terms of the plan and operates to discharge the debtor from any debt that arose before the date of confirmation (11 U.S.C. § 1141).

The debtor may also liquidate under Chapter 11 by filing a liquidating plan (11 U.S.C. §1123(b)(4)). The same rules regarding confirmation apply to liquidations under Chapter 11 except that confirmation of a liquidating plan does not operate to discharge the debts of a corporate debtor (11 U.S.C. § 1141).

Disclosure Statement

Creditors cannot be solicited either to accept or reject a plan of reorganization unless prior to such solicitation they were sent a disclosure statement approved by the court as containing adequate information sufficient to allow creditors to make informed judgments about the plan (11 U.S.C. § 1125). The disclosure statement should explain how and why the plan of reorganization will work. The disclosure statement also usually contains information about the debtor's operations, financial history, and reasons precipitating the bankruptcy filing.

10.2.3 Automatic Stay of 11 U.S.C. § 362

Section 362(a) of the Bankruptcy Code provides for a broad stay of litigation, lien enforcement, and certain other actions that would affect or interfere with the bankruptcy process. This stay arises automatically upon filing of the bankruptcy petition and applies in all bankruptcy cases. The automatic stay is a fundamental part of the bankruptcy process intended to protect the status quo during the pendency of the bankruptcy case.

Violations of the automatic stay may be punishable by a contempt judgment (28 U.S.C. § 1481). Section 362(d) sets forth the basis upon which the bankruptcy court may grant relief from the automatic stay.

Section 362(b) sets forth certain exceptions to the automatic stay. Actions by a government unit to enforce its police or regulatory powers and the enforcement of non-monetary judgments obtained by a government unit to enforce its police or regulatory powers are excepted and, therefore, are not automatically stayed at the commencement of a bankruptcy case. However, attempts to enforce monetary judgments or perfect liens or to obtain possession or control over property of the estate do not fall within this exception and are subject to automatic stay. The regional attorney should consult with the regional bankruptcy contact and the DOJ bankruptcy senior attorney on any matters concerning automatic stay issues.

If the automatic stay does not apply, some debtors have asked the bankruptcy court to issue a discretionary stay under the court's general equitable powers pursuant to Section 105 of the Bankruptcy Code. It is the position of the United States that the bankruptcy court does not have the authority under Section 105 to override the exceptions to the automatic stay under Section 362(b).

10.3 IMPACT OF BANKRUPTCY ON COMPLIANCE

While a company may continue to operate its business during a Chapter 11 reorganization proceeding, the Bankruptcy Code does not excuse such a company from its obligation to comply with environmental laws and regulations. To the contrary, 28 U.S.C. § 959(b) provides that:

> ...a trustee, receiver or manager appointed in any cause pending in any court of the United States, including a debtor in possession, shall manage and operate the property in his possession as such trustee, receiver or manager according to the requirements of the valid laws of the State in which such property is situated, in the same manner that the owner or possessor thereof would be bound to do if in possession thereof.

See *State of Ohio* v. *Kovacs*, 469 U.S. 274, 285 (1985) ("we do not question that anyone in possession of the site...must comply with the environmental laws and regulations of the State of Ohio. Plainly, that person or firm may not maintain a nuisance, pollute the waters of the State, or refuse to remove the source of such conditions."); *Midlantic National Bank* v. *New Jersey Department of Environmental Protection*, 474 U.S. 494 (1986) ("Congress did not intend for the Bankruptcy Code to preempt all state laws that otherwise constrain the exercise of a trustee's powers.")

Environmental enforcement actions against companies in bankruptcy are generally excepted from the automatic stay pursuant to the "police power" exemption of 11 U.S.C. § 362(b)(4). *In re Commonwealth Oil Refining Co.*, 805 F.2d 1175 (5th Cir. 1986) (RCRA § 3008(a) compliance order issued by EPA was not stayed by virtue of 11 U.S.C. § 362(a), even though compliance with the order would require the debtor to spend money. *United States* v. *Jones & Laughlin Steel Corp.*, 804 F.2d 348 (6th Cir. 1986) (proceeding to modify consent decree relating to debtor's violations of Clean Water Act and Clean Air Act not stayed by bankruptcy filing); *City of New York* v. *Exxon Corp.*, 932 F.2d 1020 (2nd Cir. 1991) (cost recovery case brought by city excepted from automatic stay up to the point of obtaining a monetary judgment).

Therefore, the filing of a bankruptcy petition by the owner or operator of a regulated facility does not excuse the obligation to operate and manage the facility in compliance with all applicable environmental laws and regulations. In addition, it does not prohibit EPA from taking appropriate enforcement action to compel compliance or to assess a civil penalty, although EPA should be careful to frame its action so that it falls within the exception to the automatic stay of Section 362(b). Once a penalty is assessed or a judgment on the penalty is obtained, for example, the automatic stay prohibits collection activities other than through the bankruptcy process.

10.4 ASSERTION OF CLAIMS AGAINST A DEBTOR IN BANKRUPTCY

10.4.1 Mechanics of Filing a Proof of Claim

To participate as a pre-petition creditor in a bankruptcy case and to share in any distribution, a proof of claim must be filed (11 U.S.C. §§ 501 and 502). An exception to this

rule is in a Chapter 11 case where the claim is accurately included on the debtor's schedules of liabilities (Bankruptcy Rule 3003(b)(1)).

The deadline for filing a proof of claim is generally referred to as the "bar date" and operates in some respects as a statute of limitations. In a Chapter 7 case, a proof of claim typically must be filed within 90 days after the first meeting of creditors (Bankruptcy Rule 3002(c)). The first meeting of creditors is held between 20 and 40 days after the filing of the bankruptcy petition (Bankruptcy Rule 2003). The initial notice of the bankruptcy filing, which also includes information regarding the first meeting of creditors, may state that the case is a no asset Chapter 7 and, therefore, it is not necessary to file a proof of claim within the 90-day period. If assets are subsequently discovered, creditors will be advised later of a bar date (Bankruptcy Rule 3002(c)).

The bar date is fixed by order of the court in Chapter 11 cases (Bankruptcy Rule 3003(c)(3)). Sometimes, the bar date will be fixed in the beginning of the Chapter 11 case and will be set forth in the initial bankruptcy notice. The bar date also may be fixed in the plan of reorganization. It is important to determine as early as possible if and when a bar date has been fixed in a case.

There is an official bankruptcy proof of claim form that is usually not used for environmental matters, given the complexity of most environmental claims. Requests for filing proofs of claim are made by referral to DOJ. Appendix B presents a model bankruptcy referral developed by the Workgroup. Referrals should be made as far in advance of the bar date as possible. However, where the region learns of a bar date that is imminent and there is insufficient time to prepare a formal referral, the regional attorney should contact the DOJ bankruptcy senior attorney and refer the matter informally, with a written referral to follow as appropriate.

10.4.2 Consequences of Filing a Proof of Claim

Timing Issues

When a proof of claim is properly executed and filed, it constitutes prima facie evidence of the validity and amount of the claim unless a party in interest files an objection (11 U.S.C. § 502(a) and Bankruptcy Rule 3001(f)). If an objection is filed, the burden of proving the claim then shifts to the claimant. Procedurally, an objection to a proof of claim is treated as a contested matter pursuant to Bankruptcy Rule 9014, but may also be brought as an adversary proceeding if additional relief is sought (Bankruptcy Rules 3007 and 7001). In any event, if an objection to the Agency's proof of claim is filed, the matter will be heard by the bankruptcy court, or by the district court under certain circumstances, on a timetable dictated by the court. Thus, the Agency may lose the ability to control the timing of its environmental case.

Sovereign Immunity and Jurisdiction

The filing of a proof of claim by a governmental unit[12] constitutes a waiver of sovereign immunity with respect to claims arising out of the same transaction or occurrence (11 U.S.C. § 106(a)). Furthermore, counterclaims by the estate are "core proceedings" as set forth in 28 U.S.C. § 157(d) and are heard by the bankruptcy court unless reference of the matter is withdrawn to the district court pursuant to 28 U.S.C. § 157(d). The bankruptcy estate may offset against the allowed claim of a governmental unit any claim that the debtor has against that unit (11 U.S.C. § 106(b)).

10.4.3 Treatment of CERCLA Claims Under the Bankruptcy Code

Bankruptcy Discharge

Once a debt is discharged in bankruptcy, it cannot be legally enforced against the debtor (11 U.S.C. § 524(a)). A discharge in a Chapter 7 bankruptcy case discharges an individual debtor from all debts that arose before the date of the order for relief. In a Chapter 11 case, the debtor is discharged from all debts that arose before the date of confirmation of the plan of reorganization (11 U.S.C. §§ 727(b) and 1141(d)(1)(A)). Corporations in Chapter 7 do not receive a discharge, nor do corporations that liquidated their assets under a plan of reorganization under Chapter 11.

The term "debt" is defined under Section 101(12) of the Bankruptcy Code as "liability on a claim." The term "claim" is broadly defined under Section 1010(5) of the Bankruptcy Code as:

> (A) right to payment, whether or not such right is reduced to judgment, liquidated, unliquidated, fixed, contingent, matured, unmatured, disputed, undisputed, legal, equitable, secured, or unsecured; or
>
> (B) right to an equitable remedy for breach of performance if such breach gives rise to a right to payment, whether or not such right to an equitable remedy is reduced to judgment, fixed, contingent, matured, unmatured, disputed, undisputed, secured, or unsecured. §101(5).

Discharge of CERCLA Claims in Bankruptcy

The extent to which response costs under CERCLA constitute a "claim" arising prior to confirmation of a plan of reorganization subject to discharge is of paramount importance. In a case of first impression, the Second Circuit held that EPA's claim for reimbursement of response costs under CERCLA arises at the time of the release or threatened release of hazardous substances and may be discharged in bankruptcy, even though such response costs have not yet been incurred (*United States* v. *LTV Corporation* (*In re Chateaugay*), 944 F.2d 997 (2nd Cir. 1991)). The court reasoned that future response costs may be estimated pursuant to 11 U.S.C.

12. The term "governmental unit" includes the United States and any department, agency, or instrumentality of the United States (11 U.S.C. § 101(27)).

§ 502(c) for the purpose of fixing the amount of EPA's claim for voting in the bankruptcy case. Under appropriate circumstances, the amount of EPA's claim may be determined in the ordinary course to be paid according to the terms of the plan of reorganization (*Id.* at 1006).

More recently, the trend of the courts has been toward adopting a "fair contemplation of the parties" test for determining when CERCLA claims arise. In *In re National Gypsum Company*, 139 Bankr. 397 (D.C. Texas 1992), the court disagreed with the holding in *Chateaugay* and held that only those costs associated with pre-petition conduct resulting in a release or threat of release that "could have been fairly contemplated by the parties" are claims in bankruptcy and subject to discharge. The court also listed numerous factors to be considered in determining whether costs associated with pre-petition conduct resulting in a release or threatened release of a hazardous substance were within the fair contemplation of the parties. The factors included knowledge by the parties of a site, the National Priority List notification by EPA of liability, commencement of investigation and cleanup activities, and incurring of response costs.

In *In re Jensen*, 995 F.2d 925 (9th Cir. 1993), the Ninth Circuit cited with approval *National Gypsum's* "fair contemplation" standard, while criticizing *In re Chateaugay*. In addition, the Seventh Circuit appears to favor a similar rule. Although it did not cite *National Gypsum* and emphasized that it was not establishing a rule on the accrual of a CERCLA claim, the court in *In re Chicago, Milwaukee, St. Paul & Pacific Railroad*, 974 F.2d 775 (7th Cir. 1992), stated:

> [R]ather than adopting . . . any rule, we explain below that when a potential CERCLA claimant can tie the bankruptcy debtor to a known release of a hazardous substance which this potential claimant knows will lead to CERCLA response costs, and when this potential claimant has, in fact, conducted tests with regard to this contamination problem, then this potential claimant has, at least, a contingent CERCLA claim. *Id.* at 786.

See also *In re Chicago, Milwaukee, St. Paul & Pacific Railroad*, 3 F.3d 200 (7th Cir. 1993).

Other cases have focused on the amount of information known about the release or threatened release at the time of the bankruptcy filing or prior to the bar date. For example, in *United States* v. *Union Scrap Iron & Metal*, 123 Bankr. 831 (D.C. Minn. 1990), EPA had notice of the bankruptcy case and environmental problems at sites owned by the debtor but did not know about the potential CERCLA liability of the debtor as a generator at another site until after bankruptcy reorganization. Therefore, the claim was not discharged. In *Sylvester Brothers Development Company* v. *Burlington Northern Railroad*, 133 Bankr. 133 (D.C. Minn. 1991), the debtor's CERCLA liability was not discharged where notice to the state agency did not identify CERCLA claims, and knowledge of such claims was obtained only after confirmation of the debtor's plan of reorganization.

10.4.4 Injunctive Authority

It is important to distinguish between EPA's claim for reimbursement of response costs and its injunctive authority to issue cleanup orders. Only "debts" that are liabilities on a "claim" may be discharged in bankruptcy. The bankruptcy definition of "claim" includes the right to an

equitable remedy for breach of performance if such breach gives rise to a right to payment. If a breach of performance in response to EPA's injunctive authority to issue cleanup orders gives rise to an alternative right to payment, then it is subject to discharge. Conversely, if an injunctive cleanup order is not a claim, it cannot be discharged, and the debtor remains liable for compliance with the order.

In *State of Ohio* v. *Kovacs*, 469 U.S. 274 (1985), the U.S. Supreme Court held that an environmental injunction issued under state law was a "claim" subject to discharge because the debtor was not able to do the cleanup work because all of his property was in the exclusive possession of a receiver and the state was really only interested in a money judgment from the debtor's post-petition funds. The court noted that:

> We do not question that anyone in possession of the site...must comply with the environmental laws and regulations of the State of Ohio. Plainly, that person or firm may not maintain a nuisance, pollute the waters of the State, or refuse to remove the source of such conditions. (469 U.S. at 285)

In *United States* v. *LTV Corporation* (*In re Chateaugay*), 944 F.2d 997 (2nd Cir. 1991), the Second Circuit held that "a cleanup order that accomplishes the dual objective of removing accumulated wastes and stopping or ameliorating ongoing pollution emanating from such wastes is not a dischargeable claim." The court recognized that EPA has the option of undertaking the cleanup itself and then suing to recover its response costs. The court concluded, however, that because EPA does not have the option of accepting payment in lieu of continued pollution, "any order that to any extent ends or ameliorates continued pollution is not an order for breach of an obligation that gives rise to a right of payment and is for that reason not a claim."

In *In re CMC Heartland Partners*, 966 F.2d 1143 (7th Cir. 1992), EPA did not file a proof of claim in the PRP's bankruptcy case but, subsequently, issued a CERCLA § 106 order to the reorganized debtor based upon its post-reorganization ownership of the property. The court held that claims based upon a PRP's status as a current, post-confirmation owner of a site at which harmful releases are threatened or ongoing are not discharged in bankruptcy, even if the acts contaminating the property occurred pre-confirmation. Under CERCLA, such claims run with the land.

These cases establish that the obligations imposed by a cleanup order issued to an owner or operator of contaminated property that orders the respondent to cease threatened or ongoing pollution will likely not be construed as a dischargeable claim. Whether a cleanup order issued against a former owner or operator or other party who is not in possession of the contaminated property should be similarly treated was addressed in *In re Torwico Electronics, Inc.*, 8 F.3d 146 (3rd Cir. 1993). The Third Circuit upheld the issuance of a cleanup order under New Jersey's ECRA statute against a debtor that formerly leased contaminated property. The court distinguished *Kovacs*, noting that in that case, the only performance sought from the debtor was the payment of money. Here, the court reasoned that there was no alternative payment remedy under New Jersey law notwithstanding whether CERCLA could have been applied to the site. The court reasoned that the debtor's liability ran with the hazardous waste that it left behind at its former facility.

10.4.5 Private Party Contribution Claims

Private parties face an additional obstacle in recovering response costs from a co-PRP in bankruptcy. Section 502(e)(1) of the Bankruptcy Code generally provides that any claim for reimbursement or contribution of an entity that is liable with the debtor is disallowed to the extent that such claim is contingent. In *Syntex Corp.* v. *The Charter Co.* (*In re Charter Co.*), 862 F.2d 1500 (11th Cir. 1989), the court upheld disallowance of a private party CERCLA contribution claim where no judgment had as yet been entered in pending environmental litigation and the claimants had not yet made any payments relating to environmental liability. See also *In re Eagle-Pitcher Industries*, 144 Bankr. 765 (S.D. Ohio 1992).

Several courts have struggled to avoid this harsh result. In *In re Dant & Russell, Inc.*, 951 F.2d 246 (9th Cir. 1991), the court addressed a contribution action under Section 107(a)(4)(B) of CERCLA in which a property owner sought to recover future cleanup costs from a debtor lessee that had contaminated the owner's property. The Ninth Circuit distinguished between those cases where EPA had ordered the cleanup and a cleanup instigated by a private party. The court held that if the cleanup claim was based on CERCLA Section 107(a)(4)(B) and the cleanup was not ordered by EPA or otherwise being addressed by EPA, there was no co-liability with the debtor and, therefore, the contingent contribution claim was not barred by virtue of Section 502(e)(1) of the Bankruptcy Code.

In *In re Hemingway Transport, Inc.*, 993 F.2d 915 (1st Cir. 1993), the First Circuit refused to disallow a contingent contribution claim of a developer who purchased contaminated property from the debtor. Instead, the court remanded the case directing the bankruptcy court to set a bar date by which the Chapter 7 trustee and/or the developer could file a claim on behalf of EPA pursuant to Section 501(c) or (b), respectively, of the Bankruptcy Code.

10.4.6 Penalty Claims

In evaluating a penalty claim, the claim first must be determined to be pre-petition or post-petition. Generally, the claim is pre-petition to the extent that the act or omission giving rise to the penalty occurred pre-petition, and it is post-petition to the extent that the act or omission giving rise to the penalty occurred post-petition. Some types of ongoing violations may give rise to both pre- and post-petition claims.

In Chapter 7 cases, pre-petition penalty claims are subordinated and will be paid only after all other claims are paid in full (11 U.S.C. § 726(a)(4)). Therefore, unless assets are sufficient to fund a full distribution, the likelihood of receiving any payment on a pre-petition penalty claim in a Chapter 7 case is remote.

In a Chapter 11 case, pre-petition penalty claims are paid in accordance with the terms set forth in the confirmed plan of reorganization. In some Chapter 11 cases, debtors have agreed to pay penalty claims as non-subordinated general unsecured claims because such claims may not be subordinated where the debtor is reorganizing. See, for example, *Schultz Broadway Inn* v. *United States*, 912 F.2d 230, 233 (8th Cir. 1992).

Post-petition penalty claims are generally considered administrative expenses and have first priority in payment over any other class of claims other than secured claims (*In re N.P. Mining Co.*, 963 F.2d 1449 (11th Cir. 1992); *United States* v. *LTV Corporation* (*In re Chateaugay*), 944 F.2d 997 (2nd Cir. 1991); *In re Charlesbank Laundry, Inc.*, 755 F.2d 200 (1st Cir. 1985)). See also *United States Dept. of Interior* v. *Elliot*, 761 F.2d 168 (4th Cir. 1985).

10.4.7 Administrative Expenses

The actual necessary costs and expenses of preserving the bankruptcy estate are administrative expenses that must be paid in full before any other class of claims are paid (11 U.S.C. § 503(b)). By definition, administrative expenses must be incurred post-petition because the bankruptcy estate is created by the filing of the bankruptcy petition.

Response costs incurred by EPA under CERCLA post-petition with respect to property of the estate may be entitled to administrative priority (*United States* v. *LTV Corporation* (*In re Chateaugay*), 944 F.2d 997 (2nd Cir. 1991); *In re Wall Tube & Metal Products Company*, 831 F.2d 118 (6th Cir. 1987); *In re Smith-Douglass, Inc.*, 856 F.2d 12 (4th Cir. 1988)). Note that it may be more difficult for private parties to establish an administrative priority for post-petition response costs incurred in a private party cleanup in some circuits (*In re Dant & Russell, Inc.*, 853 F.2d 700 (9th Cir. 1988); *Southern Ry. Co.* v. *Johnson Bronze Co.*, 758 F.2d 137 (3rd Cir. 1985)).

Typically, the procedure for asserting an administrative expense claim is to file an application for allowance of administrative expenses pursuant to Bankruptcy Rule 2016.

10.5 FACTORS TO BE CONSIDERED IN DECIDING WHETHER TO FILE A PROOF OF CLAIM

In evaluating whether to proceed with a referral to DOJ for the filing of a proof of claim against a liable or potentially liable party or the owner or operator of a regulated facility, consideration of the following factors may be helpful.

10.5.1 Nature and Size of EPA's Claim

Due consideration should be given to the nature and size of EPA's claim. A claim under CERCLA for reimbursement of all past and future response costs may be more compelling than a small pre-petition penalty claim where the likelihood of any recovery is remote. Post-petition penalties and response costs may be accorded administrative priority and, therefore, are more likely to be paid than are general unsecured claims.

As discussed previously, once a proof of claim is filed, EPA may be required to substantiate the claim before the court on an accelerated schedule. In addition, EPA may have to respond to discovery requests and develop expert testimony on the estimate of future response costs on relatively short notice. The need to allocate resources for such matters should be measured against the potential gain in filing a claim. For example, in a multi-generator CERCLA case with potentially hundreds of other viable potentially responsible parties (PRPs), or where other viable PRPs are already committed to the cleanup pursuant to an administrative order or consent decree,

the resources needed to pursue a claim in bankruptcy may outweigh any anticipated return. However, the ability to recover against other liable parties, by itself, should not necessarily be determinative. As discussed earlier, private cost recovery claims for future response costs are treated as contingent claims for contribution and are disallowed in bankruptcy. Therefore, other PRPs may be foreclosed from recovering any share of cleanup costs from a co-PRP in bankruptcy. In the interest of fairness and justice, EPA may choose to file a claim in the bankruptcy case of a recalcitrant PRP for a multi-generator site.

10.5.2 Size of the Bankruptcy Estate and Nature and Size of Other Claims Against the Debtor

EPA's claim cannot be evaluated in a vacuum. When possible, due consideration should be given to the size of the bankruptcy estate and other claims against the debtor. For example, it is frequently pointless to file a claim in a no asset Chapter 7 case; any recovery in such cases is impossible.

The debtor's bankruptcy case should be evaluated to determine whether the sole or principal purpose of the bankruptcy filing is to obtain a discharge of environmental liabilities. Usually, a debtor in bankruptcy has numerous financial problems, which include environmental liabilities. If, however, it appears that the debtor is using the bankruptcy proceeding to deal primarily with environmental claims and has little or no other debt, close scrutiny of the case is warranted.

In an asset case, the task of evaluating with any degree of certainty how much EPA is likely to recover if it files a proof of claim is problematic and may not be possible until the end of the bankruptcy case and after the deadline for filing a proof of claim. To evaluate the likelihood of a recovery, the debtor's assets and liabilities must be analyzed. The bankruptcy schedules may be misleading. Values assigned by the debtor in the schedules may be unreliable. While the debtor may have scheduled assets of significant value, only a fraction of that value may be realized in a liquidation sale. Often, a debtor is given a certain period of time to sell property subject to a lien in order to realize the "equity." It is difficult to predict whether such efforts will be successful. Success often depends on luck, as well as on market conditions. Often, the most valuable assets are intangibles, such as preference claims and fraudulent transfer claims. Only rarely are these types of claims scheduled. Usually, these claims only are discovered through a trustee investigation.

It is also difficult to determine the debtor's liabilities early in the bankruptcy case. Proofs of claim filed by other creditors must be examined and compared against the bankruptcy schedules. Often, the debtor must be questioned in evaluating claims. Improperly filed claims or claims subject to a bona fide dispute are common.

Accordingly, it should be recognized that the evaluation of the debtor's assets and liabilities is tentative and subject to change in many instances.

10.5.3 Other Considerations

All factors considered when deciding whether to take enforcement action in a non-bankruptcy case should also be considered when deciding whether to file a proof of claim. These

factors include culpability of the debtor, strength of the evidence against the debtor, deterrence value of such action, and precedential value of such action and the interests of justice and equity.

10.6 ABANDONMENT

Section 554 of the Bankruptcy Code provides that upon request of the trustee or other party in interest, the bankruptcy court may allow abandonment of property of the estate when the property is "burdensome" or "of inconsequential value and benefit to the estate." If abandonment is allowed, the property is no longer property of the estate and is abandoned to the debtor or other party with an interest in the property. If abandonment of contaminated property is allowed, the trustee or debtor may contend that response costs incurred after the abandonment will no longer have administrative priority status because the cleanup was not necessary to "preserve property of the estate."

In *Midlantic National Bank* v. *New Jersey Department of Environmental Protection*, 474 U.S. 494 (1986), the U.S. Supreme Court held that the trustee's power to abandon property is not unlimited and may not be allowed in contravention of a state statute or regulation that is reasonably designed to protect the public health or safety from identified hazards (*Midlantic*, 474 U.S. at 507). In a footnote, the Supreme Court went on to state:

> This exception to the abandonment power vested in the trustee by §554 is a narrow one. It does not encompass a speculative or indeterminate future violation of such laws that may stem from abandonment. The abandonment power is not to be fettered by laws or regulations not reasonably calculated to protect the public health or safety from imminent and identifiable harm. *Midlantic*, 474 U.S. at 507, n. 9.

Since the *Midlantic* decision, a number of courts have addressed the issue of when abandonment of contaminated property may be allowed. While no uniform standard has as yet emerged from these cases, courts generally consider the nature of the environmental threat, the time that would be involved in any cleanup, and the amount of money available to the estate to fund any cleanup in determining whether abandonment should be allowed. See, for example, the following cases: *In re FCX*, 96 Bankr. 49 (Bankr. E.D.N.C. 1989); *In re Peerless Plating Co.*, 70 Bankr. 943, (Bankr. W.D. Mich. 1987); *In re Anthony Ferrante & Sons, Inc.*, 119 Bankr. 45 (D. N.J. 1990); *In re Smith-Douglass, Inc.*, 856 F.2d 12 (4th Cir. 1988); and *In re Franklin Signal Corp.*, 65 Bankr. 298 (D. Minn. 1986).

10.6.1 Factors To Be Considered in Deciding Whether to Oppose a Motion to Abandon Contaminated Property

In evaluating whether to request DOJ to oppose on EPA's behalf a motion to abandon contaminated property filed by a trustee or other party in interest in a bankruptcy case, consideration of the following factors may be helpful:

- **Whether there are unencumbered assets in the bankruptcy estate that could be used to fund response actions**—In a bankruptcy case with few or no unencumbered assets, there is little to gain in opposing a motion for abandonment. In cases in which the estate

has some funds but not enough to pay for all cleanup costs, it may be appropriate to ask the bankruptcy court to condition the abandonment upon the trustee undertaking certain tasks, such as maintenance of site security or other limited activity.

- **Nature of environmental threat**—Due consideration should be given to the nature and extent of the environmental problems posed by the site. In opposing an abandonment motion, EPA should be prepared to present evidence, if requested, that the environmental conditions at the site pose an imminent threat to public health and safety.

- **Value of the property**—Where there are no other unencumbered assets in the bankruptcy estate and the property has a value greater than the cost of the cleanup, abandonment would not be appropriate. EPA might consider not opposing abandonment under such circumstances, conditioned upon its being granted a lien against the property.

- **Conditions to abandonment**—In some cases, EPA may want to negotiate conditions to a proposed abandonment, such as maintenance by the debtor or trustee of temporary security measures, EPA access, or a stipulation that the abandonment is without prejudice to the priority of any EPA claims.

Appendix A

Roster of Workgroup Members

ROSTER OF WORKGROUP MEMBERS (MAY 1995)

Name & Address	Telephone Number	FAX Number
Regional Participants		
Region I Tim Williamson Office of Regional Counsel (RCG) U.S. EPA, Region I One Congress Street Boston, MA 02203	(617) 565-9016	(617) 565-1141
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Appendix B

Proposed Model Litigation Report

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION ____

BANKRUPTCY REFERRAL REPORT

DEBTOR:	Name Address
BAR DATE FOR FILING: PROOF OF CLAIM (if applicable)	Date
JUDICIAL DISTRICT:	United States Bankruptcy Court for the _____ District of _____
REGIONAL CONTACTS:	Assistant Regional Counsel Address Phone Number Program Contact Address Phone Number

CONFIDENTIAL

ATTORNEY WORK PRODUCT PREPARED IN ANTICIPATION OF LITIGATION
DO NOT RELEASE UNDER FOIA, 5 U.S.C. SECTION 552

EXHIBITS

(If applicable or available)

1. Bankruptcy petition.

2. Bankruptcy schedules and statement of affairs.

3. Notice of bankruptcy filing. (This is often included in the order for meeting of creditors combined with notice thereof and may also include notice of the bar date.)

4. Order setting bar date. (Sometimes a separate bar order is entered.)

5. Plan of reorganization and disclosure statement. (These documents are filed only in Chapter 11 cases and usually not until the case has been pending for some time.)

6. SPUR or other cost documentation.

7. Other documents relating to liability of debtor to EPA.

I. BACKGROUND, DESCRIPTION OF DEBTOR, DESCRIPTION OF SITE/ FACILITY, AND HISTORY OF ENFORCEMENT ACTIVITIES

Briefly describe the debtor and the nature of its activities giving rise to environmental liability. Include a brief description of the facility or site associated with the debtor and a short history of enforcement activities.

II. STATUS OF BANKRUPTCY PROCEEDING

Provide a brief history of the bankruptcy proceeding, including the date the bankruptcy case was filed, the bankruptcy chapter under which the case was filed, the court in which the case is pending, the case number, the name and address of the debtor's attorney, and, if applicable, the name and address of the trustee. Describe the current status of the case and highlight any bar dates or other applicable time limitations.

III. DESCRIPTION OF EPA'S CLAIMS AGAINST THE DEBTOR

Describe EPA's claims against the debtor, including the statutory basis for such claims. Indicate the extent to which the claims are based upon pre-petition activities of the debtor and whether any post-petition claim is likely to arise. Provide all available information concerning the amount of EPA's claim. Include information relating to any possible defenses against the claim and the rationale for filing the claim.

IV. OTHER ACTION TO BE TAKEN IN THE BANKRUPTCY CASE

Describe any action to be taken other than, or in addition to, the filing of the proof of claim (e.g., objection to motion of abandonment, objection to discharge of debtor or dischargeability of debt). Include the basis for such action and any applicable time limitations on taking such action.

Appendix C

Proposed Model Informal Information Request Letter to Debtor

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GA 30365

Attorney
Address

SUBJ: **In re Debtor**; U.S. Bankruptcy Court;
_____ District of _____; Case No. _____

Dear _____:

The United States Environmental Protection Agency (EPA) recently received _____ in connection with the referenced bankruptcy case, which suggests that EPA Region ____ has been scheduled as a creditor. However, we have been unable to identify any pending actions or claims of EPA against this debtor. In lieu of scheduling an examination in accordance with Bankruptcy Rule 2004, or sending a formal information request letter pursuant to Section 104(e) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. § 9604(e) or Section 3007 of the Resource Conservation and Recovery Act, 42 U.S.C. § 6926, we request that you provide the undersigned with the following information.

Please state the basis upon which EPA was scheduled as a creditor or has otherwise been included on the mailing list in the referenced bankruptcy case. Specifically, please identify any and all sites and/or facilities and the location of such sites and/or facilities that may be associated with any claims of EPA against the debtor.

Please call the undersigned at _____ with any questions you may have. Your assistance in this matter is appreciated.

Sincerely yours,

Assistant Regional Counsel

Appendix D

Environmental Enforcement and the Bankruptcy Laws—Outline and Case Summary

ENVIRONMENTAL ENFORCEMENT AND THE BANKRUPTCY LAWS
Outline and Case Summary

Prepared by:

Joel M. Gross, Deputy Chief
Alan S. Tenenbaum, Senior Attorney
Environmental Enforcement Section
Environment and Natural Resources Division
United States Department of Justice
January 3, 1995

1. **GOALS OF ENFORCEMENT IN THE BANKRUPTCY CONTEXT**, include:

--Insure that businesses operating while in bankruptcy do not do so in violation of environmental laws.

--Insure that neither the bankruptcy itself nor any steps taken during the bankruptcy create environmental problems.

--Recover to the extent possible response costs for which debtor is liable.

--Seek to recover pre-petition penalty claims to the extent funds are available.

2. **THE APPLICABLE BANKRUPTCY LAWS AND RULES** are set forth in the following sources:

-- The Bankruptcy Code, 11 U.S.C--applicable to bankruptcies filed since 1978.

-- The Bankruptcy Act--applicable to pre-1978 bankruptcies.

-- The Bankruptcy Rules.

-- Official Bankruptcy Forms.

-- Local Court Rules--will vary from district to district.

-- 28 U.S.C. §§ 151-58--provisions dealing with bankruptcy judges.

-- 28 U.S.C. §§ 581 et seq.--provisions dealing with United States Trustees.

-- 28 U.S.C. § 959--important provision on suing trustees and debtors-in-possession and their obligation to comply with state law in the management and operation of property of the estate.

-- 28 U.S.C. § 1334--jurisdictional provisions for bankruptcy and bankruptcy related matters.

-- 28 U.S.C. §§ 1408-1412--venue provisions relating to bankruptcy.

3. **THE THREE TYPES OF BANKRUPTCIES ENCOUNTERED MOST FREQUENTLY:**

a. Individual Chapter 7--a liquidation of the debtor's assets and distribution among creditors based on priority scheme of the Bankruptcy Code. A trustee will be appointed to take charge of and liquidate the debtor's property.

b. Business liquidation--generally done under Chapter 7, but sometimes done under Chapter 11. If it is a chapter 7, there will be a trustee. If done under chapter 11, the debtor will likely remain in possession of its property.

c. Business reorganization under Chapter 11--a reorganization to allow the business to continue operating. Requires proposal and confirmation of a plan of reorganization. Generally, there will be a debtor-in-possession and no trustee.

It is important to focus on the type of bankruptcy since the applicable statutory provisions and rules may vary based on context, although certain provisions and rules will apply equally to all Chapters of the Bankruptcy Code and to all types of debtors. There are also other types of bankruptcies encountered less frequently in the environmental context, including individual Chapter 11 proceedings and Chapter 13 proceedings (wage earner plans).

4. **HOW ARE PENALTY CLAIMS DEALT WITH IN BANKRUPTCY?**

a. Automatic Stay: Actions for civil penalties for violation of environmental requirements have been held not to be within the scope of the automatic stay of Section 362(a) of the Bankruptcy Code. That section generally stays commencement or continuation of any action that could have been commenced against the debtor prior to the filing of the bankruptcy petition. However, Section 362(b)(4) excepts from the stay "the commencement or continuation of an action or proceeding by a governmental unit to enforce such governmental unit's police or regulatory power." Thus, the government can pursue an action to determine the amount of penalty. See In re Commerce Oil Co., 847 F.2d 291 (6th Cir. 1988); Case Summary, Section A(a). Once a judgment is obtained, it can only be enforced in the

bankruptcy, since Section 362(b)(5) only allows enforcement of police and regulatory judgments that are not money judgments.

b. Filing a Claim: To participate as a creditor in the bankruptcy, a proof of claim must be filed. Sections 501 and 502. An exception to this rule is that in a Chapter 11 case, no proof of claim needs to be filed if the claim is accurately included on the debtor's schedules of liabilities (Rule 3003(b)(1)).

The form for filing a proof of claim is Form 10 of the Official Bankruptcy forms. Printed forms can be used, although it may be preferable to use a retyped version to assist in conforming the form to the facts.

Time for filing a proof of claim is set forth in the Rules:

Chapter 7 cases--Pursuant to Rule 3002(c), proofs of claim must be filed within 90 days after the first meeting of creditors begins. Pursuant to Rule 2003, the first meeting of creditors will be held between 20 and 40 days after the order for relief, which is the filing of the petition in a voluntary case.

Chapter 11 cases: The court will fix a deadline for filing proofs of claim, called a bar date. Rule 3003(c)(3). The court can also extend the bar date for cause shown.

c. Priority of the Penalty Claim

In Chapter 7 cases, the Bankruptcy Code creates a priority scheme for distribution of estate property. It is subject to the "absolute priority rule". No creditor in a lower class gets anything until all creditors in all higher classes are paid in full. Within a class, payment is pro rata if there is not enough to pay everyone in full. Secured creditors get paid to the extent of their collateral prior to any unsecured creditors. Priorities among unsecured creditors are set forth in Section 507. After all priority claims are paid (administrative claims and then other specified claims including certain wage, employee benefit and tax claims) other general unsecured claims are paid, except for those claims listed in Section 726(a)(3)-(5) which are subordinated, and are paid only after all non-subordinated creditors are paid in full. The subordinated claims include pre-petition penalty claims which are not compensation for actual pecuniary loss. As a result, penalty claims are subordinated in a

Chapter 7 case. That means that penalty claims will only be paid after all general unsecured claims are paid in full, i.e., penalty claims will often not receive any significant distribution.

In Chapter 11 cases, payments to creditors are made as set forth in the plan of reorganization. In Chapter 11 cases, payments to creditors are made as set forth in the plan of reorganization. In many Chapter 11 reorganization cases, debtors have agreed to pay penalty claims as nonsubordinated general unsecured claims in recognition of the fact that such claims are not likely to be subordinated where the debtor is reorganizing. See Schultz Broadway Inn v. United States, 912 F.2d 230, 233 (8th Cir. 1992).

The foregoing deals with pre-petition penalty claims. Penalties that arise post-petition from the continued operation of the debtor or from actions of the trustee should be treated as administrative expenses, and entitled to first priority after secured claims. See Case Summary, Section B(d).

d. Discharge

Whether a penalty claim will be discharged will depend on the type of bankruptcy.

Individual bankruptcies--An individual debtor generally receives a discharge from all claims that arose prior to the filing of the petition. Section 727(b). The discharge operates as an injunction against pursuing the discharged claim. Section 524. However, there are exceptions to discharge set forth in Section 523. One exception is for debts that are penalties payable to government units which are not compensation for actual pecuniary loss (the same type of claim as is subordinated). Section 523(a)(7). Accordingly, penalty claims are not discharged against individual debtors. This exception operates automatically and it is not necessary to object to discharge of the claim. Section 523(c).

Corporate liquidations--Corporations or other non-individuals that are liquidating never get discharges. Sections 727(a) and 1141(d)(3). Thus, it is never necessary to consider whether a particular claim is discharged. Of course, once the corporation has liquidated, it will be only a shell without assets, so a preserved claim against the corporation will be of little or no value.

Corporate reorganizations--A corporation that reorganizes gets a discharge for all claims that arose prior to the date of confirmation of a plan. Section 1141(d)(1). The discharge in this context includes even those claims that are listed in Section 523 as being excepted to discharge as to individuals. See Section 1141(d)(2). As a result, penalty claims against a reorganizing corporation or other business entity are generally discharged.

5. **HOW ARE COST-RECOVERY CLAIMS TREATED IN BANKRUPTCY?**

a. Automatic Stay: Courts have held that the automatic stay does not apply to actions for recovery of response costs under Section 107 of CERCLA, because such actions are within the police or regulatory exception of Section 362(b)(4). Thus, a cost recovery claim can be pursued to judgment but can then only be enforced in the bankruptcy proceeding. See Case Summary, Section A(c).

b. Filing a Proof of Claim: Same rules as in 4(b) above.

c. When Do Cost Recovery Claims Arise?:

One issue in this area has been how future response costs should be treated, or put another way: when does a cost recovery claim arise for purposes of bankruptcy law? This issue is relevant to the total amount of the cost recovery claim and whether all of the claim has arisen and is dischargeable in bankruptcy. Some reorganizing companies have argued that the government's claim should include all liability relating to pre-petition contamination of a site and that they should get a discharge and fresh start from all liability relating to pre-petition contamination of any site. They argue that "claim" is defined broadly in Section 101(5) to include even claims that are unmatured, contingent and unliquidated, and that Section 502(c) provides for the court to estimate "any contingent or unliquidated claim, the fixing of which, as the case may be, would unduly delay administration of the case. . . " From the Government's perspective, certain CERCLA cost recovery claims should be found not to have yet arisen because one of the elements of a CERCLA claim -- the incurrence of the response costs -- arguably has not arisen and because the Government may not otherwise have a fair opportunity to participate in the bankruptcy proceeding. For example, the Government may not be aware of a CERCLA site or the Debtor's connection to the site or may have insufficient information about the contamination at a site to

participate meaningfully in the bankruptcy. Even estimating future response costs may be extremely difficult if not impossible during the early stages of the response process.

The Second Circuit court of appeals decision in the LTV reorganization (In re Chateaugay Corp.) was the first appellate decision on this issue. The court held that the pivotal event in the accrual of a CERCLA clean-up claim for bankruptcy purposes was the release or threatened release of a hazardous substance.

Recent decisions in Jensen, Chicago, Milwaukee, and National Gypsum and other cases suggest that where no response action has been taken or where the government lacks knowledge of environmental problems at a site or a debtor's connection to a site, the government's CERCLA claim has not arisen and is nondischargeable. In Jensen, the Ninth Circuit held that a the government must have sufficient knowledge of the debtor's potential liability for a cleanup claim to arise. In the Chicago, Milwaukee cases, the Seventh Circuit held that a CERCLA claim arises when the claimant can tie the bankruptcy debtor to a known release that the claimant knows will lead to CERCLA response costs, and when the claimant has conducted tests with regard to the contamination problem. In National Gypsum, the district court held that only cost recovery claims within the fair contemplation of the parties could be discharged. See Case Summary, Section C.

d. Secured Status of Cost Recovery Claim: To the extent that a cost recovery claim is secured by property of the bankruptcy estate, it will be beneficial to assert such a security interest, since it will be paid to the extent of the value of the collateral ahead of all other creditors, except those with superior secured interests in the same collateral. Under Section 107(l) of SARA, the United States is given a security interest to the extent of its response costs against property of a liable person which property is subject to or affected by the response action. (Note that in Reardon v. United States, 947 F.2d 1509 (1st Cir. 1991), the Court held that imposition of the CERCLA lien without an opportunity for any hearing was violative of due process). The lien is subject to existing liens on the property. State laws often provide for similar liens for State response costs.

To the extent that such lien may exist against property of the debtor, the secured claim will only be secured

to the extent of the value of the property being cleaned up. In the usual case where the response costs substantially exceed the value of the property, the bulk of the cost recovery claim will be unsecured.

Secured claims can only be asserted in a bankruptcy proceeding to the extent they are perfected prior to the commencement of the case. Further, Section 362(a)(3), part of the automatic stay provision, prohibits the perfection of any lien against property of the estate. This provision is not subject to the exception for police or regulatory actions.

e. Priority of an Unsecured Cost Recovery Claim:

i. To the extent of costs incurred pre-petition, an unsecured cost recovery claim will be a general unsecured claim.

ii. One issue that has been actively litigated is the priority of response costs incurred post-petition with respect to property of the bankruptcy estate. Most courts have held that such costs are administrative expenses, pursuant to Section 503, since the trustee or debtor-in-possession had an obligation to clean up the property, and the government fulfilled that obligation. In other words, such costs are "actual and necessary" costs of operating or administering the business in accordance with applicable law for the benefit of the estate. A handful of courts have denied administrative status in private party cases not involving property of the estate, holding that if the response costs were in response to pre-petition contamination, the clean-up costs are a general unsecured claim. This issue was left undecided by the Supreme Court in Midlantic National Bank. The cases on this issue are discussed in Sections B(a) and (b) of the Case Summary. The strongest facts for administrative priority status are when the costs in question are relatively small compared to the size of the estate; when the response is a relatively short term, removal type response and the threat of harm is more immediate and severe; or when the response was necessitated, at least in part, by post-petition conduct of the debtor or the trustee.

The United States has only sought administrative expense priority for costs incurred post-petition

with respect to property of the estate. We have not sought administrative priority when the costs were incurred post-petition with respect to property that the debtor does not own (such as property on which its generated wastes were disposed). To date, no court has allowed an administrative priority for response costs not incurred relating to property of the estate.

iii. If an administrative expense is to be sought, the procedure is to file an application for allowance of administrative expenses, in accordance with Rule 2016.

iv. If the court allows response costs as administrative expenses, those costs would still be subordinated to the interests of secured creditors in their collateral. If all the estate's assets are subject to security interests, the administrative expenses may not be paid. One argument to consider in this area is that under Section 506(c) where the response action at issue was taken with respect to property in which the secured creditor has its security interest, the government should be allowed to recover its response costs from the proceeds of the secured property. Section 506(c) allows the trustee to recover from secured property amounts spent to preserve the secured property. To the extent the government fulfills the obligation of the trustee, it can argue that it stands in the shoes of the trustee with respect to the secured property. See Case Summary, Section B(c).

f. Estimation:

Where claims include potential future costs at sites for which response is ongoing, debtors may seek to have those costs estimated pursuant to Section 502(c), even though the future response actions may not have even been selected. The Second Circuit decision in the LTV case suggests that such an estimation need not be for purposes of allowance. The Court stated that "nothing prevents the speedy and rough estimation of CERCLA claims for purposes of determining EPA's voice in the Chapter 11 proceeding, with ultimate liquidation of the claims to await the outcome of normal CERCLA enforcement proceedings in which EPA will be entitled to collect its allowable share (full or pro rata depending on the reorganization plan) of incurred response costs." Relying on this language, we have argued in subsequent cases, that estimation should be

for purposes of determining plan voting rights only, and not for purposes of allowance. Allowance should be determined once response actions for the site have been selected, with any claim then allowed treated like other general unsecured claims under the plan of confirmation. This argument is most likely to be successful in large bankruptcies where the potential future costs are not so large as to have their unliquidated status prevent confirmation of a plan. In smaller cases, and where the potential future costs liability is large, the court is more likely to require estimation for allowance purposes during the bankruptcy. See Case Summary, Section D(a).

g. Joint and Several Liability

The United States has asserted that CERCLA claims in bankruptcy should be determined based on the same joint and several liability principles that apply outside of bankruptcy. A number of debtors have argued that bankruptcy courts have the equitable authority to allocate liability and only allow a claim for the amount of the debtor's fair share. The National Gypsum decision was the first to address this issue and the district court held that the debtor's liability would be determined based on usual joint and several liability principles. See Case Summary, Section D(b).

h. Discharge:

Individuals--Pre-petition cost recovery claims against individuals will be discharged, unless a case specific exception to discharge can be found. Two possible exceptions to consider are those of Section 523(a)(3)--that the debt was not timely listed or scheduled in time to file a proof of claim--or Section 523(a)(6)--that the debt arose from "willful and malicious injury by the debtor to the. . . property of another entity." See Case Summary, Section K. If the latter provision is to be relied on, an objection to dischargeability must be filed. Section 523(c).

Cost Recovery Claims Against Individuals or Reorganizing Companies--Whether cost recovery claims for costs incurred post-petition will be discharged raises the issue of when the claim arises, discussed in part c. above. If response costs were not incurred prior to the filing of the petition or the government did not know about a site's environmental problems at the time of the bankruptcy or of the debtors' connection to a site, some recent cases hold that the government's claim has not arisen and is

nondischargeable. The government should not be expected to have filed a claim with respect to a site about which it had insufficient information or that was not known to be connected to the debtor. Debtors will, however, likely argue that the claim arose when the disposal took place pre-petition. See generally Case Summary, Section C(a). Recently, the United States has entered into compromises whereby claims for unknown sites will be handled in the ordinary course of CERCLA activities in the future but any judgments or settlements will be paid as general unsecured claims. See Case Summary, Section D(c).

The foregoing discussion on discharge assumes that the debtor does not continue to own the contaminated property after reorganization. If it does, such post-bankruptcy ownership gives rise to a new CERCLA claim for ongoing post-bankruptcy releases or threats of releases, notwithstanding any previous discharge in bankruptcy. See the Seventh Circuit's decision in In re CMC Heartland Partners, 966 F.2d 1143 (7th Cir. 1992) (Case Summary, Section C(a)(3)).

Corporate Liquidation--The corporation does not get a discharge at all.

Corporate Reorganization--The corporation will be discharged from all cost recovery claims that arose prior to confirmation of a plan of reorganization.

i. Contribution Claims:

i. Claims for contribution, such as those that arise under CERCLA, may be disallowed in a bankruptcy proceeding under Section 502(e) of the Code. That section provides for the disallowance of contribution claims in three instances, including where "such claim for reimbursement is contingent as of the time of allowance or disallowance of such claim for reimbursement or contribution." Thus, if a party is seeking to assert a CERCLA contribution claim against a bankrupt PRP, it may be crucial that it have already paid money or performed work. See Case Summary, Section C(b). In addition, EPA may be in a better position than the PRPs to obtain a recovery from the debtor by litigation or settlement. See Case Summary, Section D(c).

ii. Another issue relating to contribution claims is when such a claim arises. This issue has

important ramifications to the question of discharge. In the Frenville case, the third circuit held that a contribution claim does not arise for bankruptcy purposes until the party asserting the contribution claim has paid out on its obligation. In re M. Frenville Co., 744 F.2d 332 (3d Cir. 1984), cert. denied, 469 U.S. 1160 (1985). This decision has been frequently criticized and has not been widely followed. Recently, some courts have adopted the fair contemplation of the parties test discussed in Part c above in deciding whether contributions claims have arisen. See Case Summary, Section C(b).

j. CERCLA Cost Recovery Settlements:

i. EPA and some debtors have found it mutually advantageous to enter into multi-site settlements with the United States providing for contribution protection as provided in 42 U.S.C. § 9613(f)(2). See Case Summary, Section D(c). EPA or PRPs implementing remedial action are then able to obtain significant contributions from debtors toward hazardous waste cleanup. The debtors have then sought to disallow the claims of multiple PRPs as barred under CERCLA. The trend in recent cases has been to hold that claims under Section 107 of CERCLA are claims for contribution that can be barred under Section 113(f)(2) of CERCLA, 42 U.S.C. § 9613(f)(2). See Case Summary, Section C(b).

ii. In the recent settlements in the U.E. Systems, Insilco, and LTV bankruptcies, the parties agreed on a procedure for handling future sites in the ordinary course of CERCLA activities but to be paid as general unsecured claims. This was a fair and reasonable compromise of the parties' positions that avoided the need for estimation hearings. See Case Summary Section D(c).

iii. The courts have applied a deferential standard of review in considering objections to bankruptcy CERCLA settlements. The courts have approved such settlements where EPA provides a plausible explanation for the fairness and reasonableness of the settlement and the Department of Justice finds the settlement to be in the public interest after consideration of public comments. See Case Summary, Section D(c).

6. **HOW ARE NATURAL RESOURCE DAMAGE CLAIMS DEALT WITH IN BANKRUPTCY?**

Natural resource damage claims will generally be dealt with in the same manner as cost recovery claims. One separate issue relates to when a natural resource damage claim arises for bankruptcy purposes. In the National Gypsum case, we argued that such a claim could not arise prior to selection of a remedy for the site, since under CERCLA such a claim would not be ripe prior to such selection. This argument was rejected by the district court. Under that decision, if the natural resource damage claim was within the fair contemplation of the parties, a dischargeable natural resource damage claim would exist, even though a remedy has not been selected. See Case Summary, Section C(d).

7. **HOW ARE INJUNCTIVE CLAIMS DEALT WITH IN BANKRUPTCY?**

In considering the ramifications of bankruptcy to injunctive claims, courts have frequently distinguished between prohibitory injunctions and mandatory injunctions, such as clean-up orders, which will require the expenditure of money for compliance. This distinction, and the issue of whether it is a determinative one, comes up in a number of different contexts discussed below. It also bears emphasis that the various issues discussed below are closely interrelated, and that a decision in this area may discuss several of the issues.

a. Obligation of Trustee or Debtor-in-Possession to Comply with the Environmental Laws: The courts have been fairly uniform in holding that to the extent that a debtor engages in business while in bankruptcy, it must comply with all federal and state environmental laws regulating its operations. Thus, a company operating in Chapter 11 could not ignore the requirements of RCRA with respect to hazardous wastes it generates. See Case Summary, Section E. The courts have relied, among other things, on 28 U.S.C. § 959(b) which requires a trustee or debtor-in-possession to "manage and operate" the property in its possession in compliance with all valid state laws (interpreted to include federal laws as well). The courts have differed on the obligations of a trustee who is not operating the business, but is only liquidating. The use of the word "manage" implies that more than operation is included. While a number of courts have adopted this broad interpretation, others have held that Section 959(b) does not apply to Chapter 7 trustees. One ramification of this issue, which relates to the administrative expense issue

discussed in part 5(e), is whether a Chapter 7 trustee can be ordered to undertake corrective action, closure or post-closure under RCRA or to undertake removal or remedial actions under CERCLA.

b. Are injunctive claims considered claims for bankruptcy purposes? Must Proofs of Claim be filed? Can the injunctions be discharged?

The question of whether an injunction is a "claim" has important ramifications to a number of issues. First, only a "creditor" can file a proof of claim and "creditor" is defined in Section 101(9) to include an "entity that has a claim against the debtor" that arose pre-petition. Similarly, the discharge provisions of Sections 727(b) and 1141 refer to the discharge of "debts" and Section 101(11) defines "debt" as "liability on a claim." Thus, only "claims" can be the subject of proofs of claim and only "claims" can be discharged."

"Claim" is defined in Section 101(5) to mean:

(A) right to payment, whether or not such right is reduced to judgment, liquidated, fixed, contingent, matured, unmatured, disputed, legal equitable, secured, or unsecured; or

(B) right to an equitable remedy for breach of performance if such breach gives rise to a right to payment, whether or not such equitable remedy is reduced to judgment, liquidated, fixed, contingent, matured, unmatured, disputed, legal equitable, secured, or unsecured:

Thus, the key question is whether the injunction at issue "gives rise to a right to payment."

Prohibitory Injunctions: Since prohibitory injunctions do not give rise to an alternative right to payment, such injunctive claims would not likely need to be included in a proof of claim and would not be discharged.

Mandatory Injunctions: One of the significant issues that has been and is being litigated in this area is the question of when a mandatory, clean-up type, injunction will be considered to give rise to a right to payment so as to make it a claim. In Ohio v. Kovacs, the Supreme Court held that an injunction to cleanup a hazardous waste site gave rise to a right to payment against the former site owner, where a receiver

had been appointed pre-petition to take control of the site, thereby dispossessing the owner, and where the State of Ohio was found to be seeking money to clean up the site. Accordingly, Ohio had a "claim" that was discharged. The Court appeared to acknowledge that not every injunction that required the expenditure of money to comply would give rise to a right to payment. Subsequent cases have been divided on the extent that Kovacs should be limited to its facts. Most recently, in the Chateaugay (LTV) case, the Second Circuit held that cleanup obligations would not be considered claims just because they required the expenditure of money and would not be considered claims if they were intended to deal with ongoing pollution. A further issue arises as to whether this analysis is limited to property that the debtor owns, or whether it would also apply to previously owned sites and generator sites. In In re Torwico Electronics, Inc., the Third Circuit held that a state injunctive cleanup order could be enforced against a debtor that no longer owned or actively operated contaminated real property where the debtor left behind hazardous waste. See Case Summary, Sections E, F.

c. Automatic Stay: Pursuant to the police or regulatory exception of Section 362(b)(4), the automatic stay has been held not to apply to the commencement or continuation of environmental actions seeking injunctive relief. Thus, an injunctive action can be pursued to judgment. The more difficult issue is whether the automatic stay prohibits the enforcement of an injunction that is or has been obtained against the debtor. Section 362(b)(5) allows the enforcement of police or regulatory judgments "other than a money judgment." Again, it seems to be undisputed that enforcement of prohibitory injunctions, which are not money judgments, would not be subject to the automatic stay. As to mandatory, clean-up type, injunctions, the courts have looked at the issue in much the same manner as the issue of whether an injunction gives rise to "right to payment" with some courts holding that if the injunction required the expenditure of money, enforcement is stayed, and other courts holding that if money is not sought directly, the judgment is not a money judgment. See Case Summary, Sections A(a), A(b).

8. **AUTOMATIC AND DISCRETIONARY STAYS**--Some Additional Matters

a. Both the automatic stay of Section 362(a) and the exceptions to the automatic stay of Section 362(b) take effect without any affirmative conduct. Thus the

government can proceed on an action within the scope of the "police or regulatory" exception without obtaining leave of the bankruptcy court.

b. In situations where the automatic stay does apply, a party can still seek relief from stay under Section 362(d)-(g) and Rule 4001, by motion to the bankruptcy court.

c. Even where the automatic stay does not apply, the debtor or trustee may ask the bankruptcy court to issue a discretionary stay under the court's general equitable powers pursuant to Section 105. The standards for issuance of a discretionary stay are the usual standards for issuance of a preliminary injunction. The debtor or trustee would have to show, among other things, irreparable harm and likelihood of success on the merits. One issue that arises is what are "the merits" to be considered. One decision (Case H1) held that the merits are the merits of the underlying enforcement action. Another decision held that what had to be shown was a likelihood of success on whether the enforcement action would interfere with the bankruptcy adjudication. (Case H5). Cases discussing the appropriateness of a discretionary stay of an environmental action or proceeding are discussed in Section H of the Case Summary.

d. Where there are ongoing violations of the environmental laws, there is a strong argument that a discretionary stay should never be appropriate, particularly since 28 U.S.C. § 959(b) requires compliance with otherwise applicable laws. The Courts have been generally unwilling to stay such actions, because to do so would be to give preferential treatment to a company operating in bankruptcy.

9. ABANDONMENT OF CONTAMINATED PROPERTY

The Bankruptcy Code provides in Section 554 that, after notice and hearing, a trustee or any party in interest may seek to abandon property that is burdensome to the estate. If allowed, the property is abandoned to any person with a possessory interest in the property, including the debtor. Because abandonment has been perceived by trustees as a method of avoiding dealing with contaminated property that may be in the estate, it has been sought in a large number of cases where the estate includes contaminated property, and the clean-up costs exceed the property's as-clean value.

In Midlantic National Bank, the Supreme Court held that the abandonment authority was not unlimited and that abandonment

of contaminated property should not be permitted in violation of state law except on conditions that insure the protection of public health and the environment. The Court noted, however, that abandonment should not be prevented by state laws not reasonably calculated to protect against "imminent and identifiable" harm. Post-Midlantic decisions (Section G of the Case Summary) have reached differing conclusions on the standards governing when abandonment should be allowed. It would appear, however, that the more immediate the harm, the more short term the required cleanup, and the more money available in the estate, the more likely the court will be to deny abandonment.

It should be remembered that in situations where there are little if any assets of value in the estate, there may be no funds available to finance a cleanup even if abandonment is denied.

10. DISMISSAL OF FUTILE BANKRUPTCIES

In a number of cases (Case Summary, Section I), courts have dismissed bankruptcies under Section 707, where the courts have found that because of the limited assets in the estate and the responsibilities that the estate would have to clean up contaminated property, no purpose would be served by continuing the bankruptcy estate. The advantage of such a dismissal is that it avoids having limited assets of the debtor spent on administration, and allows all available assets to go for environmental remediation. A disadvantage for the government could be that it would eliminate the government's ability to seek priority under Section 506(c) of cleanup costs as against the claim of a secured creditor in the property being remediated.

11. REFERENCE AND WITHDRAWAL OF REFERENCE TO BANKRUPTCY JUDGES

a. Pursuant to 28 U.S.C. § 1334 the district courts have "original and exclusive jurisdiction of all cases under title 11 [the Bankruptcy Code] and original but not exclusive jurisdiction over civil proceedings arising under title 11 or arising in or related to cases under title 11". Thus, bankruptcy jurisdiction resides in district courts, not the bankruptcy courts. This, and other related provisions, were enacted in 1984 in response to the Marathon Oil decision in which the Supreme Court had held unconstitutional the prior grant of bankruptcy jurisdiction to non-Article 3 bankruptcy judges.

b. Pursuant to 28 U.S.C. § 151 the bankruptcy judges in each district "constitute a unit of the district court to be known as the bankruptcy court for that district." Thus, the bankruptcy court operates as an arm of the district court.

c. Pursuant to 28 U.S.C. § 157(a), each district court may provide for the reference of matters within its bankruptcy jurisdiction to the bankruptcy judges for that district. Most of the district courts have provided through a general order of reference, for the reference of all bankruptcy matters to bankruptcy judges.

d. Section 157(b) divides the proceedings that arise under title 11 into two categories. Core proceedings--those in any of 15 listed categories--are heard and determined by the bankruptcy judges who can enter appropriate orders and judgments, subject to appellate review by the district court under Section 158. Non-core proceedings--everything other than the 15 categories--are heard by the bankruptcy judge, who then submits proposed findings of fact and conclusions of law to the district court, with the final order or judgment to be entered by the district court.

e. Section 157(d) deals with the withdrawal of the reference to the bankruptcy judges. It first provides a permissive withdrawal provision, allowing the district court to withdraw any case or proceeding from the bankruptcy court "for good cause shown". The second sentence contains a mandatory withdrawal provision:

"The district court shall on timely motion of a party so withdraw a proceeding if the court determines that resolution of the proceeding requires consideration of both title 11 and other laws of the United States regulating organizations or activities affecting interstate commerce."

This provision can be used to help insure that substantive environmental issues under federal statutes are decided by district judges, and not bankruptcy judges. See Case Summary, Section J. The courts have so far agreed that the environmental statutes are the type of commerce-related statutes referred to in Section 157(d). Thus, withdrawal will be appropriate if the matter to be decided involves both environmental law and bankruptcy law. Although not required by the statute, courts have so far required that the matter

sought to be withdrawn involve "substantial and material" consideration of the non-bankruptcy statute. But where such consideration is necessary, withdrawal is required. Thus, any matter requiring consideration of the merits of the underlying environmental claim should be withdrawn. Courts in a number of cases have also ordered withdrawal over matters raising the issue of when a CERCLA cost recovery claim accrues for bankruptcy purposes. Case Summary, Section J. It can also be argued that resolution of a request for a discretionary stay, which would require consideration of the underlying claim sought to be stayed, is similarly subject to mandatory withdrawal.

f. Bankruptcy Rule 5011(a) provides that a motion for withdrawal shall be heard by a district judge (although it is initially filed in the Bankruptcy Court). Rule 5011(c) provides that the filing of a motion for withdrawal does not effectuate a stay, and a motion for a stay should ordinarily be presented to the bankruptcy judge.

g. It should be remembered that if withdrawal is granted, the matter withdrawn will ordinarily be decided by a district judge in the district where the bankruptcy is pending.

h. Environmental claims based on state laws only would not be subject to mandatory withdrawal but could be the subject of a request for permissive withdrawal, and could also be the subject of a motion for abstention under 28 U.S.C. § 1334(c), which requires such abstention where a proceeding related to a bankruptcy case based on state law can be timely adjudicated in a state court.

CASE SUMMARY

A. AUTOMATIC STAY -- POLICE AND REGULATORY EXCEPTION OF SECTIONS 362(b)(4) AND (b)(5)

a. Injunctive actions and penalty claims

1. Midlantic National Bank v. New Jersey Dep't of Environmental Protection, 474 U.S. 494 (1986)

--"Between 1973 and 1978, some courts had stretched the expanded automatic stay to foreclose States' efforts to enforce their anti-pollution laws, and Congress wanted to overrule these interpretations in its 1978 revisions."

2. Penn Terra Ltd. v. Dept. of Environmental Resources, 733 F.2d 267 (3d Cir. 1984)

--Pennsylvania could enforce administrative consent order requiring compliance with state environmental laws, and correction of prior violations, against a former coal mine operator in Chapter 7 bankruptcy; even though compliance would require expenditure of money, Pennsylvania was not seeking to enforce a "money judgment" within scope of Section 362(b)(5) exception to exception.

3. United States v. Jones & Laughlin Steel Corp., 804 F.2d 348 (6th Cir. 1986)

--Clean Air Act and Clean Water Act enforcement action for civil penalties and injunctive relief not stayed.

4. In re Commerce Oil Co., 847 F.2d 291 (6th Cir. 1988)

--Tennessee's claims for penalties for violations of Tennessee Water Control Act was not subject to automatic stay.

5. In re Kovacs, 681 F.2d 454 (6th Cir. 1982), vacated and remanded, 459 U.S. 1167 (1983)

--Sixth Circuit held that automatic stay applied to enforcement of state order requiring cleanup of hazardous waste site.

6. In re Thomas Solvent Co., 44 B.R. 83 (Bankr. W.D. Mich. 1984)

--Enjoining Michigan from enforcing pre-bankruptcy injunction requiring cleanup of hazardous waste site against debtor not engaged in ongoing business.

7. United States v. ILCO, Inc., 48 B.R. 1016 (N.D. Ala. 1985)

--Injunctive action for cleanup of hazardous waste site not covered by automatic stay. While compliance with the injunction would deplete the debtor's assets, the relief sought was designed to prevent future harm, not to compensate for past injuries.

8. Illinois v. Electrical Utilities, 41 B.R. 874 (N.D. Ill. 1984)

--Illinois enforcement action under Toxic Substances Control Act for injunctive relief and cost recovery was excepted from stay, although enforcement of judgment obtained would be stayed if it required expenditure of resources of estate.

9. In re Laurinburg Oil Co., Inc., 49 B.R. 652 (Bankr. M.D.N.C. 1984)

--No automatic stay applicable to prevent North Carolina from commencing a civil injunctive action and enforcing a judgment obtained to abate violations of State water pollution laws at a waste disposal site and to abate the public nuisance at the site.

10. In re Wheeling-Pittsburgh Steel Corp., Bankruptcy No. 85-793 PGH, Adversary No. 85-0236, Order (Bankr. W.D. Pa. Oct. 31, 1985)

--RCRA action for injunctive relief and civil penalties not stayed; enforcement of any penalty judgment stayed.

11. United States v. F.E. Gregory & Sons, Inc., 58 B.R. 590 (W.D. Pa. 1986)

--Action by U.S. for coal mine reclamation by Chapter 11 debtor which had leased and operated coal mines was excepted from automatic stay.

12. In re Williston Oil Corp., 54 B.R. 10 (Bankr. D.N.J. 1984)

--Ohio's state court action for injunctive relief and civil penalties relating to operation of oil wells was not stayed; enforcement of injunction would be allowed but not enforcement of money judgment.

13. In re Lenz Oil Service, Inc., 65 B.R. 292 (Bankr. N.D. Ill. 1986)

--Environmental action for injunctive relief and civil penalties not stayed.

14. United States v. Energy International, Inc., 19 B.R. 1020 (S.D. Ohio 1981)

--Action for penalties for violations of Surface Mining Control and Reclamation Act was not stayed.

15. In re Security Gas & Oil, Inc., 70 B.R. 786 (Bankr. N.D. Cal. 1987)

--West Virginia was entitled to bring action to seek reclamation of abandoned oil wells and to enforce injunctive relief obtained. State could also seek termination of debtor's current operations. It was not entitled, however to forfeiture of debtor's performance bond since such forfeiture violated the automatic stay.

16. United States v. Standard Metals Corp., 49 B.R. 623 (D. Colo. 1985)

--automatic stay did not apply to an action for stipulated penalties under Clean Water Act settlement; while entry of a money judgment would be allowed, enforcement of such judgment would have to take place in the bankruptcy proceedings.

17. In re Norwesco Development Corp., 68 B.R. 123 (Bankr. W.D. Pa. 1986)

--Pennsylvania was not stayed from enforcing order to Chapter 11 debtor to require submission of plan for replacement of contaminated water supply and to prohibit creation of new problems. Court does not decide whether enforcement of order to provide new permanent supply would be stayed.

18. In re Chateaugay Corp., 118 B.R. 19 (Bankr. S.D.N.Y. 1990)

--automatic stay did apply to Clean Water Act citizen's suit; police or regulatory exception did not apply.

19. United States v. Automation Components, Inc., No. 90-1279 (D.N.J. Nov. 26, 1990)

--exception to automatic stay applied to action for civil penalties and punitive damages under CERCLA §§ 106(b) and 107(c)(3).

20. United States v. Sugarhouse Realty, Inc., 162 B.R. 113 (E.D. Pa. 1993)

--exception to automatic stay applied to action for stipulated penalties for violations of cleanup requirements of a CERCLA/TSCA Consent Decree.

21. In re Madison Industries, Inc., 161 B.R. 363 (D.N.J. 1993)

--State of New Jersey's RCRA action for injunctive relief and penalties with respect to illegal fertilizer pile was not subject to automatic stay.

22. In re Goodwin, 163 B.R. 825 (Bankr. D. Idaho 1993)

--State of Idaho was stayed by section 362(a)(6) and enjoined by section 524(a)(2) from seeking to collect on a pre-petition claim to cleanup contamination on property in which the debtor no longer had an interest where the State had sought in the alternative to recover damages equal to the amount of the cleanup.

23. In re Neman, No. 93-3 (EPA Env. App. Bd. Aug. 26, 1994)

--administrative action to fix amount of penalties for violations of Toxic Substances Control Act falls within the police and regulatory exception of automatic stay.

24. United States v. Merritt, No. 94CV026 (D. Wyo. Mar. 10, 1994)

--Action for injunction under Safe Drinking Water Act to protect health and safety of residents of

mobile homes fell within police and regulatory exception of automatic stay.

b. Regulatory Actions

1. In re Commonwealth Oil Refining Co., 805 F.2d 1175 (5th Cir. 1986), cert. denied, 483 U.S. 1005 (1987)

--Automatic stay does not prevent EPA from enforcing RCRA interim status requirements;police and regulatory exception is not limited to situations of imminent and identifiable harm; administrative action to require compliance with RCRA was not one for a money judgment even though expenditure of funds would be required to comply.

2. In re Metcoa, No. B83-00415 (Bankr. N.D. Ohio Nov. 18, 1986)

--Automatic stay did not prevent Nuclear Regulatory Commission from modifying source material license.

3. In re Beker Industries Corp., 57 B.R. 611 (Bankr. S.D.N.Y. 1986)

--Proceedings relating to County and State regulation of debtor's mine were not covered by automatic stay. Section 362(b)(4) exception applied. Section 362(a)(3) stay of actions "to exercise control over property of the estate" was inapplicable.

4. Cournoyer v. Town of Lincoln, 790 F.2d 971 (1st Cir. 1986)

--automatic stay did not prevent town from enforcing its zoning ordinance by removing and disposing of scrap metal on debtor's property.

c. Cost Recovery/Natural Resource Damage Actions

1. United States v. Nicolet, Inc., 857 F.2d 202 (3d Cir. 1988)

--automatic stay does not apply to CERCLA cost recovery action by United States.

2. United States v. ILCO, Inc., 48 B.R. 1016 (N.D. Ala. 1985)

--United States' claim for cost recovery held not to be subject to automatic stay.

3. United States v. MacKay, No. 85 C6927, slip op. (N.D. Ill. Jan. 17, 1986)

--United States' CERCLA cost recovery action is not subject to automatic stay.

4. United States v. Mattiace Industries, Inc., 26 Env't Rep. Cas. (BNA) 1484 (E.D.N.Y. May 15, 1987)

--automatic stay does not apply to United States' CERCLA action for cost recovery, civil penalties and punitive damages, and injunctive relief.

5. City of New York v. Exxon Corp., 932 F.2d 1020 (2d Cir. 1991)

--Claim for cost recovery by City of New York was not subject to the automatic stay.

6. United States v. Midwest Solvent Recovery, Inc., No. H79-556 (N.D. Ind. Feb. 12, 1992)

--United States' CERCLA action for recovery of costs and for injunctive relief was within the police or regulatory exception.

7. In re Gershon, Adv. No. 91-7427 (D. Kan. Aug. 24, 1992)

--United States' CERCLA action for recovery of costs from chapter 7 debtor was not subject to the automatic stay.

8. In re New York Trap Rock Corp., 153 B.R. 642 (Bankr. S.D.N.Y. 1993)

--CERCLA cost recovery action by Rankin County Mississippi Board of Supervisors could proceed to judgment notwithstanding automatic stay.

9. In re Hemingway Transport, Inc., 993 F.2d 915 (1st Cir. 1993), cert. denied, 114 S. Ct. 303 (1993)

--EPA CERCLA enforcement actions may proceed to judgment notwithstanding automatic stay.

10. United States v. Automation Components, Inc., No. 90-1279 (D.N.J. Nov. 26, 1990)

    --CERCLA cost recovery action falls within exception to automatic stay.

11. United States v. Acme Solvents Reclaiming, Inc., 154 B.R. 72 (N.D. Ill. 1993)

    --CERCLA cost recovery action falls within exception to automatic stay.

12. United States v. American Trader, No. CV-91-3363 RJK (C.D. Cal. Dec. 15, 1993)

    --CWA action for response costs, natural resource damages, and penalties falls within exception to automatic stay.

13. United States v. Transport Co., 172 B.R. 834 (E.D. La. 1994)

    --Action for response costs under Oil Pollution Act falls within exception to automatic stay.

d. Perfection of Liens

1. In re Microfab, Inc., 105 B.R. 152 (Bankr. D. Mass. 1989)

   --allowing Massachusetts to perfect its environmental "superlien" against property of the debtor under exception of Section 362(b)(3) which allows perfection of liens where such perfection is effective under applicable law against entities that acquire interests in such property prior to the date of such perfection; the police or regulatory exception of Section 362(b)(4) does not apply to perfection of liens.

e. Notice of Claims

1. LTV Corp. v. Gulf States Steel, Inc., 969 F.2d 1050, 1059 (D.C. Cir. 1992), cert. denied, 113 S. Ct. 661 (1992)

   --Mere requests for payment or informational notices do not violate automatic stay; coercion or harassment by creditor must be shown to establish violation of the automatic stay.

B. **ADMINISTRATIVE EXPENSE PRIORITY**

a. Post-petition clean-up costs -- decisions granting priority.

1. In re Wall Tube & Metal Products Co. 831 F.2d 118 (6th Cir. 1987)

-- investigatory costs incurred by Tennessee on property of Chapter 7 debtor were entitled to be reimbursed as an administrative expense.

2. In re Chateaugay Corp. (LTV), 944 F.2d 997 (2d Cir. 1991), aff'g, 112 B.R. 513 (S.D.N.Y. 1990).

--monies spent to comply with environmental laws post-petition at debtor's sites are administrative expenses.

3. In re Hemingway Transport, Inc., 993 F.2d 915 (1st Cir. 1993), cert. denied, 114 S. Ct. 303 (1993)

--past clean-up costs incurred by party that purchased property from the bankruptcy estate were entitled to administrative priority; future clean-up costs were also entitled to administrative priority but such claims might be disallowable claims under Section 502(e) if the claimant and debtor were jointly liable to EPA; court notes that allowance of administrative expense does not require proof of discernible benefit to estate; distribution on claim for future response costs may be placed in trust.

4. In re Smith-Douglass, Inc., 856 F.2d 12 (4th Cir. 1988)

--"cleaning up environmental violations is properly considered an administrative expense."

5. Pennsylvania v. Conroy, 24 F.3d 568 (3d Cir. 1994), aff'g 153 B.R. 686 (W.D. Pa. 1993)

--granting New Jersey administrative expense priority for cost of complying with administrative cleanup order issued to individual debtor that operated a printing company; agency's costs in cleaning up facility that could not be abandoned under state laws entitled to administrative priority; administrative expense priority granted in part for expenses to be incurred in the near future; district court notes that estate was

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benefitted by performance of a cleanup that the estate was otherwise required to perform itself under applicable law and because the cleanup reduced the risk of further damage and liability of the estate; state's administrative and legal costs are entitled to same priority.

6. In re Stevens, 68 B.R. 774 (D. Me. 1987), rev'g, 53 B.R. 783 (Bankr. D. Me. 1985)

--Maine was entitled to recover its response costs as an administrative expense; since the trustee cannot abandon hazardous waste, cleanup was the responsibility of the estate.

7. In re T.P. Long Chemical, Inc., 45 B.R. 278 (Bankr. N.D. Ohio 1985)

--EPA was entitled to recover its expenses in removing hazardous material from property of a Chapter 7 estate as an administrative expense since the estate was liable under CERCLA; EPA could not recover on its claim ahead of secured creditor under Section 506(c) since its cleanup did not confer a benefit on the secured creditor.

8. In re Mowbray Engineering Co., Inc., 67 B.R. 34 (Bankr. M.D. Ala. 1986)

--EPA is entitled to recover under Section 506(c) its costs of cleaning up contaminated property prior to satisfying any secured claims against the property; clean-up costs are an administrative expense; court follows T.P. Long decision.

9. In re Peerless Plating Co, 70 B.R. 943 (Bankr. W.D. Mich. 1987)

--EPA's clean-up costs on property of chapter 7 debtor are administrative expenses.

10. In re Laurinburg Oil Co., Inc., 49 B.R. 652 (Bankr. M.D.N.C. 1984)

--expenses of debtor to comply with state water pollution laws were administrative expenses.

11. In re Vermont Real Estate Inv. Trust, 25 B.R. 804 (Bankr. D. Vt. 1982)

--costs incurred by City of Montpelier in removal of dangerous building from leased property was entitled to be paid as an administrative expense.

12. In re California Creative Dynamics, No. BK 86-07469-H, Order (S.D. Cal. June 29, 1989)

--"EPA's expenditures incurred at the debtor's facility were actual and necessary costs of preserving the debtor's estate."

13. In re Distrigas Corp., 66 B.R. 382 (Bankr. D. Mass. 1986)

--New Jersey's clean-up costs on property of Chapter 11 debtor were, at the very least, administrative expenses.

14. In re FCX, Inc., No. S-85-1574-5 (Bankr. E.D.N.C. Dec. 30, 1988)

--allowing administrative expense claims for EPA and State clean-up costs, notwithstanding prior confirmation of a plan of reorganization not providing for such claims.

15. In re National Gypsum Co., 139 B.R. 397 (N.D. Tex. 1992)

--response costs with respect to site owned by debtor would be an administrative expense but only if the site presented an imminent and identifiable harm.

16. In re Great Northern Forest Prods. Inc., 135 B.R. 46 (W.D. Mich. 1991)

--granting administrative expense claim of landlord relating to leased property.

17. In re Virginia Builders, Inc., 153 B.R. 729 (Bankr. E.D. Va. 1993)

--granting administrative priority to bank that cleaned up debtor's contaminated property even if property was contaminated pre-petition.

18. In re Allegheny International, Inc., 158 B.R. 343 (Bankr. W.D. Pa. 1992)

--granting administrative priority to chapter 11 debtor's costs in complying with pre-petition consent decree and NRC license requirement with respect to cleanup of facilities no longer owned or actively operated by debtor.

b. Post petition cleanup costs -- decisions denying priority

1. Southern Ry. Co. v. Johnson Bronze Co., 758 F.2d 137 (3d Cir. 1985), clarified by Pennsylvania v. Conroy, 24 F.3d 568 (3d Cir. 1994)

--Section 105 of Bankruptcy Code cannot be used to provide a private party complying with a state administrative cleanup order priority over unsecured claims.

2. In re Dant & Russell, Inc., 853 F.2d 700 (9th Cir. 1988)

--in case involving private parties, denying priority for post petition clean-up cost on property leased by the bankruptcy estate; court recognizes that a different result would obtain if the property had been owned by the bankruptcy estate.

3. In re Security Gas & Oil, Inc., 70 B.R. 786 (Bankr. N.D. Cal. 1987)

--clean-up obligation arising from an environmental hazard created pre-petition is a general unsecured claim.

4. In re Pierce Coal and Const., Inc., 65 B.R. 521 (Bankr. N.D. W. Va. 1986)

--Post-petition reclamation expenses resulting from pre-petition conduct of debtor were not administrative expenses. Expenses resulting from post petition conduct were administrative expenses.

5. In re Microfab, Inc., 105 B.R. 161 (Bankr. D. Mass. 1989)

   -- denying State's request to require Chapter 7 trustee to cleanup debtor's facility, since there would be no assurance that to do so, given the limited funds available, would significantly improve the conditions at the site. Even if such a showing could be made, the State would first have to undertake the cleanup itself and then seek reimbursement.

6. In re Bofors-Nobel, Inc., No. NG-85-02671, Order Denying Motion of Thermo Chem Participating Companies (W.D. Mich. Mar. 7, 1988)

   --contribution claims under CERCLA with respect to sites at which debtor was a generator are not administrative expenses.

7. In re Corona Plastics, Inc., 99 B.R. 231 (Bankr. D.N.J. 1989)

   --cleanup costs are general unsecured claims.

8. In re Kent Holland Die Casting & Plastics, Inc., 125 B.R. 493 (Bankr. W.D. Mich. 1991)

   --granting priority for costs of cleaning up contamination created during pendency of bankruptcy; denying priority for cleanup of pre-bankruptcy contamination.

9. In re Circle K Corp., 141 B.R. 688 (Bankr. D. Ariz. 1992)

   --denying administrative expense priority against debtor lessee that rejected leases that included operation of underground storage tanks.

10. In re H.F. Radandt, Inc., 160 B.R. 323 (Bankr. W.D. Wis. 1993)

    --refusing to grant administrative priority to future cleanup costs on the ground that that would constitute an impermissible advisory opinion.

11. In re Hanna, 168 B.R. 386 (9th Cir. B.A.P. 1994)

--denying administrative priority for cleanup of off-site contamination that had migrated from property of the debtor pre-petition where damages occurred pre-petition; dissent contends that liability is post-petition administrative priority based on post-bankruptcy ownership of the property and administrative order creating legal obligation to clean up contamination.

c. Administrative Expense Priority With Respect to Secured Creditor--Section 506(c)

1. In re T.P. Long Chemical, Inc., 45 B.R. 278 (Bankr. N.D. Ohio 1985)

-- EPA could not recover on its administrative claim ahead of secured creditor under Section 506(c) since, on facts presented, its cleanup did not confer a benefit on the secured creditor.

2. In re Mowbray Engineering Co., Inc., 67 B.R. 34 (Bankr. M.D. Ala. 1986)

--EPA is entitled to recover under Section 506(c) its costs of cleaning up contaminated property prior to satisfying any secured claims against the property; clean-up costs are an administrative expense; court follows T.P. Long decision.

3. In re Metcoa, Inc., No. B85-092 (Bankr. N.D. Ohio Nov. 18, 1986)

--Nuclear Regulatory Commission's claim to require compliance with license was not superior to interests of secured creditor.

4. In re Better Brite Plating, Inc., 105 B.R. 912 (Bankr. E.D. Wis. 1989)

-- Giving EPA and Wisconsin DNR priority over secured creditors in proceeds of sale of any property subject.

5. In re Better Brite Plating, Inc., Case No. 89-C-1132 (E.D. Wis. Apr. 4, 1990), vacated as moot, 136 B.R. 526 (E.D. Wis. 1990)

   --denying Wisconsin's claim that available bankruptcy assets should be used for cleanup of drums of hazardous waste using other, uncontaminated collateral of a secured creditor, notwithstanding that the drums had been generated in a period in which the business had been operated for the benefit of the secured creditor.

6. Resources Unlimited, Inc. v. Environmental Waste Control, Inc., 158 B.R. 998 (N.D. Ind. 1993)

   --chapter 11 debtor could expend funds to comply with cleanup order if there was adequate protection for secured creditor.

d. Post-petition penalty claims

1. In re Charlesbank Laundry, Inc., 755 F.2d 200 (1st Cir. 1985), holding reaff'd in In re Hemingway Transport, Inc., 954 F.2d 1 (1st Cir. 1992), and In re Hemingway Transport, Inc., 993 F.2d 915 (1st Cir. 1993), cert. denied, 114 S. Ct. 303 (1993)

   --fine incurred by Chapter 11 debtor in committing a nuisance was an administrative expense.

2. United States Dept. of Interior v. Elliott, 761 F.2d 168 (4th Cir. 1985)

   --Department of Interior's claim for penalties for post-petition violation of Surface Mining Control and Reclamation Act was an administrative expense.

3. In re Chateaugay Corp. (LTV), 944 F.2d 997 (2d Cir. 1991)

   --"civil penalties for post-petition violations would also be entitled to be treated as administrative expenses."

4. In re N.P. Mining Co., 963 F.2d 1449 (11th Cir. 1992)

   --civil penalties for post-petition mining activities are an administrative expense.

5. In re Bill's Coal Co., 124 B.R. 827 (D. Kan. 1991)

--penalties for environmental violations are an administrative expense.

6. Leavell v. Karnes, 143 B.R. 212 (S.D. Ill. 1990)

--fines, penalties or cleanup costs caused by a trustee's violation of environmental laws during the operation of a business are administrative expenses; such costs must be paid before the bankruptcy estate is closed.

7. In re Motel Investments, Inc., 172 B.R. 105 (M.D. Fla. 1994)

--stipulated penalties for post-petition failure of debtor-in-possession to comply with pre-petition consent order to remediate wetlands were administrative expenses of estate since government had taken pre-petition action to correct environmental violations.

8. In re Wisconsin Barge Lines, Inc., 91 B.R. 65 (E.D. Mo. 1988)

--fines for pre-petition conduct were dischargeable claims not entitled to priority.

C. CERCLA COST RECOVERY/WHEN CERCLA CLAIMS ARISE/ DISCHARGEABILITY/CONTRIBUTION CLAIMS

a. When CERCLA Claims Arise and Become Dischargeable

1. In re Jensen, 995 F.2d 925 (9th Cir. 1993)

--claim under California Hazardous Substance Account Act for recovery of costs incurred by the State arose pre-bankruptcy because the State had sufficient knowledge of the debtor's potential liability pre-bankruptcy based on environmental agencies' inspection of site indicating fungicide tank that might pose a hazard. Adopts fair contemplation of the parties test. Court imputed one agencies' knowledge to other state agency because they were involved generally in many of the same capacities.

2. In re Chicago, Milwaukee, St. Paul & Pacific R.R., 3 F.3d 200 (7th Cir. 1993)

--holds that a CERCLA claim arises when the CERCLA claimant can tie the bankruptcy debtor to a known release of a hazardous substance which the claimant knows will lead to CERCLA response costs, and when the claimant has conducted tests with regard to the contamination problem. Railroad's claim for contribution was discharged because railroad had inspected site and observed contamination and was aware that site was in area of Superfund site being investigated by EPA. Court remanded question of whether railroad's claim under state law had arisen for a comparison of the particular types of liability in effect at relevant times under the state statutory scheme.

3. In re Chicago, Milwaukee, St. Paul & Pacific R.R., 974 F.2d 775 (7th Cir. 1992)

--CERCLA claims of Washington State Department of Transportation were dischargeable where by the time of the bankruptcy the State could could connect the debtor to a known release and State had conducted tests with regard to the contamination; claims would be discharged even though debtor had not notified State because State was not a known creditor to debtor.

4. In re Chateaugay Corp. (LTV), 944 F.2d 997 (2d Cir. 1991)

--cost recovery claim can be discharged if it arises from pre-petition conduct of the debtor and if there were pre-petition releases or threatened releases of hazardous substances.

5. In re Penn Central Transportation Co., 944 F.2d 164 (3d Cir. 1991), cert. denied, 112 S. Ct. 1262 (1992), followed by Penn Central v. United States, 862 F. Supp. 437 (Sp. Ct. R.R.R.A. 1994)

--claims of the United States for cleanup of a contaminated rail yard formerly operated by Penn Central were not discharged because at time plan of reorganization was confirmed in 1978 CERCLA had not yet been enacted; "it was not until the passage of CERCLA that a legal relationship was created between the petitioners and [Penn Central] relevant to the petitioners' potential causes of action such that an interest could flow."

6. In re National Gypsum Co., 139 B.R. 397 (N.D. Tex. 1992)

--cost recovery claim for future costs would be a "claim" for bankruptcy purposes if it was within the fair contemplation of the parties at the time of the bankruptcy.

7. In re Allegheny International, Inc., 126 B.R. 919 (W.D. Pa. 1991), aff'd, 950 F.2d 721 (3d Cir. 1992).

--CERCLA cost recovery claim does not arise until incurrence of costs, but once some costs are incurred a claim exists for all costs to be incurred at the site.

8. United States v. Union Scrap Iron & Metal, 123 B.R. 831 (D. Minn. 1990)

--claims under Section 107 of CERCLA for recovery of costs incurred post-bankruptcy had not been discharged.

9. Sylvester Brothers Development Company v. Burlington Northern R.R., 133 B.R. 648 (D. Minn. 1991)

--Minnesota's cost recovery claim and private party claims for contribution under CERCLA are not discharged if debtor did not provide notice and Minnesota did not have actual knowledge of potential claim.

10. NCL Corp. v. Lone Star Building Centers (Eastern) Inc., 144 B.R. 170 (S.D. Fla. 1992)

--Applying fair contemplation test to private party CERCLA claim for contribution and finding that contractual relationship put claims within fair contemplation of the parties and made them dischargeable.

11. AM International, Inc. v. Datacard Corp., 146 B.R. 391 (N.D. Ill. 1992)

--denying motion for summary judgment against private party's CERCLA claim because whether the CERCLA claim was within the fair contemplation of the parties presented a genuine issue of material fact.

12. Mesiti v. Microdot, Inc., 156 B.R. 113 (D.N.H. 1993)

--advocating "foreseeability" test in determining whether CERCLA claims had arisen and were discharged; remanding case to railroad court that had reserved exclusive jurisdiction.

13. Erman v. Lox Equipment Co., 142 B.R. 905 (N.D. Cal. 1992)

--Private party CERCLA claim against debtor relating to property purchased from the debtor during bankruptcy arose post-petition at time of transfer, not at time of pre-petition contamination.

14. Waterville Industries Inc. v. First Hartford Corp., 32 E.R.C. 1925, 1927 n.2 (D. Maine Jan. 28, 1991)

--CERCLA contribution claim does not arise until costs are incurred.

15. In re Todd Shipyards Corp., No. 87-5005 (Bankr. D.N.J. Aug. 8, 1989)

--CERCLA claims for contribution do not exist for bankruptcy purposes until there is a finding of the original defendants' liability. Accordingly, those claims could not be discharged,

16. Providence and Worcester R.R. Co. v. Penn Central Corp., 30 Env't Rep. Cas. (BNA) 1309 (D. Mass. 1989).

--CERCLA and State law contribution claims against Penn Central had been discharged since they arose prior to date of plan consummation order in 1978.

b. CERCLA Claims Based On Post-Bankruptcy Ownership or Or Operation

1. In re CMC Heartland Partners, 966 F.2d 1143 (7th Cir. 1992)

--where a reorganized company continues to own contaminated property post-bankruptcy, CERCLA claims under Section 107(a)(2) based on the company's pre-petition operation of a site would be discharged, but relief may still be sought

under Section 106 and 107(a)(1) in the case of ongoing post-bankruptcy releases or threats of releases since claim arises anew based on post-bankruptcy ownership.

2. Penn Central v. United States, 862 F. Supp. 437 (Sp. Ct. R.R.R.A. 1994)

--statute allowing the sale of property "free and clear of any liens and encumbrances" does not mean that properties are conveyed free and clear of statutory CERCLA claims; also finding no successor liability where deeds expressly provided that successor wold have no liability for pre-conveyance contamination, United States did not object as a party to the case to such language in deeds, and United States did not pursue such liability since successor already faced liability based on its post-conveyance activities.

c. Disallowance of Contingent Claims For Contribution Under Section 502(e)

1. In re Allegheny International, Inc., 126 B.R. 919 (W.D. Pa. 1991), aff'd, 950 F.2d 721 (3d Cir. 1992)

--refusing to disallow claims for contribution under Section 502(e) and providing that distribution on claim be placed in trust for payment of future environmental liability.

2. In re Hemingway Transport, Inc., 993 F.2d 915 (1st Cir. 1993), cert. denied, 114 S. Ct. 303 (1993)

--refusing to disallow claim for contribution for future response costs under Section 502(e) unless both (1) trustee files surrogate proof of claim on behalf of EPA and (2) PRP is found to be co-liable with debtor to EPA because PRP is found not to have available alleged innocent landowner defense under CERCLA; requires setting of bar date for filing of claim on behalf of EPA by trustee or creditor PRP; claim would be disallowed under Section 502(e) only until such time as response costs were incurred.

3. In re Charter Co., 862 F.2d 1500 (11th Cir. 1989)

--disallowing CERCLA contribution claims pursuant to Section 502(e)(1)(B) of the Bankruptcy Code, as contingent claims.

4. In re Dant & Russell, Inc., 951 F.2d 246 (9th Cir. 1991)

--Section 502(e)(1) of the Bankruptcy Code did not bar a private cost recovery claim under Section 107(a)(4) of CERCLA where EPA did not order a cleanup at the site in question.

5. In re Harvard Industries, Inc., 153 B.R. 668 (Bankr. D. Del. 1993) and 138 B.R. 10 (Bankr. D. Del. 1992)

--Section 502(e)(1) does not bar claims of PRPs for future out of pocket costs because these are direct contingent claims that do not pose a risk of multiple payments by the debtor to EPA and the PRPs; claims for PRPs' liability to EPA are barred; monies for future cleanups can be placed in trust.

6. In re Eagle-Picher Industries, Inc., 164 B.R. 265 (S.D. Ohio 1992)

--disallowing claims for CERCLA contribution under Section 502(e)(1)(B) except for cleanup costs already incurred; claims towards future obligations under Consent Decree disallowed; request for establishment of trust denied.

7. In re Todd Shipyards Corp., No. 87-5005 (Bankr. D.N.J. Aug. 8, 1989)

--CERCLA contribution claims can be disallowed but under Section 502(e).

8. In re Cottonwood Canyon Land Co., 146 B.R. 992 (Bankr. D. Colo. 1992), supplemented, No. 87-B-1552-E (Bankr. D. Colo. July 2, 1993)

--disallowing PRP's claims for contribution under Section 502(e)(1)(B) even though EPA had not filed direct claim of its own in bankruptcy proceeding and even if costs were already incurred.

9. In re Bicoastal Corp., 141 B.R. 231 (Bankr. M.D. Fla. 1992)

--disallowing claim of creditor under Section 502(e)(1)(B) that previously had purchased contaminated property from debtor.

The following cases support the argument that claims by PRPs against other PRPs under Section 107 of CERCLA are claims for contribution under Section 113 of CERCLA that can be barred by contribution protection under Section 113(f)(2), 42 U.S.C. § 9613(f)(2).

Akzo Coatings, Inc. v. Aigner Corp., 30 F.3d 761 (7th Cir. 1994)
Dravo Corp. v. Zuber, 24 Chem. Waste Lit. Rep. 1324 (D. Neb. Sept. 9, 1992), aff'd, 13 F.3d 1222 (8th Cir. 1994)
Avnet, Inc. v. Allied Signal, Inc., 825 F. Supp. 1132 (D.R.I. 1992)
United States v. New Castle County, No. 80-489 (D. Del. Sept. 21, 1992)
Transtech v. A & Z Septic, 798 F. Supp. 1079 (D.N.J. 1992)
United States v. Asarco, Inc., 814 F. Supp. 951 (D. Colo. 1993)

But see Burlington Northern R.R. Co. v. Time Oil Co., 738 F. Supp. 1339 (W.D. Wash. 1990).

See also In re Hemingway Transport, Inc., 993 F.2d 915 (1st Cir. 1993) (describing section 107 as the pre-enforcement analog to a contribution action under section 113(f) where the plaintiff is potentially liable to EPA as a joint tortfeasor).

c. Ripeness

1. In re Combustion Equipment Associates, Inc., 838 F.2d 35 (2d Cir. 1988)

--Issue of whether a post-bankruptcy CERCLA claim had been discharged was not ripe prior to commencement of EPA enforcement action.

2. Manville Corp. v. United States, 139 B.R. 97 (S.D.N.Y. 1992)

--Issue of scope of discharge of post-bankruptcy CERCLA claims was ripe for declaratory judgment where EPA had issued special notice letters threatening enforcement action or posing possible prejudice to non-settlor's rights.

3. Penn Central Corp. v. United States, No. 92-1 (Sp. Ct. R.R.R.A Feb. 3, 1993)

--Issue of scope of railroad reorganization discharge of CERCLA claims was ripe for determination where United States had brought suit against reorganized railroad in district court.

d. Natural Resource Damage Claims

1. In re National Gypsum Co., 139 B.R. 397 (N.D. Tex. 1992)

--natural resource damage claim exists for bankruptcy purposes even though no remedy has been selected for the site, as long as the claim is within the fair contemplation of the parties.

D. CERCLA BANKRUPTCY LITIGATION AND SIGNIFICANT BANKRUPTCY SETTLEMENTS

a. Estimation and Allowance of CERCLA Claims

1. In re Chateaugay Corp. (LTV), 944 F.2d 997 (2d Cir. 1991)

--"nothing prevents the speedy and rough estimation of CERCLA claims for purposes of determining EPA's voice in the Chapter 11 proceeding, with ultimate liquidation of the claims to await the outcome of normal CERCLA enforcement proceedings in which EPA will be entitled to collect its allowable share (full or pro rata depending on the reorganization plan) of incurred response costs."

2. In re National Gypsum Co., 139 B.R. 397 (N.D. Tex. 1992)

--following LTV and suggesting that estimation should not be for purposes of allowance.

3. In re National Gypsum Co., Civ. No. 3-91-1653-H (N.D. Tex. Nov. 11, 1991)

--directing that an estimation phase with respect to the magnitude of the CERCLA cost recovery and natural resource damage claims should precede the liability phase.

4. In re CF&I Fabricators of Utah, Inc., No. 90B-06721 (Bankr. D. Utah May 11, 1992)

   --arbitrary and capricious standard of review applies to EPA ROD cost estimates; some deference to be given to EPA's costs estimates at sites for which there is not yet a ROD

5. In re CF&I Fabricators of Utah, Inc., No. 90B-06721 (Bankr. D. Utah May 11, 1992)

   --Bankruptcy Rule 7068 on offers of judgment cannot be applied against the United States in an estimation proceeding.

6. In re Allegheny International, Inc., 158 B.R. 361 (Bankr. W.D. Pa. 1993)

   --In private party contribution claim estimation hearing, court estimates cleanup costs at 13 sites at $12,792,000, but allocates contribution share of debtor at zero based on parties' understanding of environmental liabilities at time of sale of properties.

b. Joint and Several Liability

1. In re National Gypsum Co., 139 B.R. 397 (N.D. Tex. 1992)

   --debtor's CERCLA liabilities would be determined based on usual theories of joint and several liability.

2. Penn Central v. United States, 862 F. Supp. 437 (Sp. Ct. R.R.R.A. 1994)

   --reorganized railroad's liability under CERCLA would be determined based on non-bankruptcy law governing joint and several liability and divisibility since CERCLA liability arises notwithstanding any other provisions of law.

c. Significant Bankruptcy Settlements

1. In re Cuyahoga Equipment Corporation, 980 F.2d 110 (2d Cir. 1992)

   --affirming District Court's approval of CERCLA settlement as fair, reasonable, and consistent with CERCLA; provides for deference to EPA's expertise in entering into the settlement and

applies abuse of discretion standard in review district court's approval of settlement. Upholds court's jurisdiction to enter settlement under bankruptcy jurisdiction, 28 U.S.C. § 1334(b), supplemental jurisdiction over ancillary claims, 28 U.S.C. § 1367(a), and CERCLA jurisdiction, 42 U.S.C. § 9613(b). Affirms that court where bankruptcy was filed is an appropriate venue for settlement even though Superfund site and CERCLA litigation was in another district.

2. In re Energy Cooperative, Inc., 173 B.R. 363 (N.D. Ill. 1994)

--approving settlement under CERCLA and Indiana Petroleum Release Statute with trustee for at least $13.5 million; upholding settlement as based on a plausible allocation of liability based on respective years of ownership and operation of facility; and noting that as long as EPA uses data on the broad spectrum of plausible approximation it does not need to amass more precise information to justify settlement.

3. In re Paris Industries Corp., 106 B.R. 339 (Bankr. D. Me. 1989)

--approving settlement dividing proceeds from sale of contaminated property between New York and trustee.

4. In re U.E. Systems, Inc., No. 91-32791-HCD (Bankr. N.D. Ind. Sept. 28, 1992)

--approving and entering multi-site Superfund settlement providing the United States with an allowed claim in excess of $27 million, providing a procedure for handling claims for additional future sites in the ordinary course of CERCLA activities but to be paid as general unsecured claims, and providing that liabilities at sites that will continue to be owned by debtors will not be discharged.

5. In re Insilco Corp., No. SA-92-CA-0210 N.D. Tex. Jan. 19, 1993)

--approving and entering multi-site Superfund settlement providing the United States with $5,050,000 in insurance proceeds and an additional allowed claim in excess of $4.2 million; Court notes that deference should be given to CERCLA

agreements if EPA provides a plausible explanation of the factors justifying the settlement as fair, reasonable, and consistent with CERCLA and if the Department of Justice finds the settlement to be in the public interest after consideration of public comments; Court also approves procedure for handling future sites in the ordinary course of CERCLA activities but to be paid as general unsecured claims as a fair and reasonable compromise that avoids the need for unnecessary estimation hearings.

6. In re Moreco Energy Inc., No. 91-B-11886 (Bankr. N.D. Ill. Dec. 22, 1992)

--multi-site Superfund settlement requiring debtor to pay $875,000 towards remediation of four sites that it will no longer own or operate and requiring reorganized debtor to remediate site that it will continue to own and operate.

7. In re National Gypsum Co., No. 390-37213-SAF-11 (Bankr. N.D. Tex. Jan. 1993)

--multi-site Superfund settlement requiring debtor to pay administrative expense claim of $2.0 million and general unsecured claim of $10.0 million for contaminated property owned by the estate and to be conveyed to a trust and providing for an additional general unsecured claim of more than $11 million for certain other specified sites.

8. In re Chateaugay Corp., No. 86-B-11270 (S.D.N.Y Apr. 4, 1993)

--multi-site Superfund settlement providing the United States with an allowed claim of over $34.7 million, providing a procedure for handling claims for additional future sites in the ordinary course of CERCLA activities but to be paid as general unsecured claims, and providing for a cash payment of $1.0 million for remediation of a site owned by a debtor.

9. In re Circle K Corp., No. 90-5052-PHX-GBN (Bankr. D. Ariz., filed Mar. 29, 1993)

--multi-site RCRA settlement requiring debtor to pay $30 million into trust funds to provide for underground storage tank liabilities in at least 31 states.

10. United States v. Sharon Steel Corp., No. 86-C-924J (D. Utah. Nov. 13, 1990)

--Superfund settlement for site owned by debtor whereby debtor paid United States $22 million for limited cash out settlement with reopeners including for new information, exacerbation of conditions, or removal of hazardous substances without EPA authorization; debtor also agreed to certain security and inspection obligations.

11. In re The Charter Co., Order (M.D. Fla. Nov. 24, 1987)

--dismissing an appeal of bankruptcy court's approval of settlement of CERCLA claims of the United States. Since the objecting party had failed to obtain a stay during the appeal, and money had been paid out under the settlement, the appeal was moot.

12. In re Bofors-Nobel, Inc., No. 85-02671 (W.D. Mich. Mar. 7, 1988)

--refusing to vacate an approval of a settlement between the debtor, EPA and the State of Michigan under which a substantial portion of the estate assets would be made available for remediation of a facility owned by the debtor. Settlement was challenged by PRPs at another Superfund site to which Bofors had shipped waste, who sought to have some of the settlement proceeds applied to their contribution claim.

d. Late Proofs of Claims

1. In re Hudson Oil Co., 100 B.R. 72 (Bankr. D. Kan. 1989)

--allowing late filing of proof of claim where party did not know it would need to seek indemnification for environmental response costs prior to bar date notwithstanding that party waited two years to seek to file late claim.

2. In re New York Trap Rock Corp., 153 B.R. 642 and 648 (Bankr. S.D.N.Y. 1993)

--lack of knowledge that response costs might be incurred at a site constitutes excusable neglect justifying filing of proof of claim by Rankin County Board of Supervisors after bar date; but

delay of nine months from time of knowledge of hazardous condition was inexcusable neglect.

E. OBLIGATIONS OF DEBTOR IN POSSESSION OR TRUSTEE TO COMPLY WITH ENVIRONMENTAL LAWS -- APPLICATION OF 28 U.S.C. § 959(b)

1. Ohio v. Kovacs, 469 U.S. 274 (1985)

--Court states that it does not question "that anyone in possession of the [hazardous waste] site...[including] the bankruptcy trustee must comply with the environmental laws of the State of Ohio. Plainly that person or firm may not maintain a nuisance, pollute the waters of the State or refuse to remove the source of such conditions."

2. Midlantic National Bank v. New Jersey Dept. of Environmental Protection, 474 U.S. 494 (1986)

--28 U.S.C. § 959(b) supports conclusion that "Congress did not intend for the Bankruptcy Code to preempt all state laws that otherwise constrain the exercise of a trustee's powers."

3. In re Torwico Electronics, Inc., 8 F.3d 146 (3d Cir. 1993), cert. denied, 114 S. Ct. 1576 (1994)

--Debtor must comply with State of New Jersey's ECRA cleanup order even though debtor no longer owned or operated contaminated real property; environmental obligations of former operator that still owned hazardous waste run with the hazardous waste.

4. In re N.P. Mining Co., 963 F.2d 1449 (11th Cir. 1992)

--chapter 11 trustee conducting mining operations must comply with applicable Alabama mining laws.

5. In re Wall Tube & Metal Products Co., 831 F.2d 118 (6th Cir. 1987)

--28 U.S.C § 959, which requires a trustee to comply with State law, applies to Chapter 7 liquidating trustees.

6. In re Allegheny International, Inc., 158 B.R. 343 (Bankr. W.D. Pa. 1992)

--Chapter 11 debtor was required to comply with NRC's conditioning of prior termination of license on cleanup of facilities that debtor no longer owned or actively operated; pre-petition consent decree must be complied with.

7. In re Motel Investments, Inc., 172 B.R. 105 (Bankr. M.D. Fla. 1994)

--Chapter 11 debtor was operating in violation of state law contrary to 28 U.S.C. § 959 by not complying with pre-petition consent order to remediate wetlands violations with respect to property not owned by the debtor.

8. In re Commercial Oil Service, Inc., 58 B.R. 311 (Bankr. N.D. Ohio 1986), aff'd, 88 B.R. 126 (N.D. Ohio 1987)

--Trustee would be obligated to clean up hazardous waste site if bankruptcy proceeded.

9. In re Stevens, 68 B.R. 774 (D. Me. 1987)

--28 U.S.C. § 959(b) applies to liquidating trustees.

10. In re Laurinburg Oil Co., Inc., 49 B.R. 652 (Bankr. M.D.N.C. 1984)

--provisions of 28 U.S.C. § 959(b) require a debtor in possession to manage and operate property in accordance with state environmental laws.

11. United States v. Wheeling-Pittsburgh Steel Corp., 818 F.2d 1077 (3d Cir. 1987)

--Wheeling-Pittsburgh's Chapter 11 status was not an appropriate basis for the district court to relieve debtor of obligations to comply with Clean Air Act requirements.

12. In re Beker Industries Corp., 57 B.R. 611 (Bankr. S.D.N.Y. 1986)

--Chapter 11 debtor in possession was required to comply with laws regulating mine usage. The reorganization process "is not designed to displace valid state and local statutes that do not conflict with the Bankruptcy Code".

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13. In re Kish, 41 B.R. 620 (Bankr. E.D. Mich. 1984)

--Allowing a citizens suit under a state environmental statute against a Chapter 11 debtor in possession finding that 28 U.S.C. § 959(a) authorized suit.

14. In re Environmental Waste Control, Inc., 125 B.R. 546 (N.D. Ind. 1991)

--"applicable legal authority suggests that [debtor] EWC must comply with environmental law and pursue cleanup and corrective action at the landfill, regardless of its financial insolvency."

15. Wilner Wood Products v. Maine, 128 B.R. 1 (D. Me. 1991)

--debtor-in-possession must comply with air pollution laws and obtain permit if it wishes to continue to operate.

16. In re Rancourt, 144 B.R. 601 (Bankr. D.N.H. 1991)

--authorizing chapter 11 trustee to spend estate funds to stabilize imminent threats to public health but temporarily denying authority to spend additional funds to the extent a further imminent danger had not been established.

17. In re Valley Steel Products Co., 157 B.R. 442 (E.D. Mo. 1993)

--debtor does not have to clean up contaminated property that it sold prior to filing for bankruptcy; 28 U.S.C. § 959 does not apply to liquidating debtors.

18. In re Grace Coal Co., 155 B.R. 5 (Bankr. E.D. Ky. 1993)

--Kentucky could order chapter 11 debtor to cease mining activities without a permit.

F. INJUNCTIVE OBLIGATIONS/DISCHARGEABILITY

1. Ohio v. Kovacs, 469 U.S. 274 (1985)

--injunctive clean-up obligation of former waste site owner had been converted to a monetary claim and was discharged, where a receiver has been appointed to take control of waste site.

2. In re CMC Heartland Partners, 966 F.2d 1143 (7th Cir. 1992)

--where a reorganized company continues to own contaminated property post-bankruptcy, CERCLA claims under Section 107(a)(2) based on the company's pre-petition operation of a site would be discharged, but relief may still be sought under Section 106 and 107(a)(1) in the case of ongoing post-bankruptcy releases or threats of releases since CERCLA "creates a claim running with the land."

3. In re Torwico Electronics, Inc., 8 F.3d 146 (3d Cir. 1993), cert. denied, 114 S. Ct. 1576 (1994)

--State of New Jersey could enforce ECRA cleanup order against debtor that no longer owned or operated contaminated real property; injunctive obligation to remedy pollution is not a claim where there is an ongoing and continuing threat and cleanup is not a repackaged claim for damages; injunctive obligations against former operator that still owned hazardous waste left behind survive based on continuing ownership of hazardous waste.

4. United States v. Whizco, Inc., 841 F.2d 147 (6th Cir. 1988)

--coal mine reclamation obligation of an individual who was a former mine operator had been discharged by bankruptcy, since reclamation could only be accomplished through expenditure of funds; however, if in the future the former operator obtains reclamation equipment, reclamation can be required.

5. In re Chateaugay Corp. (LTV), 944 F.2d 997 (2d Cir. 1991)

-- "a cleanup order that accomplishes the dual objectives of removing accumulated wastes and stopping or ameliorating ongoing pollution emanating from such wastes is not a dischargeable claim."

6. United States v. Hubler, 117 B.R. 160 (W.D. Pa. June 8, 1990), aff'd without opinion, 928 F.2d 1131 (3d Cir. 1991)

--obligation to comply with administrative order requiring coal mine restoration was not a "claim" and therefore was not discharged; court disagrees with Whizco.

7. Penn Central v. United States, 862 F. Supp. 437 (Sp. Ct. R.R.R.A. 1994)

--Railroad Reorganization Act does not shield polluter from answering for pollution for which it is responsible on property that it has conveyed to others.

8. In re Robinson, 46 B.R. 136 (Bankr. M.D. Fla. 1985), rev'd on other grounds, 55 B.R. 355 (M.D. Fla. 1985)

--Bankruptcy court held that obligation to restore marsh lands pursuant to CWA and Rivers and Harbors Act had been discharged since restoration required expenditure of money. District Court reversed because debtor failed to file a brief.

9. In re Goodwin, 163 B.R. 825 (Bankr. D. Idaho 1993)

--State of Idaho could not seek an injunction to require cleanup of contamination on property in which the discharged debtor no longer had an interest where the State had sought in the alternative to recover damages equal to the amount of the cleanup.

G. ABANDONMENT

1. Midlantic National Bank v. New Jersey Department of Environmental Protection, 474 U.S. 494 (1986) (5-4 decision)

--provision in Section 554 allowing a trustee to abandon burdensome property did not allow for abandonment of contaminated property in contravention of state statute reasonably designed to protect the public health or safety from identified hazards. Court noted, however, that "abandonment power is not to be filtered by laws or regulations not reasonably calculated to protect the public health or safety from imminent and identifiable harm."

2. Pennsylvania v. Conroy, 24 F.3d 568 (3d Cir. 1994)

--Section 554 does not allow a debtor to violate a state law promoting public health or safety that prohibits the abandonment of property containing hazardous substances; Pennsylvania law defines abandonment as a "release" of hazardous substances.

3. In re Smith-Douglass, Inc., 856 F.2d 12 (4th Cir. 1988)

--allowing abandonment of contaminated property, since bankruptcy court determination that there was no threat of immediate harm was not clearly erroneous; financial condition of debtor is relevant to issue, and "where the debtor has unencumbered assets, the bankruptcy court should require stricter compliance with state environmental law before abandonment is permitted."

4. In re L.F. Jennings Oil Co., 4 F.3d 887 (10th Cir. 1993)

--allowing abandonment where property did not represent an immediate and identifiable harm to public health or safety because it was not on state's list of contaminated sites, there was no data to support a present threat, and there was no violation of state law other than failing to file reports.

5. In re Franklin Signal Corp., 65 B.R. 268 (Bankr. D. Minn. 1986)

--allowing abandonment after trustee took certain preliminary steps to deal with waste drums; court sets forth five part test as to when abandonment should be permitted.

6. In re Oklahoma Refining Co., 63 B.R. 562 (Bankr. W.D. Okla. 1986)

--allowing abandonment of contaminated property which did not present "immediate and menacing harm to public health or safety."

7. In re Peerless Plating Co., 70 B.R. 943 (Bankr. W.D. Mich. 1987)

--a trustee may not abandon a hazardous waste site in contravention of an environmental law unless the environmental law is so onerous as to interfere with the bankruptcy adjudication itself, the law is not reasonably designed to protect against identified hazards, or the violation caused by abandonment would be speculative or indeterminate; court disagrees with Franklin Signal.

8. In re FCX, Inc., 96 B.R. 49 (Bankr. E.D.N.C. 1989)

--allowing abandonment of contaminated property on the condition that the debtor set aside $250,000 for the payment of EPA and State clean-up costs; court holds that the "crucial determination is whether there is an immediate danger to the public health."

9. In re 82 Milbar Boulevard, Inc., 91 B.R. 213 (Bankr. E.D.N.Y. 1988)

--refusing to allow abandonment of contaminated property; directing instead the conveyance of the estate's possessory interest in the property to EPA conditioned on EPA's acceptance of such interest [which EPA thereafter did not accept] and an agreement between EPA and the Trustee on the conditions under which title would again vest in the debtor.

10. In re Shore Co., 134 B.R. 572 (Bankr. E.D. Tex. 1991)

--allowing abandonment of contaminated oil refinery, because the Texas Water Commission and EPA had not shown that the facility presented an imminent and identifiable harm.

11. In re Better Brite Plating, Inc., 105 B.R. 912 (Bankr. E.D. Wis. 1989)

--allowing abandonment where estate had no unencumbered assets and there was no imminent harm or danger to the public.

12. In re Anthony Ferrante & Sons, Inc., 119 B.R. 45 (D.N.J. 1990)

--allowing abandonment where trustee had no unencumbered assets and where state had not enforced administrative orders for eight years indicating the absence of the creation of imminent and identifiable harm to the public from abandonment. public.

13. New Jersey Department of Environmental Protection v. North American Products Acquisition Corp., 137 B.R. 8 (D.N.J. 1992)

--remanding for a hearing on whether abandonment would create a peril or aggravate the danger to the public.

14. Leavell v. Karnes, 143 B.R. 212 (S.D. Ill. 1990)

--Bankruptcy Court erred in allowing abandonment without making a finding as to whether conditions on the property pose an immediate and identifiable threat to public health or safety.

15. In re Indian Well Estates, Inc., No. LA-91-62263-VZ (Bankr. C.D. Cal. Oct. 22, 1992)

--Trustee could not abandon property until he contains and removes friable asbestos, but Trustee could thereafter abandon property even though it contained contaminated groundwater because such abandonment will not worsen or aggravate the contamination or create an imminent and significant harm to environment such as by affecting drinking water wells.

16. In re H.F. Radandt, Inc., 160 B.R. 323 (Bankr. W.D. Wis. 1993)

--Trustee could abandon property where there was no emergency with respect to site conditions.

17. In re MCI, Inc., 151 B.R. 103 (E.D. Mich. 1992)

--Trustee could abandon property where there was no imminent threat of harm to the public and the estate had no unencumbered assets.

18. In re ILCO, Inc., No. 92-C-2673-S (N.D. Ala. July 29, 1994)

--Refusing to allow abandonment of property where there was imminent and identifiable harm; absent funds in the estate, the court could not fashion a permissible abandonment with the required condition of providing for the health, safety and welfare of the public.

19. In re Southern International Co., 165 B.R. 815 (Bankr. E.D. Va. 1994)

--Upholding abandonment at section 341 meeting where notice indicated that unspecified property might be abandoned at meeting; abandonment was appropriate because spill from machinery containing toxic chemicals was only speculative at time of abandonment and was not opposed at section 341 meeting.

20. In re Sheffield Oil Co., 162 B.R. 339 (Bankr. M.D. Ala. 1993)

--Trustee was not required inspect underground storage tanks prior to abandonment where there was no evidence of any environmental violations or problem.

H. DISCRETIONARY STAY -- SECTION 105

1. In re Commonwealth Oil Refining Co., 805 F.2d 1175 (5th Cir. 1986), cert. denied, 483 U.S. 1005 (1987).

--Even assuming a Section 105 stay of an action excepted from the automatic stay is ever available, such a stay was inappropriate on facts of this case. To obtain such a stay, debtor would have to show likelihood of success on underlying enforcement action.

2. In re Security Gas & Oil, Inc., 70 B.R. 786 (Bankr. N.D. Cal. 1987)

--Bankruptcy Court may enjoin under Section 105 enforcement of a state clean-up order where the clean-up order would interfere unduly with the functioning of the Bankruptcy Code. Such interference may result from distortions of the Code's priority scheme by satisfying the clean-up claim in full or by reducing likelihood of reorganization. Court sets forth 9 factors relating to issuance of Section 105 stay.

3. In re Professional Sales Corp., 56 B.R. 753 (N.D. Ill. 1985)

--reversing bankruptcy court order under Section 105 enjoining EPA from revoking interim status of Chapter 11 debtor under RCRA; such a stay impermissibly allowed the debtor to operate its RCRA facility despite non-compliance with RCRA.

4. In re Metcoa Inc., No. B-85-092 (Bankr. N.D. Ohio Nov. 18, 1986)

--Refusing to issue discretionary stay of Nuclear Regulatory Commission's modifications of source material license.

5. In re Kish, 41 B.R. 620 (Bankr. E.D. Mich. 1984)

--Refusing to stay citizens suit against a Chapter 11 debtor in possession.

6. In re Environmental Waste Control, Inc., 125 B.R. 546 (N.D. Ind. 1991)

--refusing to issue Section 105 injunction prohibiting EPA and the State from requiring compliance with environmental laws. Court finds that debtor failed to show likelihood of successful reorganization.

7. Wilner Wood Products v. Maine, 128 B.R. 1 (D. Me. 1991)

--Section 105 may not be used to override 28 U.S.C. 959's requirement that debtors-in-possession comply with applicable state environmental laws.

I. DISMISSAL OR ABSTENTION

1. In re Commercial Oil Service, Inc., 58 B.R. 311 (Bankr. N.D. Ohio 1986), aff'd, 88 B.R. 126 (N.D. Ohio 1987)

--bankruptcy court must abstain from deciding issues raised by pending state environmental action; court dismisses bankruptcy for cause under Section 707 in the interests of public health, safety and welfare, because of delay and expense of adding a bankruptcy case to pending state and federal environmental actions and because of inexperience of court and trustee in cleaning up hazardous wastes.

2. In re Charles George Land Reclamation Trust, 30 B.R. 918 (Bankr. D. Mass. 1983)

--dismissing Chapter 7 bankruptcy because of impossibility of any trustee's managing site in accordance with state law.

3. In re American Crossarm and Conduit Co., et al., No. 87-30575T, Order (Bankr. W.D. Wash. May 4, 1987), aff'd, No. C87-3987 (W.D. Wash. Dec. 10, 1987)

--dismissing Chapter 7 bankruptcy because of inability to administer estates in light of environmental problems.

4. In re Mattiace Industries, Inc., 76 B.R. 44 (Bankr. E.D.N.Y. 1987)

--dismissing bankruptcy where debtor could not meet its environmental responsibilities.

5. In re ILCO, Inc., No. 92-C-2673-S (N.D. Ala. July 29, 1994)

--affirming dismissal of bankruptcy where no trustee could be found who was willing to serve due to contamination on property of the estate.

J. REFERENCE TO BANKRUPTCY COURT WITHDRAWAL OF REFERENCE -- 28 U.S.C. § 157(d)

1. In re National Gypsum Co., Civ. No. 3-91-1653-H (N.D. Tex. Sept. 13, 1991)

--granting withdrawal of reference over all matters relating to the CERCLA proof of claim of the United States, "particularly in view of the many unresolved issues surrounding the intersection of CERCLA and the Code"; the court later referred the case back to the Bankruptcy Court after providing guidance on these unresolved issues, 139 B.R. 397 (N.D. Tex. 1992).

2. In re Insilco Corp., No. SA-92-CA-0210 (W.D. Tex. Apr. 6, 1992)

--granting withdrawal of reference on debtor's objection to United States' CERCLA proof of claim and noting that mandatory withdrawal has been granted in all bankruptcy cases involving consideration of CERCLA where one party has moved for withdrawal.

3. In re Hawaiian Western Steel, Ltd., No. 93-00527 (D. Haw. June 30, 1993)

--proceedings involving a substantial and material consideration of both RCRA and CERCLA and bankruptcy law require withdrawal of reference from the bankruptcy court.

4. United States v. ILCO, Inc., 48 B.R. 1016 (N.D. Ala. 1985)

--granting withdrawal of reference under mandatory withdrawal provision of 28 U.S.C. § 157(d) over enforcement action under CWA, RCRA and CERCLA; court first noted that the action was within general order of reference as "related to a case under title 11"; court further held that even if mandatory withdrawal were not required it would grant discretionary withdrawal of reference.

5. In re Combustion Equipment Associates, Inc., 67 B.R. 709 (S.D.N.Y. 1986)

--granting withdrawal of reference over issue of whether a post-bankruptcy CERCLA claim was discharged.

6. In re Johns-Manville Corp., 63 B.R. 600 (S.D.N.Y. 1986)

--granting withdrawal of reference over issue of whether post petition CERCLA claim was covered by automatic stay.

7. In re Pepper Industries, Inc. No. 84-04468 (S.D. Cal. Nov. 6, 1987)

--granting withdrawal of reference in RCRA enforcement case.

8. In re Carter Industrials, Inc., No. 87-4218 (E.D. Mich. Feb. 9, 1988)

--granting withdrawal of reference on application for reimbursement of CERCLA response costs as an administrative expense.

9. American Telephone & Telegraph Co. v. Chateaugay Corp., 88 B.R. 581 (S.D.N.Y. 1988)

--granting withdrawal of reference over adversary proceeding raising issues as to dischargeability of CERCLA contribution claims.

10. City of New York v. Exxon Corp., No. 85 Civ. 1939 (S.D.N.Y. Mar. 30, 1990)

--refusing to withdraw reference over a bankruptcy proceeding pending in California, holding that a district court in one district cannot withdraw the reference to a bankruptcy court in another district. However, the court enjoined the parties from litigating the issues of CERCLA liability in the California bankruptcy proceedings, holding that a district court, not a bankruptcy court, should decide such issues.

11. In re FCX, Inc., No. 85-1574-5 (E.D.N.C. Dec. 28, 1988)

--denying motion for withdrawal of reference with respect to debtor's motion to abandon contaminated property and for other relief, since debtor had conceded CERCLA liability.

12. Superior Toy & Manufacturing Co. v. United States Environmental Protection Agency, No. 91-C-3476 (N.D. Ill. June 18, 1992)

--denying withdrawal of reference on debtor's objection to and request for estimation of United States' CERCLA claims because only a straightforward application of environmental laws would be required

13. In re Revere Copper & Brass Inc., 172 B.R. 192 (S.D.N.Y. 1994)

--reference would not be withdrawn on issue of when CERCLA contribution claims arose because this question only involved issues of fact and application of bankruptcy law.

14. United States v. Merritt, No. 94CV026 (D. Wyo. Mar. 10, 1994)

--withdrawing reference of entire bankruptcy case that was inextricably intertwined with real property that was subject of Safe Drinking Water Act case pending in District Court.

15. In re Hatzel & Buehler, Inc. v. Orange & Rockland Utilities, Inc., 107 B.R. 34 (D. Del. 1989)

--withdrawing reference of adversary proceeding that will require substantial and material consideration of environmental and OSHA regulations; withdrawal under both mandatory and permissive withdrawal.

K. MALICIOUS AND WILLFUL CONDUCT EXCEPTION TO DISCHARGEABILITY

1. Phipps v. Kentucky, No. 91-5986 (6th Cir. Dec. 3, 1992)

--debtor's mining reclamation obligations not discharged where debtor engaged in illegal mining activities even after issuance of a cease and desist order.

2. In re Tinkham, 59 B.R. 209 (Bankr. D.N.H. 1986)

--debtor's disposal conduct was not malicious and willful so as to make damage claim non-dischargeable under Section 523(a)(6); civil penalty was excepted from discharge under Section 523(a)(7).

3. In re Berry, 84 B.R. 717 (Bankr. W.D. Wash. 1986)

--debtor's abandonment of highly dangerous chemicals in open and leaking vats was willful and malicious rendering debt non-dischargeable.

4. In re Daniels, 130 B.R. 239 (E.D. Ky. 1991)

--discharged coal mine operator could be required to reclaim mine because his violations constituted malicious and willful conduct.

5. Kentucky Natural Resources and Environmental Protection Cabinet v. Seals, 38 E.R.C. 1519 (W.D. Va. 1993)

--civil penalties for violations of state surface mining laws were non-dischargeable under Section 523(a)(7) because they were penal rather than compensatory in nature.

L. PLANS OF REORGANIZATION

1. In re El Ark Industries, Inc., 122 B.R. 87 (Bankr. W.D. Ark. 1990)

--sustaining EPA objection to plan of reorganization that proposed to convey possibly contaminated property to EPA.

M. TRUSTEE LIABILITY

1. Wisconsin v. Better Brite Plating, Inc., 168 Wis. 2d 363, 483 N.W.2d 574 (Wis. 1992)

--state courts do not have jurisdiction to hold federal bankruptcy trustees personally liable for acts within their official capacity and scope of authority; mere violation of state law does not ipso facto mean that trustee acted outside his scope of authority.

2. Leavell v. Karnes, 143 B.R. 212, 219 n.3 (S.D. Ill. 1990)

--bankruptcy trustee may not be held personally liable for environmental fines, penalties, and cleanup costs for trustee's violation of environmental laws unless trustee willfully and deliberately violated his fiduciary duties.

3. In re Sundance Corp., 149 B.R. 641 (Bankr. E.D Wash. 1993)

--receiver is not liable under environmental laws for abnormally dangerous activities absent a showing of a negligent or knowingly wrongful act; receiver's actions that were authorized by order of a fully informed court are protected by doctrine of derivative judicial immunity; receiver is not liable for actions that are within the reasonable range of business judgment.

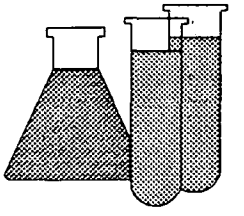
RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

11. SAMPLING AND ANALYSIS

EPA

Module 11 Objectives

- **Discuss the role of sampling and analysis in RCRA enforcement**
- **Become familiar with sampling and analysis methods**
- **Review evidence, reports, testimony, and data collection in support of enforcement actions**



Notes:

Objectives of Sampling and Analysis

- **Determine whether a waste exhibits hazardous characteristics**
- **Quantify concentrations of hazardous constituents**
- **Establish "knowing endangerment"**
- **Determine existance of release**
- **Determine nature and amount of hazardous substances or nature and extent of contamination**
- **Validate owner/operator testing, and identify laboratory fraud**

Notes:

5/6

Key Technical Activities

- **Establishing project objectives**
- **Sampling**
- **Analyzing samples**
- **Interpreting and assessing data**

Notes:

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DQO Process

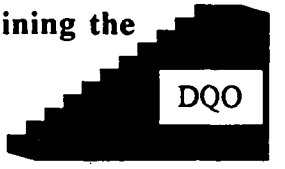
- **Serves as planning tool for controlling decision errors**
- **Improves**
  - **Planning effectiveness**
  - **Design efficiency**
  - **Defensibility of results/decisions**
- **Ensures that appropriate type, quality, and quantity of data are collected**

Notes:

5/E

Seven Steps of the DQO Process

1. **State the problem**
2. **Identify the decision**
3. **Identify the inputs to the decision**
4. **Define study boundaries**
5. **Develop a decision rule**
6. **Specify the tolerable limits on decision errors**
7. **Optimize the design for obtaining the data**



Notes:

Sampling

- **Develop a sampling strategy**
- **Determine the number of samples needed and sampling locations required to generate the necessary data**
- **Determine whether the use of composite or grab samples is appropriate**
- **Determine how data will be used and evaluated**
- **Develop a sampling plan based on the DQOs**

Notes:

52E

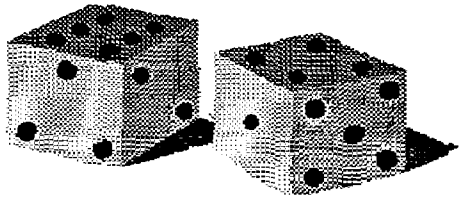
Types of Samples

- **Grab Samples**
- **Composite Samples**

Notes:

Sampling Designs

- **Judgmental**
- **Probability sampling**



Notes:

Essential Elements of Sampling and Analysis Plans

- **Based on available information prior to initiation of the project and DQOs**
- **Clearly defined purpose and project goals**
- **Clearly defined DQOs**
- **Built-in flexibility**

Notes:

Essential Elements of Sampling and Analysis Plans (Continued)

- **Procedures for providing split samples**
- **Cost-effective analytical plan, appropriate sample preparation, cleanup, and determinative procedures**
- **Effective use of screening techniques**
- **Clearly defined QC procedures to verify effectiveness of sampling and analytical procedures**
- **Careful documentation of methods and QC procedures**

Notes:

Selecting Analytical Methods

- **Identify** *regulatory driver*
- **Establish DQOs for the project (risk- or technology-based)**
- **Determine**
  - **Appropriate target analytes from the regulatory requirements and available information on the particular application**
  - **Matrices of concern**
  - **Desired accuracy, precision, and reproducibility that can be achieved**
  - **Required method sensitivity (i.e., detection limit)**
- **Select methods that meet these performance requirements**

Notes:

Selecting Analytical Methods (Continued)

- **Determine whether the application is one of the following, which requires the use of SW-846 methods:**
  - **Determination of hazardous waste characteristics**
  - **Determination of free liquid**
  - **Analyses in support of a trial burn**
  - **Analyses in support of a Delisting Petition**
  - **Determination of air emissions from process equipment**
- **"Any reliable method" can be used for all other RCRA applications.**

Notes:

Analytical Factors--Target Analytes

- **Target analytes should be appropriate for the particular application.**
- **EPA program offices have developed many general and specialized target analyte lists for various applications.**

Notes:

General Target Analyte Lists

- **Priority Pollutant List**
  - Developed by OW to measure contamination in industrial effluent discharges to streams and surface waters
  - Approximately 131 organic and inorganic analytes
- **Appendix VIII (40 CFR § 261)**
  - List of hazardous constituents in RCRA-listed wastes
  - Approximately 400 organic and inorganic analytes

Notes:

General Target Analyte Lists (Continued)

- **Appendix IX (40 CFR § 264)**
  - RCRA ground water monitoring list based on readily analyzed constituents from Appendix VIII, plus some from California and Michigan lists, used to determine whether hazardous constituents were leaching from RCRA landfills
  - Approximately 250 to 300 organic and inorganic analytes
- **Appendix IXA**
  - A shortened list of indicator compounds for leaks from landfills
  - Contains about 30 to 40 target analytes, primarily volatile organics

Notes:

General Target Analyte Lists (Continued)

- **Drinking Water Lists**
  - **MCL list consists of about 100 organic and inorganic compounds for which regulatory limits have been established**
  - **ODWGW maintains a secondary list of compounds that need to be monitored but have no regulatory limits**
- **Hazardous Constituent List (HCL)**
  - **Comprises approximately 150 organic and inorganic compounds analyzed by CLP Program under CERCLA**
  - **Considerably less rigorous than Appendix IX, particularly with regard to organic bases and non-purgeable volatiles**
- **Several lists from OAR for Clean Air Act (e.g., NESHAPS, PICs, POHCs), most of which pertain to volatile organics**

Notes:

Specialized Target Analyte Lists

- **HWIR List (to be proposed)**
  - Compounds with de minimis regulatory limits for waste exiting from RCRA system in lieu of filing a Delisting Petition
  - De minimis limits in water and soil
  - Approximately 250 organic and inorganic analytes based on Appendix IX
- **Skinner List**
  - RCRA list of target analytes for regulating wastes from petroleum refining industry
  - Approximately 50 to 100 compounds, primarily PAHs

Notes:

Analytical Factors--Sensitivity

- **Detection limits**
  - **Below regulatory threshold**
  - **Specific to samples being analyzed**

Notes:

Analytical Factors--Bias and Precision

- **Bias is the deviation due to matrix effects of the measured value:**
  - **(x_s - x_u) from a known spiked amount**
  - **Calculated from spike recovery**
  - **Most RCRA analytical methods exhibit a negative bias (i.e., spike recoveries are usually <100%)**
  - **Quantitative screening methods have a positive bias.**
- **Precision is the agreement among a set of replicate measurements without assumption of knowledge of the true value:**
  - **Can be affected by a variety of matrix effects**
  - **Calculated from duplicate samples or matrix spike duplicates (MSDs).**

Notes:

Analytical Factors--Method Reproducibility

- **Reproducibility is the demonstration that a method can be performed by multiple operators in multiple laboratories.**

Notes:

SW-846 Defined

- **SW-846 comprises test methods for evaluating solid waste.**
- **SW-846 functions primarily as a guidance document setting forth acceptable, although not required, methods to be implemented by the user, as appropriate, in responding to RCRA-related sampling and analysis requirements.**

Notes:

Mandatory Applications of SW-846 Methods

- **SW-846 methods must be used in the following five categories:**
  - **Determination of a hazardous waste characteristic**
  - **Determination of free liquid (Method 9095)**
  - **Analyses associated with submission of Delisting Petition**
  - **Analyses associated with a hazardous waste incinerator trial burn**
  - **Determination of air emissions from process equipment.**

Notes:

Mandatory Applications of SW-846 Methods (Continued)

- **Authorized States can require use of SW-846 methods for any or all RCRA applications.**
- **EPA regions do not have authority to require the use of SW-846 methods for non-mandatory applications.**
- **The Third Edition (September 1986), as amended by Updates I (July 1992), II (September, 1994), IIA (August 1993), and IIB (February 1995), methods are required to be used for mandatory applications.**

Notes:

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Quality Control Procedures

- QC procedures should be determined and incorporated into RCRA Sampling and Analysis Plans (SAPs) as part of the DQO process prior to initiation of the project.
- Standard analytical QC procedures include:
  - Analysis of appropriate blank samples to demonstrate absence of sample contamination
  - Use of appropriate numbers and types of spiked samples to verify appropriate analyte recovery
- RCRA QC "guidance" is included in Chapter 1 of SW-846.

Notes:

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Quality Control Procedures (Continued)

- **Use of duplicates/matrix spike duplicates to verify appropriate analytical precision**
- **Use of appropriate surrogates to determine whether matrix effects may be present**
- **Use of appropriate calibration procedures to optimize quantitation of target analytes.**

Notes:

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RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

11. SAMPLING AND ANALYSIS

Background Materials

EPA

11. SAMPLING AND ANALYSIS

11.1 INTRODUCTION

Sampling and analysis of waste and/or environmental media can play a critical role in Resource Conservation and Recovery Act (RCRA) enforcement case development. The fundamental basis of RCRA remains whether or not a waste is hazardous. In large part, this determination depends on sampling and analysis. In addition, the Land Disposal Restrictions program has added a whole new importance to assessing constituent concentrations. Depending on the nature of the enforcement action, U.S. Environmental Protection Agency (EPA) case development staff may have to evaluate the quality of data generated by others, assess the adequacy of data for making a case, or collaborate in the collection of data through use of an effective sampling and analysis program. In each instance, case developers must have a basic understanding of the legal and technical requirements for RCRA sampling and analysis. The information in this module should help RCRA enforcement case developers assess sampling data or support sampling and analysis programs, including assessing sampling activities conducted by facilities and contractors. In addition, this module provides an overview of the sampling and analysis process that will help case development staff better understand technical considerations involved in sampling and analysis.

11.1.1 Purpose of Sampling and Analysis

The purpose of sampling and analysis is to obtain evidence in the form of analytical and physical data that will identify chemical compounds and constituents and their concentrations in waste or environmental media. In the context of RCRA enforcement cases, information obtained from sampling and analysis can be used to:

- Determine whether a waste exhibits hazardous characteristics (e.g., to determine whether a facility is managing hazardous waste without a permit or to assess compliance with Land Disposal Restrictions)

- Quantify concentrations of hazardous constituents (e.g., for listed wastes), which is frequently important in corroborating testimony and other evidence.

- Establish that "knowing endangerment" occurred

- Determine whether hazardous waste has been released into the environment (e.g., to determine whether corrective action or other response actions are required)

- Determine the nature and extent of contamination

- Determine the nature and amount of hazardous substances (e.g., when determining whether an imminent and substantial endangerment exists (RCRA § 7003))

- Test a waste when testing performed by the owner or operator is determined to be unsatisfactory or to prove laboratory fraud.

11.1.2 Overview of Discussion

The remainder of this module addresses the following basic phases of the sampling and analysis process: 1) establishing project objectives, 2) sampling, and 3) analyzing samples. These topics are presented in the order they normally occur to provide a general understanding of each phase of the process. The discussion of sample analysis addresses the role of SW-846 in conducting analyses. Appendix A specifies when use of SW-846 testing methods is required.

11.2 DATA QUALITY OBJECTIVES—A PLANNING TOOL FOR SAMPLING AND ANALYSIS PROJECTS

> **Quality Assurance**
>
> Quality assurance is the overall program implemented to ensure the reliability and quality of data. The program includes policies and general procedures (e.g., personnel training, preventative maintenance).

One planning tool available to help successfully implement a sampling and analysis project, including evaluating whether sufficient data exist to assess compliance and determine the presence of a release and, as necessary, to bring an enforcement action, is the data quality objective (DQO) process developed by EPA's Quality Assurance Management Staff (QAMS). Variations of the DQO process and/or other planning tools can be used successfully; the key is to understand the analytical objectives for the project and to plan accordingly. The planning processes do not need to be elaborate or time-consuming to be effective.

DQOs are qualitative and quantitative statements that clarify the study objectives, define the type, quantity, and quality of required data, and specify the tolerable limits on decision errors. DQOs are used to define the quality control (QC) requirements for data collection, sampling and analysis, and data review and evaluation. These QC requirements are included in the quality assurance (QA) objectives for environmental measurements, and the DQOs are incorporated into a quality assurance project plan (QAPjP). DQO development is an ongoing process involving discussions between management and technical staff. This process is a practical means for specifying and ensuring that the requested information is known to be of the "required" quality. The type, quantity, and quality of data needed to support development of a case will depend on the regulation being enforced and on case-specific circumstances (e.g., type, quantity, and quality of existing data; past violations at facility; and enforcement action planned).

Failure to establish DQOs prior to implementing field and laboratory activities can cause difficulties for the regulatory agency during case development. For example, if the analytical methods used were not sensitive enough to demonstrate that a constituent concentration was above a regulatory threshold, then the data would be useless. On the other hand, if a low-cost technique will suffice, but a higher cost technique is selected, time and money are wasted.

A seven-step DQO process has been developed for uniform and consistent data generation activities[1] serves as now the accepted Agency procedure for establishing DQOs:

- **Step 1**—State the Problem
- **Step 2**—Identify the Decision
- **Step 3**—Identify Inputs to the Decision
- **Step 4**—Define the Study Boundaries
- **Step 5**—Develop a Decision Rule
- **Step 6**—Specify Limits on Decision Errors
- **Step 7**—Optimize the Design for Obtaining Data.

Quality Control

Quality control is the consistent, routine use of procedures designed to assure that the accuracy and precision of each measurement are defined. Specific application of these procedures in the laboratory includes various activities, including the use of appropriate reference standards, spikes, replicates, and blanks.

11.2.1 Step 1: State the Problem

The first step in any decisionmaking process is to define the problem that resulted in the study's inception. A planning team, tasked with developing the project-specific DQOs, is comprised of personnel representing all phases of the project and may include EPA attorneys, RCRA inspectors, managers, and other case development support staff. The primary decisionmaker, or leader is identified. Where applicable, field and laboratory technicians, chemists, statisticians, and modelers are also recruited for the planning team. The responsibilities of each team member are clearly defined during this initial planning stage.

State the Problem

For example, the problem might be to "determine whether water and sludge in a surface impoundment at Facility X exhibits a hazardous characteristic" in support of a 3008(a) order.

Existing information is summarized and the need for additional information determined. Literature searches can be performed, relevant historical data evaluated, or ongoing studies related to the current site studied. Available financial and manpower resources are identified and project milestones and deadlines determined, if sufficient information is present.

11.2.2 Step 2: Identify the Decision

Step 2 is used to define the decision statement that the study must resolve. The decision statement is a consolidation of the principal study question and alternative actions. The principal study question identifies the key unknown conditions or unresolved issues that will be used to reveal the solution to the problem being investigated. Alternative actions that may be taken to

1. The DQO process is based on the guidance document issued by QAMS in September 1994. *Guidance for the Data Quality Objectives Process* (EPA QA/G-4) provides general guidance to organizations for developing data quality criteria and performance specifications for decisionmaking.

solve the problem based on the outcome or on the decisions arrived at from the study also are identified.

Identify the Decision

For example, "if waste in the impoundment exhibits hazardous characteristics, then the regulatory agency will take further enforcement action under RCRA § 3008(a)."

11.2.3 Step 3: Identify Inputs to the Decision

Specific information required to resolve the decision statement must be identified during Step 3. The selected data acquisition approach will lead to the next set of questions that address the specific types of information needed to support the decision statement. Sources of the information are then developed and can include regulatory guidance, scientific literature, and historical data or past projects similar in scope to the current effort.

Identify the Inputs

For example, to make the decision, representative samples must be collected and analyzed for the hazardous waste characteristics of toxicity and ignitability in accordance with 40 CFR §§ 261.21 and 261.23.

An action level (e.g., a toxicity characteristic [TC] regulatory threshold), defined as the threshold value that provides the criterion for choosing between alternative actions, needs to be established. Only the criterion required to establish the action level needs to be formulated in this step. Step 5 addresses the quantitative determination of the action level.

Step 3 also involves evaluating existing analytical methods to determine whether the method will perform as published or whether method modification or method development needs to be included in the study. Each analyte of interest should have a method detection limit or level of quantitation assigned, which will be used in Steps 5 and 7 of the DQO process.

11.2.4 Step 4: Define the Study Boundaries

During Step 4, two types of boundaries must be defined and quantified: spatial and temporal. Spatial boundaries define the physical area to be studied and locations at which to collect samples. Temporal boundaries describe the time frame that the study data will represent and the times for sample collection. To arrive at these boundaries, the characteristics that define the population are identified, as well as the case demands. The compounds of interest and the matrix that should be evaluated are selected to determine whether the compounds are present and at what concentrations.

Define the Boundaries of the Study

For example, "the study will be limited to the waste contained in the impoundment at the time of the sampling inspection."

The spatial boundaries, or the geographic area to be studied, are specified using a physical feature or border, such as units of measure. If appropriate, the population is segregated further into more homogenous subsets, or strata, as a means of reducing variability. Constraints to sample collection are also identified to limit potential difficulties at inopportune times.

11.2.5 Step 5: Develop a Decision Rule

During Step 5, a statement is developed that combines the parameters of interest and the action levels with the DQO outputs already developed. The combination of these three elements forms the decision rule and summarizes the attributes that the decisionmaker wants to study and how the information will assist in solving the central problem. The four elements that form the decision rule are 1) the parameter of interest that describes a characteristic of the population, 2) the scale of decisionmaking that was defined in Step 4, when boundaries were defined, 3) the action level, or a measurement threshold value, used as a criterion to choose alternative actions through the use of "if/then" statements, and 4) the alternative actions, as developed in Step 2.

Develop a Decision Rule

For example, "the results for toxicity will be compared to the regulatory levels set forth in Table 1 of 40 CFR Part 261.24. The results for ignitability will be compared to the criteria described in 40 CFR Part 261.21."

11.2.6 Step 6: Specify Limits on Decision Errors

If decisionmakers select a statistical sampling approach, then acceptable or tolerable limits on decision errors and performance goals for the data collecting design are established during Step 6. A statistical sampling approach may not be appropriate for certain RCRA enforcement actions, however. In cases where judgmental or grab sampling is selected, specifying limits on decision errors is not applicable. (Section 11.3 of this module discusses the selection of specific sampling strategies.)

Specify the Tolerable Limits on Decision Errors

The regulated community is concerned with "proving the negative," or the absence of any hazardous constituents or characteristics. The enforcement agency is often concerned with "proving the positive," or demonstrating that the waste contains hazardous constituents or exhibits a hazardous waste characteristic at a high enough level relative to the regulatory threshold.

11.2.7 Step 7: Optimize the Design for Obtaining Data

Step 7 addresses the design of a resource-effective data collection system to satisfy the DQOs. This step involves verifying that the DQO outputs produced in all preceding steps are internally consistent. The design options should have been developed based on the data needed to support the enforcement action.

Optimize the Design

For example, based on field observations and judgment of the sampler, four waste samples (and associated field QC samples) could be collected and analyzed.

11.3 SAMPLING

As discussed previously, the DQO process is one approach that can be used to implement a sampling and analysis program. The outputs of the DQO process are usually a sampling and analysis plan (SAP) and a QAPjP. The SAP and QAPjP also can be merged into one plan. The level of detail for these documents will depend on the complexity and objectives of the sampling and analysis project. This section describes the key technical activities involved in the development of the sampling strategy that will become part of the SAP.

11.3.1 Development of a Sampling Strategy

The selection of a sampling strategy for a RCRA enforcement action will be influenced by the regulatory and scientific objectives, the type and magnitude of the violation suspected, facility-specific conditions, and the time and resources available. A sampling strategy and sampling procedures should be developed considering the following factors:

- Past compliance record
- History of the facility and knowledge of the waste generation processes, including knowledge of any variances, extensions, or exemptions that might apply.
- Regulation being enforced (e.g., land disposal restrictions apply to wastes that are hazardous at the "point-of-generation" and, thus, the sampling strategy would include collection of waste samples at the point-of-generation).
- Physical state of the waste or environmental medium.
- Potential hazardous characteristics of the material (i.e., toxicity, ignitability, corrosivity, or reactivity). To prove that a material has a hazardous characteristic, it must be shown that a "representative" sample of the material exhibits that characteristic and is a waste.
- Volume of material available to be sampled (e.g., 50 drums, a 10,000-gallon tank).
- Homogeneity of material over time and space (e.g., depositional characteristics, spatial variations, and particle size distribution). A larger number of samples may need to be characterized if the waste streams are highly variable.
- Method of waste generation, storage, and/or containment (e.g., logistical problems).
- Sampling conditions (e.g., weather).
- Startup, shutdown, or maintenance operations affecting site and waste accessibility.
- Required analysis, associated volume of waste needed, detection limits, and laboratory turnaround time required (Section 11.4 discusses analytical requirements in detail).

- Anticipated site- and sample-specific contingencies, such as choosing alternate sampling points.

  Example: An oil refinery operates a wastewater treatment plant, which includes an inactive storm water basin considered to be a tank by the facility. The enforcement agency has determined that the basin is a surface impoundment and believes hazardous waste may be managed in the unit. The case development team has decided that samples are needed to determine whether the waste in the basin contains hazardous waste in support of a 3008(a) order. An unannounced sampling visit will be conducted.

  The case development team has reviewed available information on the unit. The waste is believed to be water contaminated with petroleum hydrocarbons and potentially exhibits the characteristics of toxicity (*i.e.*, TC) for benzene and ignitability. The unit is approximately 100 feet wide by 300 feet long by 25 feet deep with a flat bottom. It has steep sloping walls covered by a liner. The water in the unit is approximately 2 to 3 feet deep. No exemptions or variances apply to the waste or unit under investigation.

  Sampling Strategy: Based on available information, time, and resources, the enforcement team will take four grab samples (plus associated QC samples), each to be collected from a different location within the unit. Samples will be collected using a pond sampler or dipper (on an extension pole). During collection of each sample, aliquots to be analyzed for volatile constituents will be collected prior to samples to be analyzed for non-volatile constituents. Prior to the sampling trip, the sampling team will develop a safety plan that addresses access to the waste and the potential respiratory hazardous due the volatile organic compounds.

11.3.2 Types of Samples

Grab samples are single increments of waste or environmental media collected for the characterization of the chemical concentrations and/or physical properties of interest at a selected position in time or space. One advantage of grab sampling is that the results of a number of grab samples can be used to assess the variability in constituent concentrations.

Composite samples are formed by the physical mixing of individual grab samples and represent the physical average of the parameter of interest over time and/or space. Compositing is usually chosen for cost-saving reasons (e.g., fewer samples need to be analyzed then if each grab sample was analyzed separately and the results used to calculate an average concentration). Samples analyzed for volatiles are usually *not* composited due to the potential loss of volatile constituents during the mixing process.

11.3.3 Representative Sampling

The definitions at 40 CFR Section 260.10 provide that a representative sample "means a sample of a universe or whole (e.g., waste pile, lagoon, ground water) which can be expected to

exhibit the average properties of the universe or whole." All of the definition of the RCRA characteristics include a requirement that the test portion of the waste be a "representative sample." A variety of strategies may be employed to ensure representativeness. These strategies can include either multiple grab samples or one or more composite samples from randomly chosen spots on a pile and thoroughly compositing them into one sample. It is also possible to obtain a single grab sample that is representative of a larger universe, such as a sample taken from a drum containing liquids that captures all the liquid phases present. Whichever strategy is employed, the sampler must be able to reasonably assert that it meets the Agency's definition of "representative" in order to prove that the waste is characteristic under RCRA.

11.3.4 Sampling Designs

Once the objectives of the sampling program have been define, an appropriate sampling design can be selected. There are two basic types of sampling designs may be used:

- Judgmental sampling
- Probability sampling.

Judgmental sampling (sometimes called authoritative or directed sampling) refers to the subjective selection of sites or population units by the sampler or project team. This approach is commonly used in sampling in support of enforcement activities because it is focused, requires less time and resources than statistical designs, and is adequate for RCRA case development purposes. Using knowledge of the site and waste generation processes, a sampling team may be able to divide a site or waste sources into two categories: "low probability of a violation" and "high probability of a violation." Sampling then can be conducted to characterize the waste sources.

Probability sampling (sometimes called statistical sampling) refers to the use of specific methods of random selection of sampling sites or population units. Probability sampling includes simple random sampling, stratified random sampling, and systematic sampling. Chapter 9 of EPA's SW-846 discusses the design of statistical sampling programs to be used by generators to determine whether their waste exhibits the hazardous waste characteristic of toxicity. *For enforcement purposes, the regulatory agency is not required to follow the sampling and statistical guidance outlined in Chapter 9 of SW-846.*

To help decide which design is most appropriate, it helps to ask "If we had the data today, what would we do with it?" or "how would we evaluate it?"

For example, one objective of an enforcement action might be to determine whether a waste being managed as a solid waste at a facility exhibits the characteristic of a hazardous waste. In this case, the sampling goal of the regulated community and that of the enforcement agency may be different (i.e., concept of "proving the negative" in case development, see Hazardous Waste Management System: Testing and Monitoring Activities, 55 *FR* 4440 (February 8, 1990):

- **Goal of regulated community**—Using SW-846 (or equivalent) methods and the statistical approaches outlined in Chapter 9 of SW-846 (or other guidance contained in

40 CFR 261.20(c)), owner/operators attempt to demonstrate that a regulatory threshold has *not* been exceeded (i.e., proving the negative).

- **Goal of enforcement agency**—Regulatory agencies are concerned with demonstrating that analyte concentrations in a waste exceed a regulatory level or the waste exhibits a hazardous waste characteristic (i.e., proving the positive). This demonstration may not require well-defined detection limits, adequate analyte recoveries, and high degrees of precision. "If a sample possesses the property of interest, or contains the constituent at a high enough level relative to the regulatory threshold, then the population from which the sample was drawn must also possess the property of interest or contain that constituent. Depending on the degree to which the property of interest is exceeded, testing of samples which represent all aspects of the waste or other material may not be necessary to prove that the waste is subject to regulation" (55 *FR* 4440, February 8, 1990).

11.3.5 Development a Sampling and Analysis Plan

The selection of sampling and analysis methods depends on the project objectives; however, they must be scientifically sound. Chapter 9 of SW-846 presents guidance on developing sampling plans. The selection of *sampling* methods is not prescribed by regulation; however, certain *analytical* methods are prescribed by regulation. Section 11.4 of this module discusses these analytical methods. To determine whether a waste exhibits the characteristic of a hazardous waste, for example, the generator may use any of the sampling methods listed in Appendix I, 40 CFR Part 261. Because the sampling methods are not formally adopted as regulation, Appendix I is considered a "safe harbor" provision (also, see 40 CFR 261.20(c)). The sampling and analysis plan should have built-in flexibility (i.e., provision for changes in the sampling and analysis plan at various in-process stages, based on an evaluation of the site condition, project objectives, and analytical results).

The sampling and analysis plan should include the following information:.

- Sampling team and responsibilities
- Number, type, and location of samples required, based on the established DQOs.
- Sampling equipment and sampling procedures, including use of special sampling techniques (e.g., do not homogenize samples for volatile analysis)
- Sample preparation procedures (e.g., particle size reduction, mixing or compositing of samples)
- Decontamination procedures (for equipment and personnel)
- Disposal of investigation-derived waste (i.e., disposable items contaminated as a result of the enforcement sampling effort)

- Procedures for filling sample containers, including use of contaminant-free equipment/containers
- Sample preservation (e.g., shipping samples on ice, adding chemical preservatives)
- Sample identification and labeling
- Chain-of-custody procedures
- Cost-effective analytical plan utilizing appropriate sample preparation and cleanup and determinative procedures to be used, based on the established DQOs
- Effective use of screening techniques (if applicable)
- Clearly defined QC procedures to verify effectiveness of sampling and analytical procedures (e.g., type and frequency of field QC samples, splits and duplicates)[2]
- Sample shipping procedures
- Health and safety concerns (ensure use of appropriate protective equipment and procedures in accordance with Occupational Safety and Health Administration regulations)
- Documentation of sampling activities
  - Project logbooks
  - Sample tags
  - Chain-of-custody and receipt for samples
  - Photographs, maps, drawings
  - Corrections to documentation
  - Documents obtained from facilities being investigated
  - Confidential business information claim.

11.4 SAMPLE ANALYSIS

Enforcement staff need to understand analytical methods so that they can defend their data and fully understand data submitted by the regulated community. This section provides an overview of analytical methods frequently used in the implementation of RCRA waste testing, considerations in selecting methods, and an overview of laboratory procedures.

2. The owner/operator is entitled by statute to have split samples. If split samples are provided to the owner/operator, he/she is responsible for arranging for his/her own laboratory to analyze the samples. According to 42 U.S.C. § 6927(a), "if the officer, employee, or representative obtains any samples, prior to leaving the premises, he shall give to the owner, operator, or agent in charge a receipt describing the sample obtained and if requested a portion of each such sample equal in volume or weight to the portion retained."

Many acceptable and, in some cases, required RCRA analytical methods are contained in SW-846. This EPA document is the compendium of analytical and test methods accepted by EPA's Office of Solid Waste (OSW) for use in determining regulatory compliance under RCRA. SW-846 functions primarily as a guidance document setting forth acceptable, although not required, methods to be implemented by the user, as appropriate, in responding to RCRA-related sampling and analysis requirements. Whether the regulated community uses SW-846 or equivalent methods, it is important to understand how appropriate methods are selected. The following discussion summarizes this process. It is important that the chemist understands the analytical objectives delineated during the planning process. This will ensure that the chemist, in conjunction with the sampler and those involved in determining the objectives, can develop an appropriate analytical scheme.

11.4.1 Analytical Methods and Methods Selection

Except for situations for which the RCRA regulations specify use of a particular method, the chemist should use judgment, tempered by experience, in selecting an appropriate set of methods from SW-846 or the scientific literature for preparing and analyzing a given sample. The following factors, among others, affect the selection of analytical methods:

- Regulatory driver for a application of a particular method
- Analytical DQOs for the project
  - Appropriate target analytes from the regulatory requirements and available information on the particular application
  - Matrices of concern
  - Required confidence level for data to be generated
  - Performance-based analytical parameters necessary to achieve this confidence level
  - Sensitivity required (based on the action level, regulatory threshold, or other decision point)
- Analytical methods that will meet these performance requirements
- Whether the application is one of the following, which requires the use of SW-846 methods (see Appendix A for a more detailed list)
  - Determination of hazardous waste characteristics
  - Determination of free liquid
  - Analyses in support of a trial burn
  - Analyses in support of a Delisting Petition
  - Determination of air emissions from process equipment.

For all other RCRA applications, "any reliable method" may be employed.

Method Selection

The choice of the appropriate sequence of analytical methods depends on the regulatory requirements, information required, and experience of the analyst. In some cases, the objective is to determine whether a waste is a characteristic waste (40 CFR §§ 261.20-24). In other cases, the analytical objective is to determine the constituent concentrations in the waste or environmental media (e.g., to determine whether there has been a release to the environment).

Hazardous Waste Characteristics

Chapter 8 of SW-846 presents analytical methods for determining characteristics. The following list highlights technical considerations for characteristic waste determinations:

1. Ignitability based upon flashpoint

   - Liquid waste
   - Not an **aqueous** solution containing less than 24-percent alcohol by volume
   - Flashpoint less than 140° F/60° C (the flashpoint is the temperature at which a mixture of vapor [from the liquid sample] and air will "flash" for an instant when a flame is introduced)

2. Corrosivity

   - Aqueous wastes with pH less than or equal to 2 or greater than or equal to 12.5 (low pH wastes are acidic, high pH wastes are basic, pH 7 is neutral) (pH scale is logarithmic, e.g., pH 2 waste is 10 times more acidic than pH 3).
   - Steel corroding liquid wastes

3. Toxicity

   - Toxicity Characteristic Leaching Procedure (TCLP)
   - Sampling (minimum sample size = 100 grams; may not be enough to get representative samples)
   - Sample preparation
     - -- Particle size reduction (matrix must pass a 9.5-mm screen)
     - -- TC extraction fluids generated by rotary extraction device
   - Designed to deal with multi-phasic wastes
   - After extraction step, sample analysis
     - -- For the extraction step SW-846 Method 1311 required; for sample analysis to determine constituent concentrations, SW-846 methods **not** required
   - Practical concerns: RCRA toxicity characteristic based upon landfill leaching model/ not necessarily determinative of toxicity for other purposes (e.g., obtaining injunctive relief)
   - Cost (may be greater than $2,000 per sample)

4. Reactivity

   - No test methods prescribed—refer to regulatory definition
   - EPA guidance (SW-846) sets forth methods to measure releasable cyanide/sulfide at a pH between 2 and 12.5 (Note: these methods not applicable to all cyanide-bearing wastes).

Constituent Concentrations In Waste and Environmental Media

Chapter 2 of SW-846 contains guidance on choosing the correct procedure for RCRA analyses. In addition, EPA's Environmental Methods Monitoring Index (EMMI) is a useful tool for selecting appropriate methods for particular target analytes.[3]

The **analysis** of wastes that are thought to be listed hazardous wastes **cannot conclusively establish** that the waste is indeed listed. Such analyses can be used to determine whether certain hazardous constituents are present and in what concentration. In addition, an expert (this can be the EPA chemist) can use the data to develop an opinion on whether the sample analyzed is consistent with expected findings in the listed waste. Typically, the analytical findings are used to corroborate other evidence.

Laboratory Quality Assurance/Quality Control

Case developers should assess the strength of the evidence available by reviewing the adequacy of QA/QC procedures used in the sampling and analysis. In addition, if QA/QC procedures were not followed, the case development staff should assess how critical the lapse may be to the overall case. Normally, QA/QC procedures should be determined and incorporated into RCRA SAPs as part of the DQO process **prior** to initiation of the project. The following standard analytical QC procedures are needed to determine that the sample handling procedures and laboratory methods perform as required:

- Use of chain-of-custody in laboratory and proper storage (e.g., refrigeration).
- Analysis of appropriate numbers and types of blank samples to demonstrate the absence of sample contamination from a variety of sources.
- Use of appropriate numbers and types of spiked samples to verify appropriate analyte recovery.
- Use of duplicates/matrix spike duplicates to verify appropriate analytical precision.
- Use of appropriate surrogates to determine whether matrix effects may be present.
- Use of appropriate calibration procedures to optimize quantitation of target analytes.

3. EMMI is EPA's official methods data base linking 50 EPA regulatory lists, 2,600 substances, and 926 analytical methods. EMMI is available from the National Technical Information Service (NTIS) (703-487-4650).

- Use of appropriate test methods (Again, must make method selection in light of overall objectives. Remember that many analytical procedures approved by EPA are for use by regulated community in demonstrating that materials or wastes contain low levels of contaminants and should not be regulated. In other words, they must demonstrate that a contaminant **is not present** at regulatory levels. In an enforcement case, the object is to show that a contaminant **is present**. Analytically, this is a different task, and the same test methods may not be suitable).

- Confirmatory analyses by an alternate test method.

The following issues are related to the reliability of data:

- Method detection limits (must be below regulatory threshold and be specific to samples being analyzed—cannot be theoretical number from a manual)

- Sample holding times (See TCLP Method Section 8.4 and 55 *FR* 4440 [February 8, 1990])[4]

- Sample preservation

- Matrix interferences that could cause false positive

Note: To establish that the analytical results obtained by the laboratory are reliable and, therefore, admissible, a showing must be made that appropriate quality assurance/quality controls were employed from the point the sample was taken in the field until all analyses were completed. Perfection is not required, however, and cases can be successfully prosecuted if sufficient reliable data and other evidence are available. At times, the data may be inconclusive and other evidence must be adduced.

In addition, other factors should be considered:

- EPA Contract Lab Program (CLP) protocols (often used by the defense as technical "holy grail," yet typically relate only to format requirements specified in contract "statement of work"; may have no bearing on data quality)

- Preliminary/screening analyses allow laboratory to focus on critical samples (e.g., TC toxicity)

- Whether results will be independently validated

4. "Results of samples not analyzed within the specified holding time will be considered minimum values. That is, the actual concentration will be assumed for regulatory purposes to be equal to or greater than the concentration determined after the holding time has expired." (55 *FR* 4440, 4443 [February 8, 1990])

- Sample retention/disposal

  - Establish/follow policy
  - Address case-by-case
  - Secure permission of court.

11.4.2 Overview of Frequently Performed Analyses

The analytical methods described in this section address the major methods used or encountered in assessing environmental media. The information presented provides an overview of the methods used for various types of compounds and how each method is implemented.

Metals

Metal analyses are measurements of the amount of a particular metallic element in a sample. A more scientifically correct name for this type of analysis is "elemental" because many nonmetallic or metalloid elements (e.g., arsenic) can also be determined by these techniques.

Before instrumental analysis can proceed, the elements of interest must usually be dissolved in a liquid. This process, called "digestion," is usually accomplished by boiling the sample in acids. Digestion may not be necessary for water samples if the elements are already dissolved in the water. However, it is always possible that even water samples that appear clear may contain small particles to which the elements are attached.

The three types of detectors most often used for elemental analyses are:

- ***Atomic Absorption (AA) Spectrometer)***—In this instrument, the sample is introduced into an oxyacetylene flame, and the wavelengths of light absorbed by the sample are analyzed to determine whether a particular element is present. Only one element can be determined at a time with this instrument.

- ***Inductively Coupled Argon Plasma Optical Emissions Spectrometer (ICP-OES)***—In this instrument, the sample is reduced to its elemental constituents by an argon plasma torch at about 10,000° F. The light emitted from the sample is then analyzed for wavelengths that are characteristic of certain elements. This instrument can measure more than 20 elements at a time, but is more susceptible to interferences from other elements present in the sample than AA analysis. It also requires more sophisticated processing of data than AA analysis.

- ***X-Ray Fluorescence Spectrometer***—This instrument bombards the sample with x rays and then measures the wavelengths of the light emitted by the sample. The elemental constituents of solids can be measured by this technique. It must be remembered, however, that x-ray absorption only occurs on the surface exposed to the x rays. Therefore the sample must be completely homogeneous for this technique to be used in any sort of quantitative manner. While this instrument is very fast and can analyze up to 80 elements simultaneously, the detection limits are usually much higher than those from AA or ICP-OES.

Organics

Organic compounds usually must be transferred from the sample matrix, such as soil or water, to a solvent, such as hexane or methylene chloride, before analysis. This process, called "extraction," can involve a variety of techniques, including Soxhlet extractions and continuous liquid/liquid extractions. The exceptions are volatile compounds, which can be removed from their sample matrix by bubbling gas through the sample and collected using the "purge and trap" technique. Four types of instruments are most commonly used for organics analyses:

- ***Gas Chromatograph (GC)***—GC is the basic separation tool of environmental organic chemistry. Once the sample has been extracted into a solvent, a portion of the solvent is injected into a heated port where the organic compounds are vaporized. The now gaseous compounds are transported by an inert gas, the "carrier gas," through a heated glass column. The inside of the column is coated with a material called the "stationary phase." The gaseous compounds dissolve in this stationary phase and are released back into the carrier gas stream at different rates, depending on the chemical natures. As a result, different compounds travel through the column at different speeds. The time it takes for the compound to travel the length of the column is characteristic of that compound and is called the "retention time" because it is the amount of time the compound is retained in the column.

  GCs can be equipped with different detectors, some of which are only sensitive to certain types of compounds. Other detectors are more universal in their response to organic compounds. The most common detectors are the flame ionization detector, which is sensitive to almost all organic compounds; the electron capture detector (ECD), which is extremely sensitive to compounds containing chlorine, such as polychlorinated biphenols (PCBs) and many pesticides; and the Hall electrolytic conductivity detector (HECD), which is sensitive, though less so than an ECD, only to halogenated compounds, most of which are chlorinated.

  The output of a GC is a strip chart of the detector response against time, known as a "chromatogram." When the detector responds to a particular compound, a "peak" will be traced on the chart.

- ***Gas Chromatograph/Mass Spectrometer (GC/MS)***—A GC/MS is a GC with an MS for a detector. After a particular compound has passed through the GC column, it is shattered by impact with a stream of high energy electrons, creating ions, which are then sorted by mass and detected. The instrument can produce a graph of the intensity of each ion at a particular time, known as a "mass spectrum," that is characteristic of a particular compound. The mass spectrum is compared with the spectrum from a standard containing the pure compound or can be compared by computer to a library of more than 50,000 different organic compounds. A chemist with a certain amount of expertise must judge the "goodness" of the library search results before the compound can be considered identified.

- ***High Pressure Liquid Chromatography (HPLC)***—HPLC is similar to GC, but a liquid, rather than a gas, is used to carry the compounds through the column. This eliminates

the need for volatilizing the sample in a heated injector port and permits the analysis of nonvolatile organic compounds, such as resins, and compounds that labile (break apart) when heated.

HPLC detectors are not as sensitive as GC detectors, however. The most common detector used with HPCL is the ultraviolet (UV) detector, which passes UV light through the sample and records when certain selected wavelengths are absorbed.

- ***Infrared Spectrometry (IR)***—IR is most suited for pure or relatively pure samples. A portion of the sample is placed in a beam of infrared light, and the wavelengths absorbed are recorded as a spectrum, which can be compared to standard reference spectra. This technique is very quick and straightforward but usually lacks a separation technique. If more than one compound is present in the sample, therefore, the spectra for each compound are superimposed over the others, making the results difficult to interpret.

Pesticides/Polychlorinated Biphenyls

Determining the presence of pesticides and PCBs is often separate from other organic compound analyses. Analyses for pesticides and PCBs are usually performed on a GC with an ECD or HECD detector. While a wide range of pesticides may be analyzed at one time, many of these methods focus on the 18 organochlorine pesticides on the original EPA priority pollutant list. Most of these have been banned from use in the United States.

PCB analysis is often a subset of pesticide analysis because the components of transformer oils and dielectric fluids may be determined using the same GC instruments and conditions. PCBs are usually found as mixtures called Aroclors, the trade name used by the manufacturer who distributed them in the United States. Aroclors are mixtures of a large number of individual PCBs and are classified by the weight percent of chlorine in the mixture. Most PCB methods address the seven most common Aroclor mixtures—Aroclors 1016, 1221, 1232, 1242, 1248, 1254, and 1260. Analyses may be performed for some of the 209 possible individual PCB congeners; however, this type of analysis is more difficult to interpret because the regulations are written on the basis of the Aroclor mixtures and there is no clear-cut approach to transform PCB congener results to an Aroclor concentration.

Herbicides

Although the most well-known chlorophenoxy acid herbicides are 2,4-D, 2,4,5-T, and Silvex, a wide range of herbicides may be analyzed using available EPA methods.

Identification/Compositional Analyses

Depending on the types of compounds present in the sample and their purity, the full range of analytical chemistry determinations may be required to identify all the "chemicals" present. Frequently, this may simply not be possible within the bounds of time and resources. Usually, complete compositional analysis is not necessary. The major components can often be identified by class, such as hydrocarbons, instead of as individual compounds, such as 2-methyl-3-ethyltoluene.

Asbestos

Bulk asbestos is determined by polarized light microscopy. The fibers in the sample are counted under a microscope. The percentage of asbestos fibers compared to the total number of fibers is necessarily an estimate and its accuracy depends on the experience and skills of the analyst.

Immunoassay Test Kits

Immunoassay is a relatively new analytical technique useful for separating, detecting, and quantifying both organic and inorganic analytes in diverse environmental and waste matrices. Immunoassay test products use an antibody molecule to detect and quantify a substance in a test sample. These testing products combine the specific binding characteristics of an antibody molecule with a detection chemistry that produces a measurable response used for interpretation. The basic technique has been used in medical testing for many years and environmental testing applications have been in use for almost a decade.

Immunoassay methods are used to produce two types of quantitative results:

- Range-finding or screening results indicative of compliance with an action level
- Assay values.

Commercially available testing products provide immunoassay protocols that are rapid, simple, and portable. These products can be used effectively in both laboratory and field settings and require limited training. These test products substantially increase the number of data points that can be generated within a given period and permit an operator to analyze a number of samples simultaneously within a relatively short period of time. Results are available immediately upon completion of the test and can assist in the onsite management of personnel and equipment, as well as the data management activities of the laboratory.

Immunoassay methods can provide quantitative data when configured with a series of reference standards that are analyzed and used to construct a standard curve. The signal generated from the analysis of a test sample is used to determine concentration by interpolation from the standard curve. Alternatively, these testing products can be configured to determine whether a sample is positive or negative relative to a single standard.

EPA OSW reviews and accepts individual immunoassay testing products for the detection of sample analytes in specified matrices. A variety of testing products, produced by several different developers, may be available for the same compound(s) and matrices. Each of these methods has been formulated using independently developed reagents that may result in significantly different performance characteristics and limitations.

Appendix B provides the immunoassay methods given in the 3rd Update to the Third Edition of SW-846.

As with any analytical effort, the choice of the most appropriate procedure will depend on the DQOs developed for the specific project. When employing immunoassays, the user should consider the following factors:

- The availability of immunoassays specific to the compounds of interest
- Whether the immunoassay will be used simply as a screening tool or as an assay
- The action level(s) associated with the compounds of interest, relative to the sensitivity of the immunoassay
- Whether the immunoassay will be supported by some percentage of confirmation analyses by other techniques (i.e., GC, GC/MS).

Appendix A

Required Versus Optional Use of SW-846 Testing Methods

Required Versus Optional Use of SW-846 Testing Methods

Certain hazardous waste regulations under Subtitle C of RCRA require that specific testing methods described in SW-846 be employed for certain applications. Any reliable analytical method may be used to meet other requirements in 40 CFR Part 260 through 270. The following list highlights a number of provisions contained in 40 CFR Parts 260 through 270 that require use of a specific method for a particular application or use of appropriate SW-846 methods in general:

- Section 260.22(d)(1)(i)—Submission of data in support of petitions to exclude a waste produced at a particular facility (i.e., delisting petitions)
- Section 261.22(a)(1) and (2)—Evaluation of a waste against the corrosivity characteristic
- Section 261.24(a)—Leaching procedure for evaluation of a waste against the toxicity characteristic
- Section 261.35(b)(2)(iii)(A)—Testing of rinsates from wood preserving cleaning processes
- Sections 264.190(a), 264.314(c), 265.190(a), and 265.314(d)—Evaluation of a waste to determine whether free liquid is a component of the waste
- Sections 264.1034(d)(1)(iii) and 265.1034(d)(1)(iii)—Testing of total organic concentration for monitoring compliance with air emission standards for process vents
- Sections 264.1063(d)(2) and 265.1063(d)(2)—Testing of total organic concentration for monitoring compliance with air emission standards for equipment leaks
- Section 266.106(a)—Analysis in support of compliance with standards to control metals emissions from burning hazardous waste in boilers and industrial furnaces
- Section 266.112(b)(1) and (2)(i)—Certain analyses in support of exclusion from the definition of a hazardous of a residue which was derived from burning hazardous waste in boilers and industrial furnaces
- Section 268.32(i)–Evaluation of a waste to determine whether it is a liquid for purposes of certain land disposal prohibitions
- Sections 268.40(a), (b) and (f), 268.41(a), and 268.43(a)—Leaching procedure for evaluation of waste extract to determine compliance with land disposal treatment standards
- Section 268.7(a)—Leaching procedure for evaluation of a waste to determine whether it is restricted from land disposal

- Sections 270.19(c)(1)(iii) and (iv) and 270.62(b)(2)(i)(C) and (D)—Analyses and approximate quantification of the hazardous constituents identified in the waste prior to a trial burn in support of an application for a hazardous waste incineration permit

- Sections 270.22(a)(2)(ii)(B) and 270.66(c)(2)(i) and (ii)—Analysis conducted in support of a destruction and removal efficiency trial burn waiver for boilers and industrial furnaces burning low-risk wastes and analysis and approximate quantification for a trial burn in support of an application for a permit to burn hazardous waste in a boiler and industrial furnace.

Appendix B

Immunoassay Methods

Immunoassay Methods

Method 4000 – Immunoassay (the "base" method for SW-846 immunoassay techniques that describes much of the theory and specifications common to the subsequent actual test methods)

Method 4010A – Screening for Pentachlorophenol by Immunoassay

Method 4015 – Screening for 2,4-Dichlorophenoxy Acetic Acid by Immunoassay

Method 4020 – Screening for Polychlorinated Biphenyls by Immunoassay

Method 4030 – Soil Screening for Petroleum Hydrocarbons by Immunoassay

Method 4035 – Screening for Polynuclear Aromatic Hydrocarbons in Soil by Immunoassay

Method 4040 – Soil Screening for Toxaphene by Immunoassay

Method 4041 – Soil Screening for Chlordane by Immunoassay

Method 4042 – Soil Screening for DDT by Immunoassay

Method 4050 – TNT Explosives in Water and Soils by Immunoassay

Method 4051 – Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) in Soil and Water by Immunoassay

Compliance Assistance

RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

12. COMPLIANCE ASSISTANCE

Module 12 Objectives

- **Understand EPA's compliance assistance program**
- **Discuss types of compliance assistance**
- **Identify national and local programs**
- **Understand the development process for compliance assistance activities**
- **Discuss measures of program success**

Notes:

Background

- **Reorganization of EPA enforcement program and creation of OECA**
- **Realization that traditional enforcement tools could not, in isolation, result in sustained compliance**
- **Determination to combine compliance assistance and promotion programs with the traditional enforcement and compliance monitoring programs**

Notes:

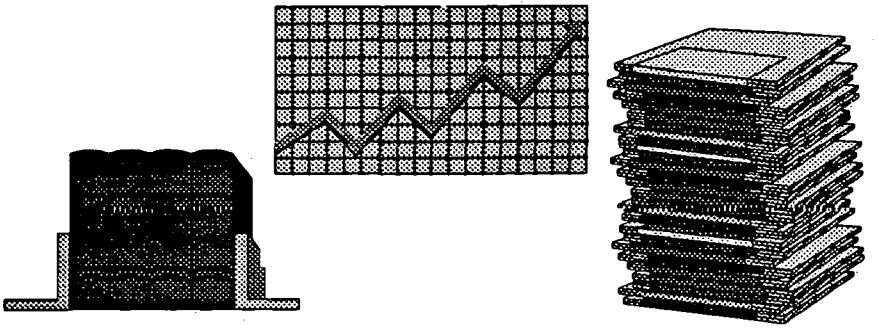
Components of Enforcement and Compliance Assurance Program

- **Compliance assistance**
- **Compliance monitoring**
- **Enforcement actions**

Notes:

Compliance Assistance Defined

Information or technical advice provided by EPA, states, or local governments to help regulated parties understand and comply with statutory and regulatory requirements.



Notes:

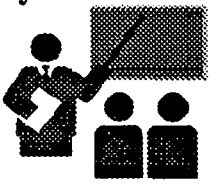
Types of Compliance Assistance

- **Outreach**
- **Response to inquiries**
- **Onsite assistance**

Notes:

Outreach

- **Is the most familiar type of compliance assistance**
- **Includes publications, training, seminars**
- **Targets both single-media program goals and specific industry sectors**



Notes:

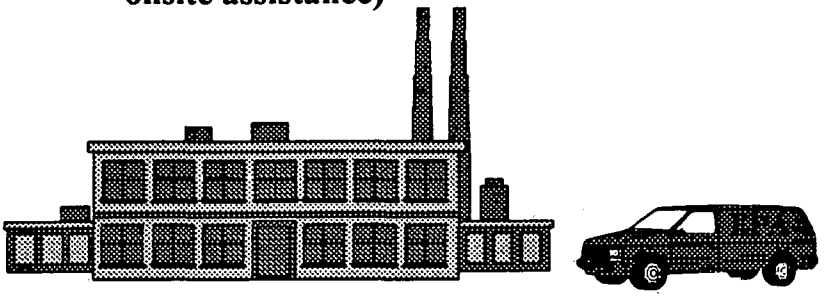
Response to Inquiries

- **Receive literally thousands of requests for assistance**
- **Track requests to target specific programs or sectors for compliance assistance**

Notes:

Onsite Assistance

- **Site visits by regulatory agency personnel**
- **Different than compliance inspections (although inspectors may be used to provide onsite assistance)**



Notes:

Nontraditional Compliance Assistance

- **May be used in addition to more traditional approaches**
- **Includes mentoring programs or other types of programs in which larger, more sophisticated companies assist smaller companies with compliance and environmental management issues**

Notes:

Current Status of Compliance Assistance

- **EPA is conducting detailed analyses to target specific programs/sectors for compliance assistance.**
- **The analysis focuses on various factors:**
  - **Noncompliance rates**
  - **Inspections conducted per sector**
  - **Inspections that lead to enforcement actions**
  - **Types and amounts of pollutants discharged.**

Notes:

Studies in Compliance Assistance

- **EPA, states, and local authorities are developing and implementing compliance assistance programs.**
- **Programs usually include some incentive to comply and often include correction periods in which to correct identified violations.**

Notes:

State/Local Programs

- **City of Santa Rosa (California)**
- **Tennessee Department of Environment and Conservation**
- **Washington State Department of Ecology**
- **Oregon Department of Environmental Quality**

Notes:

EPA Headquarters/Regional Programs

- **Compliance assistance centers**
- **Environmental auditing**
- **Clean Air Act Section 507 policy**
- **Environmental Leadership Program**

Notes:

EPA Headquarters/Regional Programs (Continued)

- **Common Sense Initiative**
- **Small business compliance incentives**
- **Small communities policy**

Notes:

Developing Compliance Assistance

- **Target specific industry sectors**
- **Establish partnerships/alliances**
- **Target compliance**
- **Develop compliance strategies**
- **Revise programs, as necessary**

Notes:

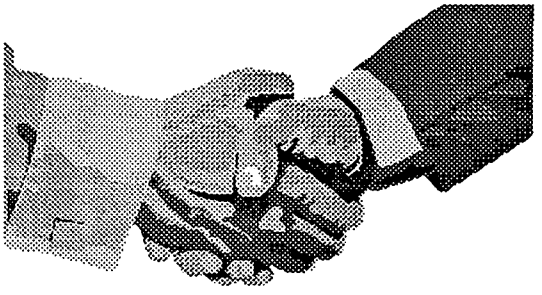
Developing Compliance Assistance (Continued)

- **Target specific industry sectors**
  - **Research general industry profile**
  - **Identify environmental problems and requirements**
  - **Identify EPA's enforcement priorities**
  - **Develop enforcement profile**
  - **Talk with stakeholders**
  - **Identify compliance assistance efforts to date**

Notes:

Developing Compliance Assistance (Continued)

- **Establish partnerships/alliances**
- **Target compliance problems, issues, and needs**



Notes:

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Developing Compliance Assistance (Continued)

- **Develop compliance strategies**
- **Revise programs as necessary**

Notes:

Measures of Success

- **EPA needs to develop some measurement tools to truly gauge the success of its compliance assistance efforts.**
- **EPA established a work group that developed five recommendations for a measures of success program.**

Notes:

Measures of Success Work Group Recommendations

- **Implement systematic reporting of environmental and programmatic impacts through use of the case conclusions data sheet**
- **Assure consistency in data definitions across all media programs**
- **Develop measures evaluating programmatic impacts**
- **Institute use of an enforcement authority index for a better balanced profile of Agency enforcement**
- **Expand scope of existing reporting measures to incorporate new Agency actions**

Notes:

Status of Measures of Success Program

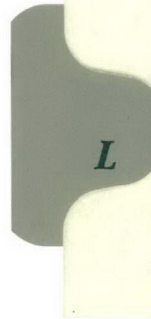
- **Several recommendations are currently being implemented and reviewed.**
- **EPA recognizes that the program will take extensive time and resources.**

Notes:

Next Steps

- **Coordinate with other enforcement offices**
- **Continue development of sector expertise**
- **Undertake pilots**
- **Continue to develop and test measures of success**
- **Develop a well-balanced approach and achieve the appropriate mix of enforcement actions and compliance monitoring**

Notes:



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RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

12. COMPLIANCE ASSISTANCE

Background Materials

12. COMPLIANCE ASSISTANCE

When reorganizing its enforcement and compliance program and creating the Office of Enforcement and Compliance Assurance (OECA), the U.S. Environmental Protection Agency (EPA) realized that the changes would affect all levels of its national enforcement program, including headquarters, the regions, and the states. EPA knew that the national program itself would need to be "reinvented." An integral part of reinventing the national program was recognizing that EPA's traditional enforcement tools—monitoring, administrative actions, criminal sanctions, and monetary penalties—could not, in isolation, lead to sustained compliance in the regulated community. After detailed analysis, Agency officials determined that EPA needed to combine compliance assistance and promotion programs with the traditional aspects of compliance monitoring and enforcement. The heart of EPA's national enforcement program now comprises the following components:

- **Compliance assistance**—Activities designed to assist the regulated community and encourage voluntary compliance with regulations

- **Compliance monitoring**—Activities designed to provide information on the compliance status of the regulated community

- **Enforcement actions**—Powerful sanctions designed to compel compliance by the regulated community.

Specifically, the compliance assistance component addresses the need to re-examine the Agency's approach to the regulated community and enforcement and to begin taking a holistic, multimedia view of the process of achieving compliance and addressing environmental problems on a sector-wide and ecosystem basis. The mission of OECA's Office of Compliance (OC) is to implement this concept.

Rather than maintain the traditional media-specific organizational structure, OC is structured along industry and economic sector lines. By focusing on sectors of the economy, as defined by Standard Industrial Classification codes, OC can identify and address significant environmental problems at the process levels rather than at the end-of-pipe or stack. The result is an office that is more strategic and less reactive. Currently, OC is directing most of its effort toward the development of programs that help industries comply. This module, therefore, focuses on such compliance assistance.

12.1 COMPLIANCE ASSISTANCE DEFINED

EPA defines compliance assistance as information or technical advice provided by EPA, states, or local governments to help regulated parties understand and comply with statutory and regulatory requirements. While participation in compliance assistance activities is voluntary on the part of the regulated entity, it should not be confused with other voluntary Agency efforts or programs, such as 33/50 (voluntary emissions reductions by certain percentages by a certain time), Green Lights (voluntary programs to reduce greenhouse gases), and Design for the Environment (program with industry to identify and address problematic process areas). These programs are intended to achieve environmental objectives that are **not** enforceable under Federal

law; compliance assistance is intended to achieve compliance with enforceable laws. Currently, EPA conducts three types of compliance assistance activities:

- Outreach
- Response to inquiries
- Onsite assistance.

Outreach is probably the most familiar type of compliance assistance conducted by the Agency. It includes publications, training, seminars, and other types of public efforts that inform the regulated community and the public of specific requirements. Technical assistance to the regulated community is also considered compliance assistance because its ultimate goal is to achieve compliance. In today's world of technology and cyberspace, EPA can expand its outreach efforts through electronic bulletin boards and CD-ROM interactive software, as well as through the Internet.

Traditionally, compliance assistance has been structured around single-media program goals. However, the Agency expects to complement its existing single-media efforts by developing and supporting multimedia information and technical assistance services to specific industry sectors, such as the dry cleaning and printing sectors. These types of efforts will address the need to provide clear and consistent information to members of the regulated community who face multiple requirements, specifically members who are too small to develop in-house regulatory expertise. The Great Printers Project, which is supported by a coalition of industry, environmental groups, EPA, and states, is a perfect example of such an approach.

Response to inquiries is another method of compliance assistance. EPA, state, and local agencies routinely receive thousands of requests every day for help interpreting specific regulations or determining the applicability of those regulations to a specific entity. EPA responds to these requests in a number of ways, ranging from hotlines to informal responses prepared and distributed by program and regional staff. Frequently, these inquiries provide the basis for the outreach activities. If the Agency receives numerous questions on a specific subject, it may indicate the need for a formal outreach program.

EPA, state, and local staff often find it useful to visit facilities to explain new requirements and offer guidance regarding cost-effective compliance technologies. This **onsite assistance** approach can be an efficient way to familiarize the regulated community and Agency staff with the practical applications of new requirements and to heighten awareness of the specific requirements. Onsite assistance efforts are sometimes undertaken by technical assistance programs that are managed by separate agencies (e.g., the Massachusetts Toxics Use Reduction Institute). Or, the **role of the inspector** may be to provide onsite assistance. EPA and state inspectors often possess the practical knowledge of regulatory requirements and industrial operations that enable them to provide assistance.

However, it is imperative that inspectors not forget their primary responsibility while onsite, which is to detect violations and any actual or potential harm. In general, it is most appropriate for inspectors to offer compliance assistance either to large groups or to individual facilities as part of a targeted effort to reach a specific business sector. It is least appropriate when an inspector is conducting a compliance inspection after a violation has already been identified.

Currently, the role of the inspector is the subject of several Agency workgroups. These workgroups are trying to address the inconsistencies between an inspector wearing a compliance hat and an enforcement hat.

Many inspectors already participate in seminars, training, and other activities designed for a wide audience, rather than individual facilities. Such activities provide an important service to the regulated community and generally present no controversy. Some states even assign inspectors to visit facilities within a targeted industry to explain regulatory requirements and offer technical advice regarding compliance. Potential violations discovered during these visits are usually not referred for enforcement action unless they present significant hazards or are criminal violations. Rather, businesses are allowed some opportunity to correct the problem with the understanding that continued noncompliance would trigger future enforcement. These types of efforts reflect a conscious decision to temporarily refrain from taking enforcement actions to allow targeted industries to better understand regulatory requirements and demonstrate a commitment to compliance.

State initiatives to provide onsite assistance can be distinguished from compliance inspections because their primary purpose is to inform and motivate businesses to comply, rather than to document potential violations for subsequent enforcement action. To avoid confusion, inspectors should take part in compliance assistance efforts only when they are part of a predetermined strategy to reach a particular sector of the regulation community. These types of consultations should also avoid shielding a facility from future enforcement actions for violations that have not been corrected, as described in the next paragraph.

As a general rule, inspectors conducting a compliance inspection are not expected to offer specific advice that might offer the facility a defense against enforcement actions brought by EPA. Inspectors may refer facility representatives to other neutral sources of advice that may be useful in returning a facility to compliance, however. The *1993 RCRA Inspection Manual* contains further discussion on this topic.

In addition to these traditional compliance assistance activities, there is a recent move toward nontraditional compliance assistance, such as mentoring programs and other programs in which larger industries help smaller industries in the same sector with compliance. For example, the John Roberts Company, a small lithographic printing company that was selected for EPA's Environmental Leadership Program (ELP), is developing a mentoring program in which larger, more sophisticated companies develop model training programs to help smaller businesses both achieve and stay in compliance while also remaining competitive. Other companies involved in the ELP, including Motorola and Ocean State Power, are developing similar mentoring programs. A fourth ELP facility, Simpson Tacoma Kraft Company, is proposing implementation of an "Adopt a Supplier" technical exchange program. While not focusing on businesses in its same sector, Simpson will be sharing its environmental and regulatory expertise with smaller, less sophisticated companies. For more information on the ELP, see Section 2.2.4 of this module.

12.2 STUDIES IN COMPLIANCE ASSISTANCE

The Agency believes that the most effective and efficient method to assuring compliance is for the regulated community to comply voluntarily. For this to occur, the regulated community

must understand the full spectrum of regulations and share information about new or existing technologies. Of the different entities (e.g., EPA, states, local authorities, or governments) developing compliance assistance programs, the concept of their programs appear to be similar in scope. For example, several of the current programs offer some type of immunity from enforcement action if compliance assistance is requested, or grace periods in which to correct violations are granted if the facility seeks assistance from the regulatory agency or penalty reductions. The following sections detail some of the various types of compliance programs that are currently in use at both the state/local and federal levels.

12.2.1 Role of State and Local Governments

As indicated in EPA's definition, State and local governments play a critical role in compliance assistance. This is appropriate because they have responsibilities for implementing federal compliance and enforcement programs. Generally, state and local compliance assistance initiatives are offered as part of overall Agency programs and may be partially supported by EPA media grants. The following sections describe four state or local compliance assistance programs.

City of Santa Rosa (California)

The City of Santa Rosa, California, Utilities Department, Industrial Waste Section, sponsors the Sonoma Green Business Compliance Incentive Program, which is a compliance assistance program aimed at improving compliance with environmental regulations by providing compliance and technical assistance and positive incentives to business. The program was originally designed to reduce inflow of organic solvents to Santa Rosa's wastewater reclamation plant from its largest hazardous waste-producing industry—vehicle services.

Prior to program implementation, inspectors for the wastewater treatment plant were responsible for monitoring discharges and issuing citations to halt illegal discharges. This added to the confusion and frustration on the part of vehicle service owners, who already believed the regulations and requirements were unclear and often conflicting. The Compliance Incentive Program was designed to reduce the frustration and help the owners comply with the requirements by providing technical assistance, multimedia regulatory streamlining, and public recognition and awareness. Every facility that participates in the program receives a sticker certifying it is a Sonoma Green Business and is in full compliance.

When a business signs up for the program, it receives an information package containing the following items:

- Details on the program
- Best management practices from all environmental media for automotive service/repair shops
- Vehicle service facility checklist that is a self-inspection checklist based on the requirements of all environmental regulatory agencies

- Vendor list for equipment and services that could help the facility comply

- Answers to the six most frequently asked questions.

Participating shops are inspected by the city's industrial waste inspectors or inspectors from other environmental agencies trained to make the multimedia inspection required by the program. If the shops are in compliance, they receive the sticker. If not, depending on the Enforcement Response Policy, a shop may be given a grace period in which to correct the violation. Compliance by auto shops was essentially nonexistent prior to the program but is now significantly higher.

Tennessee Department of Environment and Conservation

In 1993, the Tennessee Department of Environment and Conservation implemented its Underground Storage Tank (UST) Compliance Inspection Program. The goal of the program is to provide compliance assistance via voluntary inspections at UST facilities. This program grew out of the need to inspect a large number of tanks at a variety of facilities across a large geographic area with limited manpower and dollars. (There are nearly 6,000 tank owners in Tennessee.) The concept is to sign up UST owners and have them participate in voluntary inspections at their facilities (or a subset of their facilities) and then apply what they learned in the inspections to other facilities they own.

Tank owners who volunteer for the program receive inspections by the regulator. After each inspection, owners are made aware of the violations identified and then must correct those violations at the inspected facility, as well as at any other facility they own, if applicable. The owners then are responsible for ensuring that the rest of their facilities are in compliance. The typical grace period for correcting violations is 30 days. In the first year of the program, 500 compliance inspections were conducted. Of the 500 facilities inspected, only 4 were not in full compliance within the 30-day time frame.

Washington State Department of Ecology

In January 1992, the Washington State Department of Ecology (DOE) initiated its "Shop Sweeps" Automotive Campaign. The campaign has three goals:

- **Education**—To better educate DOE and local government on the complexities of day-to-day management of automotive hazardous wastes

- **Compliance**—To help the automotive repair industry understand and voluntarily comply with hazardous waste requirements

- **Pollution prevention**—To promote waste reduction and recycling as a compliance and environmental quality tool.

The campaign grew out of a partnership between industry and government, in which DOE approached automotive trade associations with the concept of providing fair and efficient compliance assistance in exchange for increased compliance and cooperation. The goal is to

conduct numerous onsite shop visits that are short and basic and to disseminate easy-to-read educational materials targeted to a variety of auto shop specialty services. The campaign targets small- to medium-sized businesses.

Currently, the program does not have a compliance component (i.e., the inspectors do not determine compliance). Individual shops decide whether to voluntarily work toward achieving compliance. Inspectors do not write up potential violations or issue notices of violations (NOVs) or citations. They do, however, leave the facility with a "to do" list that would improve their waste management, recycling, and reduction. For participating facilities, there is no guarantee that a normal hazardous waste inspection will not be conducted at another time.

In the first year and a half of the program, more than 1,400 shops were visited. Literally thousands more received mailings of educational materials and outreach via industry associations and DOE. To gauge the success of the program, DOE conducted followup visits to 5 percent of the shops (85 shops). Of those 85, 82 percent had complied with at least one recommendation made by the inspector, and 15 percent of the remaining facilities had tried or were in the process of complying with at least one recommendation. Of the original shop sweep recommendations, shops complied with 61 percent of the recommendations, attempted to comply with 25 percent of the recommendations, and made no attempt to comply with the other 14 percent.

Oregon Department of Environmental Quality

Based on a law passed by the Oregon legislature in 1991, the Oregon Department of Environmental Quality (DEQ) established a small business technical assistance program. The goal of the program is to increase compliance rates with hazardous waste management standards by providing information to smaller businesses on regulatory requirements and to assist those businesses in achieving compliance. The program is aimed at conditionally exempt generators of hazardous waste and other generators with fewer than 50 employees. To date, the program has had two somewhat distinct modes of operation: 1) a standard program in which DEQ staff respond to requests for compliance assistance and 2) a "blitz" involving more aggressive outreach but more limited assistance to each facility.

In the first mode, if businesses contact DEQ and request assistance, a site visit is conducted. This site visit includes the same components of a compliance inspection, but citations are not issued for identified violations (except for violations that pose "clear and immediate danger"). Instead, the person who conducted the site visit and the facility negotiate a compliance schedule, and the facility is required to notify DEQ when it has corrected the violations. Small Business Technical Assistance staff document all instances of noncompliance and incorporate them into an environmental management assessment (EMA), which is included in the regional hazardous waste program files. The EMA is similar to a notice of noncompliance, but does not carry with it the followup enforcement action. The blitz approach, rather than waiting for facilities to contact DEQ, includes sending letters, followed by telephone calls, offering compliance assistance to all small quantity generators, conditionally exempt generators, and approximately 100 unregistered businesses. During 3 months in 1994, 470 facilities received compliance assistance visits. These visits were basically similar to those noted previously, but the visits and preparation were far less intensive.

Under both program modes, a key component is the development and use of user friendly regulatory guides, fact sheets, and handbooks that are given to facility representatives. No formal statistics are currently available on the program success at increasing compliance rates.

12.2.2 Role of Headquarters and Regions

EPA headquarters and regions are currently directing significant effort toward the development of programs that assist industries of all sizes with compliance. As noted earlier, states and local governments are intimately involved in compliance assistance because of their day-to-day interactions with facilities. But headquarters and the regions develop the policies and procedures to facilitate compliance assistance. Headquarters and the regions also develop and implement national programs, which include the state and local programs. The Agency is developing and implementing several compliance assistance programs nationally. The following sections discuss some of these activities.

Compliance Assistance Centers

The Office of Compliance, in partnership with industry, academia, environmental groups, and other federal and state agencies, is proposing to develop four compliance assistance service centers. The assistance centers would provide a "one-stop shopping" for the targeted sectors (i.e., printing, metal finishing, auto repair, and small farms) and would distribute prepared materials consolidating information about compliance requirements, pollution prevention, and technical assistance resources. Such materials are available for use by state assistance programs, trade associations, and individual companies. The centers would also network with Small Business Development Centers, provide InterNet access, and distribute toll-free telephone numbers. In addition, technical assistance and training would be available on applicable treatment technologies.

Environmental Auditing

EPA is facing a double challenge in environmental auditing. On one hand, EPA is looking to develop incentives to encourage self-auditing and self-policing. On the other hand, the Agency does not want to totally forsake its ability to penalize non-compliers, who may be experiencing economic benefits as a result of noncompliance. The Agency's existing auditing policy, released in 1986, addresses the importance of audits and their role in compliance. However, the policy does not provide incentives to conduct self-audits, because the results would not necessarily be off limits to the Agency, which could then rely on the audit to take an enforcement action. In April 1995, therefore, EPA released a revised auditing policy in the *Federal Register* (60 *FR* 16875). This interim policy provides incentives to regulated entities to conduct voluntary compliance evaluations and to disclose and correct violations. The interim policy includes incentives, such as eliminating or substantially reducing the gravity component for civil penalties and not referring cases for criminal prosecution if specified conditions are met. The interim policy also provides that EPA will not request voluntary audit reports to trigger enforcement investigations. The interim policy is effective 15 days after publication.

Clean Air Act Section 507 Policy

Another example of EPA's emphasis on assistance is reflected in its development of the Clean Air Act Section 507 enforcement policy. Section 507 requires each state to establish a program designed to assist small businesses meet their obligations under the law. The enforcement policy was issued in response to state concerns that small businesses would not seek assistance if violations discovered during their participation resulted in enforcement actions. The policy encourages small businesses to participate by offering states with delegated enforcement authority two options:

- **Limited correction period**—Small business assistance programs can provide businesses that receive compliance assistance a limited correction period of up to 90 days for violations detected during the program, with the possibility of an additional 90-day extension. Any violations remaining after the limited correction period are subject to existing enforcement response policies.

- **Confidentiality**—Instead of providing a limited correction period, certain small business assistance programs may guarantee that information identifying participating businesses where violations were detected will be kept confidential. This confidentiality requirement does not apply to any violations discovered independent of the Section 507 program. Also, this confidentiality option can only be offered if the program is operated independent of the states delegated regulatory enforcement program.

Environmental Leadership Program

The Environmental Leadership Program is currently being piloted by EPA to recognize companies willing to develop innovative approaches to establishing accountability for compliance with existing standards in environmental laws. In April 1995, EPA announced the selection of 12 pilot projects at industrial facilities and federal installations that have volunteered to test the design of the following specific elements of the ELP:

- Advancing the design of sophisticated environmental management systems

- Incorporating multimedia compliance assurance into facility management

- Using third-party verification to provide assurance of performance and self-certification for reporting

- Implementing public measures of accountability

- Involving the community in setting goals and reviewing results

- Implementing mentoring programs to help small businesses find cost-effective ways to comply with the law.

In return for participating, pilot participants will receive public recognition and a limited period in which to correct any violations discovered during the experimental projects, as long as

the violations are not criminal in nature and do not present an imminent and substantial endangerment to the public health or environment.

EPA is developing the ELP in cooperation with state agencies, which have participated in the review and selection of participants. EPA expects the pilot phase to last approximately 12 months, during which time EPA and its public and private partners will test the key concepts and evaluate results. Following completion of the pilots, EPA will refine the program and make its benefits broadly available to those willing to meet its criteria.

Common Sense Initiative

Another example of a sector-based outreach initiative is the EPA-wide Common Sense Initiative (CSI). In July 1994, EPA Administrator Carol Browner announced the CSI as her cornerstone sector-based initiative. Six industrial sectors were selected to participate:

- Iron and steel
- Electronics and computers
- Metal plating and finishing
- Auto assembly
- Petroleum refining
- Printing.

For each of these sectors, EPA is convening a high-level team comprising industry executives, environmental leaders, government officials, and labor and environmental justice representatives to explore opportunities for making environmental regulation more effective and efficient. Decisions are reached by consensus only. These teams will be looking at six key elements affecting their sector:

- Promoting pollution prevention opportunities
- Conducting regulatory reviews
- Undertaking innovative compliance assistance and enforcement initiatives
- Simplifying and improving reporting and recordkeeping requirements
- Implementing permit streamlining opportunities
- Promoting innovative environmental technologies.

Currently, the teams are establishing pilot projects to test some concepts and ideas.

Small Business Incentive Policy

EPA's Interim Policy on Compliance Incentives for Small Business is intended to promote environmental compliance among small businesses by providing incentives for participating in compliance assistance programs and promptly correcting violations. The policy is one of the 25 regulatory reform initiatives announced by President Clinton. The policy establishes how EPA expects to exercise its enforcement discretion in deciding on an appropriate enforcement response and determining an appropriate civil penalty for violations by small businesses. For the purposes of this policy, a small business is defined as a person, corporation, partnership, or other entity who employs 100 or fewer individuals (on a company-wide basis).

Under the policy, EPA will eliminate or reduce a civil penalty based on the following criteria:

- The small business has made a good faith effort to comply with applicable environmental requirements.
- The business was not subject to a previous enforcement action (e.g., warning letter, NOV) for violations of that requirement in the past 5 years and has not been subject to multiple enforcement actions for violations of environmental requirements.
- The violation does not involve criminal conduct.
- The business corrects the violation and remedies any harm associated with the violations within 6 months of discovery.

Penalties may be mitigated based on the following guidelines:

- If a small business satisfies all of the criteria, EPA will eliminate the entire civil penalty.
- If a small business has not met all the criteria, except it needs a longer correction period, EPA will waive up to 100 percent of the gravity component of the penalty, but may seek the full amount of any economic benefit associated with the violations.
- If a small business has not met all the criteria, but has otherwise made a good faith effort to comply, EPA will exercise its discretion not to file an enforcement action seeking civil penalties or to mitigate its demand for penalties to the maximum extent appropriate.

This policy does not apply if the violation 1) has caused actual serious harm to public health, safety, or the environment, 2) may present an imminent and substantial endangerment to public health or the environment, or 3) presents a significant health, safety, or environmental threat.

Compliance Incentives for Small Communities

EPA is currently exploring the possibility of a policy to express its support for state use of enforcement flexibility to provide compliance incentives for small communities. The preliminary concept for such a policy would enable states and small communities to negotiate enforceable compliance agreements and schedules that allow the community to prioritize among competing environmental mandates. In addition, EPA would assure that states have the appropriate discretion to waive all or part of the penalty for a small community's violations where the community had made good faith efforts to comply and the violations do not involve criminal wrongdoing. In cases where small community environmental noncompliance was being addressed by state compliance assistance, EPA would not pursue a separate federal civil action for penalties or additional injunctive relief.

EPA intends that such a policy would only apply to small communities unable to satisfy all applicable environmental mandates without state compliance assistance. Such communities would be nonprofit governmental agencies that are owners or operators of facilities that supply municipal services to residents. EPA does not expect the population of potential small communities to exceed 2,500.

Other Tools

The Office of Compliance has developed numerous tools to aid in developing the compliance assistance process. These tools can loosely be divided into two broad categories: 1) inspection guidance and inspector training programs and 2) sector and data analysis. Inspection guidance and inspection training programs are used to direct utilization of resources to reflect new priorities and attitudes regarding environmental protection. For example, during fiscal years 1995/1996, the Office of Compliance will shift resources away from single media training development and instruction and focus instead on multimedia inspection guidance and training. This shift has been prompted by resource constraints and the understanding that exposing inspectors to a full range of regulatory requirements affecting a given facility or industry will reduce the redundancy built into multiple, single media inspections and will enhance "whole-facility" solutions to compliance problems.

The second major category of enforcement tools are sector and data analyses. Data analysis provides a basis for new planning and targeting efforts, as well as for program evaluation. Current initiatives in improving sector and data analyses include developing sector profiles and sector compliance strategies, re-evaluating measures of success, and improving public data accessibility.

The sector profiles initiative involves compiling profiles of 18 major industrial sectors. These profiles provide information regarding process descriptions, multimedia regulatory requirements, historical enforcement data, pollutant release information, current public and private sector initiatives, and pollution prevention opportunities. The development of sector compliance strategies allows the Office of Compliance to assess the most efficient mix of compliance and enforcement activities for each industrial sector. Such activities may include the appropriate state/federal role in outreach, compliance, and inspection priorities; enforcement actions; and targeted initiatives. The profiles acknowledge that the regulators have to better understand the regulated community to be effective regulators, enforcers, and providers of compliance assistance.

After acquiring compliance information on a specific sector, EPA can formulate a compliance strategy. The particular characteristics of the sector will dictate the strategy EPA develops to begin the process of compliance assistance and, ultimately, compliance achievement. For instance, the strategy established for the printing sector, which comprises numerous small facilities, would differ from a strategy targeted at a computer microchip manufacturer. The smaller facilities would be more appropriate for personal contact and focused outreach materials. Larger, more sophisticated facilities may be more appropriate for generalized outreach efforts (e.g., mailings, electronic bulletin boards).

The Office of Compliance has also revised measures used by EPA to evaluate the effectiveness of enforcement and compliance assurance programs. The recommended revisions

include changes to ensure consistency in data definitions across media programs, newly defined programmatic impact and directional definitions, and systemic reporting methods. The office has also developed a pilot program to promote public utilization of compliance data to foster greater understanding and awareness of the environmental programs that affect their community.

12.3 COMPLIANCE ASSISTANCE DEVELOPMENT

Developing compliance assistance programs is a multistep process that requires significant information about specific industry sectors and the associated individual industries. A normal compliance assistance development process would likely include the following steps:

- Targeting the sector
- Establishing partnerships/alliances
- Identifying and targeting compliance problems, issues, and needs
- Developing and implementing a compliance strategy
- Revising the program, as necessary, based on pilots and testing.

The activities conducted under the first step, targeting the sector, go a long way toward satisfying the requirements of the latter four steps. Targeting the sector is a process within a process and includes the following sub-steps:

- Researching general industry profiles
- Identifying environmental problems and requirements
- Identifying EPA's enforcement priorities
- Developing an enforcement profile using data bases and information contained at the state and local levels
- Communicating with stakeholders
- Identifying compliance assistance efforts to date.

Along these lines, EPA is conducting extensive analyses of industry sector compliance, focusing specifically on such factors as:

- **Noncompliance rates**—EPA is developing tracking systems and programs to measure the compliance rate of entire industry sectors. This compliance rate will be one of the drivers for determining which sectors are the most in need of compliance assistance.

- **Average number of inspections conducted per sector**—In numerous industries, including petroleum refining, organic chemicals, and iron and steel, inspections are conducted at virtually all facilities annually across the media programs (i.e., not **all** media programs inspect annually, but at least one program inspects each year). In other sectors, such as dry cleaning, printing, rubber, and plastics, inspections only occur once every 7 to 10 years.

- **Percent of inspections conducted that led to an enforcement action**—Not all inspections lead to enforcement actions. A factor to consider is the percentage of inspections that actually result in an enforcement action. For example, 32 inspections are conducted per every enforcement action taken in the nonmetal mining sector (or, 3% of inspections result in an enforcement action). In contrast, only 6 inspections are conducted per every enforcement action taken against petroleum refineries (or, 17% of all inspections lead to an enforcement action). As the percentage increases, so does the perceived need for compliance assistance.

- **Types of pollutants discharged into the environment**—The type of pollutant discharged also plays a role in targeting the sectors for compliance assistance. Sectors that discharge highly toxic pollutants, or that discharge large quantities of any pollutants, are more likely to receive attention than sectors that discharge less toxic or small quantities of wastes.

Several of these steps may be included in an activity similar to the sector notebooks currently being prepared by the Office of Compliance and discussed in Section 12.2 of this module.

EPA data bases and other sources of information can be used to determine the enforcement profile of the sector. For example, using IDEA or other enforcement/compliance-related data bases, EPA can determine the overall compliance rate for all facilities within a specific sector. Obviously, a sector with poor compliance rates would be a prime candidate for compliance assistance. Information maintained at the state and local levels can further confirm the results of the data analysis. Because several of EPA's regulatory responsibilities are carried out at these levels, state and local levels may have the majority of the information regarding compliance and enforcement activities.

Another step is to establish partnerships/alliances with stakeholders, including the industry itself, trade associations, environmental groups, and other interested parties, such as the public. When forces band together, it strengthens the program and usually results in greater participation. In the past, federal agencies have viewed some of these groups as enemies and have intentionally excluded them from the process. Everyone is starting to understand the value of stakeholder participation, however. In addition, when it comes to providing compliance assistance, several of these stakeholders, such as trade associations, have already established relationships with the sector industries and, therefore, have already established lines of communication.

EPA is currently analyzing several factors—noncompliance rates, average number of inspections conducted per sector, percent of inspections conducted that led to an enforcement action, and types of pollutants discharged into the environment—that should be considered when attempting to target a sector for compliance assistance.

Another part of the process is developing and implementing compliance strategies. These compliance strategies will include EPA's efforts to create the appropriate mix of compliance and enforcement activities, including issues like inspection priorities, regional/state roles, and use of enforcement actions/targeted initiatives. The mix will be based on strong analysis of the sector profiles, national priorities, and other data sources.

12.4 MEASURING SUCCESS OF COMPLIANCE ASSISTANCE

As noted throughout this module, EPA is now devoting significant time and resources to compliance assistance. To truly gauge the effectiveness of its compliance assistance efforts, EPA needs to develop a system for measuring success. Because compliance assistance is a new concept, there is minimal existing baseline data from which to start measuring effectiveness, especially for small businesses. To address this concern, OECA formed a workgroup in 1994 to review and revise the measures that EPA currently uses to evaluate the effectiveness of its enforcement and compliance assurance programs. In August 1994, the workgroup released several comprehensive recommendations:

- **Implement systematic reporting of environmental and programmatic impacts through use of the case conclusion data sheet**—Develop a data sheet that should 1) be used for consistent reporting of quantitative and qualitative results on administrative and judicial actions, 2) pilot the data sheet in two regions, and 3) based on review of pilot results, implement the system nationally in late 1995.

- **Assure consistency in data definitions across media programs**—Revise program policies and data definitions to consistently measure accomplishments and outputs in all program areas, placing specific emphasis on measuring facility compliance rates.

- **Develop measures evaluating programmatic impacts**—Adopt a new measure to evaluate reductions in pollutant emissions or discharge loadings resulting from compliance and enforcement activities.

- **Institute use of an enforcement authority index for a better balanced profile of Agency enforcement**—Enhance measurement of enforcement activity by highlighting both initiated and concluded actions.

- **Expand scope of existing reporting measures to incorporate new Agency directions**—Incorporate multimedia, sector, place-based, and environmental justice themes into existing reporting measures.

Several of these recommendations are currently being implemented and reviewed by staff both within OECA and in other Agency offices. EPA personnel recognize that to accurately gauge the success of its compliance assistance efforts, time and resources need to be allocated to track data that has not been tracked previously. This could result in a significant time lag before a statistically valid evaluation of the activities can be made.

12.5 NEXT STEPS

To date, EPA has made tremendous strides in its efforts to develop and implement compliance assistance programs. The momentum provided by the reorganization and the recent program successes must be maintained. Specifically, the Agency must take the following steps:

- Get "buy-in" from other enforcement offices and convince them of the merits of conducting compliance assistance

- Continue to develop sector expertise and an understanding of the regulated communities
- Continue to undertake pilot programs and test different approaches in the field
- Continue to develop, test, and implement measures of success that will provide statistically valid data on the success of compliance assistance programs
- Develop a well-balanced approach to compliance assistance, combining it with enforcement actions and compliance monitoring, to best protect human health and the environment.

The Agency components of compliance assistance discussed in this module are fresh and exciting. The personnel developing and implementing such programs are now responsible for taking these next steps to continue the trend toward compliance assistance.

Civil Penalties

RCRA PRACTITIONERS ENFORCEMENT WORKSHOP

13. CIVIL PENALTIES UNDER RCRA

Background Materials

EPA

13. CIVIL PENALTIES UNDER RCRA

The Resource Conservation and Recovery Act (RCRA) authorizes the use of civil penalties to enforce the hazardous waste requirements imposed under the Act through several provisions. Section 3008(g) of RCRA, 42 U.S.C. Section 6928(g), provides that:

> Any person who violates any requirement of this subchapter shall be liable to the United States for a civil penalty in an amount not to exceed $25,000 for each such violation. Each day of such violation shall, for purposes of this subsection, constitute a separate violation.

In addition, Sections 3008, 7003, and 3013 provide additional civil penalty authority.[1]

Section 3008(a) of RCRA authorizes the U.S. Environmental Protection Agency (EPA) Administrator to issue an administrative order assessing a civil penalty for any violation of Subtitle C (Hazardous Waste Management) of RCRA and provides:

> In assessing such a penalty, the Administrator shall take into account the *seriousness of the violation* and any *good faith efforts to comply* with applicable requirements.

EPA's RCRA Civil Penalty Policy (RCPP) incorporates these provisions.

13.1 RCRA CIVIL PENALTY POLICY (OSWER DIRECTIVE 9900.1A)

EPA issued the original RCRA Civil Penalty Policy on May 8, 1984. The Agency supplemented this policy by issuing a guidance document applying the 1984 Civil Penalty Policy to Loss of Interim Status (LOIS) cases on November 16, 1987, and revised the RCPP on October 29, 1990. The 1990 RCPP supersedes the 1984 RCPP and the LOIS guidance. The 1990 RCPP does not apply to Subtitle I (Underground Storage Tank) cases, however, which are addressed by a separate policy issued in November 1990.

The RCPP is intended to:

- Promote penalties sufficient to deter RCRA violations
- Eliminate economic incentives for noncompliance
- Ensure that RCRA civil penalties are fair and consistent
- Ensure that penalties are appropriate for the gravity of the offense
- Promote expeditious and continuing compliance
- Promote documentation of the basis for civil penalties.

1. Section 3008(h) provides civil penalty authority where a person fails to comply with an interim status corrective action order (not to exceed $25,000 for each day of noncompliance). Section 7003(b) provides penalty authority where a person fails to comply with a Section 7003 imminent hazard order (not more than $5,000 for each day of violation). Section 3013 provides authority where a person fails to comply with a Section 3013 order requiring monitoring, analysis, testing, or reporting (not to exceed $5,000 for each day of violation).

One purpose of the RCPP is to increase compliance with federal hazardous waste rules by assuring that significant monetary penalties are assessed for violations and that defendants are deprived of the economic benefits of noncompliance. The policy institutes provisions to ensure that a penalty is tied to the length of noncompliance by requiring multiday penalties for most major, continuing violations. The recovery of profits gained as a proximate result of unlawful activity is authorized in certain circumstances.[2] In addition, the RCPP imposes documentation requirements that must be followed, in accordance with the August 9, 1990, memorandum from James Strock, entitled, Documenting Penalty Calculations and Justifications in EPA Enforcement Actions.

The RCPP is also intended to enhance the deterrent effect of RCRA by increasing the amount of penalties obtained for RCRA violations. EPA's RCRA Implementation Study, issued in July 1990, determined that the sanctions imposed under RCRA program had not created a sufficiently strong deterrent effect and recommended the Agency seek higher penalties in administrative and judicial cases. EPA's administrative practices, including those under RCRA, have previously been the subject of critical reports by EPA's Office of Inspector General.

13.1.1 Applicability of the RCRA Civil Penalty Policy

The RCPP is to be used to calculate penalties:

- Sought in all RCRA administrative complaints (and subsequent litigation)
- Accepted in settlement of both administrative and judicial enforcement actions.

The RCPP applies to all cases filed after its effective date (10/29/90) and, to "the maximum extent practicable," to the settlement of cases instituted but not resolved before the effective date of the policy. As previously noted, the RCPP does not apply to Subtitle I cases.

The RCPP does not address whether assessment of a civil penalty is the appropriate enforcement response to a particular violation. Rather, it focuses on determining the proper civil penalty amount once a decision has been made to assess a civil penalty. Guidance on when to assess administrative penalties is set forth in the RCRA Enforcement Response Policy (12/21/87), which provides a general framework for identifying violations and violators of concern and guidance on selecting the appropriate enforcement action in response to categories of RCRA violations.

The policy does not limit the amounts that can be sought in civil judicial enforcement actions under RCRA Section 3008. In such cases, the government will, in its discretion, continue to file complaints requesting up to the statutory maximum civil penalty amount and to litigate for the maximum amount justifiable given the facts of the case.

2. The recovery of profits is appropriate where the profits result from unlawful activity. However, it is not appropriate where such profits are earned as a result of lawful activity or where they are attributable to delayed or avoided costs already accounted for in the economic benefit calculation.

A number of administrative decisions under Section 3008(a) have held that the RCPP is not a regulation and is not binding on the Presiding Officer, the Administrator, or his/her delegate, the Judicial Officer (see *In the Matter of Elwin G. Smith, Cyclops Corporation*, RCRA Appeal No. 86-6 (August 14, 1990); *In re A.Y. McDonald Industries, Inc.*, RCRA (3008) Appeal No. 86-2 (July 23, 1987); *In the Matter of E. Smith Division, Cyclops Corp.*, supra; and *In re Sandoz, Inc.*, RCRA (3008) Appeal No. 85-7 (February 27, 1987)).

13.1.2 Key Provisions of the RCPP

To determine the penalty amount, the RCPP considers the gravity of the violation, the time period over which the violation occurred, adjustments, and any economic benefit to the violator. Specifically, the policy provides that the penalty amount equals:

Penalty = *gravity component + multiday component +/- adjustments + economic benefit*

where:

- **Gravity component**—This component addresses the seriousness of the violation. Two factors are used to determine the gravity-based penalty component: 1) potential for harm and 2) extent of deviation from statutory or regulatory requirement.

- **Multiday component**—For days 2 through 180 of the multiday violations, multiday penalties are mandatory. After day 180, the region can revert to single day penalties, although it retains the option to continue multiday penalties.

- **Adjustments**—A proposed penalty can be adjusted to reflect such factors as good faith efforts to comply (or lack of good faith), degree of willingness or negligence, history of noncompliance (upward only), ability to pay (downward only), environmental credit projects (downward only), litigation risks, and other miscellaneous factors.

- **Economic benefit**—It is very important to recapture all economic benefits obtained by violating the law. The Agency generally uses the BEN computer program to estimate the economic benefit received by the defendant from its noncompliance. Other methods may be used in appropriate circumstances.

13.1.3 Documentation

Documentation for Penalty Sought in Administrative Complaint Litigation

To support the penalty proposed in an administrative complaint, enforcement personnel must include in the case file an explanation of how the proposed penalty amount was calculated. In addition, the file should document or reference all factual information on which EPA has relied or will need to rely to support the penalty amount sought in the complaint. In general, only final documents should be included in the record file. Such documentation should be in the record file at the time the complaint is issued and should be supplemented to reflect adjustments when adjustments are necessary.

Enforcement personnel must be prepared to present detailed information reflecting the specific factors weighed in calculating the penalty proposed in the complaint at the pre-hearing conference or evidentiary hearing. For example, evidence of specific instances where the violation actually did, could have, or still might result in harm could be presented to the trier of fact to illustrate the "potential for harm" factor of the penalty. Experience also suggests that the Agency may be called upon, before the hearing, to present to the trier of fact and the respondent the penalty computation worksheet supporting the proposed penalty amount sought in the complaint.

Normally the record supporting the penalty amount specified in the complaint should include a penalty computation worksheet that explains the potential for harm, extent of deviation from statutory or regulatory requirements, economic benefit of non-compliance, and any adjustment factors applied (e.g., good faith efforts to comply). The record should also include any inspection reports and other documents relating to the penalty calculation.

Documentation of Penalty Settlement Amount

Preparation of a penalty calculation worksheet for purposes of establishing the Agency's settlement position on penalty amount may not be feasible prior to the time that negotiations with the violator commence, because the Agency may not be aware of all relevant factors bearing on the case. Once the violator has presented the region with its best arguments relative to penalty mitigation, the region may, at its discretion, complete a penalty calculation worksheet to establish its initial "bottom line" settlement position. At a minimum, prior to final approval of any settlement, whether administrative or judicial, enforcement personnel must complete a final worksheet and narrative explanation, which provides the rationale for the final settlement amount, to be included in the case file for internal management use and oversight purposes only. Enforcement personnel may, in arriving at a penalty settlement amount, deviate significantly from the penalty amount sought in an administrative complaint, provided such discretion is exercised in accordance with the provisions of the RCPP.

13.2 USE OF THE RCPP IN LITIGATION

The RCPP has distinct applications in administrative and civil litigation.

13.2.1 Administrative Litigation

Under 40 CFR 22.13, the government must plead a specific penalty amount in an administrative complaint. Complaints must not only indicate specific penalty amounts, but must explain the reasoning behind the proposed penalty. Failure to do so could result in dismissal of an administrative complaint. Once the Presiding Officer determines that a violation has occurred, he/she must determine the amount of the civil penalty in accordance with the criteria set forth under RCRA relating to the proper amount of a civil penalty and must consider civil penalty guidelines issued pursuant to RCRA 40 CFR 22.27(b).

13.2.2 Civil Litigation

In contrast to administrative litigation, no specific penalty amount should be requested in a civil complaint. Rather, the complaint should request the statutory maximum. This provides maximum latitude to establish the penalty amount at trial or to enter settlement negotiations. The RCPP is important because it should be used in developing a proposed penalty to be used for settlement purposes, which must be included in the referral to the Department of Justice. The calculation of the proposed penalty should be considered work product and should not be disclosed to the defendant as part of discovery, because it would likely put a ceiling on any civil penalty that could be obtained in court. Occasionally, disclosure is made part of the settlement negotiations, but a confidentiality agreement with the defendant should be obtained before doing so. In addition, although a court is not required to follow the elements of the RCPP is setting a penalty, these factors are clearly relevant and should be used as a framework for arguing a penalty case. It is important to remember, however, that the RCPP is not binding on the court, which retains discretion to impose what it considers to be an appropriate penalty (*United States* v. *EWC, Inc.*, 710 F. Supp. 1172, 1142-1145 [N.D. Ind. 1989]).

13.3 HOW THE RCPP WORKS

The following discussion addresses each of the primary factors of the RCPP, including the gravity-based, multiday, and economic benefit penalty components, as well as adjustments to civil penalties.

13.3.1 Determination of Gravity-Based Penalty Component

As mentioned previously, the gravity-based component is a measure of the seriousness of a violation. Two factors are considered in determining the gravity-based penalty component:

- Potential for harm
- Extent of deviation from a statutory or regulatory requirement.

These factors form the axes of the gravity-based penalty assessment matrix, presented in Exhibit 13-1. The matrix has nine cells, each containing a penalty range. The specific cell is chosen after determining which category is appropriate for each factor.

Exhibit 13-1. Gravity-Based Penalty Assessment Matrix

Potential For Harm	Extent of Deviation		
	Major	Moderate	Minor
Major	$25,000 to 20,000	$19,999 to 15,000	$14,999 to 11,000
Moderate	$10,999 to 8,000	$7,999 to 5,000	$4,999 to 3,000
Minor	$2,999 to 1,500	$1,499 to 500	$499 to 100

Potential for Harm

Enforcement personnel should evaluate whether the potential for harm is major, moderate, or minor in a particular situation. The degree of potential harm represented by each category is defined as:

- Major

  1. The violation poses or may pose a substantial risk of exposure of humans or other environmental receptors to hazardous waste or constituents; and/or

  2. The actions have or may have a substantial adverse effect on statutory or regulatory purposes or procedures for implementing the RCRA program.

- Moderate

  1. The violation poses or may pose a significant risk of exposure of humans or other environmental receptors to hazardous waste or constituents; and/or

  2. The actions have or may have a significant adverse effect on statutory or regulatory purposes or procedures for implementing the RCRA program.

- Minor

  1. The violation poses or may pose a relatively low risk of exposure of humans of other environmental receptors to hazardous waste or constituents; and/or

  2. The actions have or may have a small adverse effect on statutory or regulatory purposes or procedures for implementing the RCRA program.

Actual harm or potential for harm should be assessed based on the risk of actual or potential human or environmental exposure to hazardous waste or hazardous constituents posed by non-compliance and the adverse effect of noncompliance on the RCRA regulatory program. Factors to consider in assessing the risk of actual or potential harm include actual releases; waste mismanagement; inadequate detection or inspection procedures; the quantity and toxicity of waste involved; and the existence, size, and proximity of receptor populations.[3]

The law is clear that actual harm need not be proven to justify a civil penalty. See, for example, *In the Matter of Wheeling-Pittsburgh Steel Corp.*, Docket No. RCRA (3008) III-070 at 13. *In the Matter of A.Y. McDonald Industries, Inc.*, Appeal No. RCRA (3008) 86-2 (Final Decision July 23, 1987) (refusing to reduce penalty because no actual harm resulted, CJO stated: "McDonald should not be rewarded for its complete disregard of the RCRA program simply because test results this far fail to show groundwater contamination").

3. In considering the risk of exposure, emphasis should be placed on the potential for harm posed, since a violator should not be rewarded with lower penalties simply because the violation happened not to have resulted in actual harm.

Actual harm was shown in *United States* v. *EWC*, 710 F. Supp. 1172 (N.D. Ind. 1989) *aff'd* 917 F.2d 327 (7th Cir. 1990). Defendants had an inadequate ground water monitoring system, despite receiving several NOVs. The Agency relied on the presence of low levels of ground water contamination to argue for imposition of a large penalty for violations of 40 CFR Section 265. Such contamination demonstrated the seriousness of the inadequate ground water monitoring system, because the purpose of such a system was to detect contamination at an early stage when corrective measures could have been implemented easily. Rather, the defendant's inadequate system put the aquifer at risk and made it impossible to know exactly the extent of contamination.

Assessing the adverse effects of noncompliance on the RCRA regulatory program focuses on examining the extent to which violations undermine the statutory or regulatory purposes and structure of RCRA. It is premised on the notion that even violations that do not pose an immediate risk or threat of risk jeopardize the integrity of the regulatory program. An example is failure to comply with financial assurance requirements, which may result in a site becoming an abandoned waste site. Examples of violations that threaten the regulatory program include:

- Failure to notify as a generator or transporter of hazardous waste and/or owner/operator of a hazardous waste facility per Section 3010
- Failure to submit a timely/adequate Part B application
- Failure to respond to a formal information request
- Operating without a permit or interim status
- Failure to prepare or maintain a manifest
- Failure to install or conduct adequate ground water monitoring.

In assessing gravity-based penalties under the 1990 RCPP where "harm to the RCRA regulatory program" is a key consideration, care should be taken to also analyze the potential harm to health and the environment from the violation. Regardless of which impact is considered more severe, the litigation team should always be prepared to demonstrate not only how the violations affect an important RCRA program, but also why the program itself is important. Explaining the health and environmental risks the program is designed to address, and the likelihood of those risks occurring are effective ways to accomplish this result. Citing to the relevant rule preamble and supporting documentation, and presenting expert testimony from EPA staff responsible for implementing the program are both appropriate litigation techniques.

Extent of Deviation

Extent of deviation from a requirement is the second factor considered in determining the gravity-based penalty. Extent of deviation relates to the extent to which the violation renders inoperative the requirement violated. In determining the extent of the deviation, the following categories should be used:

- **Major**—The violator deviates from requirements of the regulation or statute to such an extent that most (or important aspects) of the requirements are not met, resulting in substantial noncompliance.

- **Moderate**—The violator significantly deviates from the requirements of the regulation or statute, but some of the requirements are implemented as intended.

- **Minor**—The violator deviates somewhat from the regulatory or statutory requirements, but most (or all important aspects) of the requirements are met.

Once within a set range for a violation as set out in the gravity-based penalty assessment matrix, selection of the exact penalty amount is left to the discretion of the enforcement personnel, who may consider other factors, such as the seriousness of the violation, remediation efforts and the extent of cooperation, the size and sophistication of the violator, the number of days of violation, and other relevant matters.

For example, a major deviation was found where a respondent kept a percolation pond in operation for 240 days without a permit and, after it was required to close, ... did not certify compliance with ground water monitoring or financial responsibility requirements ... and ... closure plans were inadequate. *In the Matter of Grumman St. Augustine Corp.*, Docket No. RCRA 87-18-R (Initial Decision May 10, 1989).

Note that annual EPA policy (e.g., RCRA Implementation Plan) may be relevant in assessing the gravity of specific violations, as well as in selecting the exact penalty amount.

13.3.2 Multiple and Multiday Component

Multiple Violations

Under the RCPP, a separate penalty should be sought in a complaint and obtained in settlement or litigation for each separate violation that results from an independent act (or failure to act) by the violator and is substantially distinguishable from any other charge in the complaint for which a penalty is to be assessed. A given charge is independent of, and substantially distinguishable from, any other charge when it requires an element of proof not needed by the others. Penalties for multiple violations also should be sought in litigation or obtained in settlement where one company has violated the same requirement in substantially different locations. Penalties for multiple violations are appropriate when a company violates the same requirement on separate occasions not cognizable as multiday violations (e.g., where a facility fails for a year to take required quarterly ground water monitoring samples). This is significant because for multiple violations, each separate violation should assessed independently and the amounts totaled.

Multiday Violations

Where a violation continues beyond 1 day, the multiday component of the penalty should be calculated as follows:

- Determine the gravity based designation for the violation (e.g., major-major, moderate-minor, minor-minor)

- Determine whether multiday penalties are **mandatory, presumed, or discretionary** under the RCPP:

  - **Mandatory**—For days 2 through 180 of all violations with the gravity-based designations major-major, major-moderate, and moderate-major (exception for "highly unusual cases" with prior headquarters consultation)

  - **Presumed**—For days 2 through 180 of all violations with the gravity-based designations major-minor, moderate-moderate, minor-major. Such a presumption may be overcome for 1 or more days by documenting case-specific facts that mitigate against the imposition of a multiday penalty in the file.

  - **Discretionary**—For all days after the first for violations with gravity-based designations minor-moderate, moderate-minor, or minor-minor. Such penalties should be sought unless the documented facts of the case support not imposing multiday penalties. In these situations, a decision to impose or not impose multiday penalties should be documented.

- Locate the cell in the multiday matrix (Exhibit 13-2) that corresponds to the cell selected for the gravity-based penalty matrix. Multiply the dollar amount selected from the appropriate cell in the multiday matrix by the number of days of the violation, excluding the first day of violation. (Note: the first day of the violation is calculated based on the **gravity-based matrix**; subsequent days of violation are calculated based on the **multiday matrix**).

Exhibit 13-2. Multiday Penalty Matrix

Potential For Harm	**Extent of Deviation**		
	Major	Moderate	Minor
Major	$5,000 to 1,000	$4,000 to 750	$3,000 to 550
Moderate	$2,200 to 400	$1,600 to 250	$1,000 to 150
Minor	$600 to 100	$300 to 100	$100

Selections of a dollar figure from the range of penalty amounts can be made at the region's discretion based on an assessment of the RCPP's broad goals and relevant case specific factors, including:

- Goal of ensuring fair and consistent penalties that reflect the gravity of violations

- Goal of promoting prompt and continuing compliance

- Goal of deterring future noncompliance
- Seriousness of the violation relative to other violations falling within the same matrix cell
- Efforts at remediation or the promptness and degree of cooperation evidenced by the facility (to the extent not otherwise accounted for in the proposed penalty or settlement amount)
- Size and sophistication of the violator, as well as the total number of days of violation
- Other relevant considerations.

On January 28, 1994, the United States obtained a $4.2 million penalty judgment against Ekco Housewares, Inc., based on Ekco's failure to obtain financial assurance for closure and post-closure and liability coverage. The United States cited violations of a 1987 partial consent agreement and order and RCRA rules. The court assessed $1,000/day multiday penalties for 4,606 days of violation.

Generally, the failure to correct a violation constitutes a continuing violation. See *United States* v. *Trident Seafoods Corp.*, No. C92-1025D (W.D. Wash., December 13, 1993) held that the failure to comply with the notice requirements imposed for asbestos removal under the Clean Air Act is a continuing violation, ending only when renovations were complete or EPA had actual notice. In *In the Matter of Dr. Marshall C Sasser*, Docket No. 404-89-102 (Initial Decision July 30, 1991), the respondent was held to have committed a continuing violation of Clean Water Act by filling wetland and failing to correct the violation. [Note: Also, see *United States* v. *Telluride Co.*, 1995 U.S. Dist. Lexis 6303 (D. Colo., May 2, 1995), which held that the filling of wetlands does not constitute a continuing violation for purposes of extending the applicable statute of limitations, and *In re Cypress Aviation, Inc.*, RCRA (3008) Appeal No. 91-6 (Order Dismissing Notice of Appeal; January 8, 1992), which held illegal land disposal of land disposal restrictions waste warranted single day penalties only.]

In some cases, a single violation can cause the violations of numerous regulations. The most obvious example is when there is a mistaken belief that the regulated entity does not have to notify EPA of hazardous waste activity that requires a permit or interim status. In these cases, the regulated entity will most likely violate all of the provisions of 40 CFR Part 264 or 265. Alleging each violation of each regulation will result in an excessively high penalty. In such cases, discretion exists not to seek penalties for all violations as long as the penalty obtained is sufficient to meet the goals of the RCPP.

In addition, the RCPP does not preclude the assessment of penalties of up to $25,000 for each day after the first day of violation where significant harm has occurred or is threatened.[4]

4. Multiday penalties were rarely proposed under the 1984 penalty policy. Therefore, comparing current cases that may warrant a multiday penalty with earlier cases that have similar factual settings may not be appropriate.

13.3.3 Economic Benefit

The Agency's Civil Penalty Policy and RCPP mandate the recapture of any significant economic benefit of noncompliance that accrues to a violator. Under the RCPP, an "economic benefit" component should be calculated and added to the gravity-based penalty component when a violation results in "significant" economic benefit to the violator.

Economic benefit need not be calculated where it appears that the amount of the component is likely to be less than $2,500 for all violations alleged in the complaint. However, this decision should he documented on the Penalty Computation Worksheet.

Examples of regulatory areas for which violations likely are to present significant economic benefits:

- Ground water monitoring
- Financial requirements
- Closure/post-closure
- Surface impoundment retrofitting
- Improper land disposal of restricted waste
- Cleanup of discharges
- Part B submittals
- Minimum technology requirements.

With the exception of the following four situations, the Agency generally will not settle cases for an amount less than the economic benefit of noncompliance:

- The economic benefit component consists of an insignificant amount (i.e:, less than $2,500).
- Compelling public concerns would not be served by taking a case to trial.
- It is unlikely, based on the facts of the particular case as a whole, that EPA will be able to recover the economic benefit in litigation.
- The company has documented an inability to pay the total proposed penalty.

If a case is settled for less than the economic benefit component, a justification must be included on the Penalty Computation Worksheet.

Types of Economic Benefits

Compliance/enforcement personnel should examine two types of economic benefit from noncompliance in determining the economic benefit component:

- Benefit from **delayed costs**
- Benefit from **avoided costs**.

Delayed costs are expenditures deferred by the violator's failure to comply with the requirements. The violator eventually will have to spend the money in order to achieve compliance.

Examples of violations that result in savings from delayed costs are:

- Failure to timely install ground water monitoring equipment
- Failure to timely submit a Part B permit application
- Failure to timely develop a waste analysis plan.

The economic benefit for delayed costs consists of the amount of interest on the unspent money that reasonably could have been earned by the violator during noncompliance. For example, deferring a $100,000 project for 3 years will result in interest savings of approximately $65,000. Such benefit may also be viewed as the amount a company saved by not borrowing funds to achieve compliance.

Avoided costs are expenditures that are nullified by the violator's failure to comply; these costs will never be incurred. Avoided costs include the usual operating and maintenance costs, including any annual periodic costs such as leasing monitoring equipment. For avoided costs, the economic benefit equals the cost of complying with the requirements, adjusted to reflect anticipated rate of return and income tax effects on the company.

Examples of violations that result in savings from avoided costs are:

- Failure to perform annual and semi-annual ground water monitoring sampling and analysis
- Failure to perform waste analysis before adding waste to tanks, waste piles, and incinerators
- Failure to install secondary containment around a tank, where such a containment is never installed because the violator chooses closure rather than correction and continued operation.

If noncompliance has continued for more than a year, compliance/enforcement personnel should calculate the economic benefit of both the delayed and avoided costs for each year.

Use of the BEN Model to Calculate Economic Benefit

Economic benefit is calculated using the BEN computer model. This model applies standards values, sound financial theory, and computational aid in calculating economic benefit. It is useful when preparing for negotiations but should not be used during litigation (i.e., an expert should be retained to prepare and document EPA's claim).

The model can perform a calculation of economic benefit based on delayed/avoided costs with as few as only seven data inputs (See inputs 1 through 7 in Exhibit 13-3). The remainder of the data inputs consists of optional data items and standard values already contained in the program. Exhibit 13-3 presents a list and short explanation of each input.

The case team supplies key model inputs, including the costs that were presumably not incurred by the violator. It is often very difficult to obtain meaningful estimates of these costs or to counter objections raised by the defendants. The more certain enforcement staff can be of these costs, the more reliable the output. The case development team should always make sure the result appears reasonable and, if in doubt, obtain the services of an expert.

Some of the assumptions used in the BEN model have been attacked for the appropriateness of the default discount rate. This rate represents the interest savings that accrue to a company and can seem quite high to the financially unsophisticated user. While one should be aware of potential challenges, a different value should not be negotiated without consulting an expert.

Exhibit 13-3. BEN Model Inputs

1. Case Name—Self explanatory.
2. Initial Capital Investment*—This is essentially a depreciable investment, such as the initial cost of equipment.
3. One-Time Nondepreciable Expenditure*—This is an expense that will only be incurred once and does not involve capital investments. It may or may not be tax deductible, but it is not depreciable. Some examples are reporting requirements, purchase of land, or permit application costs and fees.
4. Annual Operation and Maintenance*—This expense category is for routine annual expenses, such as the costs of operating equipment, cost of leasing equipment, or cost of annual insurance premiums.
5. First Month of Noncompliance**—Self explanatory.
6. Compliance Date**—This may be in the future. The key is to make a reasonable estimate. (For TSD facilities, this date could be the date on which the facility certifies closure rather than the date on which compliance is achieved).
7. Penalty Payment Date**—This may be in the future. Enforcement personnel should make a reasonable estimate for date of payment.
8. Useful Life of Equipment+—The model accounts for the fact that the equipment purchased in input 2 has a useful life of limited duration. The model assumes it will last 15 years, then it must be replaced; however, the model is being adjusted to address this matter.
9. Marginal Income Tax Rate+—This is the rate at which the last dollar of earnings was taxed. It almost always will be the highest tax rate, as most businesses meet the maximum rate quickly.
10. Annual Inflation Rate+—Self explanatory.
11. Discount Rate+—This is the rate of return the violator expects to obtain on its investment. The money needed for pollution control was invested in something else, and the rate of return is assumed to be the discount rate.
12. Amount of Low Interest Financing+—This is the amount of subsidized financing for pollution control equipment. This is almost always zero.

* Required if Applicable
** Required Input
\+ Standard Values Available

There are instances in which the BEN methodology either cannot compute or will fail to capture the actual economic benefit of noncompliance. In these instances, it will be appropriate for the Agency to include in its penalty analysis a calculation of economic benefits in a manner other than those provided for in the BEN methodology. Thus, care must be taken to ensure that any calculation of profits included in an alternative economic benefit component of the penalty calculation does not include profits attributable to lawful operations of the facility or delayed or avoided costs already accounted for in the BEN calculation.

The issue of whether the cost of improper disposal of waste should be considered in calculating economic benefit has proven problematic. See, *In the Matter of ROI Development Corp.*, Docket No. RCRA (3008) VIII-90-12 (Initial Decision March 31, 1994), in which the holding calculation was flawed because disposal costs were not considered and *In re Burlington Northern Railroad Co.*, CAA Appeal No. 93-3 (Final Decision and Order Feb. 15, 1994), which struck language crediting disposal costs towards economic benefit, but decided the case on other grounds.

Enforcement personnel should have a copy of the revised BEN User's Manual (May 1987). The manual is designed to aid enforcement personnel with procedures for entering data in BEN and to explain the program's results. BEN supersedes previous methodologies used to calculate the economic benefit for civil penalties.

Economic benefit is not profit-driven. If a company lost money, this does not mean it realized no benefit. It means the loss would have been greater if the company had spent the needed funds. Case development staff must assume that competitors did spend the money to comply and, therefore, are harmed unless EPA recaptures this benefit. Profitability may have an impact on a violator's ability to pay, but should not be considered when determining economic benefit.

13.3.4 Adjustments

The EPA civil penalty policy and RCPP set out several other adjustment factors to consider, including:

- Good faith efforts to comply/lack of good faith
- Degree of willfulness and/or negligence
- History of noncompliance
- Ability to pay
- Other unique factors
- Environmental projects undertaken by the respondent.

The adjustment factors can increase or decrease or have no effect on the penalty amount obtained from the violator. Adjustments should generally be applied to the sum of the gravity-based and multiday components of the penalty for a given violation. Note, however, that after all adjustment factors have been applied, the resulting penalty shall not exceed the statutory maximum of $25,000 per day of violation. All supportable upward adjustments of the penalty amount of which EPA is aware ordinarily should be made prior to issuance of the complaint, while downward adjustments (with the exception of those reflecting good faith efforts to comply) should generally not be made until after the complaint has been issued, at which time the burden of persuasion that downward adjustment is proper should be placed on respondent. The following sections discuss each of these adjustment factors.

Good Faith Efforts to Comply/Lack of Good Faith (upward or downward adjustment)

Both Section 3008(a) of RCRA and the RCPP provide that evidence of good faith efforts to comply may adjust the penalty downward. Examples of good faith efforts are:

- Reporting noncompliance before EPA discovers the violation
- Remedying noncompliance prior to EPA detection
- Relying in good faith on written statements by EPA or the State.

With reference to the last point, it is important to remember that absent unusual circumstances, reliance on misstatements by government employees of regulatory requirements is *not* a defense to liability (see *Heckler* v. *Community Health Services*, 467 U.S. 51, 65 (1984); *United States* v. *Environmental Waste Control*, 710 F. Supp. 1172 (N.D. Ind. 1989) *aff'd* 917 F.2d 327 (7th Cir. 1990)). It can be a reason, however, for reducing the penalty based on good faith efforts to comply. *In the Matter of Landfill, Inc.*, RCRA (3308) Appeal No. 86-6 (Final Decision November 30, 1990), EPA alleged improper placement of ground water monitoring wells. The respondent argued estoppel because the location of the wells had been chosen by the

state. Although the CJO rejected the defense, it imposed only a nominal penalty of $250 because of the State action. In *In the Matter of Union Oil Company of California*, Docket No. RCRA-09-0223 (Initial Decision January 14, 1985), "[T]he environmental problems arose in this case because of the mistaken or erroneous action by the EPA and the State, and appears to have been resolved promptly once the mistake or error was corrected. Accordingly, it is concluded that no penalty should be assessed."

Examples of behavior that do not constitute good faith are efforts to correct the violation only because of EPA pressure (e.g., *In the Matter of American Ecological Research Recycle Corp.*, Docket No. RCRA (3008) VIII-82-4 at 33 (July 1, 1984)). Furthermore, a lack of diligence in learning the regulatory requirements cannot be excused by later good faith efforts to correct the violation (e.g., *In the Matter of Federal Hoffman, Inc.*, Docket No. RCRA (3308) V-W-87-R-001 at 21 (Aug. 12, 1987)).

Failure of EPA or the state agency to make clear to the defendant the need to comply with the law does not create a good faith factor. In *Public Interest Research Group of New Jersey, Inc.* v. *Powell Duffryn Terminals, Inc.*, 913 F.2d 64 (3rd Cir. 1990), the Court of Appeals reversed the District Court's reduction of a penalty based on "good faith." The District Court had reasoned that if EPA or the New Jersey Department of Environmental Protection had brought an enforcement action in a timely manner, violations would have ceased years earlier. The Court of Appeals held that "mere failure by governmental agencies to prosecute an NPDES permit holder does not allow a court to reduce a penalty."

In *In the Matter of Oakmark Industries*, Docket No. RCRA (3008) 85-10-09 (Initial Decision January 6, 1987), the respondent had a policy of requiring a chemist to inspect partially filled drums prior to disposal. Although the respondent's violation resulted from its failure to follow its own policy, the Administrative Law Judge reduced the proposed penalty by 25 percent, partially in recognition of the respondent's compliance program.

Degree of Willfulness and/or Negligence (upward or downward adjustment)

In some cases, instances of heightened culpability may not meet the criteria for criminal action (i.e., the acts do not constitute "knowing" violations), but do warrant some upward adjustment of a penalty for willfulness and/or negligence. Conversely, although RCRA is a strict liability statute, instances of penalty mitigation may be justified based on the lack of willfulness and/or negligence. In assessing the degree of willfulness and/or negligence, the following factors should be considered:

- How much control the violator had over the events constituting the violation
- Foreseeability of the events constituting the violation
- Whether the violator took reasonable precautions against the events constituting the violation
- Whether the violator knew or should have known of the hazards associated with the conduct

- Whether the violator knew or should have known of the legal requirement that was violated (enhance penalty only)

- Other appropriate factors.

History of Noncompliance (upward adjustment only)

Previous violations of RCRA or state hazardous waste law indicate that the party was not deterred by the previous enforcement action and normally justifies upward adjustment of the penalty (unless the current or previous violation was beyond the control of the violator). Enforcement personnel should consider the following factors, among others:

- Similarity of the previous violation
- How recent the previous violation occurred
- Number of previous violations
- Violator's response to previous violation(s) in regard to correction of problem.

Ability to Pay (downward adjustment only)

EPA generally will not assess penalties that are clearly beyond the means of the violator; however, any adjustment depends on the individual facts of the case. The burden to demonstrate inability to pay rests on the respondent, as it does with any mitigating circumstances. Thus, a company's inability to pay usually will be considered at the settlement stage and then only if the respondent raises the issue. If the respondent fails to fully provide sufficient information, then compliance/enforcement personnel should disregard this factor in adjusting the penalty.

When EPA determines that a violator cannot afford the penalty prescribed by this policy or that payment of all or a portion of the penalty will preclude the violator from achieving compliance or from carrying out remedial measures (e.g., payment of penalty would preclude proper closure/ post-closure), the following options should be considered in the order presented:

Sources Available to the Regions in Determining Ability to Pay

- Agency's Guidance on Determining a Violator's Ability to Pay a Civil Penalty, December 16, 1986
- National Enforcement Investigations Center (for publicly held corporations)
- The Agency's ABEL computer model (designed primarily for privately held corporations, but may support other business forms or be useful with other sources, e.g., the Superfund Financial Assessment System)

- An installment payment plan with interest

- A delayed payment schedule with interest. Such a schedule might even be contingent upon an increase in sales or some other indicator of improved business. (Note: This option may be less desirable because it reduces the deterrent effect of any penalty and imposes administrative burdens on the government.)

- Straight penalty reductions as a last recourse.

When including a delayed payment schedule in a consent decree, the penalty should be due upon signing, with payment deferred. This protects the claim in case of a declaration of bankruptcy.

Environmental Projects Undertaken by the Respondent (downward adjustment only)

EPA may consider adjusting the penalty amount downward in return for an agreement by the violator to undertake an appropriate environmentally beneficial project. Environmentally beneficial mitigation projects serve as an incentive to settlement and are allowed only in prelitigation agreements (prior to the actual hearing), except in extraordinary circumstances. Such projects are evaluated on a case-by-case basis and must satisfy all relevant criteria. Such criteria are set out in the RCPP and the Interim Revised Supplemental Environmental Project (SEP) Policy (May 3, 1995). The interim revised SEP policy supersedes the February 12, 1991, Policy on the Use of Supplemental Environmental Projects in EPA Settlements. The revised policy applies to settlements of all civil judicial and administrative actions filed after May 8, 1995, and to pending cases in which the government has not reached agreement in principle with the alleged violator on the specific terms of a SEP. **The revised SEP policy is discussed in the New and Upcoming RCRA Developments module.**

The RCPP identifies criteria for environmental projects, as well as categories of acceptable and unacceptable projects. The following list highlights the RCPP criteria:

- **Benefit Beyond Full Compliance**—The project must be conducted in addition to all statutory and regulatory compliance obligations and not be used for penalty mitigation in any other enforcement action. The project may not be part of the company's normal business practice or a project the company was already planning to implement.

- **Penalty Reductions Reflect Actual Costs**—With consideration of tax benefits, the actual cost of the project to the respondent shall equal or exceed the value of the mitigation (see Guidance on Calculating After Tax Net Present Value of Alternative Payments, Oct. 28, 1986, General Enforcement Policy Compendium, GM-51, or the Office of Enforcement Policy).

- **Good Faith Commitment**—The activity must demonstrate a good faith commitment to statutory compliance and environmental improvement.

- **Deterrent Effect**—Mitigation must not detract significantly from the general deterrent effect of the settlement. The government should seek penalties in conjunction with mitigation activities that deter both the specific violator and the entire regulated community. Accordingly, every settlement should include a substantial monetary penalty component.

- **Enforceability of Consent Decrees**—Judicially enforceable consent decrees must meet the statutory and public interest criteria for consent decrees and cannot contain provisions that would be beyond the power of the court to order under the particular statute violated.

- **Minimum EPA Oversight**—The activity or project must require little EPA oversight.

- **Acknowledgement of Settlement**—Any settlement that includes a mitigation project shall require that any public statement by the violator regarding the environmental or general public benefits of the project must note that funding for the project is in partial settlement of an enforcement case brought by EPA.

- **Nexus to Violation**—Qualifying activities must provide a discernable response to the perceptible risk or harm caused by the violations.

Under the RCPP, the categories of acceptable SEPs are as follows:

- **Pollution Prevention Projects**, which reduce or prevent the creation of pollution by use reduction or by application of closed loop processes.

- **Pollution Reduction Projects**, which extend substantially beyond compliance with discharge limitation to further reduce the amount of pollution that would otherwise be discharged into the environment. They can include additional pollution controls or certain types of recycling.

- **Projects Remediating Adverse Public Health or Environmental Consequences**, which not only repair the damage done to the environment because of the violation but also enhance the environment in the vicinity of the violating facility.

- **Environmental Auditing Projects**, which must extend beyond that which constitutes general good business practices.

- **Enforcement Related Environmental Public Awareness Projects**, which are publications, broadcasts, or seminars that underscore for the regulated community the importance of complying with environmental laws or disseminate technical information about the means of complying with environmental laws. Any project of this type should be carefully examined to make sure that it meets SEP criteria.

Under the RCPP, examples of projects that clearly do not meet SEP criteria are general educational or environmental awareness raising projects, contribution to environmental research, or projects that are unrelated to enforcement actions but that benefit the community, such as charitable contributions. The interim revised SEP policy specifies seven categories of acceptable SEPs.

Any acceptable SEP must have a nexus or relationship to the violation. A vertical nexus exists if the SEP concerns the same facility in the same medium. A horizontal nexus exists if it involves a different facility or medium. The latter type of relationship is less readily accepted, however, and requires OE approval.

Note that the use of SEPs imposes some degree of burden on EPA as a result of the need to monitor compliance. Therefore, case development staff should ensure that appropriate resources are available to conduct such oversight.

Other Unique Factors (downward adjustment)

The RCPP allows an adjustment for factors that may arise on a case-by-case basis. Penalties should be determined based on the maximum civil penalty the court or administrative law judge is likely to award if the case proceeds to hearing or trial and on the inherent strength of the case, considering such factors as:

- Probability of proving violations
- Opportunities to establish a useful precedent or send a signal to the regulated community
- Availability and effectiveness of the government's evidence and the potential strength of the violator's defenses.

Where significant litigative risks exist, resource consideration may also be factored into the decision. Downward adjustment of the proposed penalty for settlement purposes may be warranted depending on EPA's assessment of litigation considerations.

Appendix A

Penalty Computation Worksheet

Penalty Amount for Complaint

Company Name:

Address:

Requirement Violated:

1. Gravity based penalty from matrix

   (a) Potential for harm
   (b) Extent of Deviation

2. Select an amount from the appropriate multiday matrix cell

3. Multiply line 2 by number of days of violation minus 1 [or other number, as appropriate (provide narrative explanation)]

4. Add line 1 and line 3

5. Percent increase/decrease for good faith

6. Percent increase for willfulness/negligence

7. Percent increase for history of noncompliance

8. Total lines 5 thru 7

9. Multiply line 4 by line 8

10. Calculate economic benefit

11. Add lines 4, 9 and 10 for penalty amount to be inserted in the complaint

Additional downward adjustments, where substantiated by reliable information, may be accounted for here:

Settlement Penalty Amount

Company Name:

Address:

Requirement Violated:

1. Gravity based penalty from matrix

   (a) Potential for harm
   (b) Extent of deviation

2. Select an amount from the appropriate multiday matrix cell

3. Multiply line 2 by number of days of violation minus 1 [or other number as appropriate (provide narrative explanation)

4. Add line 1 and line 3

5. Percent increase/ decrease for good faith

6. Percent increase for willfulness/negligence

7. Percent increase for history of noncompliance

8. Percent increase/ decrease for other unique factors (except litigation risk)

9. Add lines 5, 6, 7, and 8

10. Multiply line 4 by line 9

11. Add lines 4 and 10

12. Adjustment amount for environmental project

13. Subtract line 12 from line 11

14. Calculate economic benefit

15. Add lines 13 and 14

16. Adjustment amount for ability-to-pay

17. Adjustment amount for litigation risk

18. Add lines 16 and 17

19. Subtract line 18 from line 15 for final settlement amount

Narrative Explanation

1. Gravity Based Penalty

   (a) Potential for Harm

   (b) Extent of Deviation

   (c) Multiple/Multi-day

2. Adjustment Factors (Good faith, willfulness/negligence, history of compliance, ability to pay, environmental credits, and other unique factors must be justified, if applied.)

   (a) Good Faith

   (b) Willfulness/Negligence

   (c) History of Compliance

   (d) Ability to pay

   (e) Environmental Project

   (f) Other Unique Factors

3. Economic Benefit

4. Recalculation of Penalty Based on New Information

Appendix B

Example Penalty Computation

Computation of Complaint Amount

The following example presents facts and a summary of the basis for calculating the basis for a civil penalty to be included in an administrative complaint. Note that the computation worksheets are normally completed for each violation (separate worksheets are used to calculate the penalty amount and the settlement amount), as is the narrative explanation (again, to support both the complaint and settlement amounts for each violation). BEN calculations are included here without supporting worksheets or printouts.

Facts

Company C, an owner/operator of several permitted commercial treatment facilities, regularly receives a large volume of diverse types of RCRA hazardous wastes at its Evanston facility. Upon receipt of the wastes, the Evanston facility immediately treats them and sends the treatment residues offsite for land disposal at another company's facility, Company Z.

Between December 16, 1988, and December 18, 1989, Company C's Evanston facility received one shipment per month of liquid F002 spent solvent wastes from various generators. Each shipment consisted of two 55-gallon drums, but the composition and concentration level of hazardous constituents in each drum were different due to the highly variable process that generated the waste. The Evanston facility did not test the wastes before or after treating them, and its existing waste analysis plan did not require any such testing or other analysis to determine whether the wastes are restricted. The Evanston facility properly manifested the 12 monthly shipments of wastes sent offsite to Company Z, but it did not know until June 18, 1989, that 40 CFR § 268.7 requires a land disposal restrictions (LDR) notification and certification to be sent with each shipment of waste. At that time, Company C began sending § 268.7 forms routinely stating that the treatment residues were eligible for land disposal.

On October 30, 1989, an EPA inspector at Company Z determined that 24 drums of Company C's F002 solvents were unlawfully disposed in Company Z's landfill. The unlawfully disposed wastes had been sent to Company Z in 1989 from the Evanston facility. Company Z's landfill did not meet minimum technological requirements and was leaking hazardous constituents into the ground water, the only source of drinking water for the area. The unlawfully disposed drums contained concentrations of F002 solvents in excess of the applicable Part 268 LDR treatment standards.

Although four separate violations exist, only two violations (in (2)(a) and (b) below) are addressed for purposes of this example. The following table summarizes the basis for calculating the penalty amount for the complaint, followed by a discussion of the methodology used to calculate the settlement amount.

Violations

- ***40 CFR 268.7(b)—Failure to Send Accurate Notifications and Certifications***
- ***40 CFR 268.7(b) & 268.264.13—Failure to Test Restricted Wastes***

Summary of Basis for Penalty Amount

Violations	268.7(b)—Failure to Send Accurate Notifications and Certifications	268.7(b) & 268.264.13—Failure to Test Restricted Wastes
Potential for Harm	Major: Company Z unaware that wastes require further treatment Substantial potential adverse effect on purpose of RCRA Substantial risk of exposure to hazardous waste	Major: Failure to test contributes to land disposal of ineligible hazardous waste Testing is critical element of LDR Violation may pose substantial risk of exposure to hazardous waste
Seriousness of Deviation	Major: Initial failure to send forms Subsequently sent uncertified certifications	Major: Waste analysis plan does not require testing waste Particularly significant with variable waste
Penalty	$22,500 + $22,500 = $45,000 per shipment $45,000 x 12 (violations) = $540,000	
Multiday Assessment	NA (each violation independent)	NA (same)
Economic Benefit	Avoid costs of forms; labor to complete forms and certifications BEN = $2,500	Avoid costs of waste analysis BEN = $10,000
Adjustment Factors	Willfulness/negligence: Upward adjustment of 10% ($54,000) based on the fact that Company C's other facilities had knowledge of 40 CFR 268.7	
Penalty	$540,000 + $54,000 + $12,500 = $606,500	
Final Complaint Amount	Similar violation of same requirement justifies upward adjustment, but no upward adjustment imposed because of adjustment above	
Settlement Adjustments	Other unique factors: Reduce penalty by 1/3 ($200,000); unable to tie drums to Company Z or prove waste is F002 for 4 of 12 shipments	
Final Settlement Penalty Amount	$540,000 + $54,000 + $12,500 - $200,000 = $406,500	

Appendix C

EPA Memos

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON D.C. 20460

OCT 26 1990

ENFORCEMENT SENSITIVE

MEMORANDUM

SUBJECT: Issuance of the 1990 RCRA Civil Penalty Policy

FROM: James M. Strock
Assistant Administrator for Enforcement

Don R. Clay
Assistant Administrator for Solid Waste
and Emergency Response

TO: Regional Administrators
Regional Counsel
Regional Waste Management Division Directors
Office of General Counsel

We are hereby transmitting to you the final version of the 1990 RCRA Civil Penalty Policy. This policy reflects the input of many contributors and commenters from the Regions and other Headquarters offices, to whom we extend our thanks. Because of your substantial efforts, we believe that the final product has been improved significantly.

Our purpose in revising the 1984 RCRA Civil Penalty Policy is multifold. First, we have updated and amended the 1984 policy in light of the experience the Agency has gained since 1984. Second, by (1) articulating a methodology for computing the amount of penalties to be sought in administrative complaints and accepted in settlement, and (2) adopting requirements that such calculations be carefully documented, we have attempted to ensure that in the future penalty amounts are routinely calculated in accordance with the penalty policy. Similarly, future penalties accepted in settlement cannot simply be compromises of initial calculations, but must be determined in accordance with the policy. Finally, in part by requiring that multi-day penalties be assessed in appropriate circumstances for most continuing violations, we seek to increase the amount of RCRA civil penalties and to extend the cost of noncompliance to violators. Based to some degree on the RCRA Implementation Study and other reports, it is our sense that the rate of compliance in the RCRA-regulated community can be enhanced by assessing higher penalties, which are more likely to deter regulatory violations.

In several recent judicial decisions, courts have shown a willingness to impose multi-day penalties (and concomitantly larger total penalties) on facilities found to have violated requirements of RCRA and attendant implementing regulations. See e.g., United States v. Vineland Chemical Co. Inc., et al., No. 86-1936 (D.N.J. April 30, 1990) (penalty of $1,000 per violation per day), United States v. Environmental Waste Control, Inc., 710 F. Supp. 1172, 1245 (N.D. Ind. 1989) (penalty of $2,000 per day for all violations collectively), and United States v. T&S Brass and Bronze Works, 681 F. Supp. 314, 322 (D.S.C. 1988) (penalty of $1,000 per day for the single continuing violation asserted). The $2,778,000 penalty obtained in Environmental Waste Control and the $1,223,000 penalty obtained in Vineland are two of the largest court-awarded RCRA penalties obtained by EPA in RCRA program history.

The Agency also has recently settled several RCRA cases for penalty amounts exceeding one million dollars. See, e.g., the consent decree entered September 14, 1988 in United States v. Browning Ferris Industries, Inc. and CECOS International, Inc., No. 87-317 (M.D. La.)($2,500,000 penalty), and the consent decree entered August 16, 1990 in U.S. v. Browning Ferris Industries, Inc. and CECOS International, Inc., No. 88-0718-LO (W.D. La.) ($1,550,000 penalty).

As the court in Vineland and our own experience suggest, assessment of penalties of this magnitude is often necessary to persuade regulated firms not to treat the prospect of a lawsuit by EPA as an acceptable cost of doing business. The new requirements in the RCRA penalty policy that multi-day penalties be assessed for most continuing violations will give impetus to efforts to obtain higher penalties in the administrative forum, as well.

You will find that the final version of the policy differs in a number of respects from the draft circulated for comments on December 7, 1989. These changes, which are based on the many comments we received, include the following:

1. Several Regions were concerned about language in the draft policy requiring multi-day penalties to be imposed for each day of any continuing violation. The principal concern was that the requirement would too often produce unrealistically high penalties in cases where violations had continued for years. The final policy addresses this concern, first by adopting a 180 day "floor" on multi-day penalties, under which penalties are mandatory for the first 180 days of a continuing violation and discretionary thereafter. In addition, for days 2 through 180 of a continuing violation, we have made multi-day penalties either (1) "mandatory," "presumptive" or "discretionary" as determined by the "cell" of the multi-day matrix into which a violation

falls (based on gravity of the violation). The decision to impose multi-day penalties in cases determined to be presumptive or discretionary may depend on case specific factors outlined in the policy (see attachment).

The policy also permits a Region to waive multi-day penalties, even when mandatory for a violation, in "highly unusual cases." This waiver may be exercised only with prior consultation with Headquarters. It is anticipated that waivers in these cases will be sought very infrequently. For violations in which multi-day penalties are "presumed" appropriate, the presumption may be overcome only if there are case-specific factors which support the decision not to assess the multi-day penalties. These factors must be documented in the case file. Finally, in cases where multi-day penalties are "discretionary," the bases for the decision to impose or not impose multi-day penalties must also be documented in the case file.

Where multi-day penalties are "presumed" or discretionary, the Regions would not be required to consult with Headquarters prior to foregoing multi-day penalties. In the case of judicial settlements, however, we would retain the ability to review the penalty calculations (including application of the presumption or discretion) in exercising our concurrence authority.

We are aware that at least one Region remains concerned about the potential impact of the new RCPP on smaller businesses. We believe the adjustment factors in the policy, including "ability to pay," will address this concern. In addition, we intend to review the Regions' experience in implementing the new policy. In the course of that review, we will further evaluate these or other concerns.

2. Several commenters also worried about the practical implications of the requirement in the draft that penalties be assessed for each distinguishable violation of the statute or regulations. It was pointed out that (1) when a facility fails to obtain a permit or interim status, it is automatically in violation of most of the requirements of Part 265, and (2) a violator who fails to install a groundwater monitoring system as required, ipso facto violates a number of other requirements of Subpart F. The commenters' concern was that assessing a penalty for each day of each separate violation in the situations described might too often produce uncollectible penalty figures. To avoid this result, the final policy permits the Regions to forego penalties for certain distinguishable violations which necessarily or generally result from a single initial transgression, as long as the total penalty is appropriate, sufficient to deter future behavior, and recoups any economic benefit from noncompliance.

3. The final policy now applies not only to actions filed after

it is issued, but also, insofar as practicable, to actions filed before its date of issuance.

4. The policy now provides that documentation underlying penalty calculations (particularly calculations establishing the amount of the penalty the Agency will accept in settlement) may often be withheld from those requesting it under FOIA, even after completion of an enforcement proceeding, on grounds it is protected by the attorney work product and deliberative process privileges.

5. The policy has been revised to permit an upward adjustment in the penalty amount where a violator's past record shows a pattern of noncompliance with the requirements of RCRA or other environmental statutes.

We would like to take this opportunity to emphasize to all Agency enforcement personnel the importance of adhering to the uniform methodology for penalty assessment contained in the 1990 RCRA Civil Penalty Policy. RCRA enforcement will serve as a credible deterrent if public perception (and the underlying reality) is that EPA will consistently seek and settle for amounts no less than the tough but fair penalties provided for in the revised policy.

If EPA does not seek penalties for distinguishable violations, regulated facilities may be tempted to dismiss the need to comply with separate regulatory requirements. If the Agency does not routinely recoup the economic benefit of noncompliance, the regulated community will have little financial incentive to achieve and maintain compliance with applicable RCRA requirements. If the Agency does not assess a gravity-based penalty commensurate with the seriousness of the violation, the total penalty figure will lack the proper impact. If multi-day penalties are not assessed, total penalties may be too low, and the regulated community will be rewarded for noncompliance and remain indifferent to the importance of rectifying violations quickly.

Finally, if penalty amounts are adjusted downward casually for reasons not cognizable under the penalty policy, regulated firms will have further grounds for taking their environmental responsibilities lightly. In this context, we would remind you that a downward adjustment in the penalty amount for good faith efforts to comply is no longer proper where a facility does not act to effectuate compliance until after notification of a violation by the Agency. Compliance with applicable requirements should be the accepted norm, not grounds for mitigating the penalty. By the same token, chronic offenders of RCRA or other environmental laws should be appropriately punished through upward adjustment of penalty amounts based on a history of noncompliance.

We believe that the new policy, while tough, is fair, and affords the necessary flexibility to account for case-specific

facts and litigation risks. It accommodates adjustments on targeted penalty amounts as a case progresses and the facts crystallize. We recognize that this flexibility is important to permit EPA to stake out as strong a claim as possible up front, and give respondents as much incentive as possible to settle quickly on terms which are appropriate for achieving our policy objectives. However, it is critical that any settlement adjustments conform with the policy.

We would also stress the importance of documenting the penalty amounts sought in the complaint and accepted in settlement through use of the penalty computation worksheets and narrative explanation forms provided in the revised policy. These documentation procedures serve several purposes. They encourage rigor and consistency in penalty calculations. They can be used to satisfy the requirement imposed by some Administrative Law Judges and court decisions that EPA provide defendants with the detailed factual bases and rationales for the penalty amounts sought in complaints. They also facilitate oversight by the Inspector General's office and our offices, all of whom seek to ensure that the RCRA Civil Penalty Policy is faithfully and consistently applied.

To ensure the revised penalty policy is being implemented correctly, Headquarters will periodically review and analyze Regional penalty calculation worksheets to determine Regional compliance with the policy provisions. Effective immediately, Regions are asked to attach a copy of the final penalty calculation worksheet and written narrative (samples are provided in the penalty policy) to all final RCRA administrative orders when they are sent to Headquarters for entry into the RCRA Administrative Action Tracking System (RAATS). These orders should be sent to Bob Small, OWPE, RCRA Enforcement Division, Headquarters, Mail Code OS 520. Please note that this requirement is in addition to, and not in place of, the penalty policy's requirement that copies of the worksheet and written narrative supporting the penalty in the complaint and at final settlement be kept in the case file. This requirement is discussed further in the Assistant Administrator for OE's August 9, 1990 memorandum, "Documenting Penalty Calculations and Justifications in EPA Settlement Agreements."

Regions also will be required to conduct self-assessments of their on-going efforts to implement the revised penalty policy and send a biannual Self-Assessment Report to Headquarters. The guidelines for conducting the self-assessment are flexible, to accommodate the particular needs of your enforcement program. At a minimum, the Report should 1) describe your training efforts, including seminars, memos and other guidance; and 2) establish a tracking system or checklist which shows that the penalty calculation criteria set forth in your training efforts meet Headquarter's criteria and verifies that these criteria are being properly implemented in your Region.

The first Self-Assessment Report will be due on May 1, 1991.

Please send the Report to Karin Leff at OWPE, RCRA Enforcement Division, Headquarters, Mail Code OS 520. You should also refer any questions to Karin at (FTS/202) 382-5618.

We regard the issuance of this revised policy as a necessary and important step toward enhancing the RCRA enforcement program. We are confident that with your cooperation, we will not only obtain higher penalties, but higher levels of compliance by RCRA-regulated concerns, as well.

Please direct questions concerning the policy to Jon Silberman (FTS-475-9769) of the Office of Enforcement - RCRA Division and Karin Leff (FTS-382-5618) of the Office of Waste Programs Enforcement. We anticipate providing Regional training on how to apply the policy. These persons will contact you in the near future to arrange for training Regional staff.

Attachment

Attachment

- MULTIDAY PENALTIES -

MULTIDAY PENALTY MATRIX

Extent of Deviation

From Regulatory Requirement

Potential for Harm	MAJOR	MODERATE	MINOR
MAJOR	M.	M.	Pr.
MODERATE	M.	Pr.	Dis .
MINOR	Pr.	Dis.	Dis.

Key: "M" means, "Mandatory"

"Pr." means, "Presumed"

"Dis." means, "Discretionary"

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DEC 12 1991

MEMORANDUM

SUBJECT: Draft Interim Policy on Pleading Proposed Penalties in RCRA Administrative Complaints

FROM: Kathie A. Stein
Enforcement Counsel for RCRA
Office of Enforcement (LE-134S)

Bruce Diamond, Director
Office of Waste Programs Enforcement (OS-500)

TO: Regional Counsel
Regional Waste Management Division Directors

The attached draft interim policy responds to your requests for guidance on how to plead proposed penalties in RCRA administrative complaints. The guidance addresses concerns raised regarding the requirement in 40 CFR § 22.14(a)(5) of the Consolidated Rules of Practice (CRP) to include, in administrative complaints, "a statement explaining the reasoning behind the proposed penalty."

This issue is a complex one implicating a number of Agency penalty policies under several statutes. Because the issue has arisen most frequently in the RCRA program, we are issuing this draft interim policy for RCRA administrative complaints at this time. Please follow the draft interim policy for the time being.

We specifically request your comments on the draft interim policy. We also wish to inform you that, while there are no plans at present to issue multimedia guidance on the issue, we are informed that the issue has been discussed by the recently reactivated Part 22 Regulatory Amendments Workgroup. This workgroup is considering amendments to the Consolidated Rules of Practice, generally.

Please address any questions or comments on the draft interim policy to Jon Silberman, OE-RCRA Division (FTS 260-3082) or Karin Leff, OSWER-Office of Waste Programs Enforcement (FTS 260-5618). Comments on potential amendments to the Consolidated Rules, including 40 CFR § 22.14(a)(5), may be sent to the

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Workgroup Chair, Tracy A. Gipson, OE-Office of Compliance Analysis and Program Operations (FTS-260-8780).

Attachment

cc: Scott Fulton
Enforcement Counsels
Kathy Summerlee
ORC RCRA Branch Chiefs
RCRA Program Branch Chiefs

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 12 1991

- DRAFT INTERIM POLICY -

MEMORANDUM

SUBJECT: Pleading Proposed Penalties in RCRA Administrative Complaints

FROM: Kathie A. Stein
Enforcement Counsel for RCRA
Office of Enforcement (LE-134S)

Bruce Diamond, Director
Office of Waste Programs Enforcement (OS-500)

TO: Regional Counsel
Regional Waste Management Division Directors

This memorandum addresses the pleading requirements for proposed penalties in RCRA administrative complaints. [1] 40 CFR § 22.14(a)(5) of the Consolidated Rules of Practice (CRP) requires an administrative complaint to include "a statement

---

[1] The Consolidated Rules of Practice, including 40 CFR § 22.14(a)(5), apply strictly to administrative complaints. Thus this memorandum does not address the pleading or documentation of penalty amounts in either civil judicial complaints, or civil or administrative settlements.

In civil judicial complaints, the policy of the United States is to request up to the statutory maximum civil penalty amount, based on the facts of each case. No corresponding penalty documentation is prepared nor is such documentation required in the complaints.

All documentation of settlement amounts in civil and administrative cases should be considered privileged information (i.e., "attorney work product" or "attorney-client communication"), and prepared accordingly, i.e., by or at the direction of an attorney. To preserve the work product privilege, it is important that where program personnel prepare such documents the record reflect it is at the direction of an attorney.

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explaining the reasoning behind the proposed penalty." Concern has been expressed that several judicial or administrative decisions may be read as suggesting that EPA's "boilerplate" penalty language (RCRA Civil Penalty Policy [RCPP] at 7) may be insufficient to satisfy this requirement. [2]/

This issue is a complex one implicating a number of Agency penalty policies under several statutes. Because the issue has arisen most frequently in the RCRA program, we are issuing this draft interim policy for RCRA administrative complaints at this time. Under the draft interim policy, it is recommended that RCRA administrative complaints include, at a minimum, brief narrative descriptions of the reasoning behind the proposed penalty for each separate count for which a penalty is sought.

None of the decisions cited in the footnote hold that EPA is required, by 40 CFR § 22.14(a)(5), to provide its penalty computation worksheets to respondents upon filing complaints. A Region may elect, however, as a matter of Regional policy, to provide additional non-privileged penalty computation information to respondents when the complaints are filed. [3]/

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[2]/ Environmental Protection Corp. v. Lee Thomas, CV F-87-447 EDP (E. Dist. Cal.; July 14, 1988) (Memorandum Decision re: Cross Motions for Summary Judgment); In re: Environmental Protection Corp., Docket No. RCRA-90-86-0001 (Decision and Order; October 24, 1989); In re: Environmental Protection Corp., RCRA (3008) Appeal No. 90-1 (Order Adopting the Presiding Officer's Decision on Remand as Final Agency Action; September 12, 1990); In re: Florida Fence Post Co., Docket No. 90-09-R (Ruling on Motion to Dismiss; November 30, 1990); In re: Coors Brewing Co., Docket No. RCRA-VIII-90-90 (Order on Motions; January 4, 1991).

[3]/ In administrative actions, a Region may for strategic purposes or to facilitate settlement provide respondents with more information early in the action than required by 40 CFR § 22.14(a)(5). In addition, as the litigation proceeds, the complainant will normally be required to supply detailed information on the bases for proposed penalties in the prehearing exchanges of witnesses and exhibits and at hearing. While a Region may elect to rely on previously prepared penalty documentation in these situations, care should be exercised not to cause litigative risk analyses, settlement positions, or other privileged information to be released. For this reason, even the initial documentation for proposed penalty amounts should be prepared and handled to protect government evidentiary privileges by placing all privileged information relating to litigative risk or potential mitigating factors in separate memoranda marked as "attorney work products" or "attorney-client communications."

Attached to this memorandum are examples of narrative statements which we expect would be viewed as sufficient to comply with 40 CFR § 22.14(a)(5). The narrative statements correspond to three violations which appear in the RCPP as hypothetical applications of the Policy. Please include similar narrative statements in future RCRA administrative complaints.

Attachment

cc: ORC RCRA Branch Chiefs
RCRA Program Branch Chiefs

- Attachment -

40 CFR § 22.14(a)(5):

EXAMPLES OF NARRATIVE PENALTY STATEMENTS

Example 1 Narrative statement of the reasoning behind the proposed penalty for the violation described in the RCPP at pages 48-51 and 61-64:

> Operating without a permit or interim status (42 U.S.C. 6925): By operating without a permit or interim status, the violator caused a substantial risk of exposure of humans and the environment to hazardous wastes, with substantial adverse effects on RCRA implementation. Because the violator neither notified EPA that it stored hazardous waste nor submitted a Part A application, it was in total noncompliance for the duration of the violation. The violation continued for 343 days, and provided an economic benefit of at least $9,000 to the violator.

Example 2 Narrative statement of the reasoning behind the proposed penalty for the violation described in the RCPP at pages 70-72 and 74-77:

> Failure to prevent entry (40 CFR § 265.14): The potential for harm and human exposure to hazardous wastes is substantial under the facts of this case. While a fence existed, because a substantial portion of it had been knocked down, there was significant noncompliance. The violation continued for 135 days. The violator received an economic benefit of $12,743 from its noncompliance. The violator has been cited in writing on at least two prior occasions for failing to prevent public access to the active portion of its facility.

Example 3 Narrative statement of the reasoning behind the proposed penalty for the violation described in the RCPP at pages 87-91 and 93-96:

> Failure to send accurate LDR notifications and certifications (40 CFR § 268.7): The violator's failure to properly notify its TSD facility that it was providing LDR-restricted wastes hindered the TSD's ability to characterize the wastes and caused a substantial adverse impact on the RCRA program. The violator provided substantially deficient or no LDR notifications/certifications on 12 separate occasions. Prior violations of the same rule at other violator facilities is evidence of negligence. The violator received an economic benefit of noncompliance of $2,500.

Appendix D

EPA Summary of Case Law

Cases Updated As of Summer, 1994
Notes Updated As of Spring, 1995

RCRA ENFORCEMENT & PENALTIES:

ILLUSTRATIVE JUDICIAL AND ADMINISTRATIVE DECISIONS

Prepared by: Jon Silberman, Senior Counsel
OECA-ORE-RCRA Enforcement Division

Please address any comments or recommendations for expanding/improving this outline to Jon Silberman at 202-564-4006 (FAX 202-564-0019).

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-- NOTICE: RCRA decisions are "starred." --

Note: This outline summarizes some of the four hundred-plus RCRA administrative opinions accessible through LEXIS and other electronic databases. The decisions exemplify how the courts, the Environmental Appeals Board, and the Agency's Presiding Officers apply the factors in the statute and RCRA Civil Penalty Policy (RCPP) to assess appropriate penalties. It is not possible to reproduce in an outline of this magnitude all of the case-specific factors and nuances that may have influenced the Judges in reaching their decisions. Review a hard copy of each decision before citing it as precedent in litigation.

The "Notes" in this outline provide useful background information on interpreting the RCRA penalty criteria and the cited cases. Nevertheless, they do not necessarily state EPA policy, and should not be cited as representing official EPA positions.

RCRA STATUTORY PENALTY PROVISIONS:

1. Section 3008(a)(3) [42 U.S.C. § 6928(a)(3)]:
   Penalty: $25,000 per day of noncompliance for each violation of the requirements of Subtitle C of RCRA - assessed in an order.
   Statutory Factors: "seriousness of the violation" "any good faith efforts to comply"

2. Section 3008(c) [42 U.S.C. § 6928(c)]:
   Penalty: $25,000 for each day of continued non-compliance of a compliance order.
   Statutory Factors: None.

3. Section 3008(g) [42 U.S.C. § 6928(g)]:
   Penalty: $25,000 for each violation of the requirements of Subtitle C of RCRA with each day constituting a separate violation. This penalty is assessed by a court.
   Statutory Factors: None.

4. Section 3008(h)(2) [42 U.S.C. § 6928(h)(2)]:
   Penalty: $25,000 for each day of noncompliance with a corrective action order.
   Statutory Factors: None.

5. Section 3013(e) [42 U.S.C. § 6934(e)]:
   Penalty: $5,000 for each day during which the defendant fails to comply with a § 3013 order.
   Statutory Factors: None.

6. Section 7003(b) [42 U.S.C. § 6973(b)]:
   Penalty: $5,000 for each day of violation of a § 7003 imminent and substantial endangerment administrative order.
   Statutory Factors: None.

7. Section 9006(a)(3) [42 U.S.C. § 6991e(a)(3)]:
   Penalty: $25,000 for each day of continued non-compliance with an UST administrative order.
   Statutory Factors: None.

8. Section 9006(d)(1) [42 U.S.C. § 6991e(d)(1)]:
   Penalty: $10,000 for each tank for which notification is knowingly not given or for which false information is submitted.
   Statutory Factors: None.

9. Section 9006(d)(2) 42 U.S.C. § 6991e(d)(2)]:
   Penalty: $10,000 for each tank for each day of violation of specified UST regulatory requirements.
   Statutory Factors: None.

10. Section 11005(a)(2) [42 U.S.C. § 6992d(a)(2)]:
    Penalty: $25,000 per day of noncompliance with the requirements of the Medical Waste Tracking Act for each violation. Assessed through an administrative order.
    Statutory Factors: "seriousness of the violation"
    "good faith efforts to comply"

11. Section 11005(a)(4) [42 U.S.C. § 6992d(a)(4)]:
    Penalty: $25,000 for each day of continued noncompliance with a Medical Waste Tracking Act administrative order.
    Statutory Factors: None.

12. Section 11005(d) [42 U.S.C. § 6992d(d):
    Penalty: $25,000 for each violation of the requirements of the Medical Waste Tracking Act with each day of violation constituting a separate violation. Assessed by a court.
    Statutory Factors: None.

DETERRENCE:

*** United States v. T & S Brass and Bronze Works, Inc., 681 F. Supp. 314, 322 (D.S.C. 1988), aff'd, 865 F.2d 1261, 28 Env't Rep. Cas. (BNA) 1649 (4th Cir. 1988): Defendant T & S was ordered to pay a $194,000 penalty ($1,000/day for 194 days of LOIS violations). The Court held: "Assessment of the amount of a civil penalty is committed to the informed discretion of the Court. (Citations omitted). In exercising this discretion, the Court should give effect to the major purpose of a civil penalty: deterrence. See United States v. Phelps Dodge Industries, Inc., 589 F. Supp. 1340, 1358 (S.D.N.Y. 1984); United States v. Swingline, Inc., 371 F. Supp. 37, 47 (E.D.N.Y. 1974); State, ex rel. Brown v. Dayton Malleable, Inc., 1 Ohio St. 3d 151, 438 N.E.2d 120, 125 (1982)."

*** United States v. Environmental Waste Control 710 F. Supp, 1172 (N.D. Ind.), aff'd 917 F.2d 327 (7th Cir. 1990). The Court imposed a penalty of $2.78 million based on the following factors: (1) deterrent impact of penalty (the Court discussed both general deterrence and specific deterrence); (2) lack of good faith efforts to comply; and (3) the seriousness of the violations. The Court cited T & S Brass and Bronze Works, supra, and the cases cited in T & S, in holding that "the Court should give effect to the major purpose of a civil penalty: deterrence." 710 F. Supp. at 1242. "A civil penalty must provide a meaningful deterrence without being overly punitive; it should be large enough to hurt; it should deter anyone in the future from showing a similar lack of concern with compliance. (Citation omitted)." Id. at 1244. "EWC has been faced more than once with a choice between disobeying the law or continuing its operations; each time, EWC chose to disobey the law and make more money. Substantial penalties ... are warranted." Id. at 1245.

*** United States v. Vineland Chemical Co., No. 86-1936 (D.N.J. April 30, 1990), reprinted in 31 ERC 1720, aff'd, 33 Env't Rep. Cas. (BNA) 1316 (3d Cir. 1991): Citing T & S Brass and Environmental Waste Control, the district court held that the civil penalty must provide a meaningful deterrence without being overly punitive. See also U.S. v. Ciampitti, 669 F. Supp. 684, 700 [26 ERC 2026] (D.N.J. 1987) ("civil penalties are imposed 'with the aim of both punishing the defendant[s] and of deterring [them] and others from taking further [illegal] action"). ... We must be clear to the regulated community that violations of the law are not treated lightly, especially where the regulations protect public health and the environment. Moreover, a significant penalty deprives violators of any economic benefit from delay in compliance. Too small a penalty risks being considered by violators as 'an acceptable cost of violation, rather than as a deterrence to violation. U.S. v. ITT Continental Baking Co., 420 U.S. 223, 231 (1975)." The Court imposed a $1,223,000 penalty for LOIS violations.

Diver, "The Assessment and Mitigation of Civil Money Penalties by Federal Administrative Agencies," 79 Colum. L. Rev. 1435, 1458: "The efficacy of any regulatory program depends on the sanctions imposed in individual cases. If these sanctions are set too low, potential violators may be insufficiently motivated to minimize the social harm resulting from their behavior, or society may be under compensated for the harm that does occur."

*** U.S. v. Ekco Housewares, Inc. (N.D. Ohio): On January 28, 1994, the United States obtained a $4.2 million penalty judgment in this matter based on Ekco's failure to maintain financial assurance for closure, financial assurance for post-closure, and liability coverage. The Court's deterrence-based analysis of the purposes of a civil penalty at pages 38-39 of the opinion, which cites many of the cases in this section of the Outline, represents a textbook elucidation of these penalty considerations. The Court found that Ekco accrued a total economic benefit (EBN) of $434,000. The Court cited this EBN as the "floor" of Ekco's penalty, which it then increased substantially in order to create "substantial disincentives" to deter Ekco and others from similar violations.

*** United States v. Maiorano, No. 87 C 4491 (N.D. Ill.; January 8, 1990), reprinted in 20 ELR 20444: "The government argues that a substantial penalty is warranted for reasons of deterrence. [Citations omitted] The Court agrees. ... Defendant[s] ... disregarded specific orders ... have not taken this matter seriously, and they have exhibited a pattern of behavior which evidences a complete disregard for statutory law, EPA orders, and judicial orders. To impose merely a perfunctory or token penalty would send a message to similarly situated persons that they may flout the law without consequence. ooo The government has suggested that a civil penalty of $100,000 - about $110 per day - would be appropriate. Although this figure is a relatively small proportion of the maximum penalty [permitted by law], it is nonetheless a substantial sum, and would serve [RCRA's] deterrence purposes..."

*** United States v. ILCO, No. CV-85-H-823-S (N.D. Ala. Oct. 8, 1991): The court imposed a penalty of $3,500,000 against a company in bankruptcy, and its president, for RCRA and Clean Water Act violations. In setting the penalty, the court "engaged in a delicate balancing of requiring compliance, punishing non-compliance and endeavoring to keep viable, if possible, a business which can be of great value to the implementation of policies embodied in federal and state environmental laws."

*** United States, et al. v. Production Plated Plastics, Inc., et al., File No. K87-138 CA (W.D. Mich.): The Court described the $1.5 million RCRA penalty for violations including operating

unpermitted seepage lagoons as, "certainly large enough to hurt ..."

*** In the Matter of: J.V. Peters and Co., et al., RCRA Docket No. V-W-81-R-75 (Initial Decision [Order on Remand]; September 26, 1988: "... the civil penalty provision of RCRA is essentially regulatory, seeking to enhance compliance with the Act rather than impose penal sanctions on those who violate the statute ... (citation omitted)."

U.S. V. Trident Seafoods Corp., No. C92-1025D (Order; December 13, 1993) at 7, n.4: "The rationale for considering the size of the company and the financial impact of the penalty is explained in United States v. Chevron U.S.A., Inc., 639 F.Supp. 770, 779 (W.D. Tex. 1985): 'Only a substantial penalty would have any economic impact or serve as any deterrent [to a major corporation].'"

SEPARATE PENALTIES FOR SEPARATE VIOLATIONS:

Blockburger v. United States, 284 U.S. 299, 304 (1932): "Where the same act or transaction constitutes a violation of two distinct statutory provisions, the test to be applied to determine whether there are two offenses or only one, is whether each provision requires proof of an additional fact which the other does not."

*** In the Matter of: ROI Development Corp., Docket No. RCRA (3008) VIII-90-12 (Initial Decision; March 31, 1994): On June 26, 1990, Region 8 filed a complaint under the 1984 RCRA penalty policy alleging 3 separate RCRA violations. The violations all resulted from a single, 1988 shipment of 100 gallons of 1,1,1, trichloroethane (TCE) to a non-Subtitle C disposal unit. The Region charged the Respondent with causing the illegal disposal of hazardous waste (Count I), improperly characterizing the waste on its manifest (Count II), and failing to notify the receiving facility of the appropriate LDR treatment standard (Count III). The ALJ, citing the test in Blockburger v. U.S. (i.e., "whether each violated provision requires proof of an additional fact which the other does not"), agreed with Region 8 that each of the ROI's violations should be penalized separately. The Judge agreed with the Respondent that "the violations revolve around a single factual incident," Decision at 22. He found, however, that "all three involve separate elements of proof." Decision at 23. In addition, the requirements have "separate regulatory and statutory purposes." Decision at 25. Decided by Judge Head.

*** In the Matter of: Martin Electronics, RCRA Appeal No. 86-1 (Order on Sua Sponte Review; June 22, 1987): In the Initial Decision, the ALJ had held: "In the instant case, the Respondent failed to notify the Agency of the fact that it was generating

and storing spent solvents on its premises which the Respondent used to clean parts and thin paint. ... My reading of this record would suggest that the Respondent was guilty of essentially one act and that was the failure to notify the Agency of the existence of these wastes on its property. The fact that is failed to do so in several instances and under several different regulations does not in my judgment authorize the assessment of three different penalties which, in essence, arise from the same factual situation." On review, the CJO reversed this holding. Characterizing the issues as one of "legislative intent," the CJO found that RCRA "contemplated that separate penalties would be assessed" for separate violations of distinct hazardous waste notification requirements. See also F.A.A. v. Landy, 705 F. 2d 624, 636 (2d Cir. 1983), cert. den. 464 U.S. 895 (1983), and Lougren v. Byrne, 787 F. 2d 857 (3rd Cir. 1986), cited in support of the holding.

*** In the Matter of: F & K Plating Co., Appeal No. 86-1A (Final Decision; October 8, 1987): "Even violations of the same regulations at a single location can result in separate penalties where they involve two or more independent acts and pose distinct risks." In this case, separate penalties were assessed for failing to maintain adequate security and failing to post warning signs. (The CJO added, however, that even if the two counts were consolidated, the "extent of deviation" would increase from "moderate" to "major," resulting in essentially the same penalty amount.")

*** In the Matter of Fair Haven Plastics, Inc., et al., Docket No. RCRA V-W-88-R-005 (Initial Decision; May 3, 1989): In this interesting decision, the ALJ refused to accept EPA's penalty assessment witness's own determination that several different violations could legitimately be grouped together for penalty assessment purposes. Applying the "requires an element of proof not needed by the others" test, the Judge grouped the "failing to obtain an EPA ID Number" and "shipping hazardous waste without an EPA ID Number" violations together, but insisted on separate penalty assessments for each of the following remaining violations: storage of hazardous waste without interim status or a permit; failure to properly label containers; failure to develop a personnel training program; and failure to develop a contingency plan and emergency procedures. As a consequence, the Court's GBP calculation was considerably higher than the Region's. Decided by Judge Frazier.

Public Interest Research Group of New Jersey, Inc. v. Powell Duffryn Terminals, Inc., No. 89-5831 (3rd Cir. 1990) (filed August 20, 1990: at 28 - 29: PIRG was accused of "double counting" when it counted a single reported exceedance for a pollutant as a violation of both the average concentration limit and the maximum concentration limit for that pollutant. Held: "These are clearly separate limitations and we see no reason why

PDT should not be penalized separately for violating each limitation."

In the Matter of: 3M Company, TSCA Appeal No. 90-3 (Final Decision, February 28, 1992): TSCA Sections 5 and 13 "new chemicals program" penalty appeal. Held: separate penalties assessed for each separate act of illegal "new chemical" import; separate penalties also assessed, per illegal act, under (1) TSCA Section 5 (import without a premanufacture notice [PMN]); and (2) TSCA Section 13 (false certification to Customs Department).

In the Matter of: Helena Chemical Company: FIFRA Appeal No. 87-3 (Order; November 16, 1989): Appeal of Initial Decision assessing a $12,400 penalty for numerous FIFRA violations. On the issue of liability, the ALJ determined that EPA had proven twenty separate illegal sales of the restricted use pesticide, but imposed only a single penalty. This aspect of the holding was reversed on appeal, and a new $117,400 penalty assessed: Held: "[E]ach sale was an independent act, requiring independent proof that the transaction occurred and also proof that the purchaser was not certified on the date of the sale. ... I disagree with respondent's contention that the twenty sales -- which spanned a six month period -- were part of 'the same series of events' merely because they involved the same vendor and purchaser and the same pesticide."

*** In the Matter of: Elwin G. Smith Division, Cyclops Corporation, Appeal No. 86-6 (Final Decision; August 14, 1990): The CJO concurred in the ALJ's treatment of a failure to submit a Part B application and failure to have a closure plan as a single violation, since the violator could have either filed a Part B and not closed, or closed in accordance with an approved plan and not filed a Part B.

In the Matter of: Bio-Tek Industries, Inc., Docket No. FIFRA-92-H-06 (Order Denying Motion to Dismiss Based on Threshold Legal Issues; April 13, 1993): Respondent Bio-Tek was charged with 23 counts of submitting false compliance statements in connection with studies submitted under FIFRA to support a product application. Bio-Tek had submitted certifications, as the sponsor for two studies, stating that the studies were conducted in accordance with FIFRA Good Laboratory Practices (GLPs). Each study actually failed to comply with the GLPs for multiple reasons, which is why EPA included multiple counts. The ALJ reduced the number of counts from 23 to 2, however, based on his conclusion that there really were only two identified studies and two separate certifications involved in the violations. Decided by Judge Nissen.

GRAVITY-BASED PENALTY/ADJUSTMENT FACTORS "HIERARCHY":

In the Matter of: 3M Company, TSCA Appeal No. 90-3 (Final Decision, February 28, 1992): TSCA Sections 5 and 13 "new chemicals program" penalty appeal. Held: appropriate method of calculating penalty is to first calculate a gravity-based component to reflect the seriousness of the violations, and second adjust the GBP based on factors relating to the violator. In this case, the existence of a compliance program and the inadvertence of the violations did not affect the potential for harm (gravity) of the violations and so were properly considered factors relating to GBP adjustments. "[3M's] commitment [to compliance] does not lessen the probability of harm occurring once a violation has taken place. ... [Rather, they relate to] the actions and intent of the violator [which deserve consideration] during the second [adjustment] phase of the analysis ..."

*** In the Matter of: National Coatings, RCRA Appeal No. 86-5 (Final Decision; January 22, 1988): Based on evidence that the Respondent "had no intent to dispose of hazardous waste improperly," the ALJ assigned a lower GBP than provided for in the RCRA penalty policy. The CJO reversed the Initial Decision and reinstated the Agency's proposed GBP, holding that the violator's "intent" is irrelevant to the issue of the potential of the violation to cause harm.

GRAVITY OF THE VIOLATION - "POTENTIAL" FOR HARM:

*** In the Matter of: A.Y. McDonald Industries, Inc., Appeal No. RCRA (3008) 86-2 (Final Decision; July 23, 1987): The CJO rejected the Respondent's argument that its penalty should be reduced because no actual harm resulted. The focus of the RCRA penalty policy is on potential for harm, not actual harm or intent. "McDonald should not be rewarded for its complete disregard of the RCRA program simply because test results this far fail to show groundwater contamination."

All Regions Chemical Labs., Inc. CERCLA-I-88-1089 (May 3, 1989). (Accelerated Decision, EPCRA case) aff'd sub nom. All Regions Chemical Labs., Inc v. United States Environmental Protection Agency, No. 90-1715 (1st Cir., May 6, 1991): The violator-appellant failed to notify the National Response Center (NRC), pursuant to CERCLA Section 103(a), promptly upon learning of two fires. The fires released 180,000 pounds of chlorine into the air, creating a chlorine cloud forcing 30,000 people to be evacuated. The statute required "immediate" notification. EPA learned of the first fire, 5 hours after it began, from a private citizen. EPA learned of the second fire, two hours after it began, from the Massachusetts Department of Environmental

Quality. All Regions itself gave the NRC formal notice only months later. Though CERCLA Section 109(b) permits penalties of up to $25,000 per day for continuing violations of notification requirements, EPA assessed a one-day penalty in light of the notice it had received from the private citizen and state agency. The penalty assessed was $20,000, or 80% of the statutory maximum. In contesting the $20,000 penalty, All Regions argued that no actual harm resulted from its late notification to EPA. Even after receiving notice, the violator claimed, EPA had little involvement with the response action. Held: the key factor for penalty assessment purposes is potential for harm: "When the violation was committed, that is, when the release first took place, failure to notify EPA might well have caused serious harm." "[The ALJ's] discussion, taken as a whole, "suggest[ed] that the ALJ was considering what might have happened in the absence of the 'fortuitous' events of adequate responses and notification by other parties ... Given the [A]gency's legal power to assess penalties in terms of what might have happened ... rather than what did happen, All Region's argument is unconvincing." (Emphases in original.) The Court also rejected All Regions' argument that EPA improperly failed to credit it for $1.205 million spend in clean-up costs. The violator sought a 35% penalty adjustment to reflect these costs. The Court found instead that "since clean-up costs will often be associated with harm, larger costs would often mean larger harm, calling for a higher, not a lower, penalty." Thus the clean-up costs plus the penalty amount, taken together, were not "excessive for the particular violation."

*** U.S. v. Ekco Housewares, Inc. (N.D. Ohio): On January 28, 1994, the United States obtained a $4.2 million penalty judgment in this matter based on Ekco's failure to maintain financial assurance for closure, financial assurance for post-closure, and liability coverage. In analyzing the gravity of Ekco's violations, the Court considered the identity and toxicity of the hazardous constituents at the site, the intent of the violated provisions in terms of the potential risks they were designed to prevent, and the purposes of a civil penalty.

In the Matter of: 3M Company, TSCA Appeal No. 90-3 (Final Decision, February 28, 1992): In this TSCA Sections 5 and 13 "new chemicals program" penalty appeal, the CJO determined that the GBP must reflect the "probability" of harm from the violations.

In the Matter of: State of West Virginia, Department of Highways, TSCA Appeal No. 86-2 (Final Order; January 21, 1987). Respondent in PCB case appealed imposition of full proposed penalty, arguing that the penalty should be reduced because "no harm to persons or the environment resulted from [the Respondent's] violations." Held: "[C]ongressional intent [does not] waiver where, as here, there has been no known present

damage to human health or the environment. The Agency's TSCA enforcement action is prophylactic; it is intended to prevent potential health or environmental accidents from ever occurring."

In the Matter of Port of Oakland and Great Lakes Dredge and Dock Co., MPRSA Appeal No. 91-1 (Final Decision and Order; August 5, 1992): The Port and dredging company violated the Marine Protection, Research, and Sanctuaries Act, and a permit issued thereunder. "In order to establish the potential environmental harm from the disposal of unpermitted sediments, EPA need not prove that the sediments were in fact harmful, but only that there suitability for ocean disposal had not been determined as of the time of their disposal. Decided by the Environmental Appeals Board.

In the Matter of: T H Agriculture and Nutrition Co., Docket No. TSCA VII-83-T-191 (Initial Decision; January 10, 1984). Respondent improperly shipped for disposal contaminated waste materials, in violation of "existing chemical" rules promulgated pursuant to TSCA Section 6. Held: "It is the 'probability of harm' or potential for harm and the risk inherent in the violation as it was committed that is properly considered rather than any actual harm that resulted from the subject violation."

*** In the Matter of: Millipore Corp., Docket No. RCRA (3008) II-85-0303 (Accelerated Decision; July 30, 1986) [Decision on Remand; April 30, 1987] [Final Decision; December 2, 1987]: The "issue to determine in assessing Respondent's illegal closure is not whether exposure occurred from such closing, but rather the potential for harm created by closing outside the prescribed regulatory procedures. ... [A] violator is not to be rewarded for luck where no actual harm can be proven to have occurred as a result of the violation." Decided by Judge Finch.

Note: RCRA practitioners are advised to exercise caution in relying on pre-October, 1990 administrative cases to determine the "potential for harm" of present violations, absent close analysis of the facts of both cases. Few pre-1990 RCPP cases included multiday penalty components, resulting in many cases with inadequate overall penalties which failed to reflect the true gravity of the violations. This may have promoted, in some cases, a determination of "potential for harm" and "extent of deviation" of the violations so as to compensate for the lack of multiday penalties. Cases with facts roughly equivalent to prior cases litigated today will usually warrant considerably higher overall penalties due to the multiday penalty component.

Note also: In determining the gravity of a violations, case developers should always consider the specific facts at hand, to ensure that violations of the same provisions by

different companies receive appropriate penalties where, for example, substantially different site conditions (e.g., the presence at the facility of containment systems, safeguards, and security systems) or quantities and toxicities of waste exist. Otherwise, large, poorly-run facilities could receive essentially the same gravity-based penalties as small, very well-run facilities for violations of the same provisions where the "potential for harm" is not identical. Such a result is not contemplated by the RCPP.

GRAVITY OF THE VIOLATIONS - RISK TO HUMANS AND THE ENVIRONMENT

*** In the Matter of Stallworth Timber Company, Inc., RCRA (3008) Appeal No. 89-1 (Order Denying Review; July 11, 1991): Action against company for violating surface impoundment "freeboard" operating standards (40 CFR § 265.222). Held: Initial decision assessing $25,000 "major-major" penalty affirmed. The Presiding Officer correctly determined that the absence of adequate freeboard poses a "major" risk of harm because of the "increased chance of spillage, the proximity of the area to waters of the United States, and the area's tendency to receive large areas of rainfall," and appropriately took into account that the Region's inspector had observed freeboard violations on more than one occasion. The Chief Judicial Officer (CJO) further rejected the Respondent's argument that its penalty should only have been $1,000 because the $25,000 penalty actually assessed was substantially higher than those assessed in similar cases, stating: "The penalty amounts assessed in the [other 2] cases ... are irrelevant to determining an appropriate penalty here because the circumstances of both of those violations differ substantially from those alleged here." The other cases involved storage tanks, rather than surface impoundments, and therefore posed different risks. Decided by the CJO.

*** In the Matter of: Martin Electronics, RCRA Appeal No. 86-1 (Order on Sua Sponte Review; June 22, 1987): The CJO assessed the "potential for harm" for the failure to notify EPA of a Part A permit revision at the low end of the moderate/moderate cell. The Respondent generated only 200-250 gallons of solvents per year, and had notified EPA of other waste activities so that EPA was at least aware that Respondent generated and stored hazardous wastes other than spent solvents.

*** In the Matter of: Elwin G. Smith Division, Cyclops Corporation, Appeal No. 86-6 (Final Decision; August 14, 1990): Respondent had stored over 2,000 drums of flammable hazardous wastes in deteriorating drums. The CJO determined, among other things, that: (1) the failure to maintain adequate aisle space presented a "major" potential for harm because emergency access to the barrels was blocked, increasing the possibility of a major fire of spill (there was "extremely narrow spacing of at least some of the drums"); and (2) the failure to store hazardous waste in good condition and prevent leaks also presented a "major"

potential for harm as there could have been a disaster had exposed flammable wastes ignited. An essential element of EPA's proof of the latter violation was the inspector's testimony that he saw at least half a dozen drums leaking, while others were in a deteriorated condition. The Court also noted that the violations had persisted for some time despite repeated warnings.

*** In the Matter of: ROI Development Corp., Docket No. RCRA (3008) VIII-90-12 (Initial Decision; March 31, 1994): On June 26, 1990, Region 8 filed a complaint under the 1984 RCRA penalty policy alleging 3 separate RCRA violations. The violations all resulted from a single, 1988 shipment of 100 gallons of 1,1,1, trichloroethane (TCE) to a non-Subtitle C disposal unit. The Region charged the Respondent with causing the illegal disposal of hazardous waste (Count I), improperly characterizing the waste on its manifest (Count II), and failing to notify the receiving facility of the appropriate LDR treatment standard (Count III). The Region sought single-day penalties of $25,000 apiece (i.e., major-major violations at the top of the respective matrix cells) for these violations. For each violation, ALJ the lowered the potential for harm from "major" (as proposed by Region 8) to "moderate." The Judge found that TCE is harmful to human health and the environment and that its illegal disposal posed a likelihood of exposure, but because only 100 gallons of waste were involved, he did not view the potential for harm to be "major." He rejected Region 8's argument that potential for harm should be set by reference to the overall condition of the receiving facility, holding instead that "Respondent is strictly liable only for the potential for harm of its illegal shipment under the RCRA program ..." Decision at 30. For Count II (manifest violation), the ALJ noted that while Respondent's manifest had been improperly completed, Decision at 35, the shipment included a manifest as well as an MSDS. Decision at 36. For Count I (illegal disposal), the ALJ assessed the penalty at the bottom of the moderate-major cell, based on the relatively low volume of waste involved in the violation.

*** In the Matter of: Millipore Corp., Docket No. RCRA (3008) II-85-0303 (Accelerated Decision; July 30, 1986): Factors in determining the appropriate GBP in this case included the "types and quantity of waste involved ... " (in this case, 50 drums of waste lacquer, 5 drums of waste solvent, and 45 drums of used oil, plus any additional wastes generated in closure). But see Appeal No. 86-7 (Final Decision; December 2, 1987): On appeal, the CJO reduced the "probability of harm" determination from "major" to "moderate," holding inter alia that "the Region does not furnish any explanation of how the 'nature and quantity' of the waste [alone] create[d] a substantial likelihood of exposure." The Court noted that Millipore had submitted a closure plan (albeit flawed), was replacing the old facility with a new facility at the same site, and had consulted with the Puerto Rico Environmental Quality Board about the closure. These factors all lessened the likelihood of exposure. Decided by Judge Finch.

*** In the Matter of: Sandoz, Inc., Docket No. RCRA (3008) 84-54-R (Initial Decision; October 31, 1985), aff'd, Appeal No. 85-7 (Final Decision; February 27, 1987): The ALJ balanced the "rather high" quantities of waste involved in the violation with the manner in which the subject impoundment was constructed ("an above average threshold of protection"). In this action involving groundwater monitoring violations, the ALJ determined that the fact because the Respondent's groundwater monitoring system still provided some protection despite its deficiencies, the violations posed a "moderate" rather than a "major" potential for harm. Decided by Judge Yost.

*** In the Matter of: Aero Plating Works, Inc., Docket No. RCRA (3008) V-W-84-R-071-P (Initial Decision; February 13, 1986): In this case, the ALJ found that "some firm evidence showing precisely what quantities of hazardous waste were involved and for what periods of time" was missing from the record. In the absence of this evidence, though he determined that some violations began in 1981, the ALJ placed all of the numerous violations (including "operating without a permit or interim status") in the "minor" potential for harm GBP category. The ALJ held the father and son owner/operators of the plating firm jointly and severally liable for an $18,500 penalty, and also required the son to pay an additional $3,500 penalty. Decided by Judge Harwood. (cont.)

> Note: In a followup case, United States v. Maiorano, No. 87 C 4491 (N.D. Ill.; January 8, 1990), reprinted in 20 ELR 20444, the District Court increased the penalty against the Aero Plating Works owner/operators to $100,000, based on their continuing recalcitrance.

*** In the Matter of Fair Haven Plastics, Inc., et al., Docket No. RCRA V-W-88-R-005 (Initial Decision; May 3, 1989): Respondent failed, inter alia, to file a Part A (i.e., it operated without interim status or a permit. The "potential for harm" was classified by the ALJ as "moderate," and the penalty was assessed as the low end of the applicable GBP matrix cell, because the quantity of waste accumulated since 1978 averaged only about 5.8 drums (320 gallons) per year. In addition, any threat to human health and the environment was ameliorated by the fact that the wastes were contained in drums inside an on-site trailer. In re: A.Y. McDonald Industries was distinguished. In that case, McDonald's illegal operation was deemed to present a "major" "potential for harm," where the company had dumped more than one million pounds of waste at the site over five years, and site security was poor if not nonexistent. Decided by Judge Frazier.

In the Matter of Port of Oakland and Great Lakes Dredge and Dock Co., MPRSA Appeal No. 91-1 (Final Decision and Order; August 5, 1992): The Port and dredging company violated the Marine Protection, Research, and Sanctuaries Act, and a permit issued thereunder. "Where the Region has made a permit

determination under the MPRSA that particular sediments are unsuitable for ocean disposal, their potential to cause environmental harm has been established and will be assumed once exposure or potential for exposure exists." Cited in support of this holding were In the Matter of Briggs & Stratton, TSCA Appeal No. 81-1 (February 4, 1981) (unnecessary to introduce evidence of the toxicity of PCBs in a proceeding to assess a civil penalty for PCB rules violations), and *** In the Matter of A.Y. McDonald, RCRA (3008) Appeal No. 86-2 (July 23, 1987) (the toxicological effect of material identified by regulation as hazardous waste should not be evaluated in determining the potential for harm of the waste for penalty purposes because "once a waste is deemed hazardous under the regulations, its potential danger has been established." Decided by the Environmental Appeals Board.

GRAVITY OF THE VIOLATION - HARM TO THE RCRA PROGRAM:

> Note: In assessing GBPs under the 1990 RCPP where "harm to the RCRA regulatory program" is a key consideration, care should be taken also to analyze the potential harm to health and the environment from the violations. Regardless of which impact is considered more severe, the litigation team should always be prepared to demonstrate not only how the violation impacts an important RCRA program, but also why the program itself is important. Explaining the health and environmental risks the program is designed to address, and showing how noncompliance with the program increases the likelihood of these risks occurring, are effective ways to accomplish this result. Citing to the relevant rule preamble and supporting documentation, and presenting expert testimony from the EPA staff responsible for implementing the program, are both appropriate techniques in litigation.

*** In the Matter of: A.Y. McDonald Industries, Inc., Appeal No. RCRA (3008) 86-2 (Final Decision; July 23, 1987): Held: ALJ's characterization of the potential harm as "moderate" increased on appeal to "major". "The notification and permitting requirements are crucial to the effective enforcement of RCRA. ... [T]he failure to file the notification and to apply for a permit or qualify for interim status had the effect of concealing from the EPA Respondent's existence and the nature of the hazardous waste operations. ... In other words, the notification and permit requirements go to the very heart of the RCRA program. If they are disregarded, intentionally or inadvertently, the program cannot function."

*** In the Matter of: Grumman St. Augustine Corp., Docket No. RCRA 87-18-R (Initial Decision; May 10, 1989): Respondent aircraft paint stripper failed, among other things, to submit a Part B permit application. Held: "[T]he permit application forms an essential part of the Agency's ability to regulate

hazardous waste ... Without this vital information, the Agency is severely hampered in its ability to operate a 'cradle to grave' program which the statute and regulations require." Decided by Judge Yost.

*** In the Matter of: Millipore Corp., Docket No. RCRA (3008) II-85-0303 (Initial Decision; July 30, 1986): The ALJ determined that the "Respondent, through its illegal closure, has succeeded in by passing [sic] the entire closure procedure required by the regulations. These avoided procedures include Agency comment and supervision over such details as systems and devices necessary for [groundwater protection, equipment decontamination, etc.]." "Closure or partial closure of any hazardous waste facility without an approved closure plan successfully avoids the entire regulatory procedure for closure and, thus, clearly has a substantial [i.e., "major"] adverse effect on the regulatory procedure for implementing closure." On appeal, however, see Appeal No. 86-7 (Final Decision; December 2, 1987), the CJO reduced the "potential for harm" determination to "moderate" because, although Millipore hadn't consulted with the government prior to closure, it had submitted a plan that met RCRA substantive requirements and did communicate with the appropriate officials "after the fact." Decided by Judge Finch.

*** The Marley Cooling Tower Co., Docket No. RCRA-09-88-0008 (Decision and Order; November 30, 1989): Respondent failed to submit updated financial assurance documentation for 1986 and 1987, but had actually maintained the required financial assurance. The ALJ found the likelihood of harm to be "inconsequential," since funds were available for closure and post-closure, but classified the "potential for harm" from the violation as "moderate" due to the disruptive effect of the violation on the RCRA program. Decided by Judge Greene.

*** In the Matter of: Elwin G. Smith Division, Cyclops Corporation, Appeal No. 86-6 (Final Decision; August 14, 1990): The Respondent appealed the ALJ's determination that its failure to file a revised Part A application regarding capacity presented a "major" potential for harm because of the RCRA program's dependency on accurate information. The Respondent argued that it had simply made a typographical error (typing 10,000 rather than 110,000 gallons). The CJO affirmed the ruling, noting among other things that approvals of applications for capacity increases at other facilities under 40 CFR § 270.72(b) would depend in part on the information in agency files about the available capacity at Respondent's facility.

EXTENT OF DEVIATION:

Note: The function of the "extent of deviation" factor is to reflect the degree to which the violation renders inoperative the violated requirement on any given day. The

duration of the violation over time should be addressed through the multiday penalty component, not the "extent of deviation." Pre-October, 1990 penalty cases lacking multiday penalty components do not always respect this distinction.

*** In the Matter of: Grumman St. Augustine Corp., Docket No. RCRA 87-18-R (Initial Decision; May 10, 1989): "... Respondent kept its percolation pond in operation for 240 days without a permit and after the time it was required by the law to close. Additionally the Respondent did not certify compliance with groundwater monitoring or financial responsibility requirements ..., and ... the closure plan submittals were totally inadequate." All of these factors were held to "clearly demonstrate a major extent of deviation as the violations above specified ..." Decided by Judge Yost.

*** In the Matter of Fair Haven Plastics, Inc., et al., Docket No. RCRA V-W-88-R-005 (Initial Decision; May 3, 1989): (1) Extent of deviation deemed "major for each of these violations, where the Respondent (1) failed to file a Part A, altogether; (2) failed to obtain an EPA ID Number until after the filing of the Complaint; (3) failed to mark any of its drums; (4) did nothing to meet, even partially, the requirements for a personnel training program; and (5) developed no contingency plans at all. Decided by Judge Frazier.

*** In the Matter of Environmental Protection Corporation, Docket No. RCRA-09-86-0001 (October 24, 1989; Decision and Order): Where the Respondent met some of the requirements of RCRA Section 3007(a) by responding promptly to EPA's request for documents, by supplying some of the documents, and by offering its rationale for not submitting the remainder of the documents, the "extent of deviation" of the violation was deemed "moderate." Decided by Judge Vanderheyden.

*** In the Matter of: Ashland Chemical Company, RCRA (3008) Appeal No. 87-17 (Final Decision; November 15, 1989): In his Initial Decision, Judge Nissen had determined the "extent of deviation" of Respondent's storage of hazardous waste without a permit to present a "major extent of deviation." On appeal, Ashland argued that it should be "moderate" because it had previously submitted a Part A permit application (withdrawn prior to the onset of the violation). The CJO affirmed the "major" "extent of deviation" determination, as well as the ALJ's accounting for the actions in the form of a "good faith efforts" adjustment to the GBP.

*** In the Matter of: Elwin G. Smith Division, Cyclops Corporation, Appeal No. 86-6 (Final Decision; August 14, 1990): Where the ALJ found the EPA inspector's testimony credible that the Respondent had packed waste drums into an aisle so that he had to stand sideways to go between them and that there was inadequate aisle space for towmotors to pass, the "extent of

deviation" of the Respondent's failure to maintain adequate aisle space was correctly determined to be "major." The CJO likewise affirmed the ALJ's ruling that the Respondent's failure to store hazardous wastes in containers in good condition and prevent leaks presented a "major" "extent of deviation." The EPA inspector had testified that he saw "about half a dozen drums actually leaking, while others were in deteriorated condition." Respondent's argument that where only a small percentage of its 2,000 drums were actually leaking, the "extent of deviation" should not be "major," was rejected. The leaks, according to the CJO, "were an actual harm to the environment since waste reached the ground, and could have led to a disaster if the exposed flammable waste had been ignited ..." On the other hand, where "Respondent had filed a Part A application but had simply failed to revise it to be consistent with the actual capacity of the facility," the "extent of deviation" was "moderate."

*** In the Matter of Brunswick Mercury Marine Plant, Docket No. RCRA VI-433-H (Initial Decision; July 31, 1990): (1) "[R]espondent's waste analysis plan included some of the information required by the regulation, but ... three specific requirements were not included. This failure is sufficient to constitute a moderate deviation from the regulatory framework." (2) "Respondent's inspection log, while not a complete inspection schedule, included [a] substantial portion of the total information required. Certain information ... was not included, such as an inspection schedule for particular equipment. This constitutes [a] moderate deviation from the regulatory framework." (3) "[W]hile the personnel training records do not show that hourly employees received training, they did include some of the required information. ... [B]ecause a significant portion of the required information was present, it is found that the ["extent of deviation" is moderate]." (4) Respondent's closure plan violation "is a minor deviation from the regulatory requirements, the only violation established having been failure to include an estimated year of closure." (5) Respondent had serious groundwater monitoring violations, but had installed a system and measured the parameters it thought applied. The ALJ concluded that the "extent of deviation" fell midway between "major" and "moderate," and assessed a commensurate penalty. Decided by Judge Greene.

MULTIDAY PENALTIES:

Note: Multiday penalties were rarely proposed under the 1984 penalty policy. Consequently, with the exception of the Initial Decision in the Harmon Electronics case, which has not yet been incorporated into this outline, there are no identified RCRA administrative decisions addressing multiday penalties under the 1990 RCPP. The following case summaries describe RCRA civil judicial cases where multiday penalties have been imposed.

In the Matter of Dr. Marshall C. Sasser, Docket No. 404-89-102 (Initial Decision; July 30, 1991): Respondent held liable for filling a wetlands without a permit in violation of Clean Water Act Section 404, and penalized $125,000. The Court's analysis indicates that it viewed the violation to be "continuing" (though the violation technically consisted of the "discharge" of fill materials, the subsequent failure to correct the violation resulted in a "continuing" violation for penalty assessment purposes).

*** In re: Cypress Aviation, Inc., RCRA (3008) Appeal No. 91-6 (Order Dismissing Notice of Appeal; January 8, 1992): RCRA staff may be familiar with this Region 4 action, which raised the issue of whether the illegal land disposal of LDR wastes is a "continuing violation" for which multiday penalties may be assessed. In his Initial Decision, Senior ALJ Harwood assessed single-day penalties only, but for evidentiary and other reasons (including the fact the decision did not refer to the 1990 RCPP), Region 4 did not appeal. In the Order on appeal, the CJO dismissed the Respondent's Notice of Appeal as untimely. Decided by Judge Harwood.

> Note: Regions obtaining a similar decision, in a future case with analogous facts, are requested to contact the RCRA Enforcement Division to discuss the possibility of an appeal.

*** U.S. v. Ekco Housewares, Inc. (N.D. Ohio): On January 28, 1994, the United States obtained a $4.2 million penalty judgment in this matter based on Ekco's failure to maintain financial assurance for closure, financial assurance for post-closure, and liability coverage. In its complaint, the U.S. cited violations of both a 1987 Partial Consent Agreement and Order (PCAO), and RCRA rules (including financial assurance and liability insurance provisions in 40 CFR §§ 265.143, .145, and .147). Ruling in the government's favor on all counts, the Court assessed $1000/day multiday penalties for 4,606 days of violation, resulting an overall penalty of $4,606,000.

*** U.S. v. T & S Brass and Bronze Works, Inc., 681 F.Supp. 314 (D.S.C. 1988), aff'd in part and vacated in part, 685 F.2d 1261 (1988): Defendants continued to operate hazardous waste surface impoundments after losing interim status. The Court imposed a civil penalty of $1,000/day, for a total of $194,000.

*** U.S. v. Environmental Waste Control, 710 F.Supp. 1172, 1142-1145 (N.D.Ind. 1989), aff'd 917 F.2d 327 (7th Cir. 1990): Defendants continued to operate a hazardous waste landfill after losing interim status, had an inadequate ground water monitoring system, and placed waste in unlined cell in violation of the minimum technology requirements. The Court imposed a civil penalty of $2,000/day, for a total of $2,788,000.

*** U.S. v. Vineland Chemical Co., 31 ERC 1720 (D.N.J. 1990): Defendants continued to operate two surface impoundments after losing interim status. Finding inter alia that the defendants acted in bad faith in misleading EPA and NJDEP in conducting certain closure activities without prior notice, the Court imposed a penalty of $1,000/violation/day, for a total of $1,223,000.

In the Matter of Ashland Oil, Inc., SPCC Appeal No. 91-1 (Final Decision; September 15, 1992): Ashland failed to prepare and maintain a Spill Prevention Control and Countermeasure Plan, for one of its facilities by not disclosing the location and/or existence of certain tanks. The Environmental Appeals Board affirmed the ALJ's ruling that per day penalties were appropriate for the time period during which Ashland failed to amend its Plan.

U.S. V. Trident Seafoods Corp., No. C92-1025D (Order; December 13, 1993) at 5-6: "Trident argues that its failure to give written notice [of a demolition, pursuant to NESHAP requirements] should be regarded as a single violation of a single day [sic]. There is no clear law on this point. The government refers to an administrative decision, In re Coastline Purchasing Corp., 1992 RCRA Lexis 21 (failure to give notice under [RCRA] resulted in fine for each day notice was not given). ... [T]he Court agrees with the government's position, given the self-evident purpose of notification to enable the enforcement agency to monitor asbestos removal and assure [sic] effective compliance with work rules. ... The Court concludes as a matter of law that failure to comply with the notice requirement is a continuing violation, ending only when renovation is completed or EPA has actual notice."

*** U.S. v. MIDC (aka William Fiore) (3rd Cir.; December 20, 1993): The Court affirmed a lower court ruling assessing a $480,000 civil penalty for violations of a RCRA Section 3013 (Monitoring, analysis, and testing) Order. Section 3013(e) authorizes penalties of up to $5,000 per day for such violations. The Fiore Court, which assessed multiday penalties of $2,000 per day for 240 days of violation, expressly rejected a defense that "[other] lost cases ... have imposed a penalty in the range of [only] about $1,000 per day."

ECONOMIC BENEFIT OF NONCOMPLIANCE:

*** United States, et al. v. Production Plated Plastics, Inc., et al., File No. K87-138 CA (W.D. Mich.): The Defendants in this case operated unpermitted seepage lagoons, delayed submission of closure and groundwater monitoring plans, failed to comply with RCRA's financial assurance and liability provisions, and did not implement their groundwater plan. In addition, the Defendants

never complied with RCRA's financial assurance or financial liability provisions. The Court deemed the Defendants to have received an economic benefit of noncompliance (EBN) of at "least $1 million through their failure to comply with the statute."

*** A.Y. McDonald Industries, Inc., RCRA Appeal No. 86-2 (Final Decision; July 23, 1987): The CJO held that "the economic benefit component should include only the cost of the cheapest mode of compliance." The CJO added, however, that EPA is not required to "prove (in its prima facie case) that every conceivable compliance alternative would have been more costly than the only one on which the economic benefit calculation is based." Rather, EPA may satisfy its burden of going forward by demonstrating the cost of a reasonable compliance option. The burden would then shift to the Respondent "to produce evidence" on available cheaper compliance options. In this case, the CJO determined that EPA's engineer's testimony was sufficient to establish a prima facie EBN case. The CJO also held that "good faith" efforts are irrelevant to the EBN determination.

*** In the Matter of: Grumman St. Augustine Corp., Docket No. RCRA 87-18-R (Initial Decision; May 10, 1989): "The Respondent argued that the Agency's [BEN] calculations were in error because an alternative to the scenario proposed by the Agency witness, the Respondent could have bought a truck and used one of its own employees to drive it rather than hiring a transporter as was done [sic] by the Agency's witness. ... The regulations and penalty policy are clear that if a Respondent wishes to contest the economic benefit adjustment provided by the Agency, ... it has a burden to come forward with documentation to demonstrate how and in what particulars the Agency [was] in error in its calculations. In this instance, the Respondent did not submit any documentation ... [A]bsent such documentation the Agency's calculations and estimates should be accepted unless there is some showing that they mis-applied the formula or requirements of the penalty policy." Decided by Judge Yost.

*** In the Matter of Federal Hoffman, Inc., Appeal No. 87-15 (Final Decision; November 15, 1989): EPA's EBN computation for placing liquid wastes in a landfill lacking a liner was assessed in full, where the Respondent made no attempt to rebut it.

*** In the Matter of: Sandoz, Inc., Appeal No. 85-7 (Final Decision; February 27, 1987): In this case, EPA introduced evidence of EBN using national data on expenses incurred by industries in complying with RCRA's groundwater monitoring requirements. The violator countered with credible company-specific data indicating lower-than-average cost savings, which EPA did not refute. Therefore, the CJO assessed the lower amount. The CJO added, "I express no opinion as to whether a penalty component premised on a national model of compliance costs, standing unrebutted, would satisfy EPA's burden of proving the proposed penalty was appropriate."

*** In the Matter of: ROI Development Corp., Docket No. RCRA (3008) VIII-90-12 (Initial Decision; March 31, 1994): On June 26, 1990, Region 8 filed a complaint under the 1984 RCRA penalty policy alleging 3 separate RCRA violations. The violations all resulted from a single, 1988 shipment of 100 gallons of 1,1,1, trichloroethane (TCE) to a non-Subtitle C disposal unit. The ALJ refused to assess the $1660 in EBN calculated by Region 8. This amount consisted of the cost of disposing of the 100 gallons of TCE at a permitted landfill. The Judge held: "Complainant's calculation of economic benefit to ROI is flawed since there is no indication of the cost to ROI of the actual disposal as an offsetting factor, so it cannot be established that the Respondent gained any economic benefit from its violations." Decision at 38 (emphasis added). Decided by Judge Head.

Note: A similar issue was appealed by EPA to the EAB in a CAA administrative action, In re: Burlington Northern Railroad Company, CAA Appeal No. 93-3 (Final Decision and Order; February 15, 1994). In Burlington Northern, the EAB modified the ALJ's Initial Decision by striking language in the Initial Decision purporting to credit towards EBN costs which had not contributed to compliance. Because the ALJ had assessed statutory maximum penalties even without the EBN, however, the EAB declined to address the merits of the issue.

U.S. v. Roll Coater, Inc., Cause No. IP 89-828 C (Order Following Bench Trial; March 22, 1991): CWA case (violations of pretreatment standards): The Court rejected EPA's BEN discount factor (capital asset pricing model). The Court accepted the defendant's discount factor (weighted average costs of capital). The EBN component of the penalty should reflect the cost of the least expensive compliance alternative.

*** In the Matter of: Sandoz, Inc., Docket No. RCRA (3008) 84-54-R (Initial Decision; October 31, 1985): No consideration of either good or bad faith should enter into the EBN calculation. Decided by Judge Yost.

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ADJUSTMENT FACTORS:

1. GOOD FAITH/LACK OF GOOD FAITH:

*** United States, et al. v. Production Plated Plastics, Inc., et al., File No. K87-138 CA (W.D. Mich.): The Defendants in this case operated unpermitted seepage lagoons, delayed submission of closure and groundwater monitoring plans, failed to comply with RCRA's financial assurance and liability provisions, and did not implement their groundwater plan. The Court noted that, since 1986, the Defendants had expended over $4.5 million cleaning up the facility, as well as $500,000 per year operating a purge and

treat system for the years the system was operational. Nevertheless, the violations occurred despite the fact that the Defendants "were well aware of the various RCRA deadlines." Thus, "any "good faith" exhibited by these expenditures was counterbalanced by the "numerous occasions defendants have purposely thwarted the effectiveness of the statute." These included Defendants' failure to act in good faith to raise the necessary funds to clean up the facility.

*** In the Matter of: A.Y. McDonald Industries, Inc., RCRA Appeal No. 86-2 (Final Decision; July 23, 1987): The CJO reduced the ALJ's 25% "good faith" adjustment for one count to 5%, ruling that while the violator had self-reported its failure to notify EPA of hazardous waste activity, it did so only through its notification efforts for a new facility. "[S]ignificant reductions should be reserved for those cases where the violator promptly reports its noncompliance ... once discovered or suspected."

*** In the Matter of: Omark Industries, Docket No. RCRA (3008) 85-10-09 (Initial Decision; January 6, 1987): In this case, the Respondent had a policy of requiring partially filled drums to be checked by a chemist before disposal. The Respondent's violation resulted from the company's failure to follow its own policy in this instance. The ALJ reduced the proposed penalty reduced by 25%, partially in recognition of this compliance program. Decided by Judge Nissen.

*** In the Matter of: ROI Development Corp., Docket No. RCRA (3008) VIII-90-12 (Initial Decision; March 31, 1994): Region 8 filed a complaint alleging 3 RCRA violations resulted from a single, 1988 shipment of 100 gallons of 1,1,1, trichloroethane (TCE) to a non-Subtitle C disposal unit. In an effort to comply with RCRA, ROI hired a contractor to dispose of its hazardous waste, and its transporter actually completed its manifest. While ultimately unsuccessful (and thus irrelevant to liability), the ALJ viewed these actions as demonstrating "good faith efforts to comply," and "lack of willfulness," respectively. He adjusted ROI's penalties accordingly. Decision at 33, 36. Decided by Judge Head.

Public Interest Research Group of New Jersey, Inc. v. Powell Duffryn Terminals, Inc., No. 89-5831 (3rd Cir. 1990; August 20, 1990) at 34-35: The Court of Appeals reversed the District Court's reduction of a GBP, due to "good faith", because of the actions and/or non-actions taken by the Defendant due to the USEPA's and the NJDEP's failure to act more diligently in making defendant comply. The District Court had found that, had the government acted properly, "the violations would have ceased long ago. Therefore, these two governmental bodies are partially to blame for the defendant's lack of compliance for the years at issue." The Court of Appeals reversed: The "mere failure by governmental agencies to prosecute an NPDES permit holder does not allow a court to reduce a penalty." While there may be

instances where a district court may consider a government agency's inaction and the permittee's reaction when setting civil penalties "as justice may require where a defendant has failed in a good faith attempt to comply with its permit because of technical or economic problems and the EPA has affirmatively recognized and excused noncompliance", this was contradicted by the record in PIRG which showed that "defendant, motivated possibly by greed or apathy, chose to procrastinate..."

*** In the Matter of: Landfill, Inc., RCRA (3308) Appeal No. 86-8 (Final Decision; November 30, 1990): EPA charged the Respondent with failing to maintain an adequate groundwater monitoring system by improperly placing its wells. The Respondent's defense was that EPA was estopped from alleging the violation because the State had approved the location of wells prior to their installation. This defense was rejected for purposes of liability, but the Chief Judicial Officer upheld the ALJ's findings that, "the respondent installed the monitoring wells at their present location at great expense and with the advice and complete approval of the State. The undersigned is of the view that a nominal penalty of $250 should be assessed ..."

*** In the Matter of: Union Oil Company of California, Docket No. RCRA-09-84-0223 (Initial Decision; January 14, 1985) ("[T]he environmental problems arose in this case because of the mistaken or erroneous action by the EPA and the State, and appears to have been resolved promptly once the mistake or error was corrected. Accordingly, it is concluded that no penalty should be assessed." Decided by Judge Harwood.

*** The Marley Cooling Tower Co., Docket No. RCRA-09-88-0008 (Decision and Order; November 30, 1989): Respondent violated RCRA, inter alia, by failing to demonstrate financial assurance for bodily and property damage to third parties. One of Respondent's defenses was that it in numerous discussions with California officials regarding its closure plan no deficiencies had been mentioned. The ALJ found that, "[w]hile ... lack of knowledge is ordinarily not used as a basis for reducing the penalty, respondent's reliance upon guidance from [the State] is evidence of its good faith, supporting a 25% reduction in the gravity-based penalty." Decided by Judge Greene.

In re: General Electric Co., Docket No. TSCA-IV-89-0016 (Order on Motions for an Accelerated Decision; August 30, 1990): Evidence that EPA employees rendered erroneous advice held relevant and admissible for purpose of determining the appropriate penalty. Decided by Judge Nissen.

*** United States v. Lacks Industries, Inc., No. G87-413 CA (W.D.Mich.; June 22, 1990), reprinted in 32 ERC 1221: "[T]he Court concludes that civil penalties of $250,000.00 are appropriate in the present case for a number of reasons. First, the failure of Lacks to comply with RCRA is, to some degree, the

result of its reliance upon representations made to it by MDNR [State] officials [that the lagoons were not subject to RCRA]."

U.S. v. Roll Coater, Inc., Cause No. IP 89-828 C (Order Following Bench Trial, March 22, 1991): CWA case (violations of pretreatment standards): Due to a lack of effective communication between EPA, defendant, and the state (Indiana had affirmatively recognized and excused noncompliance), no penalty was assessed for time period prior to August 1988. The Court found that, in delaying construction of plant while testing technology at another site, defendant exercised "good faith."

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2. DEGREE OF WILLFULNESS AND/OR NEGLIGENCE

*** In the Matter of: Ashland Chemical Company, RCRA (3008) Appeal No. 87-17 (Final Decision; November 15, 1989): "... Ashland proposes an additional 5% reduction based on the absence of willful noncompliance. ... The record reflects no effort by Ashland to obtain advice from OEPA or U.S. EPA as to whether its regulatory status had changed once its tanks became contaminated with water. Moreover, lack of knowledge of the legal requirement should not be used to reduce a penalty for to do so might encourage ignorance of the law." Decided by the CJO.

*** In the Matter of: Standard Tank Cleaning Corp., RCRA Appeal No. 91-2 (Final Decision; July 19, 1991): Appeal of action against company for failing to obtain liability insurance for accidental occurrences. In the underlying action, the Region had proposed a penalty of $135,321.50, $110,312.50 of which was for "economic benefit of noncompliance." In his Initial Decision, Judge Vanderheyden found that "Respondent's conduct over a protracted period of time ... displayed deliberate neglect, indifference, or both," and increased the penalty to $145,313. The CJO dismissed Respondent's appeal as untimely.

*** In the Matter of: Gordon Redd Lumber Company, RCRA Docket No. 88-01-R (Initial Decision; May 30, 1991). EPA's complaint alleged storage and disposal of hazardous waste without interim status or a permit, and numerous other violations. EPA proposed a $75,000 penalty. The ALJ assessed a $20,000 penalty for violations involving leaking garbage bags of K001 waste determined to constitute a hazardous waste management "facility." The ALJ found, among other things, that "[a]lthough Mr. Redd is certainly no Mother Theresa of the environment, one can certainly understand his confusion and frustration resulting from the [inconsistent] actions of the [State]." Decided by Judge Yost.

*** In the Matter of: National Coatings, RCRA Appeal No. 86-5 (Final Decision; January 22, 1988): The CJO determined that the dumping incident was accidental and Respondent had no intent to improperly dispose of the wastes. He therefore upheld the ALJ's penalty reduction of 25% for lack of willfulness.

*** In the Matter of: Grumman St. Augustine Corp., Docket No. RCRA 87-18-R (Initial Decision; May 10, 1989): Respondent failed, inter alia, to submit a Part B permit application. The ALJ determined, among other things, that the Respondent's failure to keep abreast of even the most minimal statutory and regulatory requirements (it had not even obtained up-to-date copies of RCRA) and correct its violations, despite repeated notice from EPA, evidenced negligence justifying a 25% increase in the penalty. Decided by Judge Yost.

In the Matter of: Riverside Furniture Corp. EPCRA-88-H-VI-406S (Initial Decision; Sept. 28, 1989). The penalty amount was not reduced despite the fact that Riverside "did not have actual knowledge" of EPCRA requirements. The ALJ held that Riverside is "charged with knowledge of the United States Statutes at large." Publication of 40 CFR 372 in the Federal Register gave Riverside "legal notice of the EPCRA regulations". Decided by Judge Jones

In the Matter of Port of Oakland and Great Lakes Dredge and Dock Co., MPRSA Appeal No. 91-1 (Final Decision and Order; August 5, 1992): The Port and dredging company violated the Marine Protection, Research, and Sanctuaries Act, and a permit issued thereunder. The Environmental Appeals Board adjusted its gravity-based penalties for all three of the dredging and disposal violations upward to reflect Respondent's culpability for having intentionally dredged unauthorized sediments.

*** U.S. v. Ekco Housewares, Inc. (N.D. Ohio): On January 28, 1994, the United States obtained a $4.2 million penalty judgment in this matter based on Ekco's failure to maintain financial assurance for closure, financial assurance for post-closure, and liability coverage. The Court, at pages 40-41 of the Opinion, cited Ekco's wilfulness and lack of good faith efforts to comply as supporting a significant penalty.

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3. HISTORY OF NONCOMPLIANCE:

*** In the Matter of: Grumman St. Augustine Corp., Docket No. RCRA (3308) 87-18-R (Initial Decision; March 10, 1988): Among the ALJ's reasons for increasing Respondent's penalty by 25% were Respondent's history of prior violations of RCRA, and EPA and State Consent Orders thereunder. Decided by Judge Yost.

U.S. v. Roll Coater, Inc., Cause No. IP 89-828 C (Order Following Bench Trial; March 22, 1991): CWA case (violations of pretreatment standards): Held: history of noncompliance refers to past cases, not length of present violations.

4. ABILITY TO PAY:

*** In the Matter of: Central Paint & Body Shop, Inc., RCRA Appeal No. 86-3 (Final Decision; January 12, 1987): "RCRA does not include ability to pay as one of the factors that EPA must consider in assessing a penalty ... ability to pay is not an element of EPA's proof ... Respondent, as proponent of a reduction in penalty based on its financial condition [has] the burden of proof ..." In this case, the Respondent's arguments that it couldn't afford the penalty were deemed unpersuasive.

*** United States, et al. v. Production Plated Plastics, Inc., et al., File No. K87-138 CA (W.D. Mich.): The Defendants in this case operated unpermitted seepage lagoons, delayed submission of closure and groundwater monitoring plans, failed to comply with RCRA's financial assurance and liability provisions, and did not implement their groundwater plan. In assessing a $1.5 million penalty for the violations, the Court rejected soundly the Defendants' primary defense of "inability to pay." The Court scrutinized the evidence adduced at trial, including Defendant Michael J. Ladney's (the majority shareholder) personal income tax returns, and his and the companies' assets, in establishing that Defendants had the financial ability not only to comply with RCRA but to pay a meaningful penalty as well. While recognizing that "the penalty is certainly large enough to hurt," the Court found that "Defendants currently have assets which can be liquidated to satisfy the requirements of this Court's Judgment" (estimated by the Judge to require roughly $4.5 million in expenditures). (Emphasis added). In acknowledging that the Defendant would likely need to liquidate assets to satisfy the judgment, the Court considered, among other things, the availability of discretionary assets, Defendants' investments in speculative ventures, and the fact that several million dollars of assets were channelled away from PPP into related corporations.

In the Matter of: Dr. Marshall C. Sasser, Docket No. 404-89-102 (Initial Decision; July 30, 1991): Respondent held liable for filling a wetlands without a permit in violation of Clean Water Act Section 404, and penalized $125,000. The Court determined that the Respondent had the "ability to pay" the full assessed penalty, but permitted him to pay in installments because many of his assets were non-liquid (an ironic holding, since this is a "water" case). Decided by Judge Yost.

In the Matter of: Sporicidin International, FIFRA Appeal No. 88-2 (Final Order; June 4, 1991): Action against seller of alleged sterilizing agent for misbranding a pesticide and making unauthorized claims. The CJO affirmed the Initial decision assessing a $10,000 penalty. Respondent may be assumed to have the ability to pay a penalty where EPA alleges it can pay and the Respondent fails to challenge the allegation.

In the Matter of: Timothy R. Ward, TSCA-VII-86-T-635, (Initial Decision; November 24, 1987): In this case involving the improper disposal of PCBs on a rural roadside, the ALJ held that the requirement that the Agency consider ability to pay when assessing penalties "should not suggest or imply that payment of the penalty assessed will be without pain or borne with complete facility; rather, it should be in such amount that Respondent, and others similarly situated, will choose to comply with pertinent regulations, promulgated for the protection of the public, rather than pay an appropriate penalty." This case is significant in that it supports the proposition that civil penalties should have an economic impact on the violator. Decided by Judge Jones.

*** F & K Plating Co., RCRA (3008) Appeal 86-1A (Final Decision; October 8, 1987): The ALJ reduced the violator's penalty by 25% based on, inter alia, "inability to pay." On appeal, the CJO determined that the Respondent's unverified balance sheet and shop manager's uncorroborated testimony, standing alone, were inadequate to demonstrate "inability to pay." Likewise, unsworn assertions by counsel for Respondent were entitled to no weight. The CJO determined, however, that based on the record as a whole, F & K deserved some "inability to pay" adjustment. The case was remanded to the Regional Administrator to determine an appropriate reduction. F & K was counseled that it "must fully support any alleged inability to pay with detailed and credible documentation," preferably regular financial statements, tax returns, or independent audits.

*** In the Matter of: National Coatings, Inc., Docket No. RCRA (3008) V-W-84-R-052 (Initial Decision; June 20, 1986): Where the evidence indicates that the penalty is not beyond the Respondent's ability to pay, but the Respondent may be unable to pay the penalty in one lump sum, the Respondent should be permitted to apply to the Regional Administrator to pay in installments. Decided by Judge Harwood.

*** United States v. Maiorano, No. 87 C 4491 (N.D. Ill.; January 8, 1990), reprinted in 20 ELR 20444: "Although the ability to pay may warrant consideration in some circumstances, the Court does not view it as a particularly significant factor in this case. Defendants have never provided evidence concerning their financial circumstances, despite numerous opportunities to do so. [Footnote omitted] Furthermore, defendants have been so intransigent that they are in no real position to request mercy based on their personal circumstances."

5. OTHER UNIQUE FACTORS:

Note: The primary application of this adjustment factor is to reflect "litigation risks" in settlement; hence there are relatively few decisions where it plays a significant role in the penalty determination. The importance of this factor

may increase in the future if, as a policy matter, EPA relies upon it to help implement "Reinvention of Environmental Protection" initiatives involving auditing, small businesses, and other penalty-related matters.

*** In the Matter of: ROI Development Corp., Docket No. RCRA (3008) VIII-90-12 (Initial Decision; March 31, 1994): Region 8 filed a complaint alleging 3 RCRA violations resulted from a single, 1988 shipment of 100 gallons of 1,1,1, trichloroethane (TCE) to a non-Subtitle C disposal unit. The ALJ reduced the Respondent's penalty based, among other things, on the fact that "the disposal in question was a one-time transaction, consisting of the disposal of waste accumulated from a manufacturing process which had been discontinued, in favor of a process which yields no hazardous waste." The Judge held that "[t]his voluntary change constitutes more than merely coming into compliance with the RCRA requirements and Respondent should receive credit for it by a downward adjustment of the penalty." Decision at 34.

*** In the Matter of: Millipore Corp., Inc., Appeal No. 86-7 (Final Decision; December 2, 1987): The CJO reduced the Respondent's penalty by 40% to reflect, inter alia, the "unusual circumstances" of the Puerto Rico Environmental Quality Board failing to follow its own rules by not responding to the Respondent's proposed closure plan in a timely fashion (the delay had contributed to the severity of the violation).

*** In the Matter of: Elwin G. Smith Division, Cyclops Corporation, Appeal No. 86-6 (Final Decision; August 14, 1990): The CJO affirmed the reduction of the violator's penalty by 25% for failing to submit a Part B application and/or develop a closure plan. The Respondent had cooperated fully in the planning and execution of an elaborate "sting" operation concerning a contractor hired by the violator even though the Respondent was not charged with any improper conduct regarding the contractor.