The Advanced RCRA Inspector's Institute

Swissotel Boston
December 13 - 17, 1993

Monday 12/13	1:30 - 2:30	Welcome and an Introduction
	2:45 - 4:30	Exploring Inspection Paradigms
Tuesday 12/14	8:30 - 9:45	Waste Minimization/Pollution Prevention Part 1
	10:00- 11:30	WMIN/PP Part 2
	12:30 - 1:30	Concurrent Sessions: BIF/Combustion Inspections Air Emissions (AA/BB)
	1:45 - 3:00	(Cont'd)
	3:15 - 4:30	(Cont'd)
Wednesday 12/15	8:30 - 9:30	Enforcement Initiatives Part 1
	9:45 - 10:15	Initiatives Part 2
	10:30 - 12:00	Import Export Inspections
	1:00 - 2:15	RCRA Interface with Other Laws
	2:30 - 3:45	Multimedia Inspections Part 1
	4:00 - 4:45	MM Part 2
Thursday 12/16	8:30 - 9:30	New Waste Issues
	9:45 - 10:45	Gray Areas In the Definition of Solid Waste Part 1
	11:00 - 12:00	Gray Areas Part 2
	1:00 - 2:00	Enforcement Case Development Part 1
	2:15 - 3:15	Enf. Case Development Part 2
	3:30 - 4:30	RCRA Civil Penalty Policy
Friday 12/17	8:30 - 10:00	Federal Facilities Enforcement
	(10:00 - 10:30)	(Extended break for check-out)
	10:30 - 11:30	Inspection Paradigms Revisited
	11:30 - 12:00	Complete evaluations and collect certificates

(Some time may also be made available throughout the course for individual's to address the specific questions or ideas to all participants)

The Advaced RCRA Inspector's Institute

U.S. EPA Headquarters Library
Mail code ~~3201~~ 3404T
1200 Pennsylvania Avenue NW
Washington DC 20460

Advanced RCRA Inspector's Institute Evaluation Form

State or Federal

Welcome and Introduction

The Module: Was it well organized and did it meet your needs in this area? Scale: 1 to 10, 1 is awful, 10 is outstanding.

The Presenter: Did s/he seem competent in this area and present the material clearly and concisely? Scale: 1 to 10.

Worthiness: Is this module worthy of remaining in tha AI? Scale: 1 to 10, 1 is it should be dumped, 10 is gotta keep it

Exploring Inspection Paradigms

The Module: Was it well organized and did it meet your needs in this area? Scale: 1 to 10, 1 is awful, 10 is outstanding.

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Waste Minimization/Pollution Prevention

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BIF/Combustion

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Air Emissions

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Enforcement Initiatives

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Import/Export

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RCRA Interface with Other Laws

The Module: Was it well organized and did it meet your needs in this area? Scale: 1 to 10, 1 is awful, 10 is outstanding. _____

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Multimedia Inspections

The Module: Was it well organized and did it meet your needs in this area? Scale: 1 to 10, 1 is awful, 10 is outstanding. _____

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New Waste Issues

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Gray Areas in the Definition of Solid Waste

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Enforcement Case Development/ RCPP

The Module: Was it well organized and did it meet your needs in this area? Scale: 1 to 10, 1 is awful, 10 is outstanding. _____

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Federal Facilities Enforcement

The Module: Was it well organized and did it meet your needs in this area? Scale: 1 to 10, 1 is awful, 10 is outstanding. _____

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Inspection Paradigms Revisited

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On a scale of 1 to 10 please rate the entire AI in the following areas

Content and Organization

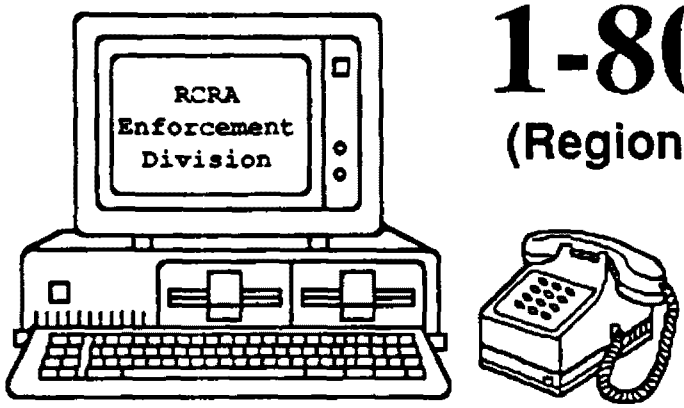
Presentation

Timeliness and Applicability

Overall, on a scale of 1 to 100, rate the AI ⟶ _____

The REDboard

An Electronic Bulletin Board Dedicated to RCRA Enforcement Personnel



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Operated in EPA Headquarters by EPA personnel

Features:

- File Library of CFRs, FRs, model orders, SEPs, HOTLINE reports, guidance documents, checklists, rule summaries, proposed rules, etc.
- On-Line databases
- Mail Room to allow the posting of messages or questions to specific persons, groups, or all callers.
- Late breaking Bulletins from HQ about RCRA and RCRA Enforcement and a News-Wire of RCRA news stories from across the country
- RCRA Trivia Challenge allowing you to test you knowledge of RCRA against callers from all over the country.
- Questionaires to keep HQ informed or register for HQ training courses.

Technical Information:

- Accessible through any modem or LAN outfitted with a modem pool.
- Standard communications software settings (Parity=NONE, Data Bits=8, Stop=1).
- Compatible with most any communication software.
- Supports all file transfer protocols including Xmodem, Ymodem, and Zmodem.
- Fully ANSI and VT-100 emulation compatible.

If you have any problems logging onto the REDboard call Jeff Kelly at 202-260-2809

PARTICIPANT'S MANUAL
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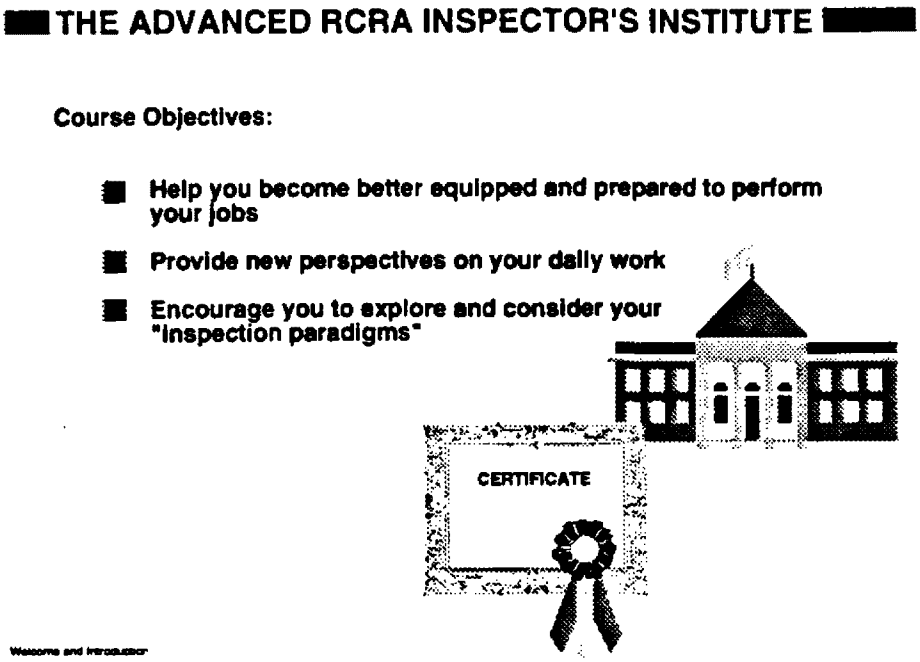
GUIDE TO THE PARTICIPANT'S MANUAL

The Participant's Manual has been designed to provide you with important information about topics discussed during the Institute. It is intended to supplement the oral presentations. The Manual is divided into 15 sections — one for each session of the course, plus an evaluation form. The Manual is supplemented by a library of materials that are available to you throughout the course of the Institute.



OVERHEAD #1

TITLE: The Advanced RCRA Inspector's Institute

KEY POINTS:

- Over the course of the next four days, you will gain new knowledge of selected topics to help you become better equipped and prepared to perform your job. Your experience at this Institute should culminate in your gaining new perspectives and insights with respect to your day-to-day work, both from information presented by the instructors, activities in which you will participate, and discussions you may have with fellow participants. In addition, this Institute aims to assist you in considering your inspection paradigms, about which you will hear more later on.

- Through a combination of lectures, exercises, and other activities, we will:

  — Identify non-standard facility conditions and processes and suggest approaches for dealing with them

  — Discuss new RCRA regulations and EPA policy in terms of how it will affect your job requirements

  — Discuss and evaluate the different approaches Regions and states take to situations that they each face

OVERHEAD #1

TITLE: The Advanced RCRA Inspector's Institute (continued)

KEY POINTS:

- — Discuss complex issues that may arise only once or twice during your career, and suggest whom to contact if additional assistance is required
- — Identify written and human resources for obtaining more information on topics covered by the Institute.

- One of the overall goals of this Institute is to help you become more proactive in conducting your inspections, thinking through the best approach on a case-by-case basis.

GET INVOLVED

Welcome and Introduction
Overhead 2 of 3

OVERHEAD #2

TITLE: Get Involved

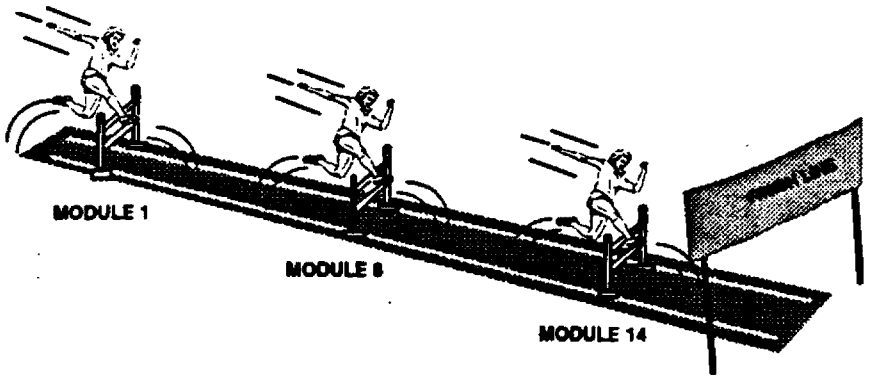
KEY POINTS:

- We want you to express yourselves. The style of the course is informal and it is structured to encourage interaction. You have been handed color-coded nametags, assigned to corresponding color teams, and been seated at certain tables to achieve this format. The nametags will assist everyone in getting to know each other's names, and the colors will facilitate forming groups when the various activities call for team work. Some activities may require independent work, but others will require joint efforts. Participants with red nametags should be seated at tables with red banners, and will comprise the "red team"; those with blue nametags should be seated at tables with blue banners, and will comprise the "blue team"; and so on.

- This session of the Institute is a pilot, and your active involvement is critical to assisting EPA in determining the future direction of this training program.

- Throughout the course, we want you to participate in exercises, ask questions, provide feedback, raise new perspectives and insights, and share your ideas.

STAY THE COURSE



OVERHEAD #3

TITLE: Stay the Course

KEY POINTS:

- This is an ambitious course — covering numerous areas of interest to provide you with a broad, comprehensive base of knowledge that builds on your previous experience. To achieve all of the course objectives we reviewed earlier, we will do our best to stay the course, keep on schedule.

- We will begin each day at 8:30 a.m. and with breaks interspersed, we will work together until lunchtime. We will break for lunch between approximately 12:00 p.m. and 1:00 p.m. You will have a 1-hour lunch break. We will also have breaks each afternoon.

- At the end of each module, we will ask that you take a few moments to complete that portion of the evaluation form related to the module. At the end of the Institute, you will be asked to complete and submit the evaluation form. Again, since this is a pilot, we really want and need your input.

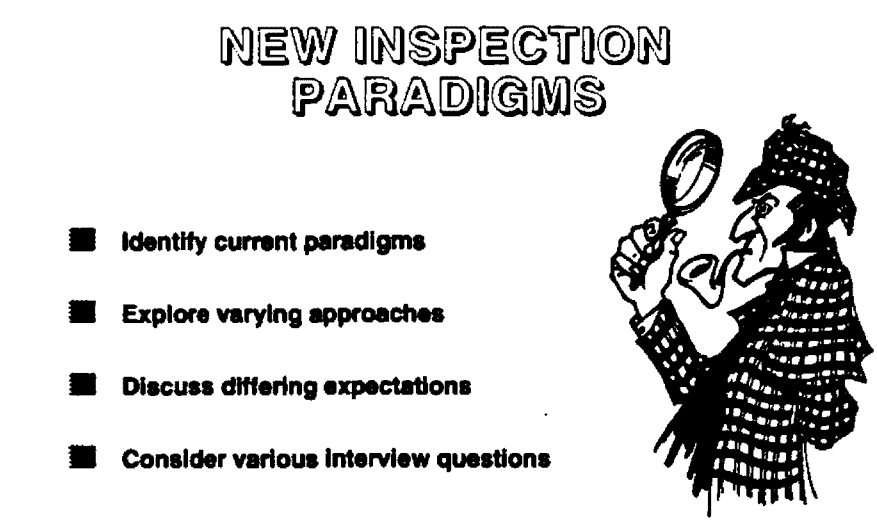
OVERHEAD #3

TITLE: Stay the Course (continued)

KEY POINTS:

- Now let's look at the Participant's Manual, which contains materials related to each of the training modules. Everything you will need for exercises and for reference during modules is contained in the Manual. We also intend for the Participant's Manual to serve as a valuable reference after you leave this pilot.

- We have also provided a library, which is located next door. Please feel free to browse through it before and after module presentations, during breaks, or at the end of each day. The library contains additional resource materials that you will find useful, such as copies of guidance documents, reports, and statutes and regulations, as well as information about how to obtain them. You may also find the library helpful for certain exercises.



OVERHEAD #1

TITLE: Exploring Inspection Paradigms

KEY POINTS:

- During this presentation, we will explore what is meant by paradigms and how yours, as an inspector, may be expanded, or even changed. Expanding your paradigms may enable you to become more effective at conducting inspections and, in the broader perspective, better protect the environment.

- We will undertake activities during this session — and in later ones — that enable you to:

  — Build upon your baseline approach
  — Expand the current framework within which you can conduct an inspection
  — Identify opportunities to improve inspection approaches.

  Once again, we need your assistance to make these activities worthwhile.

- Reports issued recently (such as Caldwell and ITF) have indicated that we could improve upon our enforcement approaches. EPA is responsive to such suggestions and seeks the aid of its RCRA inspectors in identifying better methods for determining and enforcing violations. If you are interested in reviewing these reports, we have included them in our Institute Library.

OVERHEAD #1

TITLE: Exploring Inspection Paradigms (continued)

KEY POINTS:

- During our discussions we will explore the differences between state and Federal expectations for inspectors. We will also identify the variety of questions that the RCRA inspector can ask at various points during the inspection process to ensure that a thorough inspection has been conducted.

- Through these discussions and exercises, we will identify approaches for looking at the facility as a whole, including its operations, practices, and environmental management program.

- We will be conducting several exercises to help identify present inspection paradigms and use alternative ways of thinking to explore new paradigms for conducting inspections. We will also view a video to help us understand what paradigms are, and how they can restrict us if we don't know how to use them to our advantage. The video is not EPA-specific, but it shows us how to take the concept of paradigms and apply it to everyday situations. We will take that information and discuss ways to apply "paradigm thinking" to conducting inspections.

- Before viewing the video, let's begin with an exercise, based on the baseline inspection approach, that will help you identify your present inspection paradigm. Using the form provided, write down, in some detail, your current pre-inspection, inspection, and post-inspection activities. To help you think as you list these activities, let me suggest the following questions that you might consider:

  — How do you organize yourself? You may want to list specific activities, resource tools, etc.

  — What inspection methods have you used successfully?

  — What conditions or circumstances caused you to change your inspection approach?

  — What advice you would give other inspectors about how to effectively prepare for, conduct, and follow up an inspection of a facility?

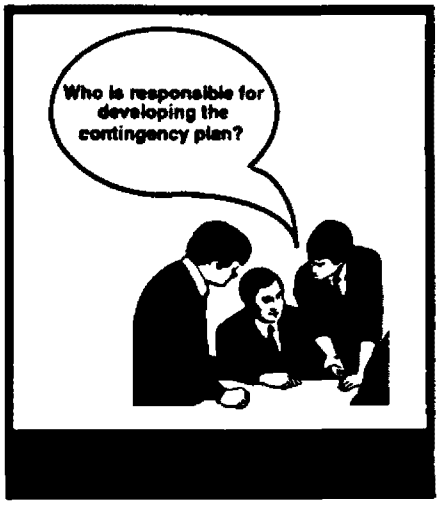
  Again, do not limit yourself to these questions.

- When you have finished, place your form in the attached envelope and write your name on the envelope. We will collect them and return them to you later in the course.

- As we proceed with this presentation and over the next several days of this course, you are encouraged to continue to think about how you're presently conducting inspections and remain receptive to new suggestions and ideas.

THE FACILITY AS A WHOLE

- Gather additional information



- Ask questions

Exploring Inspection Paradigms
Overhead 2 of 3

OVERHEAD #2

TITLE: The Facility as a Whole

KEY POINTS:

- Interviewing facility personnel is a critical component of your inspection. There are several examples of questions that can be asked of facility managers to learn more about the facility:
  - — Who talks to the local community about your facility's activities? Does your management talk to them or is this left to the environmental staff?
  - — Who is responsible for developing the contingency plan? What management level(s) reviews and signs off on the plan? Who decides when the contingency plan is to be amended?
  - — Who appoints the emergency coordinator?
  - — What systems are in place to ensure that the waste analysis plan is updated?
  - — Is there a system of accountability for the testing and maintenance of equipment at the facility? Are operations audited to verify that procedures for equipment testing and maintenance are being followed?
  - — Who decides what is a solid waste? A hazardous waste?
  - — If problems are identified, what level of management, if any, is informed and accountable?

OVERHEAD #2

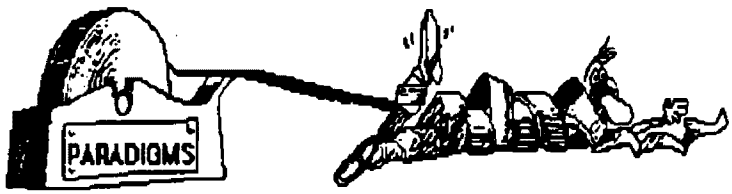
TITLE: The Facility as a Whole (continued)

KEY POINTS:

- Do you have additional suggestions for questions that could be asked?
- Asking these questions will help you determine whether the facility is operating in compliance with applicable laws. Tact is an important factor when you raise these questions. Demonstrating awareness of your interviewees and their "business perspective" will help avoid a confrontational or defensive interview. For instance, you need to recognize that each level of management will have a different perspective based on their responsibilities/interests (i.e., Environmental Manager vs. Plant Manager vs. Vice-President).
- When choosing a strategy or combination of strategies, remember to consider the purpose of the inspection, the complexity of the facility, and your knowledge of the type of inspection to be conducted.
- In your Participant's Manual you will find a chart that illustrates the steps involved in an inspection, the objectives of each step, and the resource tools needed for each step to assist you when preparing for your inspections. You may want to add to it as you broaden your inspection paradigms.

PARADIGM DOS AND DON'TS

- **Do**
  - — Identify present paradigms
  - — Become a Paradigm Pioneer
- **Don't**
  - — Be blinded by the Paradigm Effect
  - — Get stuck in Paradigm Paralysis



Exploring Inspection Paradigms
Overhead 3 of 3

OVERHEAD #3

TITLE: Paradigm Dos and Don'ts

KEY POINTS:

- Only by developing an awareness of our individual paradigms can we start to look beyond them. Paradigms can and do affect judgments and decision making, as well as restricting us to looking at the future in traditionally accepted ways. Therefore, it is necessary to understand and look beyond the confines of your paradigms. This openness will enable you to seek new methods to continuously improve your inspection approach.

- By getting stuck within the confines of a single paradigm, you may become blinded to new and innovative approaches because you have always been successful doing things the same way. It is important to avoid the "checklist mentality trap". Therefore, don't get stuck in Paradigm Paralysis by immediately rejecting a new and different approach because it does not fit your individual paradigm.

- Try to be a Paradigm Pioneer, and reach out beyond your old paradigms. Talk to your peers, managers, and even friends about ways you can continually improve. Even people who are not inspectors may be able to offer insight from a new and/or different perspective. Be flexible enough to change to a new paradigm early in its development, even if the available evidence does not yet completely demonstrate its value.

OVERHEAD #3

TITLE: Paradigm Dos and Don'ts (continued)

KEY POINTS:

- Throughout the course, you should keep in mind several questions: In what ways are you paralyzed by your inspection paradigms? How can you expand your old ways of conducting inspections to be more effective and thorough? What new approaches can you apply to your individual inspection activities?

- Included in your Participant's Manual is a list of resources you can consult if you would like to know more about paradigms.

EXPLORING INSPECTION PARADIGMS

"PERSONAL INSPECTION APPROACH"

PRE-INSPECTION APPROACH:

INSPECTION APPROACH:

POST-INSPECTION APPROACH:

Please feel free to continue on the back if the space provided is not sufficient.

"BASELINE" INSP ON APPROACH

	ONSITE INSPECTION ACTIVITIES	OBJECTIVE	TOOL(S)
STEP 1	Facility entry	• Proper notification	RCRA Inspection Manual
STEP 2	Conduct opening discussion	• Focus inspection	Agenda ("To Do List")
STEP 3	Review and understand facility operations, waste handling procedures, and records	• Identify inconsistencies/changes	General industry information (i.e., fact sheet), permit summary sheet, map, process flow diagram
STEP 4	Visual inspection	• Collect evidence	Camera, notebook
STEP 5	Document observations	• Provide evidence for possible enforcement action	Checklist, notebook
STEP 6	Closing discussion	• Discuss preliminary inspection findings	Notebook

REFERENCE MATERIALS ON THE CONCEPT OF PARADIGMS

Journals

Brown, T. (1992, May). Joel Barker: New thoughts on paradigms. Industry Week, 241, 12–14.

Brown, T. L. (1991, March). Of paradigms—and visions: Joel Barker says they can tell you a lot about business success—and failure. Industry Week, 240, 11.

Buddy, can you spare a paradigm? (1990, November). Training, 27, 83–85.

Goldratt, E. (1992, February). Late-night discussions: When is a paradigm shift really a paradigm shift? Industry Week, 241, 63–64.

Huey, J. (1991, September). Nothing is impossible: Paradigm shifting. Fortune, 124, 134–140.

Murray, A.I., & Reshef, Y. (1990, October). American manufacturing unions' stasis: A paradigmatic perspective. Academy of Management Review, 15, 682–693.

Rose, F. (1990, October). A New Age for business?: Introducing management theories and practices based on new paradigm for viewing the world. Fortune, 122, 156–158.

Steele, L.W. (1991, July–August). Needed: New paradigms for R&D. Research Technology Management, 34, 13–21.

Vicere, A.A. & Graham, K.R. (1990). Crafting competitiveness: Toward a new paradigm for executive development. Human Resource Planning, 13, 281–295.

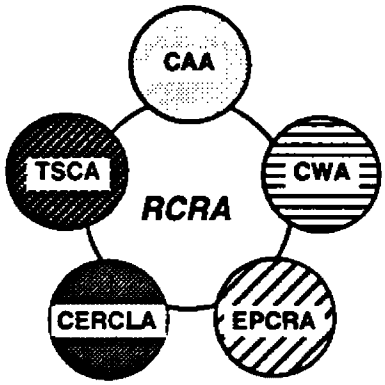
Books

Kuhn, Thomas S. The Structure of Scientific Revolutions, University of Chicago Press: Chicago, Il., 2nd edition, 1970.

Video

Barker, Joel A. Discovering the Future: The Business of Paradigms, ILI Press: Lake Elmo, Mn., 1985.

MULTI-MEDIA INSPECTIONS



Multi-Media
Overhead 1 of 14

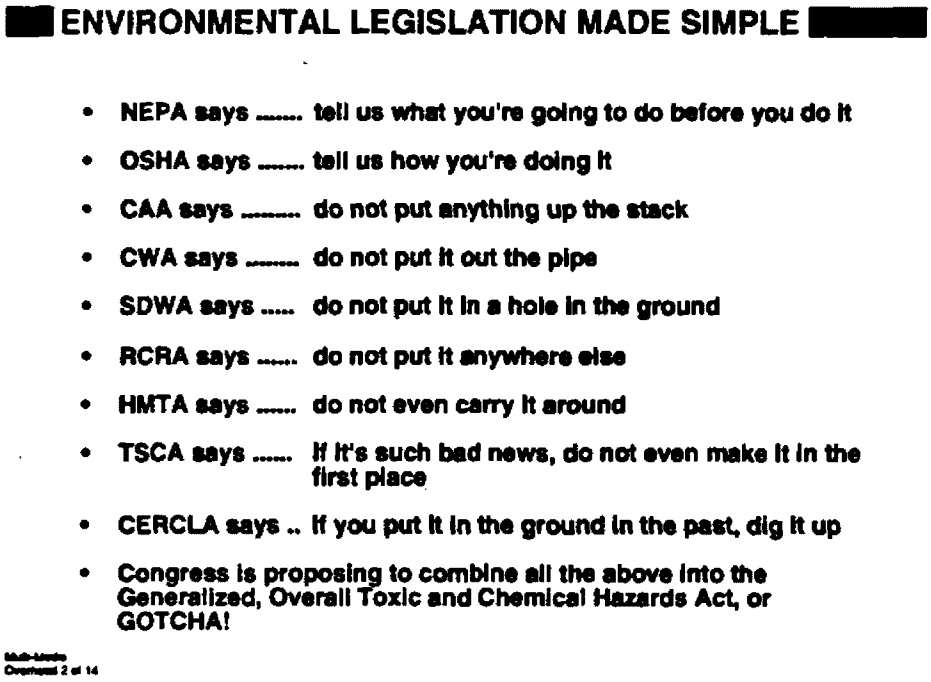
OVERHEAD #1

TITLE: Multi-Media Inspections

KEY POINTS:

- The purpose of our discussion about multi-media inspections is to encourage you, as inspectors, to investigate and cite RCRA violations that arise from equipment or operations regulated under other programs, and to provide you with an understanding of, and the rationale behind, the Agency's drive toward multi-media inspections. Investigating RCRA interfaces with other statutes is important for a comprehensive single-media compliance inspection. Your understanding of where and how RCRA interfaces with other programs should be part of your current RCRA inspections and will facilitate your future multi-media inspections.

- This presentation will assist you in delineating the boundaries of RCRA regulations, which in turn will expand your inspection capabilities. The fact sheets in your Participant's Manual will serve as reference materials for when you leave this training. We will refer to these materials again as we proceed through our discussions.



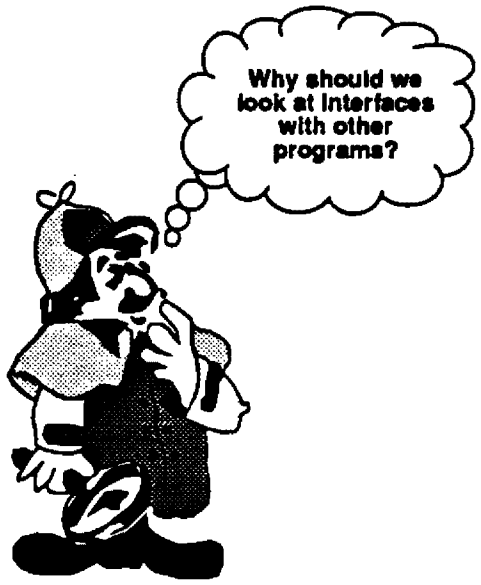
OVERHEAD #2

TITLE: Environmental Legislation Made Simple

KEY POINTS:

- To give you a sense of the nature of all of the environmental programs, we thought we would try to capture it all on one overhead.

GENERAL ISSUES



Multi-Media
Overhead 3 of 14

OVERHEAD #3

TITLE: General Issues

KEY POINTS:

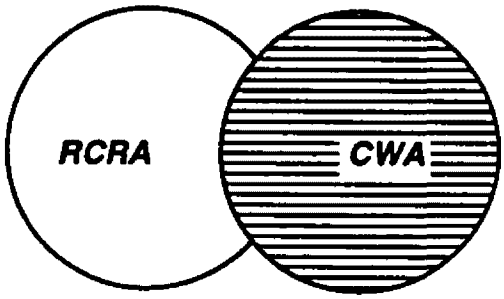
- When inspectors expand their regulatory knowledge to include how facility operations/activities, that are regulated in other EPA programs, impact RCRA compliance, they obtain a more comprehensive view of a facility. This will result in more effective enforcement and, hopefully, improved compliance. In addition, this could avoid delays in enforcement action.

- A more comprehensive knowledge in turn may also provide a RCRA inspector with the opportunity to contribute to enforcement actions under other regulatory programs.

- Some exclusions under RCRA exist because a type of waste or operation is regulated under another program. However, RCRA violations can still occur (i.e., if the operation generates a RCRA hazardous waste). By examining the extent of RCRA jurisdiction in relation to other statutes, you can perform comprehensive single-media inspections, more effectively citing RCRA violations. Multi-media inspections, which will be discussed later in this presentation, go beyond the single-media compliance inspection.

- In the next few overheads, I will cover only a few of many examples of RCRA interfaces. I will use several examples to illustrate interface issues that you should be investigating in your RCRA compliance inspections. The focus of the examples will be on the regulatory programs of CWA, CAA, and CERCLA.

RCRA INTERFACES—CWA



OVERHEAD #4

TITLE: RCRA Interfaces—CWA

KEY POINTS:

- More detailed information is provided in the fact sheets you have in your Participant's Manual. We will refer to these as we proceed.
- Under RCRA regulations, wastewater treatment units (WWTUs) are not required to obtain a permit or have interim status.
- To qualify for this exclusion, WWTUs must meet three criteria:
  - — The unit must be part of a wastewater treatment facility subject to regulation under the CWA
  - — The unit must manage hazardous wastewater
  - — Treatment or storage must take place in tanks or tank systems.
- Specifically, under the CWA, the facility must have either a NPDES permit or discharge to a POTW.

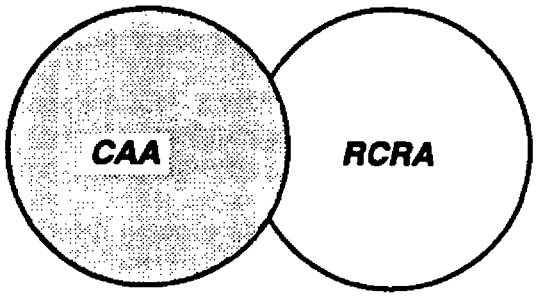
OVERHEAD #4

TITLE: RCRA Interfaces—CWA (continued)

KEY POINTS:

- Remember, RCRA limits the exemption to the WWTU (i.e., the tank); the exemption does not apply to the waste generated from the facility.
- These WWTUs are required to obtain a RCRA Part B permit because their waste streams are not otherwise regulated under the CWA (i.e., no applicable effluent guidelines or pretreatment standard specifying zero discharge.)
- For example, any sludges or residues generated from the facility may be defined as a hazardous waste. Ensure that the generator has identified whether the sludge is hazardous and how the sludge is managed.
- There are additional limitations to the exclusion. Specifically, the exemption is not intended to apply to zero discharge WWTUs that are not required to obtain a NPDES permit.
- Industrial wastewater discharges that are point source discharges subject to NPDES permitting regulations are excluded from RCRA. The exclusion does not exclude industrial wastewater while being collected, stored, or treated prior to discharge.
- A POTW that accepts hazardous waste and complies with a NPDES permit is considered to have a RCRA permit provided the POTW complies with a few RCRA regulations, including:
  - EPA identification number
  - Manifest system
  - Biennial reporting.
- Again, please refer to the RCRA/CWA fact sheet. This sheet provides regulatory citations for the individual requirements.

RCRA INTERFACES—CAA



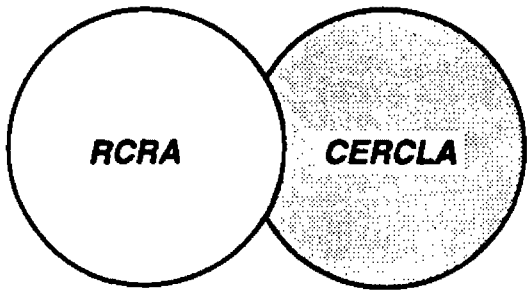
OVERHEAD #5

TITLE: RCRA Interfaces—CAA

KEY POINTS:

- Moving on to the next example, boilers and industrial furnaces (BIFs) that burn hazardous waste are required to obtain a RCRA Part B permit. These facilities may also have regulatory requirements under other programs.
- For example, a RCRA inspector may look at the state air permit for a BIF to determine if:
  - — Hazardous wastes are fed into the unit
  - — The proper control technologies are in place
  - — The facility is monitoring emissions.
- CFCs being recycled under the regulations of CAA are not subject to RCRA. The exclusion applies only to the CFC refrigerant, not to oils or other waste removed from the equipment.
- Some air emission control devices at RCRA facilities are regulated under CAA, but may still generate a hazardous waste.

RCRA INTERFACES—CERCLA



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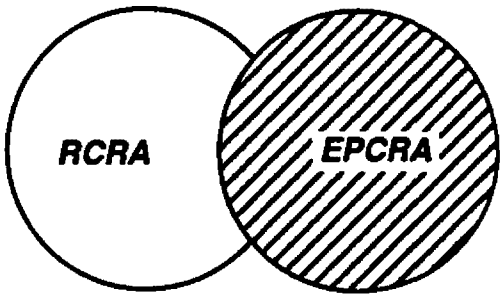
OVERHEAD #6

TITLE: RCRA Interfaces—CERCLA

KEY POINTS:

- Actions taken at CERCLA sites may have to comply with other environmental regulations, including RCRA. RCRA standards are generally considered to be applicable or relevant and appropriate at CERCLA sites.
- CERCLA National Priorities List (NPL) sites may be cleaned up under RCRA corrective action authority.
- A release of a hazardous substance greater than its reportable quantity must be reported under CERCLA. The notification requirements of RCRA (for generators and TSDFs) must also be fulfilled.
- Hazardous substances may not be taken to off-site RCRA facilities with significant violations.

RCRA INTERFACES—EPCRA



OVERHEAD #7

TITLE: RCRA Interfaces—EPCRA

KEY POINTS:

- As another example, the information required on Form R, the Toxic Chemical Release Inventory Reporting Form (TRI), is a valuable tool in multi-media enforcement because it focuses simultaneously on chemical releases to all environmental media. Enforcement programs can use Form R to target inspection and compliance activities under several EPA programs.
- RCRA inspectors can also benefit from reviewing TRI data by obtaining a better understanding of the chemicals handled on-site and the facility's management practices.
- Manufacturing facilities that are required to submit a Form R must report data on chemicals handled, and releases into the air, water, or land (both on- and off-site).
- Please refer to the blank example Form R, located in your Participant's Manual. Part one is facility identification.
- Part two is chemical-specific information. Facilities record releases in Section 5.
- Examples of on-site reportable releases include fugitive emissions, surface water discharges, underground injection, and on-site disposal of RCRA hazardous waste.

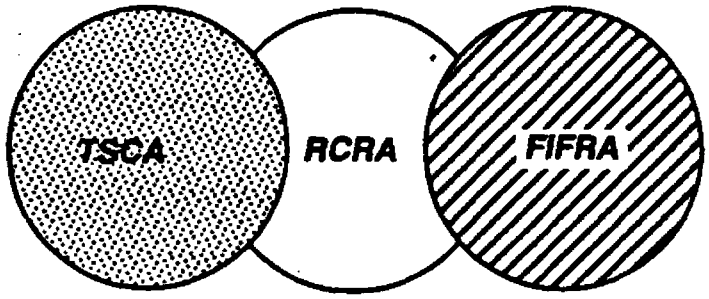
OVERHEAD #7

TITLE: RCRA Interfaces—EPCRA (continued)

KEY POINTS:

- A transfer off-site of a toxic chemical is reportable when it is disposed, recycled, treated, or used for energy recovery.
- At a later date, take the time to read the completed Form R and take note of the required data elements.
- Examples of how an inspector can use this information include:
  - Off-site transfers—compare with manifests
  - On-site disposal—examine which units/wastes are subject to RCRA
  - UIC—check if hazardous waste is injected, and look for a no migration petition
  - Air—investigate volatile releases, such as from an air stripper, to determine if they relate to a RCRA treatment process
  - Water—look at the waste water discharges to determine if they are generating a hazardous waste, and if they are permitted for the discharges.

RCRA INTERFACES—TSCA & FIFRA

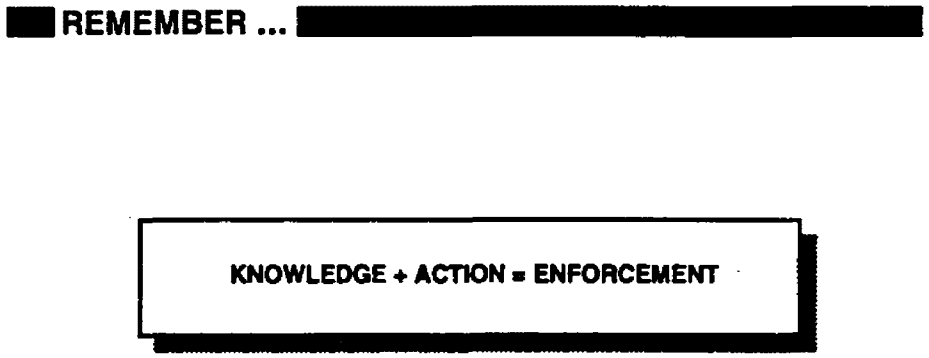


OVERHEAD #8

TITLE: RCRA Interfaces—TSCA & FIFRA

KEY POINTS:

- Mixed PCB/Hazardous Wastes must be managed under the requirements of both TSCA and RCRA.
- Mixed PCB/Hazardous Wastes are also subject to the Land Disposal Restrictions.
- Regarding FIFRA, there isn't much interface between it and RCRA. A couple of issues to think about, however, are:
  - — FIFRA regulations contain procedures recommended and not recommended for disposal (40 CFR 165).
  - — Some FIFRA substances are hazardous wastes under RCRA and must be disposed of as such.



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OVERHEAD #9

TITLE: Remember ...

KEY POINTS:

- Inspectors should investigate RCRA interface issues to expand their regulatory knowledge and improve their inspection efforts.
- An understanding of different regulatory programs will enhance an inspector's capability to define the RCRA jurisdictional limits.
- In addition, when RCRA inspectors identify violations of other EPA programs, they should take the initiative to report the violation to the appropriate enforcement program. Referrals from cross-program screening will be discussed in the next section.
- Understanding where and how RCRA interfaces with other programs is not only the foundation for understanding multi-media considerations, but is also an important part of your current RCRA inspections and the key to the overall goal of timely and appropriate environmental compliance.
- What we have discussed here are issues related to RCRA interfaces. These interfaces require a solid understanding of other programs to perform comprehensive single-media inspections. We will next discuss the Agency's drive toward multi-media enforcement and the various approaches to conducting multi-media inspections.

MULTI-MEDIA INSPECTIONS

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OVERHEAD #10

TITLE: Multi-Media Inspections

KEY POINTS:

- Next, we will look briefly at the background behind and underlying rationale for multi-media inspections, as well as discuss three different approaches to these inspections.
- I will describe the three multi-media inspection approaches and explain the planning, conducting, and follow-up requirements of each type of inspection. You will have the opportunity to ask questions, share insights, and/or raise issues.
- First, let's take a look at the concept of multi-media enforcement and inspections.

MULTI-MEDIA—WHAT IS IT?

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OVERHEAD #11

TITLE: Multi-Media—What Is It?

KEY POINTS:

- At registration, each of you was provided with an index card on which you were asked to write down a definition of multi-media enforcement and multi-media inspections. I expected to find numerous definitions among your answers, and I anticipated that some of your answers would either overlap or conflict with one another. Let's see what we've got ...

- As you can see, many people have different understandings of what multi-media enforcement is and what constitutes a multi-media inspection. We <u>all</u> know it is not uncommon for the Regions to vary in their approaches to doing things. For example, a recent OWPE study, that evaluated the role of RCRA inspectors in promoting pollution prevention, revealed many Regional differences in multi-media approaches. The OWPE study found that Regional RCRA programs have already initiated various innovative methods of cross-program coordination and multi-media inspections.

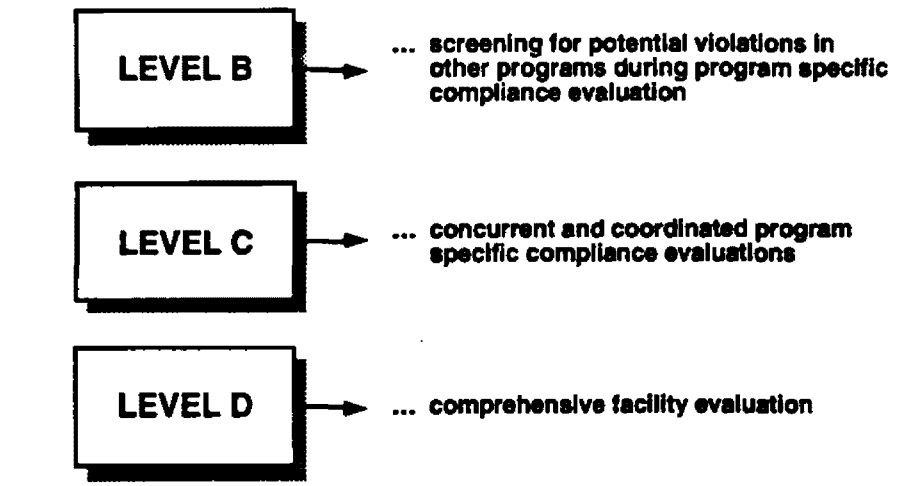
OVERHEAD #11

TITLE: Multi-Media—What Is It? (continued)

KEY POINTS:

- It has become apparent that not only do we have different understandings of multi-media enforcement and multi-media inspections, but we also define the three types of multi-media inspections differently. A "Level D" inspection in one Region may look nothing like one in another Region.

- In order to communicate effectively during this course and the rest of this Institute, it is important that we all are talking the same language and sharing the same understandings. Let's examine the three types of multi-media inspections as defined by NEIC, and we will discuss any differences that exist between your respective Regions and states.



OVERHEAD #12

TITLE: Three Types of Multi-Media Inspections

KEY POINTS:

- The three types of multi-media inspections, as defined by the *NEIC Multi-Media Inspection Manual*, are:
  - — Level B: A screening inspection conducted during a program-specific compliance evaluation
  - — Level C: A detailed, coordinated compliance evaluation of several targeted program-specific areas
  - — Level D: A consolidated, comprehensive facility evaluation.
- We will not be speaking about Level A inspections because, as you know, that type of inspection is a single-medium compliance inspection, conducted by one or more inspectors. The objective of a Level A inspection is to determine facility compliance status with program-specific regulations.
- Level B inspections are single media, not truly multi-media. The objective is to determine compliance for program-specific regulations, and also to identify potential violations in other programs for referral. Level B inspections have limited, focused objectives and are most appropriate for smaller, less complex facilities that are subject to only a few environmental laws.

OVERHEAD #12

TITLE: Three Types of Multi-Media Inspections (continued)

KEY POINTS:

— An OWPE study in 1991 revealed that Regions 1, 4, 7, and 8 were performing these Level B screening inspections. This type of inspection requires minimal cross-program training. The inspector must possess a general understanding of program requirements in order to flag potential violations and refer these problems to the appropriate program inspector(s). Typically, an inspector who conducts a Level B inspection uses a 1–2 page checklist and looks for key indicators of compliance problems (i.e., opaque smoke).

- Level C inspections involve concurrent and coordinated program-specific compliance evaluation. The objective of the Level C inspection is to determine compliance for several targeted program-specific areas, as well as report on possible noncompliance in other environmental program areas. Level C multi-media inspections have more compliance issues to address than the Level B inspection and are more appropriate for intermediate to large facilities that are subject to a variety of environmental laws.

  — The OWPE study found that Regions 2, 3, 6, 7, and 10 and NEIC are performing many of these coordinated inspections. In these Regions, staff responsible for performing Level C inspections typically work in unison with inspectors from other program offices, but each inspector cites violations only in his/her particular program.

  — This type of inspection is media-specific, and is conducted by a team of single-media inspectors from different programs. The team, which is headed by a team leader, conducts either 1) a joint inspection, where the team staff meet at the facility and simultaneously conduct their respective program-specific investigations, or 2) a coordinated inspection, where the team staff agree to conduct their respective program-specific investigations within the same timeframe, but not necessarily during the same visit.

- Similar to a Level C inspection, a Level D inspection determines compliance for several targeted program-specific areas and reports on possible noncompliance in other environmental program areas. Level D inspections look beyond compliance to identify environmental problems that might otherwise be overlooked. Level D multi-media inspections are the most thorough, often taking a process approach, and, consequently, are resource-intensive inspections. Level D inspections may involve cross-trained inspectors. This type of inspection is appropriate for intermediate to large complex facilities that are subject to a variety of environmental laws.

- Region 6 and NEIC are performing consolidated multi-media inspections. For these inspections, their inspectors are trained to conduct cross-program inspections and have the authority to cite violations in more than one program. The Level D inspection team, headed by a team leader, is comprised of staff thoroughly trained in different program areas. This consolidated inspection addresses not only compliance in targeted program-specific areas, but also tries to identify environmental problems that might otherwise be overlooked.

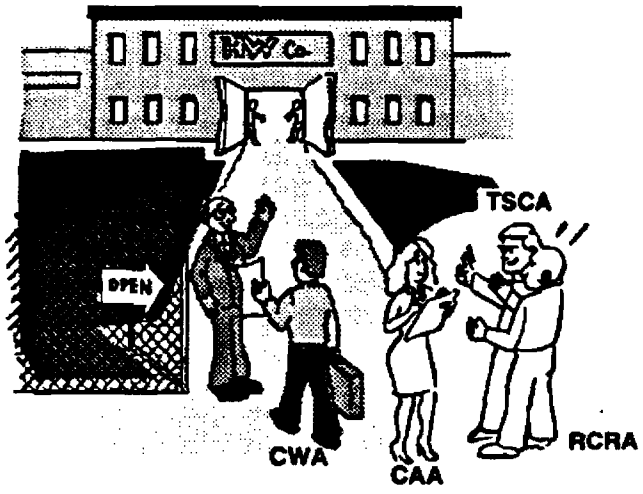
OVERHEAD #12

TITLE: Three Types of Multi-Media Inspections (continued)

KEY POINTS:

- For example, a large industrial facility with multiple process operations may be regulated under numerous environmental statutes, such as the Clean Water Act (CWA), Clean Air Act (CAA), Resource Conservation and Recovery Act (RCRA), Toxic Substances Control Act (TSCA), Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), and the Federal Insecticide and Rodenticide Act (FIFRA). The on-site investigation is conducted during one or more time periods, during which intense concurrent program-specific compliance evaluations are conducted, often by the same cross-trained personnel.

WHY ARE MULTI-MEDIA INSPECTIONS IMPORTANT?



EPA deems multi-media inspections essential.

OVERHEAD #13

TITLE: Why are Multi-Media Inspections Important?

KEY POINTS:

- If you have not already seen multi-media inspections conducted in your Region, you will soon. EPA's current initiatives emphasize the need for multi-media enforcement nationwide.

- Why the drive for multi-media enforcement? There are several reasons for this direction as you can tell from the list of advantages we just generated:

  — Multi-media enforcement is a top Agency priority, demonstrated by support for it at the highest levels. In 1990, Administrator Reilly established a goal of taking a multi-media approach to 25% of all enforcement activities. In a February 19, 1991 memorandum, "Implementation of the Administrator's Multi-Media Enforcement Goal," Deputy Administrator Habicht clarified the Administrator's goal of 25% multi-media enforcement. He also explained that multi-media enforcement is part of the overall "integrated" direction the Agency is taking, and that the goal is an Agency-wide goal, covering all programs and all types of actions.

OVERHEAD #13

TITLE: Why are Multi-Media Inspections Important? (continued)

KEY POINTS:

— Mr. Habicht further explained EPA's move toward multi-media enforcement as one that is "tempered by an overriding concern that (the Agency's) highest priority is to protect public health and the environment whether such protection derives from a multi-media or single-media approach." He emphasized that "multi-media enforcement is a means, not an end in itself."

— EPA's strategic planning documents and enforcement activities emphasize multi-media compliance/enforcement and present EPA's vision for multi-media targeting, inspections, and enforcement actions. These documents include:

- Draft Agency-Wide Strategic Plan
- Enforcement Four Year Strategic Plan
- Enforcement in the 1990's Project.

— The benefits from using a multi-media approach to enforcement are many. This movement is intended to further several objectives:

- Greater environmental protection, risk reduction, and pollution prevention. This objective could be accomplished by identifying/preventing cross-media transfers, and ensuring that all emissions or waste streams are appropriately addressed by a regulatory authority.

- Greater deterrence (i.e., greater leverage over violators, larger penalties, and greater potential for innovative settlements).

Another potential benefit is greater resource efficiency than single program/ single media approaches can accomplish alone, as demonstrated by the Massachusetts Blackstone Project. The Blackstone Project was a joint pilot project of the Massachusetts Department of Environmental Protection and the Massachusetts Department of Environmental Management, for which a combination of multi-media compliance inspections, enforcement rooted in waste prevention, and expanded technical assistance was used to improve environmental protection in the Commonwealth. Notwithstanding the Blackstone Project, it is uncertain whether any resource efficiencies have been gained in the Regions from Level C and D inspections.

— As you will learn in the Federal Facilities module, the Enforcement Management Council selected Federal facilities for a major multi-media enforcement initiative for FY 93/94. Federal facilities are a highly visible sector of the regulated community. They are of great environmental significance and have become an Administration priority. While committed to improved environmental performance, Federal agencies' compliance rates have traditionally been lower in all media than those of private facilities. Federal facilities are, therefore, in need of more comprehensive environmental compliance evaluations.

OVERHEAD #13

TITLE: Why are Multi-Media Inspections Important? (continued)

KEY POINTS:

— The findings of an Agency-wide program evaluation study, conducted by OPPE's Program Evaluation Division in December 1990, show that the Agency is overwhelmingly positive about multi-media enforcement as a general concept. Managers and staff support the idea of resolving environmental problems at a facility in a holistic manner. The overall consensus is that multi-media enforcement as an enforcement strategy makes sense when used appropriately.

TRAINING OPPORTUNITIES

Multi-Media
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OVERHEAD #14

TITLE: Training Opportunities

KEY POINTS:

- This handout contains a course description of a NETI multi-media training opportunity. The description also includes the name and telephone number of the person to contact for those of you who are interested in pursuing training.

- Before we go any further, I think each of us would benefit from learning what is going on in the states and Regions with respect to multi-media inspections and training, such as:

  — The type and number of multi-media inspections conducted/planned
  — The type/extent of training provided
  — Problems and successes experienced.

OVERHEAD #14

TITLE: Training Opportunities (continued)

KEY POINTS:

- Would anyone like to summarize his/her state/Regional experiences with multi-media inspections? Our time is limited, so I can only call on one or two people to share information regarding state/Regional experiences with multi-media inspections. Anyone?

PRESENTATION ON
LEVEL B INSPECTIONS:

A SIMPLE SCREENING EXERCISE

WHAT IS A LEVEL B INSPECTION?

OVERHEAD #1

TITLE: What Is a Level B Inspection?

KEY POINTS:

- In the next few minutes, I will discuss Level B inspections of the kind that Region I is conducting. After the presentation, there will be a few minutes for questions.

- Let's begin by defining what we mean by "Level B inspections." These inspections are similar to single-media inspections. However, for a Level B inspection, an inspector quickly screens for potential violations in other programs. The inspector does not need to be completely knowledgeable of the regulatory requirements in all programs.

REGION I's LEVEL B SCREENING

- **Multi-media screening is performed at all facilities and by all programs**
- **All inspectors are provided with one day of basic training on all programs**
- **A multi-media tracking system identifies inspections or enforcement actions that are planned or have been recently conducted**

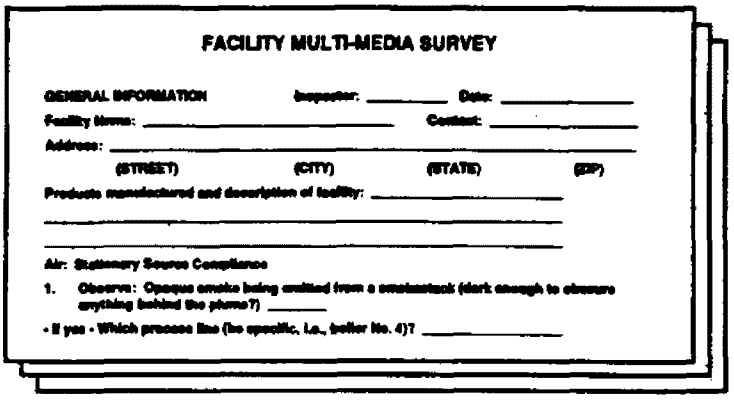
OVERHEAD #2

TITLE: Region I's Level B Screening

KEY POINTS:

- Region I no longer performs Level A single-media inspections, for which an inspector evaluates one media without looking for potential problems in other media programs. Region I currently performs a Level B inspection at all facilities in all media programs (unless a Level C or D inspection is conducted).
- All Region I inspectors have been provided with intensive, one-day training, where 20–30 minutes is devoted to each program. This is an enormous amount of information to address in one day (additional training may be provided in the future). Although it appears to be successful in Region I, other Regions/states may consider allowing more time for training.
- Prior to conducting an inspection, inspectors review the Region I multi-media tracking system to determine if any inspections or enforcement actions in other programs are planned or have been recently conducted. The system contains information on inspections/enforcement actions since 1990. For older information, IDEA is also available. However, Region I RCRA inspectors have found that the information contains primarily RCRA information, and not a great deal of information on the other programs. If an inspection/enforcement action was recently conducted, then the inspector will contact the representative in the other program to learn more about the facility.

CONDUCTING THE LEVEL B SCREENING



FACILITY MULTI-MEDIA SURVEY

GENERAL INFORMATION Inspector: _____ Date: _____

Facility Name: _____ Contact: _____

Address: _____

(STREET) (CITY) (STATE) (ZIP)

Products manufactured and description of facility: _____

_____

_____

Air: Stationary Source Compliance

1. Observe: Opaque smoke being emitted from a smokestack (dark enough to obscure anything behind the plume?) _____

- If yes - Which process line (be specific, i.e., boiler No. 4)? _____

OVERHEAD #3

TITLE: Conducting the Level B Screening

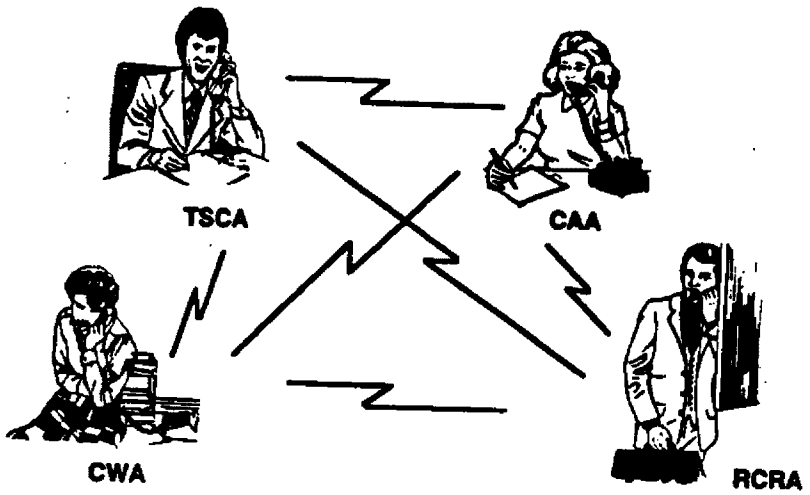
KEY POINTS:

- Region 1 has developed a four-page "Facility Multi-Media Survey," which is a checklist to assist inspectors in identifying potential violations or concerns in other programs. As you can see, the checklist contains basic questions that serve as indicators of non-compliance. The checklist identifies general visual clues of possible noncompliance, as well as program-specific questions.

- Once on-site, an inspector incorporates the screening checklist into the regular single-media compliance inspection. Typically, it takes an additional 30 minutes to complete the checklist. This extra time has not been too burdensome for inspectors in Region 1. It is important to caution that if more time is spent examining the potential multi-media issues, then it is possible that adequate time may not be dedicated to performing a comprehensive RCRA compliance inspection.

- Following the inspection, an inspector merely sends a copy of the checklist to the appropriate program contacts identified. In practice, checklists are not always sent, but rather, inspectors contact other inspectors by phone to determine if they should be concerned about a situation (e.g., asking if RCRA applies in certain situations).

BENEFITS/LESSONS LEARNED



OVERHEAD #4

TITLE: Benefits/Lessons Learned

KEY POINTS:

- One obvious benefit of multi-media screening is that all Region I inspectors get some basic training/understanding of other programs.

- Inspectors have not only learned who to call, but they have had more contact with other programs by using the checklists. As a result of Region I's initiative to conduct multi-media screenings, programs talk to each other more now than they had in the past.

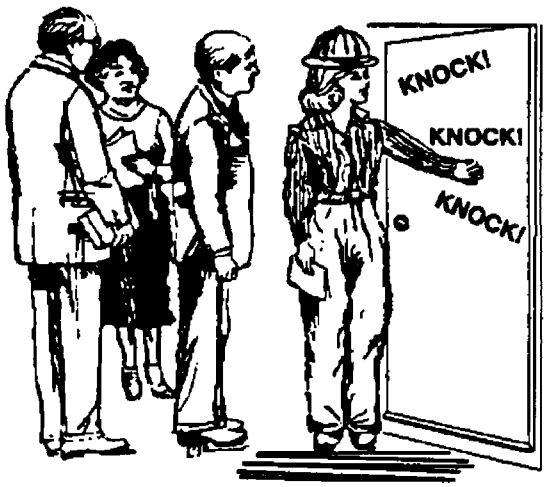
  As one example, an inspector from the CAA program was conducting an industrial source inspection when he noticed a large mound of contaminated soils on the property. When the inspector questioned the facility manager about the mound, the facility manager stated that she was waiting to receive a RCRA permit. Upon the inspector's return to the office, he notified the RCRA program of his observations at the industrial facility. The inspector was informed that the RCRA permit was revoked and that the facility was not going to receive a permit.

- In the long-term, a multi-media perspective can improve our understanding of facilities and, potentially, the quality of our enforcement programs.

PRESENTATION ON
LEVEL D INSPECTIONS:

AN EXERCISE IN PLANNING AND COORDINATION

WHAT IS A LEVEL D INSPECTION?



OVERHEAD #1

TITLE: What Is A Level D Inspection?

KEY POINTS:

- In the next few minutes, I will discuss the Level D inspections that Region 6 is conducting. As part of this briefing, I will explain the planning process that is involved in coordinating these Level D inspections, and I will describe how these inspections are conducted. I will briefly mention the follow-up process and conclude by sharing the lessons learned from Region 6's experiences in the field. After the brief presentation, there will be a few minutes for questions.

LEVEL D: A TEAM EFFORT

EPA Programs Involved:

- AIR
  - SIP
  - NSPS
  - PSD
  - NESHAPS
  - ASBESTOS RENO/DEMO
- RCRA
- NPDES
- TSCA Sections 5, 6, and 8
- EPCRA
- SPCC
- UIC
- UST
- WETLANDS
- SDWA

OVERHEAD #2

TITLE: Level D: A Team Effort

KEY POINTS:

- These are the ten programs in Region 6 that have been involved in Level D inspections. Each of these programs, however, is not always involved in an inspection. The types of compliance problems that are suspected at a facility determine which programs will be involved in any given Level D inspection. For example, at a facility where drinking water wells are present, an inspector from the SDWA program would be involved in the multi-media inspection. In general, the programs that are often involved in Level D inspections are RCRA, TSCA, Air, and NPDES.

- In Region 6, most of the inspectors are single media inspectors. All Region 6 inspectors have been involved in multi-media inspections at least one time in their career. Few have expertise in more than one program. Those that do have expertise in more than one program are trained in TSCA. Only one inspector is cross-trained in three programs: RCRA, Water, and TSCA.

OVERALL PLANNING PROCESS

- **Selection of Target Facilities**
- **Selection of Inspection Team and Team Leader**
- **Conduct of State and EPA File Reviews**
- **Inspection Team Planning and Coordination Meetings**
- **Coordination with State Agencies**

OVERHEAD #3

TITLE: Overall Planning Process

KEY POINTS:

- Over the last two and one-half years, Region 6 has performed 13 Level D inspections, all of which have been unannounced. Region 6 reviews emissions data from the Toxics Release Inventory (TRI) and compliance data to target facilities for these multi-media inspections. Facilities with the greatest emissions, and that are significant noncompliers in more than one program, are targeted for Level D inspections. States may also recommend certain facilities that have recalcitrant or difficult management.

- Each inspection requires significant planning and coordination efforts. The process for selecting a team leader has been, simply, one of taking turns. GS-11s to GS-13s can serve as team leader, and everyone takes a turn at fulfilling this role. The team leader acts as a facility/inspection team focal point to deal with site access, planning, and coordination issues.

- The type of facility and the programs impacted by the suspected/existing compliance problems determine the composition of the inspection team. In general, the inspection team may consist of: 1) Team Leader (a senior ESD inspector), 2) Site Safety Officer, 3) EPA Program-Specific or Multi-Media Inspectors, 4) State Inspectors, 5) State and EPA Enforcement Officers, and 6) Sampling Support Personnel.

OVERHEAD #3

TITLE: Overall Planning Process (continued)

KEY POINTS:

- Four to six weeks prior to an inspection, the team leader holds a planning and coordination meeting. By this time the file reviews have already been conducted, and the team members have the knowledge of the site and the background to inform the team leader of their respective needs. In this way, the team leader can prepare a schedule for conducting the inspection.

- Coordination with state agencies is important because they typically have more recent and first-hand knowledge of the facility.

CONDUCTING THE INSPECTION

- **Pre-Inspection Site Safety Meeting**
- **Inspection In-Briefing**
- **Combined Inspections of Specific Units**
- **Nightly Inspection Coordination Meetings**
- **Inspection Outbriefing**

OVERHEAD #4

TITLE: Conducting the Inspection

KEY POINTS:

- As mentioned earlier, Region 6 has a policy of conducting unannounced inspections. Prior to departing for the targeted facility, the team leader and inspection team review the site safety plan to ensure that the inspectors have the appropriate training and equipment necessary to conduct the inspection.
- When the inspection team arrives at the facility site, the Team Leader and Site Safety Officer approach the entrance and attempt to enter the facility. They lead an inspection in-briefing, informing the facility members that other inspectors will be entering the facility within the next hour.
- Once the inspection in-briefing is concluded, the inspection team may enter the facility according to the inspection schedule, which the Team Leader prepared based on the timing and other needs cited by the individual team members. The schedule allows for single-media inspections of specific units to be conducted concurrently, only when necessary. The inspection schedule has proven to be a cost-effective and time-saving tool.

OVERHEAD #4

TITLE: Conducting the Inspection (continued)

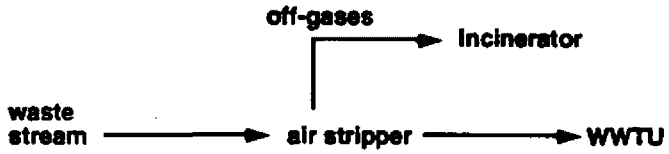
KEY POINTS:

- In conducting the actual inspection, there is little difference between a single-media inspection and a multi-media inspection. The difference occurs in the cross-program communications. Region 6 has learned to ensure that each regulated unit is inspected by all appropriate inspectors at the same time.

- Nightly inspection coordination meetings are held at the end of each day's inspection. These meetings keep the Team Leader informed of the inspectors' progress, findings, and any problems. These meetings also offer inspectors an opportunity to compare notes (e.g., on the flow of wastes/emissions) and identify inconsistencies or areas of concern that can be addressed the following day.

- The inspection out-briefing is held with the facility manager at the completion of the inspection. At this closing meeting, each single-media inspector informs the facility manager of his/her findings.

BENEFITS OF A REGION 6 INSPECTION



OVERHEAD #5

TITLE: Benefits of a Region 6 Inspection

KEY POINTS:

- Here is a real-life example of how cross-program coordination during an inspection paid off.
- During the nightly inspection coordination meeting, the inspectors identified inconsistencies in the information collected in the inspection of each of these units. The following day, the RCRA, Air, and NPDES inspectors reinspected the units simultaneously. They discovered that the off-gases from an air stripper were sent to the incinerator, and represented a significant proportion of the air and feed material supplied to the incinerator. This was initially unreported to the RCRA inspector during the incinerator inspection.

FOLLOWING UP THE INSPECTION

OVERHEAD #6

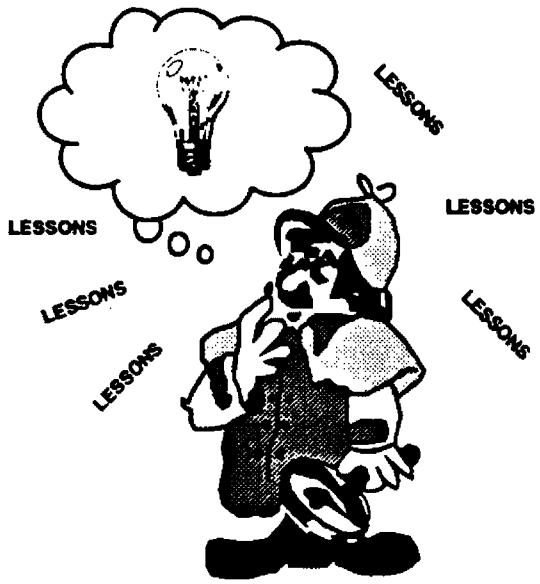
TITLE: Following Up the Inspection

KEY POINTS:

- Inspectors on the multi-media team prepare single-media inspection reports and submit them to the Team Leader and Regional Counsel concurrently.

- The Team Leader then prepares an Executive Summary for the Multi-Media Inspection Report. This summary is 5 to 18 pages in length and summarizes the facility description, inspection activities, and findings. Region 6 learned from experience that it is necessary to compile the Multi-Media Inspection Report while the enforcement personnel are preparing the case to meet the statutory timely and appropriate requirements.

LESSONS LEARNED



OVERHEAD #7

TITLE: Lessons Learned

KEY POINTS:

- State participation is extremely helpful. Since many programs are delegated to the states, it is beneficial to have State personnel at the facility. Often, State representatives have been to the facility more recently, have more complete files, and have a better historical picture of the site. State personnel may also recognize more changes at a facility (e.g., closing a unit).

- Cross program planning, coordination and communication are essential. Upfront planning assists the Team Leader in knowing what programs have impact at the facility. Once an inspection team is formed, understanding the scheduling needs of the various members is essential to ensuring a timely and cost-effective approach to conducting the inspection.

- Establishment of a Team Leader as the focal point for inspections, enforcement, state contacts, etc. is critical. The Team Leader is necessary–otherwise, people would be stumbling over one another.

- A phased approach to conducting Level D inspections is preferred. Do not have everyone at the facility at the same time. Limit the team size and equipment needed by spreading out the scheduled inspection activities.

United States Environmental Protection Agency | Office of Solid Waste and Emergency Response | November 1992

EPA

RCRA/Clean Water Act Interface

A Quick Reference Fact Sheet

Background

The regulation of hazardous wastewater activities can fall under jurisdiction of both the Clean Water Act (CWA) and RCRA. However, the distinction between the two statutes is relatively clear because, in many instances, RCRA contains exclusions and conditions that ensure that RCRA jurisdiction ends where CWA jurisdiction begins.

One of the principal provisions of the CWA governs the discharge of treated pollutants from "point sources" to surface waters. RCRA regulates the generation, transportation, treatment, storage, and disposal of solid and hazardous waste. Treatment and disposal practices of RCRA waste are the two practices most likely to be encompassed by the CWA.

Potential Issues

The following examples highlight specific RCRA regulations that interface with CWA.

Wastewater Treatment Unit (WWTU) Exemption — Under §§264.1(g)(6) and 265.1(c)(10) WWTUs are exempt from RCRA permitting requirements. To qualify for this exclusion, a WWTU must meet three criteria specified in §260.10:

- The unit must be part of a wastewater treatment facility subject to regulation under the CWA
- The unit must manage a hazardous wastewater
- Treatment or storage must take place in tank or tank system.

Specifically, under the CWA, the facility must have either a National Pollutant Discharge Elimination system (NPDES) permit or discharge to a Publicly Owned Treatment Works (POTW).

Only the WWTU (i.e., the tank) is exempt from Subtitle C regulation, the exemption does not apply to the waste. Consequently, all applicable hazardous waste management standards apply to the waste prior to treatment in the WWTU, and to any residue generated by the treatment of that waste. In other words, solid waste (e.g., sludges) resulting from the treatment of a listed hazardous waste in an exempt WWTU will remain a listed hazardous waste, and solid waste resulting from the treatment of a characteristic hazardous waste in an exempt unit will remain hazardous as long as the solid waste continues to exhibit a characteristic (§§261.3(c) and (d)). The generator is responsible for identifying whether the sludge is hazardous and how the sludge is managed.

There are additional limitations to the exclusion. Specifically, the exemption is not intended to apply to zero discharge WWTUs that are not required to obtain a NPDES permit. These WWTUs are required to obtain RCRA Part B permit because their waste streams are not otherwise regulated under CWA (i.e., no applicable effluent guidelines or pretreatment standards specifying zero discharge).

Another exclusion specification was made in the February 21, 1991 Boiler and Industrial Furnace (BIF) final rule. In the rule, EPA modified the definition of "incinerator" in §260.10 so that it specifically excludes the term "sludge dryer," and added a specific definition for a "sludge dryer." With this distinction, if a sludge dryer meets the newly codified definition, it can be part of an exempt WWTU (provided, of course, the unit meets the definition of a tank) instead of being classified as a thermal treatment device which would need a permit under RCRA.

CWA Pretreatment Standards — On July 24, 1990, EPA promulgated regulations that revised the General Pretreatment and National Pollutant Discharge Elimination System regulations in 40 CFR Parts 122 and 403. These revisions were made pursuant to §§307(b) and 402(b)(8) of the CWA and §3018(b) of RCRA. Effective August 23, 1990 specific discharges were prohibited unless the waste streams were first treated. Two of these prohibited waste streams meet the following characteristic hazardous waste definitions:

- Ignitable wastes, including a material meeting the definition in §261.21(a)(1)
- Reactive wastes, including a material meeting the definitions in §261.23(a).

Additionally, the new standards prohibit the discharge of oil and grease that will interfere with POTW operation, as well as the discharge of trucked wastes, except at designated discharge points.

Along with an existing §403.5(b) prohibition on materials with a pH lower than 5.0 (a material with a pH less than or equal to 2.0 is considered a corrosive waste under §261.23(a)(1)), these new provisions are requiring new treatment at RCRA facilities. This treatment must occur in appropriate RCRA units or RCRA exempt units (e.g., an exempt elementary neutralization unit under §§264.1(g) or 265.1(c)).

Permit by Rule for POTWs — A permit by rule eliminates the need for facilities to submit a full Subtitle C permit application when they are permitted under CWA. Specifically, a POTW that accepts for treatment a hazardous waste and has a NPDES permit will be considered to have a permit under RCRA if the following §270.60(c) requirements are met:

- EPA identification number
- Use of the manifest system
- Maintain an operating record
- Biennial reporting.

A POTW accepting hazardous waste for treatment w[hich] does not comply with the above mentioned r[equi]rements must comply with all the Subtitle C p[ermit] requirements.

Domestic Sewage Exclusion — If a hazardous waste stream is managed prior to discharge, it must be handled as a hazardous waste in, for example, a §262.34 accumulation tank or in a permitted storage area. This is because, technically, the waste ceases to be under RCRA jurisdiction at the point where the industrial wastewater mixes with the sanitary wastes. Typically, this mixture takes place within the sewer system and the application of RCRA regulations would be difficult. Thus, EPA has determined that a waste falls within the CWA exclusion when if first enters a sewage system if it will mix with sanitary sewage prior to storage or treatment by a POTW. A hazardous waste that never mixes with domestic sewage cannot qualify under all of the criteria set forth in §261.4(a)(1).

If the waste is substantively managed in RCRA units before discharge, it must be included as part of a generator's monthly hazardous waste count. Alternatively, if a waste is generated from a process unit and immediately discharged to the sewer, the material would not be counted.

Industrial Wastewater Discharge Exclusion — Industrial wastewater discharges that are point source discharges subject to regulation under §402 (NPDES permitting) of CWA are not solid waste under §261.4(a)(2) of RCRA.

This exclusion applies only to the actual point source discharge. It does not exclude industrial wastewaters while being collected, stored or treated prior to discharge. If these wastewaters are hazardous, the appropriate permitting or generator accumulation provisions of RCRA Subtitle C apply. Additionally, the exclusion does not include sludges that are generated by wastewater treatment. The generator is responsible for identifying whether the sludge is hazardous and how it is managed.

United States Environmental Protection Agency | Office of Solid Waste and Emergency Response | November 1992

EPA

RCRA/Clean Air Act Interface

A Quick Reference Fact Sheet

Background

RCRA and the Clean Air Act (CAA) both have regulatory programs to address emissions onto the environment. The CAA comprises a series of interlocking programs designed to protect health and the public welfare from emissions polluting the ambient (outdoor) air.

The 1990 amendments to CAA contain several innovative approaches to air regulation. The Act is subdivided into a number of titles including provisions for attainment and maintenance of National Ambient Air Quality Standards (NAAQS), mobile sources, air toxics, acid rain control, permits, ozone protection, enforcement and other miscellaneous provisions.

Potential Issues

The following examples highlight RCRA regulations that interface with CAA.

Chlorofluorocarbon (CFC) Reclamation Exclusion — The CAA requires that all ozone depleting emissions from all kinds of refrigeration be reduced to the lowest level possible through recycling, recovery, and other controls. Specifically, Title VI of CAA prohibits venting during servicing and disposal of refrigerants after July 1, 1992. To be consistent with Title VI, and because CFC refrigerants would display the toxicity characteristic under RCRA, used CFC refrigerants from totally enclosed heat transfer equipment, provided the refrigerant is reclaimed for further use — is not subject to regulation as a hazardous waste (§261.4 (b)(12)). Additionally, to qualify for the exclusion, the persons performing the reclamation activities and the equipment they use must be certified under CAA.

This exclusion is only applicable to the actual CFC refrigerant, any oils or other waste removed from the equipment is subject to hazardous waste determination.

Air Emission Control Devices — Air emission control devices located at RCRA hazardous waste facilities but regulated under CAA, can generate residues that may be defined as a hazardous waste. For example, activated carbon units used as air emission control devices of gaseous industrial process emissions will not necessarily be regulated under RCRA. Trapped organics in such columns are not hazardous waste because the gas being treated is not a solid waste (it is an uncontained gas), and therefore any condensed organics do not derive from treatment of a hazardous waste. However, the non gas residues from these devices could be hazardous wastes if they are listed or if they display a characteristic.

Stationary Sources — The CAA of 1990 includes a list of 189 toxic air pollutants of which emissions must be reduced. EPA must publish a list of source categories that emit certain levels of these pollutants. The list of source categories must include:

- "Major sources" - emitting 10 tons per year of a single air toxic, or 25 tons per year of any combination of these toxics
- "Area Sources" - smaller sources emitting less than 10 tons per year of a single air toxic, or 25 tons per year of any combination of these toxics.

Several types of facilities regulated under RCRA Subtitle C may qualify as "major" or "area" sources of toxic air pollutants subject to CAA. Specific small businesses that may be regulated under both programs include dry cleaners, gasoline stations, printers, auto body repair shops, metal finishers, surface coating and painting operations, and solvent degreasing operations.

United States Environmental Protection Agency | Office of Solid Waste and Emergency Response | November 1992

EPA

RCRA/CERCLA Interface

A Quick Reference Fact Sheet

Background

RCRA and CERCLA both address hazards in the environment. The primary distinction between them is that RCRA regulates management of wastes while CERCLA authorizes cleanup responses whenever there is a release of wastes. However, the programs overlap in two major ways:

- RCRA standards can be considered Applicable or Relevant and Appropriate Requirements (ARARs) and are central to selecting remedies under CERCLA
- RCRA corrective action and CERCLA actions may be evoked under similar circumstances.

Under CERCLA §106, EPA has the authority to abate an imminent or substantial danger to public health or the environment that results from a hazardous substance release. The authority under RCRA §7003 is essentially the same, except that RCRA's imminent hazard provision addresses non-hazardous as well as hazardous solid waste releases. In an enforcement action, the CERCLA and RCRA imminent hazard provisions may be used in tandem to strengthen the government's case.

On the whole, the CERCLA response authority has a broader reach than RCRA's corrective action. The RCRA provisions apply only to RCRA regulated facilities. CERCLA, on the other hand, can be utilized to require response work by any PRP at any place where there is a release or potential release of a hazardous substance. CERCLA hazardous substances include all RCRA hazardous wastes and substances listed by other statutes, such as the Safe Drinking Water Act and the Clean Air Act. Moreover, CERCLA authorizes the use of EPA money or that of third parties for site cleanup; EPA or the third party can then seek reimbursement from potentially responsible parties (PRPs). The RCRA program can only compel the responsible parties to engage in a cleanup and has no fund to expend on direct cleanup.

The RCRA and Superfund programs follow roughly parallel procedures in responding to releases, although different labels are applied to the procedures. Both programs have procedures for:

- Discovery of a release
- Examination of available data to determine if an emergency action is warranted
- Short-term measures to abate the immediate adverse effects of a release
- Investigation and formal study of long-term cleanup options
- Formal selection of a remedy.

The major procedural difference between the RCRA and Superfund programs involves ranking. CERCLA requires that site conditions be analyzed according to the Hazard Ranking System and that only sites placed on the National Priorities List (NPL) receive any remedial action funding. Currently, no comparable requirement exists in the RCRA corrective action procedures.

Potential Issues

The following examples highlight specific RCRA regulations that interface with CERCLA.

Listing of RCRA Non-Corrective Action Sites — The RCRA/CERCLA interface consists of issues regarding the listing and cleanup of RCRA sites under CERCLA. The June 10, 1986, *Federal Register* published the components of the Final RCRA Listing Policy to address the circumstances under which RCRA sites will be placed on the NPL and be subject to CERCLA. Under that policy, sites not subject to RCRA Subtitle C corrective action authorities will continue to be placed on the NPL. Encompassed by this policy are:

- Sites that ceased activity prior to the Subtitle C effective date
- Sites that do not manage regulatory hazardous waste
- Contamination resulting from activities of hazardous waste handlers not subject to corrective action, such as generators or transporters.

The RCRA Subpart S proposed rule, July 27, 1990, 55 FR 30789, presented much more stringent and far reaching corrective action measures than currently exist within the RCRA regulations. The proposed rule also contains a discussion of its relationship to other programs. The Agency anticipates that there may be a number of facilities at which substantial CERCLA remedial studies and/or actual remediation will have been already conducted by the time a RCRA permit is used (thereby triggering the Subpart S corrective action requirements). In such cases, if the remedial work has been conducted according to the CERCLA National Contingency Plan (NCP), EPA would consider that work to be consistent with the requirements of Subpart S, making additional or different studies or cleanup requirements unnecessary. If, however, the Superfund remedial activities conducted at a RCRA facility addressed only a portion of the units or releases at the facility requiring remediation, then the RCRA permit would need to address any remaining corrective action required under Subpart S.

Listing of Potential RCRA Corrective Action Sites — Sites that can be addressed under RCRA Subtitle C corrective action authority generally will not be placed on the NPL. However there are circumstances in which it may be appropriate to use CERCLA authorities to address facilities at which necessary corrective actions under RCRA are unlikely to be performed. Specifically, on June 10, 1986 the Agency identified three types of facilities that meet these criteria:

- Facilities owned by persons who are bankrupt
- Facilities that have lost RCRA interim status and for which there are additional indications that the owner/operator will be unwilling to undertake corrective action
- Sites, analyzed on a case-by-case basis, whose owners/operators have shown an unwillingness to undertake corrective action.

On October 4, 1989, the Agency added other categories of RCRA facilities that may be appropriate for NPL listing, specifically, facilities that are non- or late-filers for permits, converters (i.e., facilities whose Part A permits have been withdrawn), protective filers, and sites holding RCRA permits issues before enactment of HSWA. The Agency may also use CERCLA, or participate in joint efforts with States under RCRA, to address situations of "area-wide" contamination.

Cleanup of NPL Sites Under RCRA — In some instances, sites have been listed on the NPL and later actions are taken under RCRA corrective action. The Agency issued a memorandum on July 11, 1990, (Clayto, Wassersug and Mulkey) outlining the requirements for cleanup of final NPL sites under RCRA. The memo stated that RCRA authorities may be used at NPL sites, and that actions taken at an NPL site under RCRA §3008(h) need not meet NCP requirements for remedy selection in order to delete the site from the NPL.

RCRA Regulations as CERCLA ARARs — CERCLA actions may have to comply with other environmental requirements, including those under RCRA. A requirement under other environmental laws may be either "applicable" or "relevant and appropriate." Applicable requirements are those cleanup standards, standards of control, and other substantive environmental protection requirements, criteria, or limitations promulgated under Federal or state law that specifically address a hazardous substance, pollution, contaminant, remedial action, location or other circumstances at a CERCLA site.

Relevant and appropriate requirements (ARARs) are RCRA standards that, while not "applicable," address problems or situations sufficiently similar to those encountered at a CERCLA site that their use is well suited to that site. For a Federal or state regulation that is determined to be an ARAR, §121(e)(1) of CERCLA requires a remedial action to comply with the substantive but not administrative requirements for activities conducted on-site.

CERCLA Off-Site Policy — CERCLA's off-site policy states that no hazardous substance may be taken to an off-site RCRA facility if the facility has significant RCRA violations or other environmental conditions that affect its satisfactory operation. This policy is discussed in the November 29, 1988, *Federal Register (53 FR 48218)* and the document entitled *Revised Procedures for Implementing Off-Site Response Actions (Directive Number 9834.11)*

United States Environmental Protection Agency | Office of Solid Waste and Emergency Response | November 1992

EPA

RCRA/Emergency Planning and Community Right to Know Act Interface

A Quick Reference Fact Sheet

Background

Section 313 of the Emergency Planning and Community Right to Know Act (EPCRA) of 1986 requires EPA to establish an inventory of routine toxic chemical emissions from certain facilities. Facilities subject to this reporting requirement are required to complete a Toxic Release Inventory Form (Form R) for specified chemicals. Reports must be submitted to EPA by July 1 of each calendar year. EPA is required to compile the reports into a national computerized data base called the Toxic Release Inventory (TRI). The data available from TRI is a valuable tool for targeting enforcement efforts as well as helpful to a RCRA inspector in understanding the facility operations.

The reporting requirement applies to owners and operators of facilities that have 10 or more full-time employees, that are in Standard Industrial Classification (SIC) codes 20 through 39 and that manufacture, process, or otherwise use a listed toxic chemical in excess of specified threshold quantities. These facilities are required to report data on chemicals handled, and releases into the air, water, or land (both on and off-site).

Potential Issues

The following examples highlight TRI data that can benefit a RCRA inspector.

Releases On-Site — Section 5.5 of Form R requires facilities report the amount of a toxic chemical release to a landfill, land treatment unit, surface impoundment, or other land disposal unit. Most of the TRI land releases are considered on-site disposal of hazardous waste, regulated under RCRA. A RCRA inspector can use this information to determine if a particular unit at a facility is, or should be, permitted under RCRA.

Releases Off-Site — Section 6.2 of Form R requires facilities report the amount of a toxic chemical transferred to an off-site location. These off-site locations must be identified and classified as disposal, recycling, waste treatment, or energy recovery facilities. A RCRA inspector can compare this information to a facility's RCRA manifesting records for verification of proper disposal.

Releases to Water — Section 6.1 of Form R requires facilities report the amount of toxic wastewater discharges to POTWs, and section 5.3 requires facilities to report the quantity of a toxic chemical discharged to receiving streams or water bodies. A RCRA inspector can look at these discharges to determine if the facility has an exempt WWTU or if a RCRA permit is necessary.

Underground Injection — Section 5.4 of Form R requires facilities to report the amount of a toxic chemical injected underground. Using this information, a RCRA inspector can check if hazardous waste is injected and see if the facility has a no migration petition.

Releases to the Air — Sections 5.1 and 5.2 of Form R require facilities to report the amount of a toxic chemical released into the air (both fugitive and stack emissions). Stack emissions are releases to air that occur through confined air streams, such as stacks, vents, and ducts. Fugitive emissions are all releases to air that are not releases through a confined air stream. An investigation of the air releases can indicate to a RCRA inspector if the facility has or should have a RCRA regulated treatment process.

United States Environmental Protection Agency | Office of Solid Waste and Emergency Response | November 1992

EPA

RCRA/Toxic Substances Control Act Interface

A Quick Reference Fact Sheet

Background

The management of polychlorinated biphenals (PCBs) is regulated under the Toxic Substances Control Act (TSCA). A complex set of regulations exists under TSCA restricting PCB use, requiring inspections, reporting and recordkeeping, establishing labeling and marking requirements, and outlining disposal criteria. Specifically, §6(e) of TSCA directly banned the manufacture of new PCBs and prohibited processing, distribution in commerce, and use of all PCBs in other than a totally enclosed manner, unless specifically excluded by EPA.

PCB waste may also meet the definition of a RCRA hazardous waste, however, PCBs alone are not a RCRA hazardous waste. If the PCB waste is mixed with a RCRA listed hazardous waste or exhibits a characteristic of a hazardous waste it would be subject to RCRA as well as TSCA.

Potential Issues

The following examples highlight RCRA regulations that interface with TSCA.

Mixed PCB/Hazardous Waste—Waste that is both a PCB waste regulated under TSCA and a hazardous waste regulated under RCRA must be managed in compliance with both sets of regulations. The one exception to this can be found at §216.8, which excludes from RCRA regulations PCB-containing dielectric fluid and electric equipment which fails the toxicity characteristic for D018 - D043 only.

Land Disposal Restrictions (LDR)—Mixed PCB/hazardous waste is subject to the LDR under Part 268. Specifically, §268.42 (a) (1) requires liquid hazardous waste containing PCBs at concentrations greater than or equal to 50 ppm, but less than 500 ppm be incinerated in accordance with the technical requirements of §761.70 or burned in a high efficiency boiler in accordance with the technical requirements of §761.60. Liquid hazardous waste containing PCBs at concentrations greater than or equal to 500 ppm must be incinerated in accordance with technical requirements of §761.70. The incinerator or boiler accepting these wastes must be permitted under both RCRA and TSCA.

Multi-Media Investigations Workshop

Designed to provide inspectors with 3-day training on multi-media investigation approaches to determine total environmental compliance and how to use this information to prepare multi-media enforcement actions. Topics include investigation techniques, coordinator responsibilities and regulation, and legal requirements.

Sponsor: National Enforcement Training Institute

Contact: Charlie Murray

Telephone: (303) 236-5111

REGION I
FACILITY MULTI-MEDIA SURVEY

GENERAL INFORMATION Inspector: _____ Date: _____

Facility Name: _____ Contact: _____

Address: _____
(STREET) (CITY) (STATE) (ZIP)

Products manufactured and description of facility: _____

_____

_____

Air: Stationary Source Compliance

1. Observe: Opaque smoke being emitted from a smokestack (dark enough to obscure anything behind the plume? _____

   - If yes - Which process line (be specific, i.e., boiler No. 4)? _____

   - Air pollution control equipment out of service? _____
   - If yes - When will it be back on line? _____

2. Has the facility added any processes or expanded any pre-existing processes in the since 1980? _____

   - If yes - Were state or federal air permits obtained? _____

3. Does the facility have any coating operations? _____

   - Water-based or solvent-based coatings? _____
   - Are all processes lines controlled? _____

4. Has the facility undergone any renovations or demolitions during the last 18 months which involved the removal or disturbance of asbestos-containing materials? _____

   - If yes - Approximately how many square feet or linear feet? _____
   - Name of contractor: _____ EPA/State notified? _____

EPCRA (Title III)

1. Has facility had a release of a hazardous substance in excess of the Superfund reportable quantity? _____

   - If yes - To whom was notification of the releases provided? _____
   - Was notification oral or written? _____

2. Does the facility manufacture, process, or use any toxic chemicals in a quantity greater than 10,000 lbs per year? _____

   Has the facility submitted any toxic chemical release forms (Form R) to EPA?

   _____

FIFRA

1. Does the facility manufacture, repackage, relabel or store pesticides? _____

2. If yes, what is the EPA product registration number and establishment registration number? _____

RCRA

Storage of Wastes in Containers/Drums/Tanks/Pails/Dumpsters

1. Do you see any of the above containing waste? Who did you speak to regarding this? _____

   _____

   _____

2. Were any of the above containers (drums, pails, etc.) open? Were any of them in poor condition (leaking, corroded, etc.)? If so, describe waste (i.e., liquid, sludge, etc.), indicate markings on containers and the container location(s).

   _____

   _____

3. Would any of the above containers be difficult to access? If so, indicated reason (such as poor aisle space or obstruction of containers). _____

   _____

Potential Improper Disposal of Wastes

1. Is there any evidence of spills, leak, process discharge or dumping to the ground, pits or lagoons? If so, note location and extent of release. _____

   _____

SPCC

1. How many gallons of oil does the facility store above and below ground? ____

   - If the facility stores more than 660 gallons in a single tank or more than 1230 gallons in a number of tanks above ground or more than 42,000 gallons below ground - Does the facility have a SPCC (Spill Prevention, Control, and Countermeasure) plan signed by a certified P.E.? _____

TSCA PCB

1. Does the facility use electrical equipment that contains PCB's? _____

   - If yes - What is the connection of PCB's in the equipment? _____

   (Note: Equipment containing less than 50 ppm is considered non-PCB.)

2. Does the facility store PCB's or PCB-containing electrical equipment on site? _____ Labels? _____

3. Is there any evidence of PCB spills or leaking electrical equipment? _____

TSCA Core

1. Does the facility manufacture or import chemicals of any kind, in any amount? _____

2. Does the facility have a working research and development laboratory (i.e., more than a simple QC lab)? _____

3. Has the facility ever submitted a Pre-Manufacturing Notification (PMN) under TSCA to the EPA? _____

UST

1. Observe - Do underground tanks appear to be a potential problem due to the excessive spillage, cracked or broken fill/vent lines or leaking pumps, joints, or valves? _____

   - If yes for virgin petroleum and chemical tanks - Are the tanks registered with the state? _____
   - Are the tanks equipped with a leak detection system? _____
   - When was the tank last tested? _____

- If yes for waste tanks - Is the tank equipped with secondary containment and continuous leak detection monitoring system? _____
- If not - Has the tank had an integrity assessment by an independent P.E.? _____
- Does the piping have secondary containment? _____
- If not - Is the piping visually inspected daily? _____

WATER

1. Observe/Ask - Does the facility use water in its manufacturing processes? _____

   - If yes - Does the facility discharge wastewater into a receiving stream, municipal sewer system, or a subsurface disposal system? _____ Which? _____
   - Does the facility have a permit for each of these discharges? _____
   - Does the facility treat wastewater prior to discharge? _____

2. Observe - Is the effluent from the wastewater treatment facilities clear and free of solids? _____

   - Does the equipment appear to be clean and well maintained? _____
   - Are there any unusual odors? _____
   - Is the effluent from the facility currently in compliance with the limitations established in the discharge permit? _____

3. Observe/Ask - Does the facility have floor drains? _____

   - If yes - What materials are spilled down the floor drains? _____
   - Where do the floor drains discharge (treatment facility, the municipal sewer, or directly to a receiving water)? _____

UIC

1. Observe/Ask - Is there or has there ever been any discharge from this facility onto or into the ground other than sanitary waste (i.e., does this facility have or has it had any wells (dug, drilled or driven), dry wells, leachfields or septic systems which receive(d) commercial or industrial waste (liquid and/or solid), cooling water, boiler blowdown water or drainage from roof drains, floor drains, or parking lot drains)? _____ If yes, give a brief description:

WETLANDS

1. Observe - Are there any wet areas near the facility with wetland-type vegetation (cattails, rushes, sedges) that have been disturbed by waste disposal, ditching or filling? _____

   _____

   - If yes - Did facility obtain a federal section 404 permit or any state or local permit authorizing the fill? _____

POLLUTION PREVENTION (Optional)

1. Has the facility ever made process changes specifically to reduce waste generation, or emissions to any media?

2. Has the facility considered substituting non-toxic materials as inputs for products that are currently made with hazardous substances?

3. Has the facility ever determined how much it costs to manage its wastes?

4. Does the facility or company have a formal pollution prevention policy or waste minimization policy?

ADDITIONAL COMMENTS

CONCLUSION

RECOMMENDATION FOR FOLLOW-UP

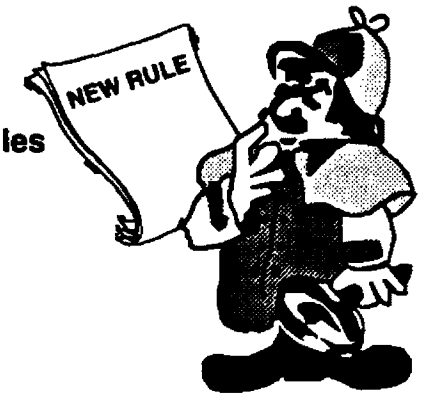
Forwarded to	Contact	Phone	Mail Code
Air	Bob O'Meara	565-3258	APC
EPCRA	Greg Roscoe	565-3744	ATC
FIFRA	Pam Ringhoff	565-3932	APP
RCRA	Stan Chin	573-5750	HRW-CAN3
SPCC	Steve Macintyre	860-4364	EEE-LEX
TSCA	Greg Roscoe	565-3744	ATC
UST	Bill Torrey	573-9604	HPU-CAN2
WATER	Steve Silva	565-2489	WCC
WETLANDS	Matt Schweisberg	565-4431	WWP

cc: Larry Brill - WCB -

This is a pre-decisional document protected by the deliberative process privilege. Conclusions or recommendations are intended solely as preliminary information for government personnel. This form contains tentative conclusions and staff-level recommendations and does not create any rights, substantive or procedural, or defenses, as they are not binding on the Agency.

NEW WASTE

- **EPA's rulemaking process**
- **Headquarters support**
- **Enforcement of new rules**



New Waste
Overhead 1 of 13

OVERHEAD #1

TITLE: New Waste

KEY POINTS:

- During this module, we will examine the regulatory development process and discuss some of the issues that arise when new rules bring previously unregulated wastes or facilities into the RCRA system. We will cover the following:
  - — EPA's rulemaking process
  - — Impact of new rules on inspectors and how inspectors can participate in the rulemaking process
  - — The types of assistance Headquarters can provide inspectors
  - — Upcoming EPA rule-making initiatives that may impact inspectors.

THE REGULATORY DEVELOPMENT PROCESS

New Waste
Overhead 2 of 13

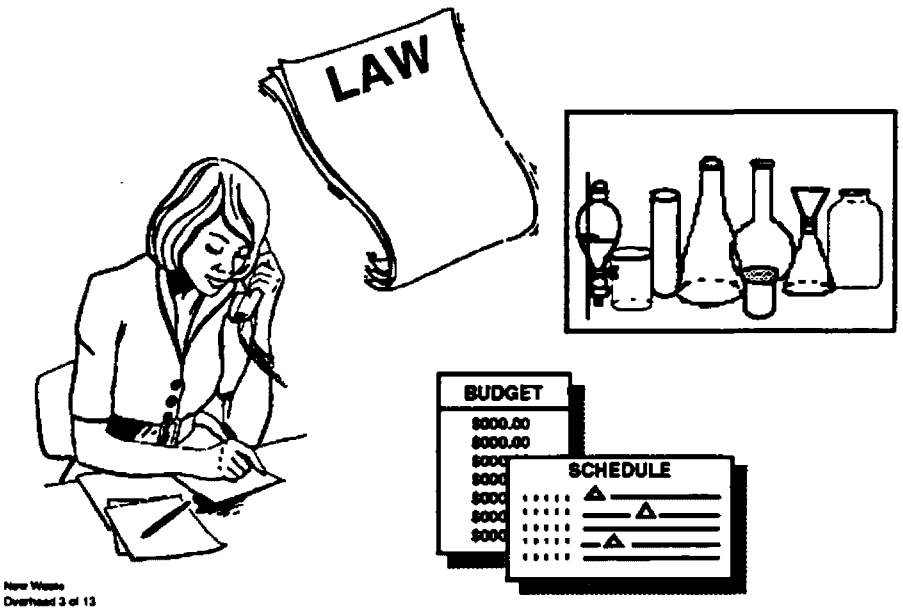
OVERHEAD #2

TITLE: The Regulatory Development Process

KEY POINTS:

- Rulemaking establishes requirements for implementation of statutes passed by Congress.
- Regulation writers must correctly interpret the intent of Congress when they develop a new rule and must coordinate input from a large number of sources within and from outside EPA.
- A significant portion of EPA's personnel and resources are devoted to development and enforcement of regulations.
- Inspectors usually see new regulations at the "end of the pipe," after the lengthy and complex regulatory development process has occurred.
- I am going to explain the regulatory development process and how that process relates to you as inspectors.

RULEMAKING ELEMENTS



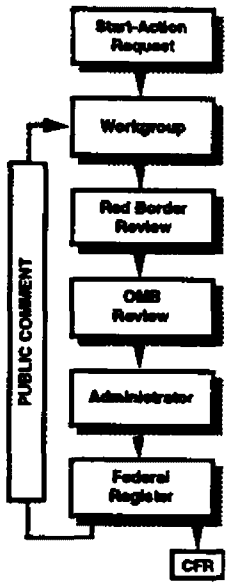
OVERHEAD #3

TITLE: Rulemaking Elements

KEY POINTS:

- Many factors must be considered when developing a new rule.
- The law is the starting point. It determines the subject matter and may establish requirements for special studies or set schedules for regulatory development.
- Every rule requires a large amount of information about scientific, technical, economic, and administrative issues to be analyzed.
- EPA rules generate a lot of political interest and action since they affect the public, the business community, and many special interest groups.
- Development of a rule is a complex multidisciplinary project. Management and coordination of the staff and resources involved are crucial to success.
- The rule must be developed with implementation in mind. Regions and states can play an important role in keeping EPA Headquarters informed about specific implementation issues.

PROCESS OVERVIEW



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OVERHEAD #4

TITLE: Process Overview

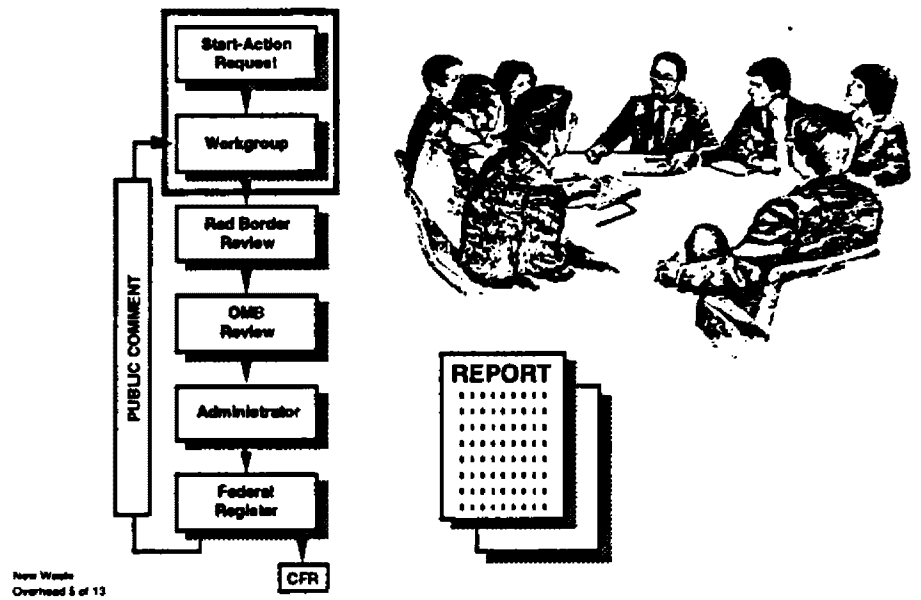
KEY POINTS:

- The rulemaking process as outlined on this flow chart appears straightforward. Write a draft rule, have it reviewed, make the necessary changes, and issue the final rule.

- At the initiation of rulemaking, EPA must consider the content of the statute; a mix of scientific, technical, and administrative information; political issues; and the impact of the rule on the regulated community.

- The rulemaking process can take years in some cases. For example, data collection and studies may be required to provide EPA with the technical information needed to support the rule. Each rule undergoes a Regulatory Impact Analysis to assess its potential impact on the regulated community. Controversial or complex rules, such as those that may affect another regulatory program, require extensive communication and coordination between different program offices.

- EPA may solicit comments and information before development of a proposed rule by publishing an Advance Notice of Proposed Rulemaking in the *Federal Register*. This is an opportunity for the public, including inspectors, to provide input on a rule before major portions of the rule have been written.



OVERHEAD #5

TITLE: Start Action Request and Workgroup

KEY POINTS:

- The Start Action Request is a one-page form that initiates work on a rule and establishes the Agency workgroup. It is prepared by the program office with primary responsibility for the rule to alert other EPA offices about the rulemaking and provide the Steering Committee with an opportunity to address inter-office or cross-program aspects.

- The Steering Committee is a standing group of eleven individuals representing each Assistant Administrator and the General Counsel. It is the primary mechanism for coordinating and integrating the Agency's regulatory development activities.

- The Steering Committee approves Start Action Requests, monitors the progress of workgroups, and ensures that significant issues are resolved.

- Regions participate in Steering Committee activities through Regional Regulatory Contacts. These individuals coordinate reviews in the Regions and facilitate rule-related activities for the Regional Administrators.

OVERHEAD #5

TITLE: Start Action Request and Workgroup (continued)

KEY POINTS:

- Workgroups are staff-level groups whose members are assigned by the Steering Committee based on technical expertise and cross-program issues.

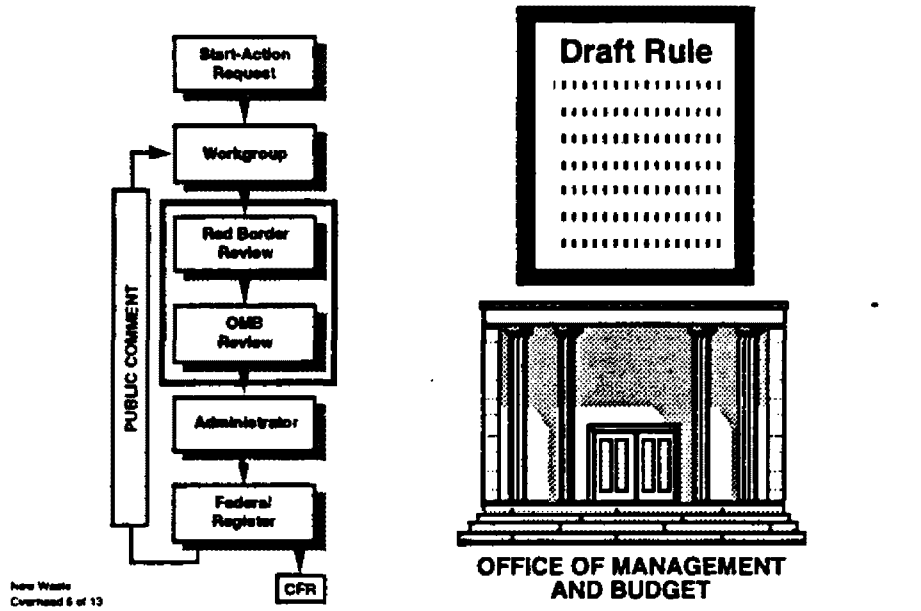
- Workgroup members meet regularly to develop regulations and supporting materials, to prepare reports and briefings, and to participate in drafting and revising the rule. Most workgroup members are EPA HQ staff, however, representatives of the Regions, states, or other agencies may participate if appropriate.

- The workgroup's responsibilities include:

  — Supporting the lead office in the technical and analytical work
  — Identifying policy issues and options, particularly cross-program issues
  — Resolving issues or raising them for consideration by upper management
  — Providing progress reports, evaluating options, and incorporating comments on the rule.

- For large complex rules, those defined by the Agency as major or significant, the workgroup will prepare a development plan stating regulatory options and issues for review by the Steering Committee before initiating development of the rule. The identification of a rule as major or significant is determined early in the regulatory development process by the program office and Steering Committee.

- The development plan explains the need for the regulatory action, identifies goals and objectives, presents the major regulatory issues and alternatives, and presents the work plan and resource requirements for developing the regulation.



OVERHEAD #6

TITLE: Red Border and OMB Review

KEY POINTS:

- Red Border review is the formal mechanism by which EPA senior managers (Assistant Administrators, Regional Adminstrators, and General Counsel) review and approve regulations.
- By the time the regulatory package reaches Red Border review, which generally takes about three weeks, all significant issues should have been identified and resolved by the workgroup and the Steering Committee.
- The package submitted for Red Border review includes the text of the preamble, the regulatory language, and a communications strategy. The preamble provides background and an explanation of the rationale for the rule. The communications strategy specifies the targeted audience for the rule and a plan for publicizing the rule once it is issued.
- After Red Border review, comments are addressed by the workgroup and the package is prepared for submittal to OMB for review, which action is required by Executive Order 12291. That order defines rules as either major or non-major. A major rule is one that may have a large impact on society in terms of cost (over $100 million annually) or in terms of effects on an industrial sector, employment, or international trade.

OVERHEAD #6

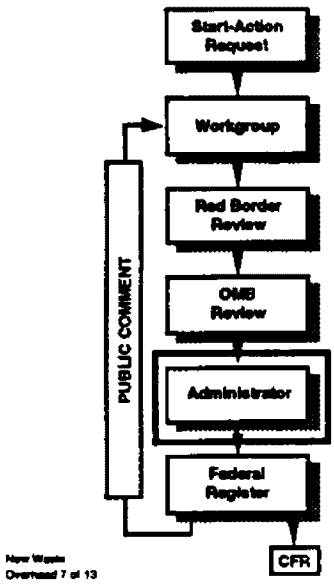
TITLE: Red Border and OMB Review (continued)

KEY POINTS:

- The purpose of OMB review is to assure that, within the constraints of their statutes, agencies choose among alternative regulatory approaches by considering the costs and benefits associated with each.

- OMB review should be completed within 60 days of submittal by EPA for proposed major rules and 30 days for the final rule. Proposed and final non-major rules should be reviewed in 10 days. The review period can be extended and rules generally do not go forward until all of OMB's concerns and issues have been resolved.

ADMINISTRATOR



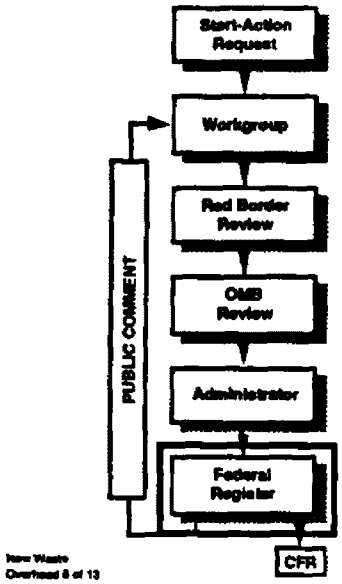
OVERHEAD #7

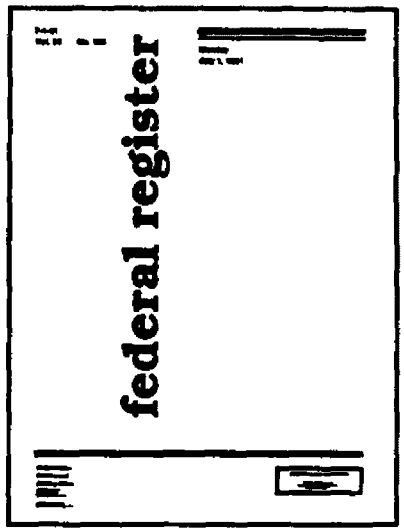
TITLE: Administrator

KEY POINTS:

- Once OMB has reviewed the rulemaking package, it goes to the Adminstrator for signature.
- If the rule is a final rule, it becomes effective on the date the Administrator signs it.
- It then goes to the Office of the *Federal Register* for publication.

FEDERAL REGISTER





OVERHEAD #8

TITLE: Federal Register

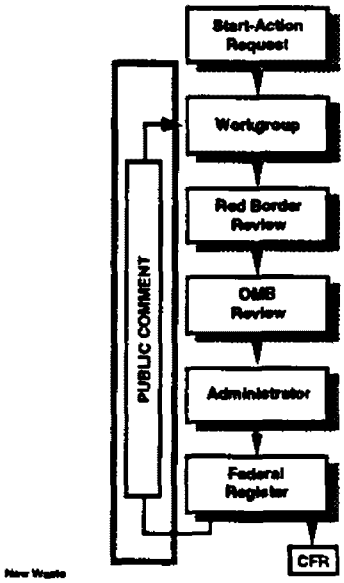
KEY POINTS:

- Publication in the *Federal Register* provides official notice of the promulgation of a regulation. Sometimes policies or guidelines are also issued through *Federal Register* notices.

- Publication of the proposed or final rule in the *Federal Register* usually occurs within four days after the final package has been reviewed for consistency with the Office of Federal Register's requirements for publication. Extremely long rules or those with a large number of tables or graphics may not be published for a week or more after submittal for review.

- The preamble to the rule, which often contains important information about issues related to the specific provisions of the rule, is published in the *Federal Register*. Because the preamble is not included in the text of the regulation itself, an individual with a copy of the regulation published in the *Code of Federal Regulations* may not have the preamble explaining the rationale for parts of the regulation.

PUBLIC COMMENT



OVERHEAD #9

TITLE: Public Comment

KEY POINTS:

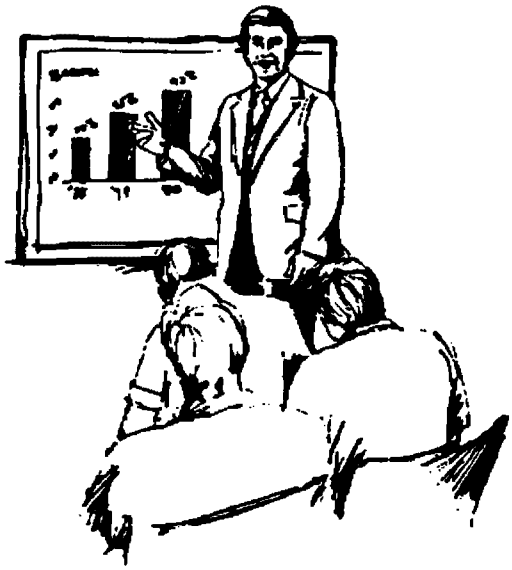
- The Administrative Procedures Act and several other environmental statutes require EPA to provide the public with an opportunity to participate in the development of regulations. These requirements reflect fundamental Constitutional principles. People have the right to express their preferences with regard to laws that affect their lives.

- An advance notice of proposed rulemaking or proposed rule usually solicits input from the public and interested parties within a specified time frame after publication in the *Federal Register*. Comments can be submitted in writing to EPA or may be presented at public hearings.

- Interested organizations and individuals can provide valuable information to EPA during the regulation development process. They provide information about how the regulated community will respond to a rule as well as potential obstacles to implementation, compliance, and enforcement.

- Inspectors can participate at this stage in the rulemaking process by reviewing regulations and offering suggestions to improve the effectiveness and enforceability of the final rule.

NEGOTIATED RULEMAKING



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OVERHEAD #10

TITLE: Negotiated Rulemaking

KEY POINTS:

- When interested parties participate in the rulemaking process, many issues and concerns can be addressed before issuance of the final rule, thus reducing the likelihood of litigation. Because so many groups are affected by environmental regulation, approximately 80% of EPA regulations are litigated.

- EPA can conduct a negotiated rulemaking to address contentious issues before publication of a rule. The process includes development of a formal Federal Advisory Committee of interested parties such as trade associations, environmental groups, states, local governments, or other federal agencies.

- This participatory process reduces the likelihood of litigation after publication of a rule, but participation in the process does not limit a group or individual's right to challenge the final rule through litigation.

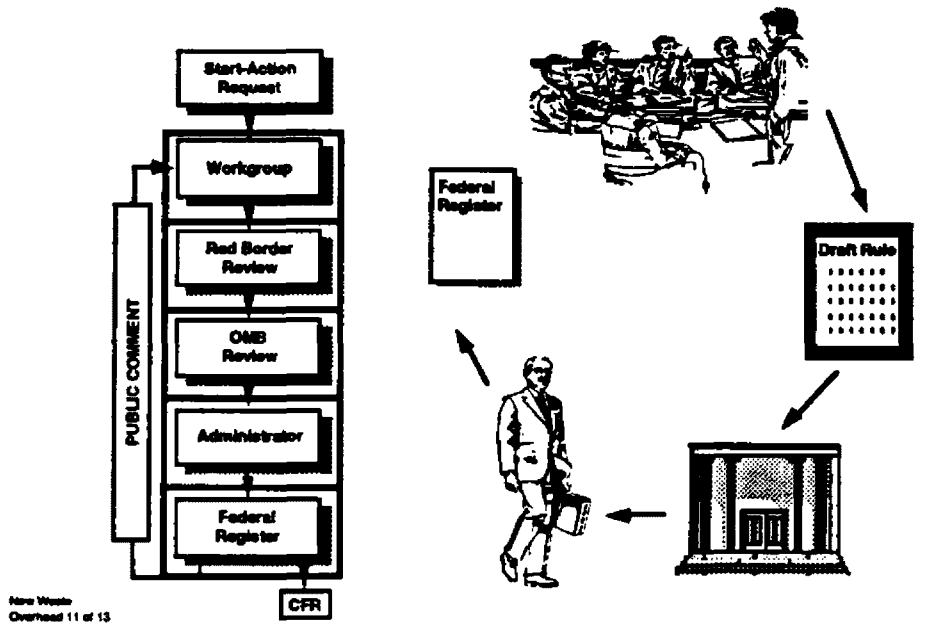
- Negotiated rulemaking is most appropriate in circumstances in which a judicial challenge to the rule is anticipated, complex issues are likely to require significant and lengthy review, or EPA needs information from the regulated community that is not readily available.

OVERHEAD #10

TITLE: Negotiated Rulemaking (continued)

KEY POINTS:

- EPA may also encourage participation in a traditional rulemaking through the use of consultations with affected parties, advance public hearings or meetings, circulation of a strawman draft for comment before the formal rulemaking process, roundtable discussions to solicit views, or formal policy dialogues to resolve significant policy issues.



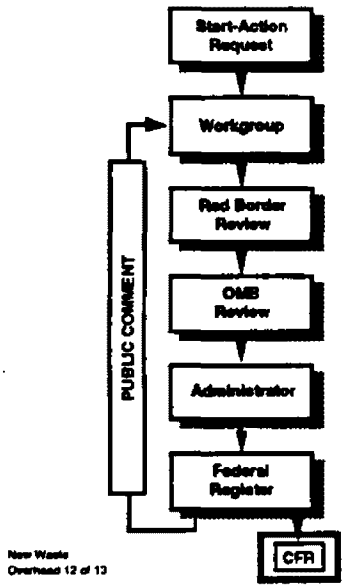
OVERHEAD #11

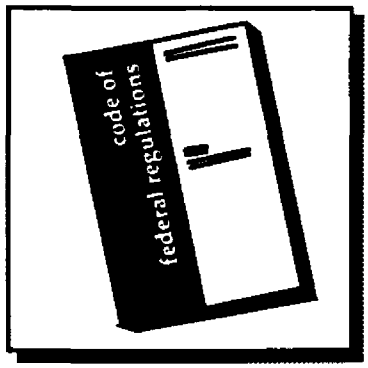
TITLE: Final Rule

KEY POINTS:

- At the end of the public comment period, the workgroup reconvenes to respond to comments and prepare the final rulemaking package. All comments received become part of the public record of the rulemaking and are placed in the public docket. It is not unusual for a rule to undergo extensive changes at this point in the regulatory development process.
- Issues requiring senior management and cross-program coordination are brought to the attention of the Steering Committee.
- EPA summarizes the comments received and the Agency's response in the notice for the final rule.
- The final rulemaking package proceeds through the same review process as the proposed rule.
- Once the final rule is published in the *Federal Register*, it is codified in the *Code of Federal Regulations*.

CODE OF FEDERAL REGULATIONS





OVERHEAD #12

TITLE: Code of Federal Regulations

KEY POINTS:

- The CFR is updated annually to incorporate any changes in regulations.
- It incorporates new and revised regulations as published in the *Federal Register*. The CFR contains only the text of the regulation itself. Supplementary information, such as that provided in the preamble to a rule, guidance documents, or policy directives is not included in the CFR.
- The CFR is not a static document. Every time a statute is enacted or revised, dozens or even hundreds of regulations must be written. EPA may have up to 250 regulations in development at any one time. Once a rule is promulgated, it may require updates or technical clarification.
- Regulations have significant and far-reaching consequences for individuals and businesses. EPA spends considerable effort to develop regulations that address the myriad concerns of the public, the government, and the regulated community.

ENFORCEMENT SUPPORT FOR NEW RULES

- Information
- Enforcement strategy
- Training
- Guidance

New Waste
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OVERHEAD #13

TITLE: Enforcement Support for New Rules

KEY POINTS:

- When a new rule is issued, the Office of Waste Programs Enforcement provides information and support to regional and state enforcement personnel.

- EPA's first task is to get information out to those affected by the rule. Over the past few years, EPA has held satellite videoconferences on the wood preserving and BIF (boilers and industrial furnaces) rules to disseminate information to large numbers of people. The Office of Solid Waste produces information on the RCRA program; OWPE produces guidance and training oriented toward RCRA enforcement. The offices work together to support effective communication of program priorities.

- OWPE develops an enforcement strategy for each rule. The enforcement strategy usually includes a general discussion of the rule; regulatory considerations such as cross-program issues; an approach for communicating the new requirements to regulators and the regulated community; identification of the universe affected by the rule; and EPA's planned enforcement response, including any targeted initiatives.

OVERHEAD #13

TITLE: Enforcement Support for New Rules (continued)

KEY POINTS:

- Training and guidance documents are also developed to promote consistency in interpretation of regulatory requirements and to provide tools and techniques to assist in inspections. For example, checklists are often used by inspectors to ensure complete coverage of a rule's requirements.

- The RCRA Enforcement Division has a three-tiered approach to training for new regulations. Upon issuance of a rule, the emphasis is on information dissemination and outreach through activities such as video conferences. RED will later send staff to different locations to provide training to Headquarters, the Regions, and states. Finally, RED develops long-term training tools such as videos or computer-based programs that can be used to meet ongoing training needs.

- In your Participant's Manual, you will find a set of regulatory fact sheets addressing many of the points we have just discussed.

THE STEERING COMMITTEE

Purpose: The Steering Committee is a standing group with representation from each Assistant Administrator and the General Counsel. It is the primary mechanism for coordinating and integrating the Agency's regulatory development activities. Its key functions are to approve Start Action Requests (SARs); charter and monitor the progress of staff-level workgroups, especially regarding cross-media or inter-office problem-solving; and ensure, when appropriate, that significant issues are resolved or elevated to top management. Regions participate in Steering Committee activities through Regional Regulatory Contacts. These Contacts coordinate reviews in the Regions and facilitate rule-related activities for the Regional Administrators (RAs).

Participants:

CHAIR: Thomas Kelly 382-4001	OW: James Horne 382-7818	OE: Winston Haythe 475-8783
OAR: Robert Brenner 475-7717	ORD: Jay Benforado 382-7669	OARM: Rick Garman 382-5000
OPPE: Dan Fiorino 382-4012	OPTS: Judy Nelson 382-2890	OSWER: Margaret Schneider 382-4617
OGC: Gerald Yamada 475-8064	ORO/SLR: Jim Wieber 382-4719	

Operation: The Steering Committee meets biweekly (every other Wednesday), with additional meetings scheduled as necessary. Its regular format is (a) review of Development Plans (b) consideration of pending Workgroup Reports (c) discussion and disposition of SARs, and (d) other issues. Upon request, the Chair will schedule a separate meeting to consider a proposed or final rulemaking package, or arrange for some other form of Steering Committee review. Any office may submit documents or issues for the agenda through its Steering Committee Representative. Regional Contacts receive all Steering Committee documents. Typically they are not able to attend meetings, but Regions can send written comments. Due to time limitations, they may call the Regulation Development Branch (RDB) in the Office of Standards and Regulations with issues, so that RDB can present these views at a meeting. After each meeting, the Committee Chair issues a closure memo that documents outstanding issues, agreements, and action to be taken. RDB provides staff support for the Committee.

In addition to their role as members of the Steering Committee, these representatives play an important regulatory management role within their offices. They direct the flow of documents into and through the agency's regulatory review systems (including Red Border, and Federal Register activities); serve as their Assistant Administrator's liaison with OMB under Executive Orders 12291 and 12498; and direct their programs' review of other offices' regulatory development activities.

See Also: Administrator's Memorandum, "The Regulatory Development Process: Change in Steering Committee Emphasis" (October 16, 1986); and "Information Sheet to Guide New Steering Committee Process" (November 19, 1986). Available from the Regulation Management Branch (382-5475).

START ACTION REQUESTS

Purpose: A Start Action Request (SAR) initiates work on a rule or related action and establishes the Agency workgroup. It provides brief, descriptive information and should be prepared at the very outset of an office's effort. Its principal purposes are to alert other Agency offices to the lead office's intention to develop a rule, and provide the Steering Committee with the opportunity to discuss and plan for the inter-office or inter-media aspects of the action. In addition, submitting the SAR to the Steering Committee is the mechanism for: (a) reaching agreement on the necessary review steps (e.g., a Development Plan, Workgroup Reports, and an Information Collection Request), and (b) helping all Agency programs decide at the start of the process whether to designate members to participate on the workgroup and what skills would best contribute to the rulemaking.

Preparing the Document: The SAR is a one-page form with instructions on the reverse side. It asks primarily for descriptive information, which should be available to the lead office when it starts work on the regulation. The most important category of information on the form is item 4, called "Description of Action." The Steering Committee uses this information to determine the significance of the action for the Agency and for individual offices, the need for a Development Plan or other planning documents, the composition of the workgroup, and the type of management review that is appropriate. For these reasons, the description should give information on any likely cross-program effects, issues or problems. The description should:

- o clearly define the problem, including its health and environmental significance;
- o indicate the effect of the problem and the intended regulatory action on other environmental media or programs;
- o identify the EPA Regions and other groups that should be involved;
- o specify the kind of expertise and level of participation expected from workgroup members.

Operation: The lead office Steering Commitee Representative approves the SAR, catagorizes it as either "discussion" or "nondiscussion", and submits 25 copies to the Regulation Development Branch (RDB) for distribution. "Discussion" SARs warrant a briefing from the lead office to facilitate approval and workgroup nominations. "Nondiscussion" SAR's are considered automatically approved and only require nomination of workgroup representatives at the meeting. The lead office should submit "nondiscussion" SARs 15 days prior to the biweekly Steering Committee meeting. Steering Committee Representatives can decide before the final agenda is set (one week before the meeting) if the SAR needs a briefing and RDB can reschedule it as a "discussion" item. " Discussion" SARs need only be submitted 8 days before the Steering Committee meeting for inclusion in the final agenda. The Committee approves the SAR, charters a workgroup, designates workgroup members, and determines what further reviews are appropriate. If the SAR does not provide sufficient information for Steering Committee Representatives to select their workgroup members, they can give RDB the name or names after the meeting. RDB will include these names in the closure memo for the meeting. The lead office then convenes the workgroup.

See Also: SAR forms, guidelines, and prototypes are available from Steering Committee Representatives or from the Regulation Development Branch (382-5475).

THE WORKGROUP

Purpose: Workgroups are EPA-wide, staff-level groups formed to develop regulatory actions and supporting materials. The workgroup's primary responsibilities are to: 1) support the lead office in its design, technical and analytical work; 2) identify and assess principal policy issues and options, especially those that are cross-media; 3) resolve issues or elevate them for upper management's resolution; 4) ensure the quality and completeness of regulatory packages. Workgroup members are expected to represent the policy positions and perspectives of their management as well as to contribute their technical and analytic expertise.

Participants: Typically the lead office will place several people on the workgroup to support the chair and conduct the bulk of the technical, analytical, and drafting work. OGC, OPPE, and often ORD and OE participate; other program offices--OAR, OPTS, OSWER, and OW--often participate actively especially when there are significant inter-media issues. OARM and Regional Offices participate less frequently. If a Steering Committee Representative assigns more than one workgroup member, they usually designate one person as lead to represent their Assistant Administrator's position and coordinate the efforts of the other members. (If workgroup progress requires that there be a single lead from other offices, the lead program Steering Committee Representative can ask each office to designate a lead workgroup member.) Except in special cases, it is difficult for Regions to participate actively on workgroups. Therefore, the lead office should initiate efforts to solicit Regional office perspectives, especially those that pertain to implementation issues.

Operation: The workgroup's formal operation begins with the approval of the Start Action Request (SAR) and the chartering of the workgroup by the Steering Committee. The lead office chairs and convenes workgroup meetings. Other members of the workgroup are assigned by their offices' Steering Committee Representatives. How the workgroup should operate will vary, depending on the rulemaking. The workgroup chair should discuss and clarify members' roles and expectations early in the process to avoid misunderstandings. The workgroup's first responsibility, for major and significant rules, is to prepare a Development Plan, which the Steering Committee reviews. For most rules, the Steering Committee will ask the workgroup to report on its progress through periodic Workgroup Reports, which the workgroup chair must prepare. To ensure workgroup and Steering Committee consensus on the agenda of issues for discussion, the workgroup chair should prepare a comprehensive list of issues (originally part of the Development Plan for major or significant rules) and revise it as appropriate throughout the rulemaking.

See Also: Fact Sheet #5, "Workgroup Reports", available from the Regulation Development Branch (382-5475).

DEVELOPMENT PLANS

Purpose: The Development Plan sets forth the framework for developing proposed major or significant Agency rules. Its purpose is to explain the need for the action; identify regulatory goals and objectives; present the major regulatory issues and alternatives; identify any policies, decision criteria or other factors that will influence regulatory choices; and present the work plan and resource requirements for developing the regulation.

The Development Plan is prepared for Steering Committee review. This review is meant to identify the full range of issues early in the process. The Steering Committee will: (a) raise cross-media or other issues or alternatives not identified in the Plan; (b) inform the lead office of related activities underway in the Agency; (c) encourage coordination of Agency resources, experience and policies; and (d) review the work plan and schedule to decide how the various offices will participate and whether they can meet the time and resource needs of the lead office.

Preparing the Document: The lead office prepares the document with participation from the workgroup. The document should include detail commensurate with the complexity and importance of the rule. To the extent possible -- based on previous experience and available data -- the plan should describe the environmental problem and issues, and the alternatives to be considered in addressing them. It should also address enforcement and implementation issues. In any case, the document should include a comprehensive list of issues, which the workgroup should amend as necessary throughout the development process.

Operation: The lead office should submit the Development Plan for Steering Committee review within 60 days of SAR approval (unless the Steering Committee agrees to another date). The lead office submits the Plan to its Steering Committee Representative, who reviews the document before sending 25 copies to the Steering Committee Chair for distribution. The Steering Committee review period is two weeks. To get a Plan on an agenda, the Steering Committee member must submit it to the Office of Regulation Management and Evaluation, Regulation Development Branch by COB (4:00 p.m.) Tuesday, 15 days before the biweekly Wednesday meeting.

Steering Committee members review the package to ensure that it is complete and identify questions or issues. The lead program office then briefs the Steering Committee on the plan at the biweekly meeting. Members will raise any questions or issues at that meeting. After discussion, and resolution of questions and issues, the Steering Committee approves the Plan, perhaps contingent upon certain revisions or clarifications. The Committee agrees upon an appropriate schedule for workgroup reports and other review steps. A closure memo documents the Steering Committee meeting, including issues raised, decisions made, schedule for workgroup reports, and next steps. The Steering Committee tracks progress on the rule through workgroup reports.

See Also: Guidelines and prototype Development Plans are available from Steering Committee Representatives or the Regulation Development Branch (382-5475).

WORKGROUP REPORTS

Purpose: Workgroup Reports keep the Steering Committee informed about workgroup progress on a regulatory action. They describe: (a) issues and alternatives being addressed and resolved; (b) any issues that need to be elevated for resolution; and (c) the status of ongoing work and any anticipated delays. The Steering Committee's discussion of the Workgroup Report focuses on cross-media or other issues or alternatives not being considered by the workgroup. Steering Committee concurrence with the Report is designed to ensure that issues resolved by the workgroup are not raised again at a later date, and that unresolved issues are dealt with in a timely way.

Preparing the Document: The workgroup chair prepares the Report in consultation with workgroup members. The document should summarize the status of issues but need not be exhaustive. It should be sufficiently detailed to allow workgroup members to determine that all issues are included and that their status is presented accurately. Steering Committee Representatives are expected to confer with their workgroup member(s). A cumulative or master list of issues (both resolved and unresolved) should accompany the Report as an attachment. This list should reflect the issues outlined in the Development Plan, and might not change throughout the workgroup effort unless issues change or new ones arise. If no Development Plan is prepared, the first Workgroup Report should contain the initial list of issues to be addressed. Any additional issues arising during the rule's development should be added to the master list.

Operation: The lead office submits the Report to its Steering Committee Representative, who reviews the Report before sending it to the Steering Committee Chair for distribution. (Workgroup members should already have received a copy.) The Steering Committee review period is two weeks. To get a report on the agenda the Steering Committee Representative must submit 25 copies to the Office of Regulation Management and Evaluation, Regulation Development Branch by COB (4:00 p.m.) Tuesday, 15 days before the biweekly Wednesday meeting. At the meeting, the program office briefs the Steering Committee on the Report. Typically the workgroup chair attends the Steering Committee meeting to participate in the discussion. After discussion, the Steering Committee approves the Report or requests revisions and makes recommendations. If issues must be elevated, Steering Committee Representatives determine what these issues are and in what forum to raise them. The Steering Committee Chair issues a closure memo that documents issues raised and decisions made at the Steering Committee meeting.

See Also: Fact Sheet #3, "The Workgroup", available from the Regulation Development Branch (382-5475). A Workgroup Report Format and copies of prototype Workgroup Reports are available from Steering Committee Representatives.

INFORMATION COLLECTION REQUESTS (ICRs)

Purpose: Under the Paperwork Reduction Act (PRA), Agency offices must prepare an ICR to obtain OMB clearance for any activity that will involve collecting substantially the same information from ten or more non-Federal respondents. ICRs are submitted for review initially to the Information Policy Branch (IPB), in OPPE, and then to OMB. Offices or workgroups may need to prepare ICRs for:

- o information requirements to be included in a rule -- e.g., reporting, monitoring, or record-keeping requirements, and/or
- o other information collection activities -- e.g., conducting studies or surveys, sending out application forms, doing audits, etc.

Information requirements in final rules may not be valid and enforceable until OMB clears the corresponding ICR. In the absence of clearance, enforcement actions taken on the basis of information so collected may be subject to challenge on grounds of non-compliance with the PRA.

Preparing the Document: An ICR consists of an SF 83 form plus an attached justification statement. In this justification, the following points serve as the focus for both the IPB/OPPE and OMB reviews:

- o the statement of need for -- and use of -- the information to be collected;
- o the plans for managing the information and assuring data quality;
- o the calculations of cost to the government and burden on respondents, especially to make sure that they are consistent with calculations of economic impact in the rulemaking package; and
- o a detailed explanation of any statistical components in surveys, including the sampling and analysis plans.

Operation: To address information requirements in rules, the first step should be to use the Start Action Request to indicate that there may be reporting or record-keeping requirements. These information requirements may involve rulemaking issues of interest to other offices. Such issues should be discussed in the workgroup, and if unresolved should be included in workgroup reports to the Steering Committee. Once the ICR is ready, the originating office's Information Management Coordinator submits it to IPB. This should be no later than when the rulemaking package first reaches formal Agency-wide review (workgroup closure or Red Border review). IPB then reviews the ICR for information policy issues and responds with any problems within two or three weeks. Any such problems must be resolved at the latest in conjunction with Red Border review, since IPB must submit the ICR to OMB on the date that the proposed rule is published. OMB review normally take 60-90 days. In the case of information requirements in proposed rules, if OMB does not approve the ICR, it must be resubmitted when the final rule is published. Similarly, if information requirements change from proposed to final rule, a revised ICR must be submitted.

For other information activities, the ICR should be ready to submit four months before the infomation collection is scheduled to begin -- earlier if there may be survey design issues. The program office should discuss concepts at the workgroup level, and Development Plans should include enough lead time to allow for preparation, review and clearance of the ICR. Bear in mind that for surveys a pilot or pretest may be necessary and that -- in some cases -- the pilot or pretest may need its own ICR.

See Also: "Information Collection Request Handbook", available from IPB (382-2706) or the Information Management Coordinator in your Assistant Administrator's office. For further discussion of the PRA see 5 CFR Part 1320.

WORKGROUP CLOSURE MEETINGS

Purpose: The workgroup closure meeting is an alternative to Steering Committee review of the decision package prior to Red Border (Assistant Administrators') review. This closure meeting provides a forum for confirming that (a) the workgroup has successfully completed its job, resolving as many issues as possible and clearly defining others, (b) the rulemaking package is ready for AA, RA, and DA-level review, and (c) Agency and external requirements have been met.

Participants: The Director of the Regulation Management Division (from Office of Regulation Management and Evaluation [ORME]), or a representative, chairs the closure meeting. The role of the ORME chair is to facilitate closure, not to decide substantive issues. Members of the workgroup participate in the meeting as representatives of their Assistant or Regional Administrators. Participation in the closure meeting normally is a precondition for an office's participation in the Red Border Review.

Operation:

1. The Steering Committee Representative from the lead office requests a closure meeting through the appropriate Desk Officer in the Regulation Development Branch of ORME. The lead office must provide a complete draft rulemaking package to workgroup members at least ten calendar days before the closure meeting. This draft package includes materials that normally are expected to be part of the Steering Committee review--the rule, action memo, preamble, supporting analysis, information clearance request (ICR), and other relevant materials. A copy of the memo announcing the closure meeting must be sent simultaneously to all members of the Steering Committee.

2. The typical format for the meeting is: with the ORME chair presiding, the workgroup chair gives a brief summary of issues resolved and those still outstanding, and describes any changes since the lead office distributed the draft package to the workgroup. Other workgroup members offer their respective Assistant or Regional Administrators' positions (e.g., concurrence, concurrence with comment, concurrence with conditions, or nonconcurrence). If there is more than one workgroup member from an office, then they should be sure to coordinate their positions before the closure meeting. The ORME chair encourages closure by clearly establishing:

    a) matters that should be addressed before Red Border,
    b) issues (if any) to be presented in Red Border,
    c) participation in, and date for beginning, Red Border review.

3. Following the closure meeting, ORME will issue a brief summary that certifies a package for Red Border review or documents other conclusions. This closure memo defines the conditions, timing, and other aspects of Red Border review. The lead office and affected parties resolve any problems, either before or during Red Border review, using the Steering Committee as a forum if appropriate.

See Also: Fact Sheet #3, "The Workgroup", available from the Regulation Development Branch (382-5475)

RED BORDER REVIEW

Purpose: Red Border is the formal review mechanism by which senior management (usually Assistant and Regional Administrators and the General Counsel) reviews and approves regulatory packages before they are presented to the Administrator or other approving official. The workgroup, with Steering Committee oversight, should already have defined all significant issues and resolved all or most of them, so that no new issues or problems arise during Red Border review.

Participants: The Assistant Administrator for the lead office approves the package for Red Border review by signing the transmittal memo. The review may include only the Assistant Administrator for OPPE and the General Counsel. However, other Assistant Administrators or Regional Administrators may participate if their offices were represented on the workgroup (or by approval from the lead office Steering Committee Representative if they were not). The Steering Committee decides who will participate when they review the action prior to Red Border.

Preparing the Document: The Red border package should include:

- Action Memorandum
- Preamble and Regulatory Text
- Communications Strategy
- Federalism Review Form (EPA Form 3720-11)

The lead office submits enough copies of the regulatory package for all reviewing offices and regions, plus two, to the Regulation Development Branch (RDB). If the rule is approved for concurrent Red Border and OMB review it should also include OMB form SF83 and four additional copies of the preamble and rule.

Operation: The review period is generally three weeks. The lead Assistant Administrator may request a shorter Agency review if the rulemaking is under a tight schedule; i.e., court or statutory deadlines. Any such request must be in writing, and include the reason for expedited review. During the Red Border review the appropriate RMB desk officer receives written comments from the reviewing offices and transmits them to the lead office. After Red Border is complete and the lead office has considered and responded to all comments, it prepares the package for OMB review.

See Also: Fact Sheet #9, "OMB Review Under E.O. 12291" and Fact Sheet #7 "Information Collection Requests", available from the Regulation Development Branch (382-5475).

OMB REVIEW UNDER E.O. 12291

Purpose: Under Executive Order (E.O.) 12291, each proposed and final rule (including some policy documents and guidelines) which the agency issues must be sent to OMB for review before the Administrator signs it. The Order defines two categories of rules: major and non-major. Major rules are those having a very large impact on society, either in terms of costs (over $100m annually), or in terms of effects on an industrial sector, employment, or international trade. The purpose of OMB review is to assure that, within the constraints of their statutes, agencies choose among the various alternatives by considering the costs and benefits associated with each. OMB has exempted certain high-volume classes of rules with limited impacts (e.g., pesticide tolerances) from E.O. 12291 review.

Participants: The lead office responds to OMB issues or questions on its rule. The Steering Committee Representative for that office takes the lead in arranging all OMB meetings and in coordinating the office's response to OMB. The lead program office should include OPPE and OGC in any meetings with OMB, and confer with other affected offices on the appropriate response before making substantive changes. OPPE tracks and reports on the status and current issues of rules under OMB review for senior management.

Operation: Except for the exempted rules -- and those in certain special categories (e.g. TSCA 8(a) Rules) -- all rules are sent to OMB's Office of Information and Regulatory Affairs (OIRA) before they are signed by the Administrator or a designated official. OMB review normally follows Red Border review. If this sequence of review would cause EPA to miss a statutory or court-order deadline, the Steering Committee may authorize concurrent OMB and Red Border review.

To initiate the E.O 12291 review, the lead office must submit five copies of the preamble and rule along with a single copy of a SF-83 form signed by their Steering Committee Representative to the Regulation Development Branch. OPPE clears and signs the SF-83 for submittal to OMB. For interim final rules without prior proposals, OGC must also sign the SF-83 (before submittal to OPPE) to verify that they agree that an interim final meets the Agency's responsibilities for notice and comment under the Administrative Procedures Act.

The period for OMB review cited in the Order varies according to the type of action: major rules have a 60-day review at proposal and 30 days at final; non-major proposed and final rules have a 10-day review. If OMB does not complete its review within the specified review period the OIRA desk officer calls the RDB desk officer to extend the review. In virtually all cases, rules do not go forward for final signature in EPA until the program office addresses OMB concerns and resolves outstanding issues. Court-ordered deadlines and stringent statutory deadlines may occasionally require that EPA publish a rule before OMB has finished its analysis and comment. After OMB review is completed the lead office prepares the package for AX (Administrator's Correspondence Control) and the Administrator's signature. The package includes two copies of the preamble and rule, the signed action memo, communications strategy, Federal Register typesetting request (EPA Form 2340-15), and request for reprints, if desired (EPA Form 2340-1). The lead office should deliver the package to RDB for transmission to AX. Obtaining the Administrator's signature usually takes a week to ten days.

See Also: Fact Sheet #8, "Red Border Review", available from the Regulation Development Branch (382-5479). Steering Committee Representatives can advise on exemptions from E.O. 12291 review.

FEDERAL REGISTER PUBLICATION

Purpose: The Federal Register publication system was established by Congress as a means of informing the public of regulations that affect them. Publication in the Federal Register has certain legal effects, including: providing official notice of a document's existence and content; creating a rebuttable presumption that the text is a true copy of the original document; establishing that the document was duly issued, prescribed, or promulgated; and providing evidence that is recognized by a court of law.

Preparing the Document: When preparing a document for Federal Register publication, the lead office should follow the formal requirements of the Office of the Federal Register (OFR), found in the Federal Register Document Drafting Handbook. The Federal Register package should include:

- o the signed original of the preamble and regulation plus three copies
- o the Federal Register Checklist, signed by the Steering Committee Representative or other approving official;
- o typesetting request (EPA form 2340-15); and
- o EPA form 2340-1 if reprints are being ordered

OFR follows strict publication requirements, so even minor problems can delay publication. The most common problems causing delay are: errors in codification; unclear graphs, charts, and tables; too few copies; unclear signatures; omitting a typesetting request or Federal Register Checklist.

Operation: If the package requires the Administrator's signature the lead office must submit the Federal Register materials with the package for transmission to AX (See Fact Sheet 9). In any case, direct all Federal Register packages to EPA's Federal Register Officer, Regulation Development Branch (RDB), Room 409WT, 382-7204. RDB reviews documents for consistency with OFR requirements and transmits them to OFR for publication. Documents usually appear in the Federal Register within four days after RDB approves them. However, if a document is particularly long (250 pages or more), and contains many tables, graphs, and figures, publication will take at lease one week. **RDB provides a listing on E-Mail that describes all documents sent to the Federal Register or published within the past five days.** To access this system simply: 1) sign onto E-Mail, 2) type PRPOST, when the prompt ">" appears, 3) type FED REG when "category:" appears, and 4) read or scan the listing.

See Also: Federal Register Document Drafting Handbook, available from the Agency's supply store; Federal Register Checklist, available from Steering Committee Representatives or the Regulation Development Branch (382-5475).

THE REGULATORY FLEXIBILITY ACT

Purpose: The purpose of the Regulatory Flexibility Act of 1980 is to reduce the burden of Federal regulations on small entities -- that is, small businesses, government jurisdictions, and private organizations. The Act applies to all rules subject to the notice and comment procedures of the Administrative Procedures Act (except grant regulations). It requires agencies to consider adverse economic effects their regulations will have on small entities. For regulations that will have a "significant impact on a substantial number" of small entities, agencies must consider alternative measures by preparing a Regulatory Flexibility Analysis (RFA). Agencies are encouraged to consider establishing exemptions or tiering their regulations, when consistent with their statutory and program objectives.

Participants: The lead office is responsible for preparing the RFA or certifying that there are no significant impacts on small entities. The Regulation Development Branch (RDB) in the Office of Regulation Management and Evaluation (ORME) oversees EPA's compliance with the Act. EPA's Small Business Ombudsman (in the Office of Small and Disadvantaged Business Utilization) can advise on small business issues and the Small Communities Coordinator (Office of Regional Operations, State and Local Relations) is the Agency lead on issues affecting small communities. The Small Business Administration (SBA) has overall responsibility for the Act. It reviews the Agency's analyses and certifications. SBA also reports to Congress on Agency compliance with the Act.

Preparing the Document: In defining "small" entity the Agency may use SBA's definition or, in consultation with SBA, it may establish its own definition and propose it for public comment. If the Agency decides that a rule will not have a significant impact on a substantial number of small entities, it must certify and justify this finding in the rule's preamble at both proposal and promulgation. The Agency must send a copy of any certification to SBA at proposal or promulgation. If the Agency determines that a rule will have a significant economic impact on a substantial number of small entities, it must prepare an RFA. The RFA should identify all alternatives to the chosen option and describe:

1) objectives/legal basis of the rule;
2) benefits derived from the proposed changes;
3) characteristics of the affected industry and analysis of demographics, cost, competitive effects, and exemptions or allowances;
4) recordkeeping, reporting, or other compliance requirements; and
5) other regulations which may duplicate, overlap, or conflict with the proposed rule.

The Agency must transmit a copy of the RFA to the SBA at proposal. The RFA may be part of the economic impact analysis. The final rule should include: a summary of public comments on the RFA; a summary of the Agency's assessment of those comments, and any changes made in response to the comments; a summary of each regulatory alternative; and a justification of the chosen alternative.

Operation: The lead office must submit two copies of the RFA to RDB. RDB will forward one of these to SBA. The act also requires the agency to improve its outreach to small businesses, government jurisdictions and private organizations through such means as articles in trade publications, direct mailings, and public hearings. All items in the semi-annual Regulatory Agenda must include a finding on small entity impacts ("yes" or "no"). The Small Business Ombudsman can participate actively in only a small number of rules. For rules that will significantly affect small entities, the lead program office should contact the Ombudsman as early as possible in the rule's development to assure that the office has time to participate.

See also: "Guidelines for Implementing the Regulatory Flexibility Act", copies are available from the Regulation Development Branch (382-5479).

REGULATORY NEGOTIATION & CONSULTATION

Description: Negotiation and consultation with outside parties are an important part of the rulemaking process at EPA. Such consultation during the Agency's development of regulations and policy actions offers several benefits: it brings outside information and perspectives to the Agency's decisions; it allows representatives of different interests to engage in policy deliberations with each other and with the Agency; it builds support for the Agency's decisions and increases the overall efficiency of EPA's decision making process. Agency staff can rely on a variety of approaches that EPA and other agencies have found effective, ranging from highly structured regulatory negotiations to more informal processes such as policy dialogues, facilitated public meetings, and facilitated workshops. With all of these approaches, the Agency uses an experienced, neutral facilitator to help the parties prepare an agenda, define issues, share information, clarify interests, and otherwise establish a process for achieving their goals.

Operation: Program offices are invited to call on the Regulatory Negotiation Project Staff in the Regulation Management Division to help decide when to use a consensus-building approach and which one to use. The Project Staff can recommend an approach or a combination of approaches suited to an office's needs. They can also provide criteria for selecting items as candidates for regulatory negotiation.

The Regulatory Negotiation Staff is trained in facilitating meetings and in training others in the use of consensus-building approaches. When these activities require contract support, the Staff can direct the program office to appropriate experts. The Project has a contract mechanism which program offices can use to engage this outside support.

In the regulation development process, the Start Action Request (Fact Sheet #2) is the appropriate point at which an office should consider what kinds of consultative approaches to incorporate into the rulemaking. The workgroup should also consider these approaches in preparing the Development Plan (Fact Sheet #4). At both stages the Steering Committee reviews the documents and may inquire about or recommend strategies for consulting with outside groups.

Agency Participation: The Steering Committee participates in the initial consideration of consensus-building approaches in its review of SARs and Development Plans. When a lead office participates in a regulatory negotiation, it represents the Agency as a whole in making decisions. In this capacity, it must keep the workgroup and Agency managers informed of the status of negotiations, assure that they express ideas and reservations in a timely manner and obtain agreement before committing the Agency. In addition, formal negotiations will entail briefing senior managers, OMB, and possibly the Administrator. When a lead office participates in less formal consensus-building activities, it should keep workgroups informed and raise issues internally if it will be taking any position that will commit the Agency.

See Also: "Regulatory Negotiation Selection Criteria", a project description, and a "Regulatory Negotiation Overview", are available from the Regulatory Negotiation Project Staff (382-7565).

REGULATORY IMPACT ANALYSIS

Purpose: Under Section 2 of Executive Order (E.O.) 12291, each major proposed regulatory action must be accompanied by a Regulatory Impact Analysis (RIA) when submitted to OMB for review. An RIA document is written primarily to describe the need for the proposed regulatory changes, and the benefits and costs of these changes. The RIA contains the full complement of economic information considered by the Agency as it develops a regulation. Economic information is included into the regulatory decision, within the constraints of statutes, so that the effects of a proposed regulation on individuals' economic welfare and the economic behavior of markets, can be considered in conjunction with other regulatory objectives.

Participants: The lead office is responsible for preparing the RIA document, although other offices may request to contribute to its preparation.

Preparing the Document: An RIA document should consist of the sections described below. The extent of detailed analysis and discussion allotted to each section will depend upon which questions are crucial to guiding the development of the regulation. The RIA should describe the following:

1) the need for and consequences of the proposed action (i.e., the market imperfections, quantities of pollutants and risks, current controls, and changes in environmental risks);

2) alternative approaches for achieving the environmental objective (e.g., negotiated rules, market incentives, judicial, state and local mechanisms);

3) the expected and measurable benefits of the regulation (where possible, benefits should be described in qualitative, quantitative and monetary terms);

4) the estimated economic costs of the regulation (e.g., costs to industry and consumers, government costs, "social welfare costs", adjustment costs associated with employment and changes in other productive resources, and other market conditions and impacts);

5) an evaluation of the benefits and costs (e.g., the relevance of time to the realization of benefits and costs associated with the regulation, and the economic efficiency of the action as measured by net economic benefits);

6) the rationale for choosing the proposed regulatory action (including the extent to which economic information was a factor in the decision); and

7) the statutory authority under which the regulation has been developed.

The RIA is best viewed as a document that organizes information and comprehensively assesses the effects of alternative actions and the trade-offs among them. Ideally, the schedule by which the RIA document is prepared should closely follow the regulatory development process, in order that it can be of immediate use as regulatory decisions are made.

See also: The Agency has produced a series of documents to assist staff in the preparation of RIAs. Included among these are "Guidelines for Preparing Regulatory Impact Analysis", which includes a series of appendices on specific issues (benefits, costs, discounting, and economic impacts). Copies of these documents and collateral literature are available from the Economic Analysis and Research Branch, Office of Policy, Planning and Evaluation (382-3354).

March 18, 1991

ADDITIONAL PROCEDURAL REQUIREMENTS ESTABLISHED BY CONGRESS FOR EPA RULEMAKING

Frequently Congress has added procedural requirements over and above those found in the Administrative Procedure Act when delegating authority to EPA. In an effort to ensure all affected interests are heard and all significant issues are fully explored, Congress requires the Agency to do more than provide an opportunity to comment and explain the basis and purpose of a new rule. The following statutes that EPA administers contain additional procedural requirements.

Safe Drinking Water Act (1974)

For most rules:

- opportunity for a public hearing
- Agency consultation with an advisory committee and the Science Advisory Board when developing regulations

Toxic Substances Control Act (1976)

For certain rules:

- explanation of reasons for a proposed rule
- oral hearings required
- cross examination and opportunity for parties to rebut on disputed issues of material fact
- review by courts based on a more rigorous standard than most (substantial evidence)

Clean Air Act Amendments of (1981)

For certain rules:

- establish a more elaborate rulemaking docket
- more staggered notice requirements than most other rules
- opportunity for oral hearing
- opportunity for rebuttal comments
- judicial review based solely on information in the rulemaking docket

Clean Water Act Amendment (1981)

For certain rules:

- 60 day comment period for proposed rule
- public hearing if requested within 30 days of publication, as appropriate
- review in courts based on a more rigorous standard than most rules (substantial evidence)
- deadlines for effective date of standard

From several perspectives, the process used to develop rules is as important as the substance of the requirements it establishes. EPA has established a system for regulation development that attempts to minimize the possibility of procedural error, ensure ample opportunity for public participation, and guarantee that all substantive issues are raised and considered carefully.

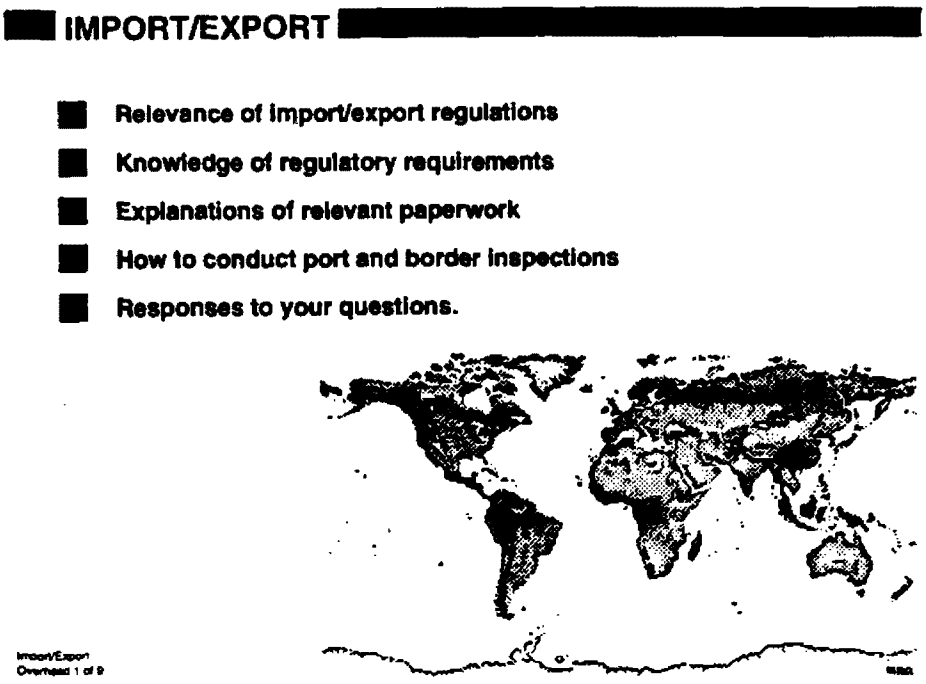
ADDITIONAL LEGAL REQUIREMENTS: STATUTES THAT APPLY TO RULEMAKINGS IN ALL AGENCIES

PAPERWORK REDUCTION ACT. This statute was enacted in 1980 and has since been amended. It is intended to minimize the paperwork burden imposed on the private sector and state and local governments by the federal government and to ensure that all information that is collected is actually useful. It applies to all rulemakings that contain information collection requirements. In general, the Act requires that agencies conduct a paperwork burden analysis and to justify the information in intends to collect. This must be submitted with the notice of proposed rulemaking to the Office of Management and Budget for review.

REGULATORY FLEXIBILITY ACT. This legislation mandates that agencies engaged in rulemaking pay particular attention to the effects of their actions on small businesses and other small entities. This law also requires an analysis, the results of which are usually incorporated into the final rule published by the agency. When appropriate, the agency must demonstrate that it has taken all appropriate steps to minimize the negative effects that a proposed rule will have on small entities.

NATIONAL ENVIRONMENTAL POLICY ACT. This statute requires agencies to determine whether the actions they are undertaking will have a significant impact on the environment. In those cases when a rule under development would have a significant impact, the agency is required to prepare an environmental impact statement (EIS). The EIS is prepared in accordance with guidelines established by the Council on Environmental Quality. These guidelines establish the types of environmental effects that must be considered and the process by which the impact statement is prepared. The results of the EIS are then incorporated into the rule.

FEDERAL ADVISORY COMMITTEE ACT. This legislation is important to rulemaking because it places constraints on agencies' communications with the public. When an agency intends to consult with persons outside the agency prior to or during the development of a rule, it must take steps to ensure that any such advisory group is balanced in terms of affected interests. The advisory committee must be "chartered" by a process that involves publication of a notice in the Federal Register.

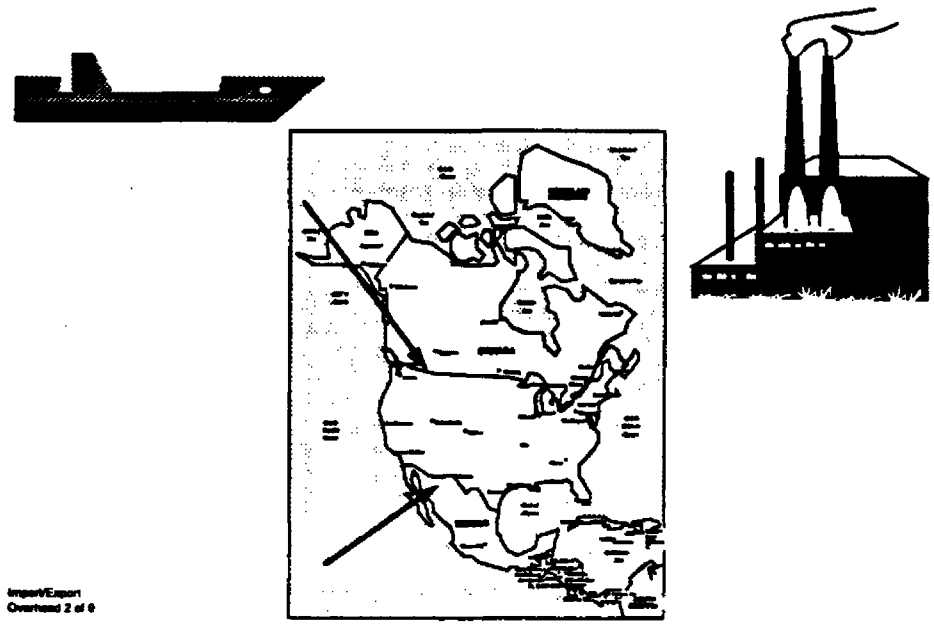


OVERHEAD #1

TITLE: Overview/Purpose

KEY POINTS:

- The purpose of this module is to provide you with an understanding of the issues related to the import and export of hazardous waste, including:
  - — The relevance of import/export regulations to RCRA inspectors
  - — Regulatory requirements for the import/export of hazardous waste
  - — Types of relevant paperwork
  - — How to conduct port and border inspections
  - — Responses to the questions you were asked to provide on the index cards included in your information packet.

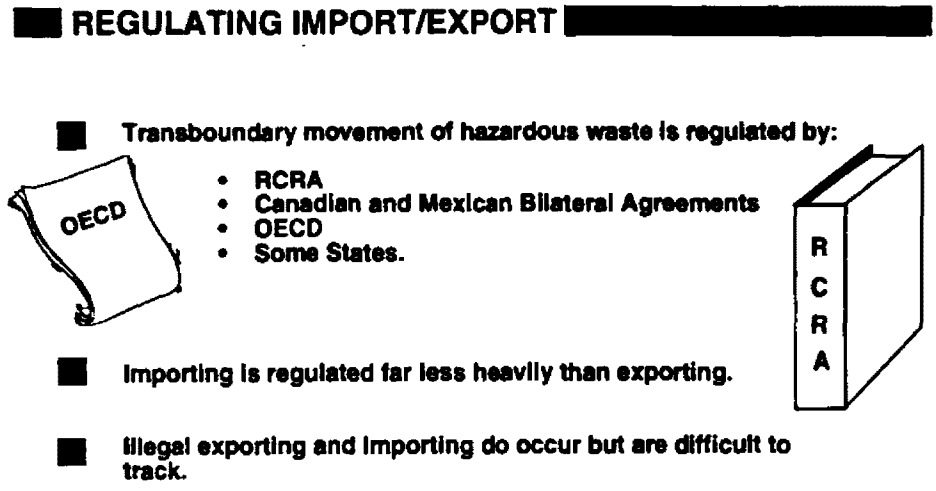


OVERHEAD #2

TITLE: Regulating Import/Export(1)

KEY POINTS:

- RCRA inspectors need to be familiar with import/export regulations because they may be called upon to conduct import/export inspections at ports, borders, and facilities.
- For ports and borders, RCRA inspectors work closely with U.S. Customs Service Inspection and Control (I&C), the Border Patrol, the Port Authority, and the National Guard.
- At facilities, often the first step is to ask if there is ongoing importing or exporting activity. Whether the answer is yes or no, if you do not believe it, ask to check manifests and contractual agreements between facilities. If facility representatives answer in the negative, and you believe them, continue with the inspection.



Import/Export
Overhead 3 of 9

OVERHEAD #3

TITLE: Regulating Import/Export (2)

KEY POINTS:

- Import of hazardous waste is only minimally regulated through RCRA and OECD (between OECD countries).
- The U.S. imports more hazardous waste than it exports.
- Legal export of hazardous waste from the U.S. exceeds 130,000 tons annually.
- RCRA requirements include completion of manifests (for import and export), and notification of EPA of intent to export. RCRA does not currently require environmentally sound management by the country of import.
- OECD requirements are only in effect between countries that are signatories. The U.S. is a signatory, as is Canada. Mexico is not (currently).
- Only recyclable wastes can be shipped to OECD countries (that is, Basel countries). However, no clear definition of what constitutes recycling exists. Non-recyclable materials can be shipped from the U.S. to non-OECD countries.
- State authorities exist for regulating import and export. For example, both Texas and California have specific rules and offices that deal with hazardous waste traffic, and they each have specific notice requirements.

Import/Export
Overhead 4 of 8

OVERHEAD #4

TITLE: Identifying Import/Export Situations

KEY POINTS:

- To know what to ask a facility representative, you must understand all applicable requirements.
- Without asking questions and looking at paperwork, it is highly unlikely that you will identify import/export activity during a facility inspection.
- If you know or suspect that a facility is engaged in import/export, you will want to review the paper trail to identify the nature of such activity and to ensure compliance with all requirements. Import/export files are usually kept separate from operating files.
- This paper trail can include:
  - — Notification of Intent to Export (§262.53)
  - — Manifests
  - — Exception reports
  - — EPA Acknowledgment of Consent
  - — Import Notification of Regional Administrator or State Director (§§ 264.12 and 265.12)
  - — Shipping Papers
  - — Annual Reports
  - — Contracts with foreign consignee.

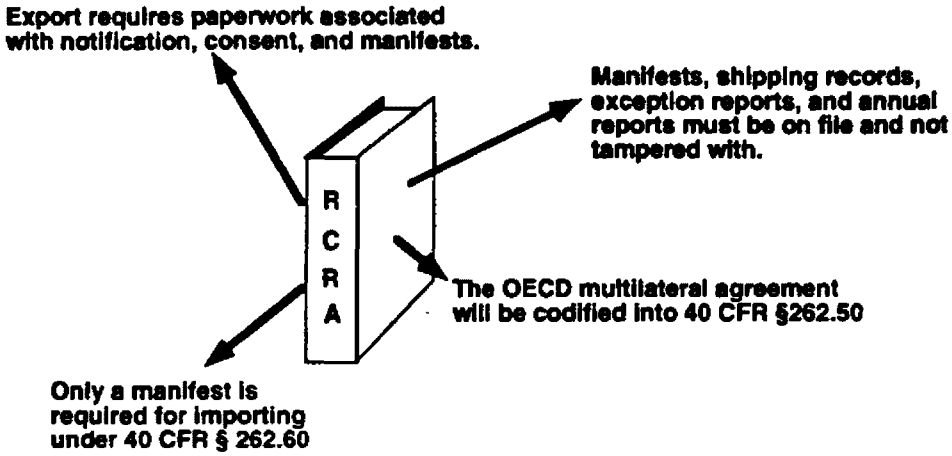
OVERHEAD #4

TITLE: Identifying Import/Export Situations (continued)

KEY POINTS:

- More will be said about each type of document later.
- Each Region has an Import/Export Coordinator. A list of phone numbers is included in your Participant's Manual.

REGULATING IMPORT/EXPORT – RCRA



OVERHEAD #5

TITLE: Regulating Import/Export -- RCRA

KEY POINTS:

- During an inspection at a facility that imports waste, the inspector should find a manifest in the records. There are no other import regulations regarding manifests (§§ 264.12 and 265.12 apply).

- At an inspection of a facility that exports hazardous waste, the inspector should review the files for:

  — Shipment records that include the Notification of Intent to Export, the confirmation of delivery, and an annual report, maintained in the files, for three years after the date the waste was accepted by a transporter (under § 262.57 of RCRA).

  — Manifests — a generator must keep a copy of each signed manifest for three years from the time the waste was exported or until receipt of a signed copy of the manifest from the designated facility that received the waste (§262.54 and §263.20(g)). This signed copy must be retained as a record for at least three years after the date the waste was accepted by the initial transporter. The manifest requirements are under § 262.54.

OVERHEAD #5

TITLE: Regulating Import/Export -- RCRA (continued)

KEY POINTS:

- In addition, there are reports that an inspector should find in the records:
  - — Acknowledgments of Consent (AOCs) are required to be attached to the manifests under § 262.53
  - — Discrepancies in how the above mentioned forms are filled out (e.g., missing addresses).
  - — Exception reports (if necessary)—these must be filed if the exporter 1) does not receive the manifest on time; 2) does not receive written notification from the receiving facility on time; or 3) has the waste returned to it.
  - — Annual reports—reports for the previous calendar year must be filed by an exporter with EPA by March 1 each year.

REGULATING IMPORT/EXPORT – [redacted] OECD AGREEMENT

- Binds the United States.
- Only valid between member countries.
- Permits the movement of waste destined for recovery operations.

Import/Export
Overhead 6 of 9

OVERHEAD #6

TITLE: Regulating Import/Export -- OECD

KEY POINTS:

- OECD is the Organization for Economic Cooperation and Development.
- The multi-national agreement on waste establishes a graduated control scheme for exports and imports of waste recyclables among OECD countries. Currently there are 24 signatories.
- Waste recyclables are separated into Green, Amber, and Red categories based on how hazardous the waste is. Wastes on the Amber and Red lists are subject to more controls than wastes that are on the Green list.
- Before exporting can occur, there must be a valid contract between facilities, and the exporter must provide written notification to the competent authorities of the concerned countries, including any transit countries. The notification may be forwarded by the authorities of the country of export to the competent authorities of the country of import and country(ies) of transit.
- Competent authorities in the country of import must transmit an Acknowledgment of Receipt of Notification to the notifier within three working days and objections must be lodged within 30 calendar days.

OVERHEAD #6

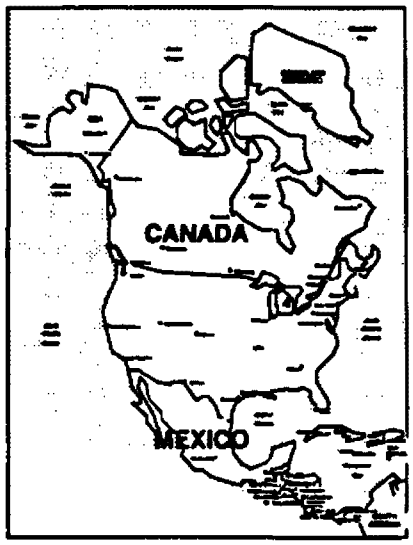
TITLE: Regulating Import/Export -- OECD (continued)

KEY POINTS:

- Written consent by the country of import and country(ies) of transit is required for all wastes on the Red list.
- Consents are valid for one year, or as specified by the receiving country.

REGULATING IMPORT/EXPORT – BILATERAL AGREEMENTS

- The United States has bilateral agreements with Canada and Mexico.
- The Canadian Agreement is currently being revised.



Import/Export
Overhead 7 of 9

OVERHEAD #7

TITLE: Regulating Import/Export -- Bilateral Agreements

KEY POINTS:

- The United States' agreements with Canada and Mexico, which are similar, require that the country of import be notified:
  - — 30 days in advance of shipment to Canada
  - — 45 days in advance of shipment to Mexico.
- In both cases the country of import will send an Acknowledgment of Receipt to EPA.
- In addition, the country of import will send to EPA written consent, written consent with conditions, or written objections to import:
  - — In Canada, after 30 days, consent is tacit; that is, the shipment is assumed to be acceptable if no written notice is received by EPA
  - — In Mexico, consent must be within 45 days and is never tacit.
- Canada is the only country in the world to which we can send waste for disposal.
- The Canadian agreement is currently being revised.
- Waste may be shipped to Mexico for recycling only.

OVERHEAD #7

TITLE: Regulating Import/Export -- Bilateral Agreements (continued)

KEY POINTS:

- SEDESOL (formerly SEDUE), the Mexican agency responsible for the environment, estimates that only 31% of Maquiladora waste is returned to the United States; all of it is supposed to be. Maquiladora is used as a generic term for firms that process components imported into Mexico which are then exported, usually back to the U.S.

- Again, look for paperwork discrepancies in facility records to determine potential violations of these agreements.

OVERHEAD #8

TITLE: Import/Export -- U.S. Customs Service

KEY POINTS:

- Under RCRA regulations, exporters of hazardous waste must provide a copy of a manifest to U.S. Customs at the point where the hazardous waste leaves the United State. This is required under § 262.54(h)(i).
- EPA and U.S. Customs both agree to provide information that will allow each to do its job. EPA participates in Customs border activities and supplies information about its own activities and leads. Customs collects and supplies manifests to NEIC for EPA, and participates in activities and provides information, where appropriate.
- EPA inspectors and Customs officials will conduct joint inspections at borders and ports.
- The MOU between the two agencies is currently under revision. A copy of the signed MOU is included in the library.
- Customs issued Hazardous Cargo Guidelines, which explain Customs' approach to inspections. A copy of the Guidelines are located in the library.

IMPORT/EXPORT COORDINATORS

EPA, Region I
Joan Jouzaitis
617-573-5775
FAX 573-9662

EPA, Region II
Margaret Emile
212-264-1253
FAX 264-7613

EPA, Region III
Elizabeth Ackerman
215-597-6413
FAX 597-8174

EPA, Region IV
John Lank
404-347-7603
FAX 347-5205

EPA, Region V
Allen Wojtas
312-353-6194
FAX 353-4788

EPA, Region VI
Joseph Schultes
Rose Toner
214-655-2192
FAX 655-6460

EPA, Region VII
Peter Sam
913-551-7642
FAX 551-7521

EPA, Region VIII
Janice Pearson
303-293-1504
FAX 293-1488

EPA, Region IX
Pat Kuefler
415-744-2149
Leif Magnuson
415-744-2141
FAX 744-1044

EPA, Region X
Cheryl Williams
206-553-2137
FAX 553-8509

EPA, NEIC
Jim Vincent
303-236-5120
FAX 236-5116

HQ-CID
Kathy King
202-260-9379
FAX 260-0268

HQ-OE-International
Larry Sperling
202-260-3087

HQ-OE-RCRA
Catherine Smith
202-260-6590
FAX 260-4632

HQ-OGC
Kathy Nam
202-260-2737
FAX 260-7702

HQ-OSW
Angela Cracchiolo
202-260-4779
Denise Wright
202-260-3519
FAX 260-0225

HW-OWPE/RED
Estelle Bulka
202-260-9324
Troy Hartley
202-260-9869
Susan Garcia
202-260-9094
FAX 260-8630

OMS, OWPE/RED
Karen Milne, Acting Chief
202-260-1787
IMPORT/EXPORT STAFF
Bob Small
202-260-9375
Carolyn Sage
202-260-8730
Carolyn Carr
202-260-2810

OIA
Wendy Grieder
202-260-4887
FAX 260-8512

OVERHEAD #8

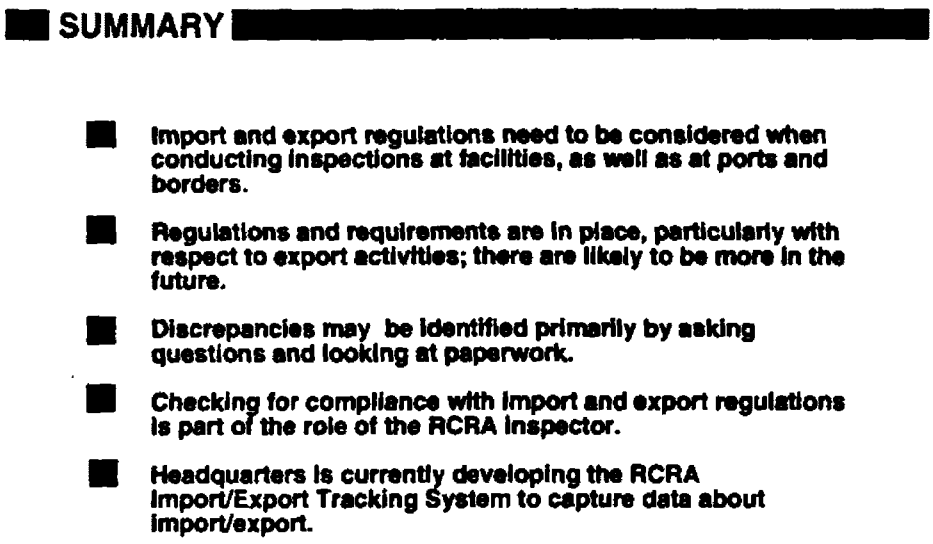
TITLE: Import/Export -- U.S. Customs Service (continued)

KEY POINTS:

- Finally, note that summaries of

  — RCRA requirements
  — OECD requirements
  — Bilateral Agreements
  — Customs/EPA relations

  are included in the Participant's Manual.



Import/Export
Overhead 9 of 9

OVERHEAD #9

TITLE: Summary

KEY POINTS:

- Certain types of wastes are more likely to be exported than others. Remember that K061, F006, and Ni Cd batteries are likely to be exported, so facilities that generate or handle these should undergo special scrutiny.
- There might be more regulations in the future because of OECD's incorporation into RCRA.
- Always ask if a facility imports or exports hazardous waste. Ask to look at manifests and contractual agreements.
- In addition to conducting inspections at facilities where import or export is an issue, you may be called on to conduct an inspection at a port or border.
- Coordinate your port and facility inspections with Headquarters and U.S. Customs, communicate clearly your plans and goals, and follow <u>all</u> safety precautions.

Summary of RCRA Regulations
Import/Export

Exports

Notification

- A Notification of Intent to Export must be submitted to EPA by the generator 60 days before the initial shipment. (§262.53)
- The Notification may cover activities for up to 12 months.

Consent

- EPA will provide copies of the Notification to the government of a receiving country and any transit countries. (§262.53(e))
- When a receiving country consents to the receipt of hazardous waste, EPA will forward an Acknowledgment of Consent to the exporter. (§262.53(f))
- If the receiving country objects, EPA will notify the exporter in writing. (§262.53(f))
- The consent of transit countries is not required under RCRA.

Manifests

- Manifests are required of exporters under §262.54.
- A manifest must identify the name, site address, and EPA I.D. number of the receiving facility.
- It must identify the point of departure of the waste from the U.S.
- The Acknowledgment of Consent forwarded from EPA must be attached to the manifest.

Reports

- Exception Reports - An exception report must be filed by the exporter if (1) they did not receive a copy of the manifest signed by the transporter, including an indication of the place of departure within 45 days of the date the waste left the exporter's facility; (2) they did not receive written confirmation from the receiving facility that the waste was received within 90 days; or (3) the waste was returned to the U.S. (§262.55)
- Annual Report - An annual report must be filed by an exporter with the EPA by March 1 of each year, summarizing the types, quantities, frequency, and destination of all waste exported during the previous calendar year. (§262.56)

Recordkeeping

- Shipment Records - An exporter must keep the Notification of Intent to Export, the confirmation of delivery, and the annual report for three years from the date waste was accepted by a transporter. (§262.57)
- Manifest - A generator must keep a copy of each signed manifest for three years from the time the waste was exported or until receipt of a signed copy of the manifest from the designated facility that received the waste. This signed copy must be retained as a record for at least three years from the date the waste was accepted by the initial transporter. (§262.57)

Relevance to Inspectors

- Check to see that manifests, shipping records, exception reports, and annual reports are on file and have not been tampered with.

Imports

- Any importer must have in its files a manifest for any imported waste, including the name and address of the exporter and the EPA I.D. Number of the exporter.

- A U.S. importer must sign and date each manifest, and obtain the signature of the initial transporter. (§264.71)

- An importer must notify the Regional Administrator in writing at least 4 weeks in advance of the date waste is expected to arrive. Notice of subsequent shipments from the same foreign source is not necessary. (§264.12)

- An importer must inform a generator in writing that its facility has appropriate permits for, and will accept, the waste the generator is shipping. (§264.12(b))

Records

- An importer must retain the written acceptance notice as part of its facility operating record.

Relevance to Inspectors

- Imports are not closely regulated and may be difficult to detect.

Mexican Bilateral Agreement Requirements

Notification

- The competent authority of the country of import must be notified at least **45 days** in advance of shipment of waste.
- The notification may cover the individual shipment or multiple shipments, and it is valid for up to 12 months.
- The notification must contain the following information:
  - Exporter name, address, phone number, and identification number;
  - Waste description, waste identification number, and shipping
  - description;
  - Estimated frequency and **time period** of shipments;
  - Estimated total quantity;
  - Point of entry;
  - Means of transportation (mode and type of container);
  - Description of the treatment or storage; and
    Name and site address of the receiving facility.

Acknowledgment

- Acknowledgment of Receipt is returned from the country of import.
- Consent, partial consent, or objection must be made within **45 days** from the date of Acknowledgment of Receipt.
- **There is <u>no</u> tacit consent.**

Canadian Bilateral Agreement Requirements

Notification

- Country of import must be notified **30 days** in advance of shipment.
- Notice may cover an individual shipment or multiple shipments, and is valid for up to 12 months.
- The notification must contain the following:
  - Exporter name, address, phone number, and identification number;
  - Waste description, waste identification number, classification and shipping name;
  - Estimated frequency;
  - Estimated total quantity;
  - Point of entry;
  - **Transporter name and address;**
  - Means of transportation (mode and type of containers)
  - Description of the manner of treatment, storage, or disposal;
  - Name and address of receiving facility; and
  - **Approximate date of first shipment.**

Acknowledgment

- Country of import will send an Acknowledgment of Receipt.
- Country of import will return a written consent, partial consent, or objection within **30 days.**
- **After 30 days, consent becomes *tacit*.**

Relevance to Inspectors

- The Mexican and Canadian Bilateral Agreements are similar in many respects. Their differences are highlighted in boldface.
- Most violations will relate to the required paperwork, or lack thereof.

OECD Agreement Requirements

General

- The OECD agreement establishes a graduated control scheme (Green, Amber, and Red) for exports and imports of waste recyclables among OECD countries.
- Waste recyclables on the Green list are subject to all existing controls normally applied in commercial transactions and any applicable international agreements on transportation.
- Hazardous wastes on the Amber and Red lists are subject to additional procedural controls, regarding notification and consent, tracking documents, and contracts.
- **The OECD Agreement permits the movement of wastes destined for recovery operations only.**
- The transit of wastes through non-member countries by OECD countries is subject to all applicable international and national laws and regulations.

Notification

- There must be a valid contract between facilities, starting with the notifier (generator) and ending with the recovery facility, in order for export activity to be sanctioned.
- The exporter must provide written notification to the competent authorities of the concerned countries. These include any transit countries. The notification may be forwarded by the authorities of the country of export to the competent authorities of the other countries of import.

Acknowledgment

- Competent authorities in the country of import must transmit an Acknowledgment of Receipt of Notification to the notifier (either the exporter or the forwarding government authority) within three days.
- Objections must be lodged within 30 days after the Acknowledgment of Receipt is sent.
- Written consent by both the country of import and the country(ies) of transit is required for all wastes in the Red tier.
- Consents are valid for one year.

Relevance to Inspectors

- The United States is bound by the OECD Agreement.
- Acknowledgments will be required from transit countries as well as import countries.

OECD Countries:				
	Australia	France	Japan	Spain
	Austria	Germany	Luxembourg	Sweden
	Belgium	Greece	The Netherlands	Switzerland
	Canada	Iceland	New Zealand	Turkey
	Denmark	Ireland	Norway	United Kingdom
	Finland	Italy	Portugal	United States

Yugoslavia participates in OECD work as a "special status" country

Customs/EPA Relations

The legislative history accompanying Section 3017 of RCRA provides that EPA "should work with the U.S. Customs Service to establish an effective program to monitor and spot check international shipments of hazardous waste to assure compliance" with hazardous waste export requirements.

Exporter Responsibilities

- Exporters of hazardous waste must provide a copy of hazardous waste manifests to U.S. Customs at the point where the hazardous waste leaves the United States.

EPA Responsibilities

EPA agrees, subject to available resources, to:

- Develop procedures for Customs to identify hazardous wastes and notify EPA when shipments of hazardous waste do not comply with Section 3017;
- Notify appropriate Customs officials when they should conduct "for cause" inspections of suspect shipments;
- Promptly respond to requests by Customs for assistance in inspecting, seizing, detaining, or otherwise handling known or suspected non-complying shipments; and
- Take the lead on investigating non-compliance with Section 3017 and bring enforcement actions where appropriate.

Customs Responsibilities

U.S. Customs agrees, subject to available resources, to:

- Collect all manifests that transporters deliver to U.S. Customs officials;
- Periodically transmit all manifests to the National Enforcement Investigation Center;
- Inspect, seize, detain, or otherwise handle non-complying shipments;
- Issue a compliance circular to its officials that describes requirements applicable to exports of hazardous waste;
- Participate in enforcement actions where appropriate; and
- Where appropriate, provide information, briefings, and training to its officials, which will inform and prepare them to apply the hazardous waste export requirements.

DIVISION OF HAZARDOUS WASTE
One Winter Street Boston, Massachusetts 02108

#1

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: MAD 000 604 447 | Manifest Document No.: 9 6 4 4 2
2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address:
Laidlaw Environmental Services (North East), Inc.
221 Sutton Street, North Andover, MA 01845

4. Generator's Phone (508) 583-1002

5. Transporter 1 Company Name: Laidlaw Environmental Services | 6. US EPA ID Number: NYD 980 773 675

7. Transporter 2 Company Name | 8. US EPA ID Number

9. Designated Facility Name and Site Address: Laidlaw Environmental Services (Mercier), Inc.
1294 Boul St. Marguerite
Ville Mercier, Quebec Canada JOL 1KO | 10. US EPA ID Number

A. State Manifest Document Number: MA G588681
B. State Gen. ID: 300 Canal St.,Lawrence, MA
C. State Trans. ID: RB-25227 QW
D. Transporter's Phone (514) 632-6640
E. State Trans. ID:
F. Transporter's Phone ( )
G. State Facility's ID: NOT REQUIRED
H. Facility's Phone 614) 691-9610

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ Waste Combustible Liquid,n.o.s./NA 1993 Combustible Liquid(Ethanol, Isopropanol) (D001F003) D012-8408	1	TT	4000	G	F002F003 F005D011 D001D007
b.					
c. JUN 5 1992					
d. #15768					

J. Additional Descriptions for Materials Listed Above (Include physical state and hazard code.)
a. Waste water trace solvents
MEINOEM 41A per data sheets 1855 described as
waster waste with ketones and alcohol.
b. This is a non-PCB Liquid,

K. Handling Codes for Wastes Listed Above
a. c. b. d.

15. Special Handling Instructions and Additional Information Driver's SIG: DATE: 06/05/92
P.O.# 96442 - Restricted Waste Notification Attached. Point of exit from US: High Gate Spring, VT.
In case of emergency contact: INFOTRAC 1-800-535-5053 (590).

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.
and conforms to the terms of the attached EPA acknowledgement of consent.

Printed/Typed Name	Signature	Date (Month Day Year)
Jeff Roetzel		06 05 92

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
YVES LAPLANTE		06 05 92

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

19. Discrepancy Indication Space

JUN 1992 Received EPA

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Date (Month Day Year)

OMB No. 2050-0039 Expires 9/30/92
EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete

GENERATOR

TRANSPORTER 1

TRANSPORTER 2

MA G588681

COPY>1: FACILITY MAILS TO DESTINATION STATE.

COPY>1: FACILITY MAILS TO DESTINATION STATE

PRESS HARD—You Are Writing Through Eight Copies
(See Reverse Side for Instructions)

#2

48-14-1 (3/89)—71

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. Do not Staple.

Form Approved OMB No 2050-0039 Expires 9-30-91

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: NYD002229128 — Manifest Document No.:
2. Page 1 of — Information in the shaded areas is not required by Federal Law

3. Generator's Name and Mailing Address: ONEIDA SILVERSMITHS, EAST SENECA STREET, SHERRILL, NY 13461

A. State Manifest Document No.: NY B 168275 7

4. Generator's Phone: (315) 361-3115

B. Generator's ID: Same

5. Transporter 1 (Company Name): SERVICES SANITAIRES BLAINVILLE

6. US EPA ID Number: NYD960762140

C. State Transporter's ID:

D. Transporter's Phone: (514) 430-1496

7. Transporter 2 (Company Name):

8. US EPA ID Number:

E. State Transporter's ID:

F. Transporter's Phone: ( )

9. Designated Facility Name and Site Address: STABLEX CANADA INC., 760 BLVD INDUSTRIAL, BLAINVILLE, QUEBEC, CANADA

10. US EPA ID Number: CDD980756415

G. State Facility's ID:

H. Facility's Phone: (514) 430-9230

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ HAZARDOUS WASTE SOLID, N.O.S. (F006) ORM-E (copper, zinc, nickel) NA9189	001	CM	30160	P	EPA F006 STATE
b.					EPA STATE
c.					EPA STATE
d.					EPA STATE

Exported To Canada U.S. Customs
JUN 19 1992
WSP

Received EPA JUL 1992

J. Additional Descriptions for Materials listed Above: a. c. b. d.

K. Handling Codes for Wastes Listed Above: a. L c. d.

15. Special Handling Instructions and Additional Information

PO D2788 TOTAL DRY WEIGHT 7.54 TONS (SUPERFUND TAX)

24 HOUR EMERGENCY TELEPHONE NUMBER (315)361-3115 "No SED required Sect.30.55 (h) fstr"

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by [illegible] and [illegible] government regulations and [illegible]

If I am a [illegible] program in place to reduce the volume and [illegible] to be economically practicable [illegible] method treatment, storage or disposal [illegible] health [illegible] I have made a good faith effort to [illegible] to me and [illegible]

Printed/Typed Name: ARTHUR L. KELLER — Signature: [signature] — Mo Day Year: 06 18 92

17. Transporter 1 (Acknowledgement of Receipt of Materials)

Printed/Typed Name: JEAN ROGER OUELLET — Signature: [signature] — Mo Day Year: 06 18 92

18. Transporter 2 (Acknowledgement of Receipt of Materials)

Printed/Typed Name: — Signature: — Mo Day

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19

Printed/Typed Name: — Signature: — Mo Day Year

GENERATOR

TRANSPORTER

Copy to Bureau and the N.Y. Dept. of Environmental Conservation (518) 457-7362.

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS WASTE
One Winter Street
Boston, Massachusetts 02108

#3

Job #: 71-53110

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator US EPA ID No.: MAD047075734 — Manifest Document No.: 77164

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Geochem, Inc. d/b/a Jet-Line of Lowell
263 Howard Street, Lowell, MA 01852

4. Generator's Phone (508) 937-7294

A. State Manifest Document Number: MA F377164

B. State Gen. ID: SAME

5. Transporter 1 Company Name: Jet-Line Services, Inc.

6. US EPA ID Number: MAD062179890

C. State Trans. ID: 105131 DH 909033 MA RA

7. Transporter 2 Company Name:

8. US EPA ID Number:

D. Transporter's Phone (617) 344-2510

E. State Trans. ID:

9. Designated Facility Name and Site Address
Stablex Canada, Inc.
760 Industriel Blvd. Blainville
Quebec Canada J7C 3V4

10. US EPA ID Number: NYD980756245

F. Transporter's Phone:

G. State Facility's ID: Not Required

H. Facility's Phone (800) 782-2539

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, Hazardous Waste Solid, n.o.s. (F006) ORM-E NA9189	001	CM	15200	P	F006
b. RQ, Hazardous Waste Solid, n.o.s. (F006) ORM-E NA9189	001	CM	14200	P	F006
c.					
d.					

GENERATOR

J. Additional Descriptions for Materials Listed Above (include physical state and hazard code.)
a. Metal Hydroxide Sludge
b. Metal Hydroxide Sludge
c.
d.

K. Handling Codes for Wastes Listed Above
a. c.
b. d.

15. Special Handling Instructions and Additional Information 11a) L-28, 11b) L-28 No SED required, Section 30.55 (h) FTSR. Emergency Contact: Robert E. Poitras (508) 937-7294. Point of Entry: Phillipsburg Quebec, Point of Exit: Highgate, VT.

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. and conforms to the terms of the attached EPA acknowledgement of consent.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Robert E. Poitras — Signature: Robert E. Poitras — Date: Month 06 Day 15 Year 92

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: BARRY BIRCH — Signature: Barry Birch — Date: Month 06 Day 15 Year 92

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: — Signature: — Date: Month Day Year

FAC

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: — Signature: — Date: Month Day Year

JUN 1992 Received EPA

In case of emergency or spill, immediately call the National Response Center (800) 424-8802.

Form Approved OMB No. 2050-0039 Expires 9-30-91
EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete

COPY>1: FACILITY MAILS TO DESTINATION STATE

PRESS HARD - YOU ARE WRITING THROUGH EIGHT COPIES. SEE REVERSE SIDE FOR DIRECTIONS

#4

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS WASTE
One Winter Street
Boston, Massachusetts 02108

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator US EPA ID No.: MAD001035971 — Manifest Document No.: 12732

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
ROCHE BROS.
161 PHOENIX AVE., LOWELL, MA 01852

4. Generator's Phone (508) 454-9135

A. State Manifest Document Number: MA[redacted]G052690[redacted]
B. State Gen. ID: [redacted] SAME

5. Transporter 1 Company Name: SUFFOLK SERVICES, INC.
6. US EPA ID Number: MAD981892557
C. State Trans. ID: [redacted]40023 MA

7. Transporter 2 Company Name:
8. US EPA ID Number:
D. Transporter's Phone: (617) 286-0044
E. State Trans. ID: [redacted]

9. Designated Facility Name and Site Address
STABLEX CANADA, INC.
760 BOUL. INDUSTRIAL
BLAINVILLE, QUEBEC, CANADA J7C 3V4

10. US EPA ID Number: NYD980756415
F. Transporter's Phone: [redacted]
G. State Facility ID: [redacted] Not Required
H. Facility's Phone: [redacted]430-9730

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. RQ HAZARDOUS WASTE SOLID, NOS ORM-E, NA9189 (D007) (D008) (CONTAINS LEAD)(CONTAINS CHROMIUM)	001	CM	20	Y	D008
b.					
c.					
d.					

The within merchandise duly exported under Customs supervision at the Port of Highgate Springs, Vt.
JUN 08 1992

J. Additional Descriptions for Materials Listed Above (Include physical state and hazard code.)
STACK DUST ASH

K. Handling Codes for Wastes Listed Above
a. c.
b. d.

15. Special Handling Instructions and Additional Information: POINT OF EXIT HIGHGATE SPRINGS, VT
EMERGENCY RESPONSE:
8am-5pm (617)286-0044 AFTER 5pm (508)865-3692 or (617)944-3366

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: JUDY LAGASSE — Signature: Judy Lagasse — Date: Month 06 Day 08 Year 92

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Philip Earl — Signature: Philip Earl — Date: Month 06 Day 08 Year 92

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: — Signature: — Date: Month Day Year

JUN 1992
Received
E.P.A.

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: — Signature: — Date: Month Day Year

DNR

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

DO NOT WRITE IN THIS SPACE
ATT. ☐ DIS. ☐ REJ. ☐ PR. ☐

1989

Failure to file is punishable under section 299.548 MCL or Section 10 c Act 136, PA 1969

#5

Please print or type

Form Approved OMB No 2050-0039 Expires 9-30

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. M I T 2 7 0 0 1 2 1 9 8 — Manifest Document No
2. Page 1 of — Information in the shaded areas is not required by Federal law

3. Generator's Name and Mailing Address
GRAND HAVEN BRASS FOUNDRY
230 N. HOPKINS
GRAND HAVEN MI - 49417

A. State Manifest Document Number MI 2420324
B. State Generator's ID

4. Generator's Phone (616) 842-4100

5. Transporter 1 Company Name
LAIDLAW CARRIERS INC.

6. US EPA ID Number M I D 9 8 0 6 1 9 9 3 6

C. State Transporter's ID
D. Transporter's Phone 416-615-093

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
FALCONBRIDGE LTD.
KIDD CREEK DIV. P.O. BOX 2002
TIMMINS ONT P4N 7K1

10. US EPA ID Number O D P 0 0 0 0 0 3 5 6

G. State Facility's ID
H. Facility's Phone 705-267-2161

	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER). HM	12. Containers No	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.	N/I
a.	FOUNDRY SAND R.Q. HAZARDOUS WASTE SOLID N.O.S., ORM-E NA9189	0 0 1	C M	6 9 9 0 0	P LB	D 0 0 8	H
b.							
c.							
d.							

GENERATOR

JUL 1992 Received EPA

Additional Descriptions for Materials Listed Above
FOUNDRY SAND FOR RECYCLING OF COPPER WASTE AND CONFORMS TO THE TERMS OF THE ATTACHED EPA ACKNOWLEDGEMENT OF CONSENT.
EMERGENCY # 616-842-4100 GRAND HAVEN BRASS FOUNDRY

K. Handling Codes for Wastes Listed Above
a/ /
b/ /
c/ /
d/ /

15. Special Handling Instructions and Additional Information
PORT OF EXIT SAULT ST MARIE DRIVERS SIGNATURE Ewart Bergsma 6/30/9

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. ★

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR; if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Date Month Day Year
ROGER K EASTON	Roger K Easton	0 6 3 0 9 2

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month Day Year
EVERTT BERGSMA	Ewart Bergsma	0 6 3 0 9 2

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month Day Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19

Printed/Typed Name	Signature	Date Month Day Year

EPA Form 8700-22 (Rev. 9/88) To be mailed by Generator to: Michigan DNR Box 30038 Lansing MI 48909

PR 5110 Rev 9/90

IN MICHIGAN AT 1-800-292-4706 OR OUT OF STATE AT 517-373-7660 AND THE NATIONAL RESPONSE CENTER AT 1-800-424-8802 24 HOURS PER DAY.

Please print or type (Form designed for use on elite (12-pitch) typewriter)

Form Approved OMB No 2050-0039 Expires 9-30-92

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No: TXD000835222 | Manifest Document No: 329925 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: APARATOS ELECTRICOS DE ACUNA, S.A. DE C.V. / CD. ACUNA, COAHUILA MEXICO
GENERAL ELECTRIC COMPANY / 108 CENTER DR. / DEL RIO, TX 78840 (MAILING ADDRESS)

4. Generator's Phone (512-774-3561

A. State Manifest Document Number: 0429825

B. State Generator's ID: 32982/98861

5. Transporter 1 Company Name: GENERAL ELECTRIC COMPANY
6. US EPA ID Number: TXD000835222
C. State Transporter's ID: 32932
D. Transporter's Phone: 512-774-356

7. Transporter 2 Company Name: MRV WASTEWATER?, INC.
8. US EPA ID Number: TXR113106654
E. State Transporter's ID: TX40321
F. Transporter's Phone: 915-581-660

9. Designated Facility Name and Site Address: ENVIROSAFE SERVICES OF IDAHO / HIGHWAY 78 - MISSILE BASE ROAD / GRAND VIEW, ID 83624
10. US EPA ID Number: IDD073114654
G. State Facility's ID:
H. Facility's Phone: 208-384-150

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. X RQ HAZARDOUS WASTE SOLID, N.O.S., ORM-E, NA9189 (CONTAINS HYDROXIDE SALTS, ZINC AND CHROME)	188	DM	31517019	TBS	F006 941880
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above: WASTEWATER TREATMENT SLUDGE; 15% WATER, 84% HYDROXIDE SALTS 5000PPM ZINC, 120PPM CHROME

K. Handling Codes for Wastes Listed Above: D-81

15. Special Handling Instructions and Additional Information: WEAR RUBBER BOOTS, GLOVES, RESPIRATOR, GOGGLES WHEN HANDLING; EMERGENCY CONTACT: FRANK FERREIRA (512)774-3561; EMERGENCY GUIDE NO. 31
MTL SUBJECTED TO LAND DISPOSAL RESTRICTIONS

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
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GENERATOR

Printed/Typed Name: Frank Ferreira | Signature: Frank Ferreira | Month Day Year: 10/10/1992

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: FRANK FERREIRA | Signature: Frank Ferreira | Month Day Year: 10/10/92

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: | Signature: | Month Day Year:

FACILITY

19 Discrepancy Indication Space

20 Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: | Signature: | Month Day

Received EPA

Style F 15 REV E LABELMASTER Div of AMERICAN LABELMARK CO CHICAGO, IL 60646 (800) [illegible]-5808 EPA Form 8700-22 (Rev 9-88) Previous editions [illegible]

TRANSPORTER # 1

State of California- Health and Welfare Agency

Please print or type. Form designed for use on elite (12-pitch typewriter).

See instructions on back of page 6.

#7

Department of Health Ser
Toxic Substances Control Prog
Sacramento, Calif

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of	Information in the shaded areas is not required by Federal law.
C A D 0 0 3 9 6 3 5 9 1 2	8 0 9 1 4 1 1		

3. Generator's Name and Mailing Address	4. Generator's Phone (408) 988-4386	A. State Manifest Document Number: 9158094
ECS Refining 705 Reed St.Santa Clara, 95050	Tecate Electromecancia P.O. Box 57 Tecate, CA. 92080 ✓	B. State Generator's ID: M A B 0 3 6 0 1 3 2 0 0

5. Transporter 1 Company Name	6. US EPA ID Number	C. State Transporter's ID: N/A
Tecate Electromecancia	N/A	D. Transporter's Phone: N/A
7. Transporter 2 Company Name	8. US EPA ID Number	E. State Transporter's ID: 200963
ECS Refining	C A D 0 0 3 9 6 3 5 9 1 2	F. Transporter's Phone: (408) 988-4386
9. Designated Facility Name and Site Address	10. US EPA ID Number	G. State Facility's ID: C A D 0 0 3 9 6 3 5 9 1 2
ECS Refining 705 Reed St.Santa Clara 95050	C A D 0 0 3 9 6 3 5 9 1 2	H. Facility's Phone: (408) 988-4386

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a. RQ Hazardous Waste, solid n.o.s. ORM-E NA 9189	0 0 6	D M	1 8 3 5	P	State: 181 EPA/Other: D008
b.					State: EPA/Other:
c.					State: EPA/Other:
d.					State: EPA/Other:

J. Additional Descriptions for Materials Listed Above	K. Handling Codes for Wastes Listed Above
63% Tin 37% Lead. Contains lead drops	a. 01 b. c. d.

15. Special Handling Instructions and Additional Information

Wear gloves, eye protection and dust mask

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Printed/Typed Name	Signature	Month	Day	Year
Murray Fleck	Murray Fleck	0 7	0 8	9 2

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Joaquin Roma D.	J. Roma D.	0 7	1 0	1 9 2

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Randy Hitt	Randy Hitt	0 7	1 0	1 9 2

19. Discrepancy Indication Space

A

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

AUG 1992
Received
EPA

DO NOT WRITE BELOW THIS LINE.

White: TSDF SENDS THIS COPY TO DHS WITHIN 30 DAYS.
To: P.O. Box 3000, Sacramento, CA 95812

GENERATOR

TRANSPORTER

FACILITY

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

OREGON ACCIDENT RESPONSE CENTER 452-0311

ase print or type (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039 Expires 9-30-91

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. WAD 058367152 Manifest Document No. BC 000001034 000017

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Ebco Metal Finishing
7851 Alderbridge Way
Richmond, BC V6X 2A4

Northwest Enviro Serv
1700 Airport Way South
Seattle, WAsh 98321

4. Generator's Phone (604) 276-1488

5. Transporter 1 Name: Northwest Enviro Service

6. US EPA ID Number: WAD 058367152

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
Chem-Security Systems, Inc.
Star Route
Arlington, Oregon 97812

10. US EPA ID Number: ORD089452353

US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
RQ hazardous waste solid NOS ORM-E NA 9189 F-006	1	DT	36500	P
b.				
c.				
d.				

RECEIVED JUN 25 1990

JUL 1990 RECEIVE

[redacted]

5. Special Handling Instructions and Additional Information Waste Profile Sheet Number(s)
a.
b. J 81398 DDX HA2 response #31
c.
d.

6. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

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Printed/Typed Name	Signature	Month Day Year
Richard E Van Meter	[signature]	06 25 90

7. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month Day Year
Richard E Van Meter	[signature]	06 25 90

8. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month Day Year

9. Discrepancy Indication Space

Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19

Printed Typed Name	Signature	Month Day

rm 8700-22 (Rev. 9/88) Previous editions are obsolete

TRANSPORTER #2

#9

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No. WAD 988467254	Manifest Document No. 50138	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
ANDERSON NEWALTA ENVIRONMENTAL SERVICES CORPORATION
12851 No. 5 Road, Richmond, B.C. V7A 4E9

4. Generator's Phone ( )

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: Anderson Newalta Environmental
6. US EPA ID Number: WAD 988467254

C. State Transporter's ID

D. Transporter's Phone: (604)277-6262

7. Transporter 2 Company Name
8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
ENVIROSAFE SERVICES OF IDAHO INC.
10.5 miles N.W. of Grandview, Idaho
83624

10. US EPA ID Number: IDD73114654

G. State Facility's ID

H. Facility's Phone: (208) 834-2275

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. RQ HAZARDOUS WASTE SOLID N.O.S. ORM-E NA 9189 (EPA: EP TOXICITY)	44	DM	14.5	T	D004 D009 D010
b. PQ8 NON HAZARDOUS WASTE	31	DM	8	T	
c.					
d.					

J. Additional Descriptions for Materials Listed Above
A) WASTE METAL HYDROXIDE SLUDGE ESII PCN #028D
B) WOOD WASTE CONTAMINATED WITH PQ8 PQ8 is 1% Copper [redacted] ESII PCN #27AF QUINOLINOLATE

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

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GENERATOR

Printed/Typed Name	Signature	Month	Day	Year
ELTON ALLEN (on behalf of Anderson)		09	20	90

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
RAY BRENNAN (on behalf of Anderson)		09	20	90

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

TRANSPORTER

19. Discrepancy Indication Space

SEP [illegible] RECEIVED

FACILITY

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Printed Typed Name	Signature	Month	Day	Year

TRANSPORTER #1

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DOCS

OFFICE OF
ASTE AND EMERGENCY RESPONSE

May 19, 1992

BY FAX: 504-775-3057

Mr. Glen E. Hasse
Vice President
Schuylkill Metals Corpora
P.O. Box 74040
Baton Rouge, LA 70874

Dear Mr. Hasse:

Please find enclosed the Acknowledgement of Consent for Schuylkill Metals Corporation, Baton Rouge, Louisiana to export 250 Tons of Nickel/Cadmium batteries (EPA hazardous waste numbers D006) to S.N.A.M, CEDEX, FRANCE. You will also find enclosed, special instructions for the export of hazardous waste.

If you have any questions, please give me a call at 202-260-9324.

Sincerely,

Estelle A. Bulka
RCRA Enforcement Division

Enclosures

Printed on Recycled Paper

Please be advised of the following special RCRA requirements for export shipments of hazardous waste. These requirements are found at 40 Code of Federal Regulations, Part 262, Subpart E - Exports of Hazardous Waste.

1. If the major terms of the original notice should change, you must renotify EPA. Please send your renotification to: EPA, Office of Waste Programs Enforcement, RCRA Enforcement Division (OS-520), 401 M Street, S.W., Washington, D.C. 20460, "Attention: Notification to Export" prominently displayed on the front of the envelope. (§262.53(c))

2. The hazardous waste manifest for each shipment must identify the point of departure from the United States in Item 15. (§262.54(c))

3. The following statement must be added to the end of the first sentence of the certification set forth in Item 16 of the Uniform Hazardous Waste Manifest Form: "and conforms to the terms of the attached EPA Acknowledgement of Consent"; (§262.54(d))

4. A copy of this Acknowledgement of Consent must be attached to the U.S. hazardous waste manifest that accompanies each shipment of hazardous waste. (§262.54(h))

5. You must provide the transporter with an additional copy of the manifest for delivery to the U.S. Customs official at the point the hazardous waste leaves the United States in accordance with §263.20(g)(4). (§262.54(i))

6. You must file an exception report with the Office of Waste Programs Enforcement, RCRA Enforcement Division (OS-520), Environmental Protection Agency, 401 M Street, S.W., Washington, D.C. 20460, if you have not received a copy of the manifest signed by the transporter stating the date and place of departure from the U.S. within forty five (45) days from the date it was accepted by the initial transporter; if within ninety (90) days from the date the waste was accepted by the initial transporter, the primary exporter has not received written confirmation from the consignee that the hazardous waste was received; and the waste is returned to the United States. (§262.55)

7. You must file an annual report by March 1 of each year with the Office of Waste Programs Enforcement, RCRA Enforcement Division (OS-520), Environmental Protection Agency, 401 M Street, S.W., Washington, D.C. 20460. (§262.56)

All shipments of hazardous waste must conform to all applicable state and Federal hazardous waste regulations and transportation requirements, as well as these specific export requirements.

Any questions you may have concerning this Acknowledgement of Consent or other export requirements may be directed to Ms. Estelle A. Bulka, EPA, Office of Waste Programs Enforcement (telephone number 202-260-9324) or to Mr. Jim Vincent, EPA, National Enforcement Investigations Center (telephone number 303-236-5120).

UNCLASSIFIED

GE 01 PARIS 12809 0615262
TION OES-09

[redacted]G-00	ACDA-15	AID-01	AMAD-01	CEQ-01	CIAE-00	COME-00
[redacted]-01	DINT-05	DODE-00	DOEE-00	EB-01	EUR-01	E-01
H-01	INRE-00	INR-01	IO-19	L-03	ADS-00	NSAE-00
NSCE-00	NSF-02	OIC-02	OMB-01	PM-01	PRS-01	SP-01
SS-01	STR-20	TRSE-00	T-01	USIE-00	EPAE-00	/090W

--------------------2F363C 061527Z /38

061527Z MAY 92
AMEMBASSY PARIS
SECSTATE WASHDC PRIORITY 6369

CLAS PARIS 12809

OES/ENV; PLEASE PASS TO EPA/OIA - GRIEDER

O. 12356: N/A
GS: SENV, ETRD, KSCA, FR
BJECT: approval of hazardous waste export,
huylkill metals corporation - snam

F: (a) paris 10052, (b) state 106135

On may 6, 1992, embassy received mfa diplomatic
e no. 1132 De/env, dated april 28, 1992, giving
[redacted]al french government consent to shipments of
[redacted]aste from schuylkill metals corporation to le
re[redacted]rance.

Substantive portions of the note, in embassy

unclassified
unclassified

e 02 paris 12809 061526z
nslation, follow:

: ministry of foreign affairs presents its
pliments to the embassy of the united states of
erica and, referring to the embassy note no. 188 Of
il 28, 1992, relative to the export of hazardous
te destined for the snam treatment facility at
nt-quentin fallavier in isere (schuylkill metals
poration - baton rouge epa id no. D006), has the
or to confirm that the relevant french authorities
e no objection to the aforementioned operation.

en their nature (cadmium-nickel batteries) and

ho[redacted] of treatment (recycling of cadmium, iron and

ickel), these wastes are subject to the simplified
egime of title ii of decree no. 90-267 Of march 23,
990, concerning importation, exportation and transit
f hazardous wastes: the initial holder of the wastes
i required to address an "import declaration for
istes of nonferrous metals destined for re-use,
:generation and recycling" to the prefect of the
partment in which the receiving facility is located,
this case the prefect of isere, and to accompany the
ste with a document containing the information
esented in the declaration.

us, the importation into france of wastes destined
r treatment by the snam facility in saint-quentin
llavier does not require written authorization from

unclassified
unclassified

je 03 paris 12809 061526z
: prefect.

l quote.

Copies of the french note and translation are being
ed to epa/oia. The original will follow by mail.
ley

May 19, 1992

This document will serve as the EPA Acknowledgement of Consent for SCHUYLKILL METALS CORPORATION, BATON ROUGE, LOUISIANA to export 250 TONS OF NICKEL/CADMUM BATTERIES (EPA HAZARDOUS WASTE NUMBER D006) to S.N.A.M., CEDEX, FRANCE. This Consent is VALID for the period of APRIL 28, 1992 TO APRIL 27, 1993. Please be advised that a copy of this Consent must accompany each shipment of hazardous waste and that a copy of the manifest must be left with the U.S. Customs Service, when the material leaves the jurisdiction of the United States.

ACTION
INFO OSWER-1 EC-1 OED-1 OPPE-1 OIA-3

DISTRIBUTION HQAE
CHARGE: EPA

VZCZCEP0677
RR RUEHEPA
DE RUEHME #3961/01 0441805
ZNR UUUUU ZZH
R 131801Z FEB 92
FM AMEMBASSY MEXICO
TO SECSTATE WASHDC 3634
BT
UNCLAS MEXICO 03961

PLEASE PASS TO EPA/OIA, T ATKESON/S CORREA AND WENDY GREIDER
DEPT FOR ARA/MEX-PAUL STORING, OES/ENV-MINNIE ROJO

E.O. 12356: N/A
TAGS: SENV, EPA, MX
SUBJECT: SEDUE APPROVES DATA CHANGES FOR 5 (FIVE) IMPORTERS OF HAZARDOUS WASTE /
- EPA FILE NO. 1-4/1992

REF: 91 STATE 366582; MEXICO 24302

1. SCIENCE OFFICE HAS RECEIVED A LETTER FROM SEDUE AUTHORIZING QUANTITY AND TIME PERIOD CHANGES FOR 5 (FIVE) IMPORTERS OF HAZARDOUS WASTE TO ZINC NACIONAL, MEXICO.

2. AN INFORMAL TRANSLATION OF THE LETTER FOLLOWS:

(START INFORMAL TRANSLATION)

OFFICIAL NOTICE NO. 411-000044 DATED JANUARY 6, 1992

ON BEHALF OF ZINC NACIONAL, S.A. LOCATED IN MONTERREY, NUEVO LEON, WE COMMUNICATE THE FOLLOWING INFORMATION. ZINC NACIONAL HAS PROVIDED REAL DATA FOR FIVE (5) OF ITS SUPPLIERS OF ZINC DUST, WHICH WERE ORIGINALLY ESTIMATED. THIS NOTIFICATION IS GIVEN IN ORDER TO EXPEDIENTLY COMPLETE THE RECORDS FOR THIS COMPANY AND THE ENVIRONMENTAL PROTECTION AGENCY

ATTACHED PLEASE FIND THE LIST OF SUPPLIERS WITH THE TOTALS THEY HAVE BEEN AUTHORIZED TO IMPORT
(COMPLIMENTARY CLOSING)
ARQ. RENE ALTAMIRANO PEREZ (SIGNED)
UNCLASSIFIED

(THE ATTACHED LIST CONTAINED THE FOLLOWING SPECIFI
SUPPLIERS.)

1 SHEFFIELD STEEL CORP
- P.O. BOX 218
- SAND SPRINGS, OKLAHOMA 74063

- TELEPHONE: (918) 245-1335
- QUANTITY : 9,500 TONS
- PERIOD : JANUARY 9, 1992
- THROUGH J ANUARY 8, 1993

2 BIRMINGHAM BOLT CO., INC.
- ILLINOIS STEEL DIVISIONQ
- RR 1 - BOX 164
- BOURBONNAIS, ILLINDIS 60914

- TELEPHONE: (815) 937-3131
- QUANTITY : 10,000 TONS
- PERIOD : JANUARY 1, 1992
- THROUGH DECEMBER 31, 1993

3 BIRMINGHAM BOLT CO., INC
- SOUTHERN UNITED STEEL CORP.
- 2301 HUNTSVILLE ROAD
- BURMINGHAM, ALABAMA 35201

- TELEPHONE: (205) 252-5777
- QUANTITY : 7,500 TONS
- PERIOD : JANUARY 1, 1992
- THROUGH DECEMBER 31, 1992

4 SALMON BAY STEEL CORP
- 22011 - 84TH SOUTH
- KENT, WASHINGTON 98032

- TELEPHONE: (206) 872-6100
- QUANTITY : 11,000 TONS
- PERIOD : JANUARY 1, 1992
- THROUGH DECEMBER 31, 1992

5 BIRMINGHAM STEEL CORP.
- MISSISSIPPI STEEL DIVISION
- P O. BOX 5780
- JACKSON, MISSISSIPPI 39213

- TELEPHONE: (601) 939-1623
- QUANTITY : 5,000 TONS
- PERIOD : J ANUARY 1, 1992
- THROUGH DECEMBER 31, 1992

(END INFORMAL TRANSLATION)
(DRAFTED SCI:GALLONCO)

FEBRUARY 18, 1992

This document will serve as the EPA Acknowledgement of Consent for SHEFFIELD STEEL CORP., SAND SPRINGS, OK, to export 9,500 TONS OF EMISSION STEEL DUST (EPA HAZARDOUS WASTE NUMBER K061) FROM ELECTRIC FURNACES to ZINC NACIONAL, MONTARREY, NUEVO LEON, MX. This Consent is VALID for the period of JANUARY 9, 1992 [illegible] JANUARY 8, 1993. Please be advised that a copy of this Consent must accompany each shipment of hazardous waste and that a copy of the manifest must be left with the U.S. Customs Service [illegible]

NOTIFICATION
PREAVIS

SEP - 2 1992

RECEIVED
8572
AUG 2 1992
TDG / MOT

EC-564

CONSIGNOR (GENERATOR) / EXPEDITEUR (PRODUCTEUR)
Provincial ID No. - N° d'id. provincial: ON 1 3 7 8 7 0 5

Notification Reference No. / N° de référence: 24433

Company Name - Nom de l'entreprise: Laidlaw Environmental Services Ltd.
Tel. No. (Area Code) / N° de tél. dest. rég.: (416) 227-7872

Mailing Address / Adresse postale: P.O. Box 188, Thorold, Ontario, L2V 3Y9
City - Ville / Prov. / Postal Code - Code postal

Shipping Site Address - Adresse du lieu d'expédition: 1829 Allanport Road
City - Ville / Prov. / Postal Code - Code postal: Thorold, Ontario L2V 3Y9

CONSIGNEE (RECEIVER) / DESTINATAIRE (RECEPTIONNAIRE): Chemical Waste Management Inc.
Provincial ID No. - N° d'id. provincial: NYD180536163

Address - Adresse / City - Ville / Prov. / Postal Code - Code postal: Same as Receiving Address

Receiving Site Address - Adresse du lieu de destination: 1550 Balmer Road
City - Ville / Prov. / Postal Code - Code postal: Model City, New York 14107

CARRIER / TRANSPORTEUR — Modes of Transport / Modes de transport: Road
Provincial ID No. - N° d'id. provincial: 1) A8581 2) A820183 3) A820280
Company Name - Nom de l'entreprise: 1) Laidlaw Environmental Ltd. 2) Buffalo Fuel Corp. 3) Chemical Waste Management Inc.
Tel. No. (Area Code): 1) (519) 864-1021 2) (716) 773-1921 3) (716) 754-8283
Address - Adresse: 1) R.R.#1 2) 2445 Allen Ave. 3) 1135 Balmer Road
City - Ville / Prov. / Postal Code - Code postal: 1) Corunna, Ontario, N0N 1G0 2) Niagara Falls, New York 14302 3) Model City, New York, 14107

Length of Stay in Transit Country(ies): / Durée du séjour dans les pays de transit: 1 Day
Handling Method in Transit Country(ies): / Méthode de manutention dans les pays de transit:

METHODS OF DISPOSAL - MÉTHODES D'ÉLIMINATION: 1) Trans-ship for Incineration 2) 3) 4)

First Shipment - Premier envoi: Date of Departure - Date de départ (Yr. - An / Mo. - Mois / Day - Jour)	Estimated Date of Arrival - Date d'arrivée prévue (Yr. - An / Mo. - Mois / Day - Jour)	Province(s) or Country(ies) of Transit / Province(s) ou pays traversé(s)(es)	Point of Entry or Exit / Port d'entrée ou de sortie	Highway Used / Route utilisée PCB only - PCB seul
9 2 1 0 2 0	9 2 1 0 2 1	Ontario & U.S.A.	Queenston or Niagara Fall	

Multiple Shipments: Including 12 shipments to be completed by: 93/10/19 (Y/M/D) with a total quantity of: _____ L or 9,600 kg.

Envois multiples: Nombre d'envois _____ à être transportés pour le _____ (A/M/J) d'une quantité totale de: _____ L ou _____ kg.

Shipping Name of Waste / Appellation réglementaire du déchet	Waste Identification / Identification du déchet: N° Provincial No. (Quebec - Ontario only - seulement)	TDG/PIN TMD/NIP	Quantity per Shipment / Quantité par envoi	Units L or / ou kg Unités	Classification	Packing Group / Groupe d'emballage	PCB - only / PCB - seul: Concentration	Units (mixed) / Unités (premier)	Packaging/Container Emballage/Contenant: Number / Nombre	Codes ult. est.
1) Methy/ethyl,Ketone Peroxides	26 3 A	U N 2127	800	kg	5.2 (E)	I			4	01
2)										
3)										
4)										

Special Handling / Emergency Instructions / Manutention spéciale / Instructions d'urgence: Attached / Annexées ☐ Below / Ci-dessous ☒ ERP2-1201
Emergency Telephone (519) 864-1201

Consignee will comply with TDG Regulations 4.20.1 1(1)(a)(ii)A and 4.9 (1)(a)(b)(c)(i)(ii)(d)

Consignor / Consignee Certification: I declare that arrangements have been made to receive and disposal of the consignment of waste.
Déclaration de l'expéditeur / destinataire: Je déclare que des dispositions ont été prises pour la réception et l'élimination de l'envoi de déchets.

Name of authorized Person (print) - Nom de l'agent autorisé (Caractères d'imprimerie): Roman Spera
Signature: [signature]
Date: Yr. - An / Mo. - Mois / D. 9 2 0 8 1 8

Copy 1 (white) - Transport Canada for Inter-Provincial Consignment(PCB) - Transport Canada for International and Transborder Consignment(s)

Copie 1 (blanche) - Transports Canada, envoi inter-provincial (BPC) Transports Canada, envoi(s) international(aux) et transfrontalier(s)

Environment Canada | Environnement Canada
Conservation and Protection | Conservation et Protection

CANADA'S GREEN PLAN
LE PLAN VERT DU CANADA

Ottawa (Ontario)
K1A 0H3

Your file / Votre référence

Our file / Notre référence

08-SEP-1992

12.1-001

Ms. Lisa Warner (OS-520)
Policy and Regional Operations Branch
RCRA Enforcements Division
U.S.E.P.A.
401 M Street S.W.
Washington, DC 20460

Dear Ms. Lisa Warner (OS-520),

In accordance with Article 3 (a & b) of the Canada/United States Agreement Concerning the Transboundary Movement of Hazardous Waste, enclosed please find copies of export notifications.

EC#	Exporter Name	Origin	Destination
92-0555.001-.003	Safety-Kleen Corp.	Saskatoon,SK	Hebron,OH
92-0556.001	Safety-Kleen Corp.	Saskatoon,SK	Reedhey,CA
92-0557.001-.002	Safety-Kleen Corp.	Saskatoon,SK	Elgin,IL
92-0558.001	Safety-Kleen Corp.	Edmonton,AB	Dolton,IL
92-0559.001	Safety-Kleen Corp.	Edmonton,AB	Reedhey,CA
92-0560.001	Safety-Kleen Corp.	Edmonton,AB	Elgin,IL
92-0561.001	Safety-Kleen Corp.	Saskatoon,SK	Dolton,IL
92-0562.001	Hazco Environmental Servi	Calgary,AB	Grandview,ID
92-0564.001	Laidlaw Environmental Ser	Thorold,ON	Model City,NY
92-0565.001	Laidlaw Environmental Ser	Corunna,ON	Canton,MI
92-0566.001	Prism Systems Inc.	Burnaby,BC	Newark,CA
92-0567.001	Norsk Hydro Canada Inc.	Becancour,PQ	Palmerton,PA

Yours Sincerely,

Allan Adair
TEGA Waste, Clerk
Waste Management Branch

recycled paper
papier recycle

Canada

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

September 15, 1992

EPA Notice No.: 297/92

MS. MARY GERDING
ROSS INCINERATION SERVICES, INC
36790 GILES ROAD
GRAFTON, OH 44044
EPA I.D. No.: OHD048415665

Dear MS. GERDING:

This is to acknowledge receipt of your notice, dated June 18, 1992, of intent to export hazardous waste to Canada as required by Title 40, Code of Federal Regulations, Part 262, Subpart E, Section 262.53 promulgated pursuant to the Resource Conservation and Recovery Act (RCRA). In accordance with the U.S.-Canada Bilateral Agreement on the Transboundary Movement of Hazardous Waste, the U.S. Environmental Protection Agency (EPA) forwarded your notice to the Government of Canada and Canada has no objection to your shipment(s) of hazardous waste.

This letter constitutes the EPA Acknowledgment of Consent for the export of the following hazardous waste as specified in your notice:

> Waste Description: FLY ASH FILTER CAKE FROM HAZ WASTE INCINERATION. EPA Waste Code: D001,2-43,F001-12,19,24,37-39,KXXX,PXXX,UXXX. DOT Shipping Name: HAZARDOUS WASTE, SOLID, NOS; DOT Hazard Class: ORM-E; DOT I.D. No.: NA9189. Total Volume to be Exported: 2,500 TONS. Estimated Frequency: 180 loads per YEAR.

The notice of intent to export for which this consent letter is issued listed multiple EPA waste codes too numerous to include in the waste description above. For convenience, EPA has used DXXX, FXXX, PXXX, KXXX and/or UXXX as abbreviations for these multiple codes. Please be advised that these abbreviations are not valid EPA waste codes for use on any other hazardous waste documents. All manifests and EPA annual reports must display all waste codes applicable to the actual waste shipped. Only wastes with EPA codes included in the notice of intent to export and specifically consented to by Canada may be exported.

Printed on Recycled Paper

You may ship this waste to the following consignee:

STABLEX CANADA, INC.
760 INDUSTRIAL BLVD.
BLAINVILLE, QUEBEC
CANADA J7C 3V4
EPA I.D. No.: NYD980756415

Shipments may occur during the period from July 21, 1992 to July 21, 1993.

You are also reminded of the following special RCRA requirements for export shipments of hazardous waste. Specific details of these requirements are contained in Title 40 of the Code of Federal Regulations, Part 262, Subpart E.

1. If the major terms of the original notice of intent to export on which this consent is based should change, you must renotify EPA. Please send your renotification to: EPA, Office of Waste Programs Enforcement, RCRA Enforcement Division (OS-520), 401 M Street, S.W., Washington, D.C. 20460, with "ATTENTION: NOTIFICATION TO EXPORT" prominently displayed on the front of the envelope. (262.53(c))

2. The Uniform Hazardous Waste Manifest Form for each shipment must identify the point of departure from the United States in Item 15, Special Handling Instructions. (262.54(c))

3. The following statement must be added to the end of the first sentence of the certification set forth in Item 16 of the Uniform Hazardous Waste Manifest Form: "and conforms to the terms of the attached EPA Acknowledgment of Consent". (262.54(d))

4. A copy of this Acknowledgment of Consent must be attached to the U.S. hazardous waste manifest that accompanies each shipment of hazardous waste. (262.54(h))

5. You must provide the waste transporter with an additional copy of the U.S. hazardous waste manifest accompanying the shipment for delivery to a U.S. Customs official at the point the hazardous waste leaves the United States in accordance with 263.20(g)(4) and (262.54(i)).

6. You must file an exception report with the EPA, Office of Waste Programs Enforcement, RCRA Enforcement Division (OS-520), 401 M Street, S.W., Washington, DC 20460, Attn: NOTIFICATION TO EXPORT, if you have not received a copy of the manifest signed by the transporter stating the date and place of departure from the U.S. within forty five (45) days from the date it was accepted by the initial transporter; if within ninety (90) days from the date the waste was accepted by the initial transporter, the primary exporter has not received written confirmation from the consignee that the hazardous waste was received; or if the waste is returned to the United States. (262.55).

7. You must file an annual report by March 1 of each year with the EPA, Office of Waste Programs Enforcement, RCRA Enforcement Division (OS-520), 401 M Street, S.W., Washington, DC 20460, Attn: NOTIFICATION TO EXPORT, summarizing all hazardous waste shipments exported during the previous calendar year. The report must include all items listed in 262.56.

All shipments of hazardous waste must conform to all applicable State and Federal hazardous waste regulations and transportation requirements as well as these specific export requirements.

Any questions you may have concerning this Acknowledgment of Consent or other export requirements may be directed to Mr. Bob Small, EPA Office of Waste Programs Enforcement (Phone 202/260-9375) or to Mr. Jim Vincent, EPA National Enforcement Investigations Center (Phone 303/236-5120).

Sincerely,

Karen L. Milne, Acting Chief
Policy Analysis and Coordination Section
RCRA Enforcement Division (OS-520)

cc: Jim Vincent, EPA/NEIC

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the ... not required by Fe ...
. . . . .	0 0 0 0 1		

3. Generator's Name and Mailing Address
ICI Autocolor
1300 Castlefield Avenue
Toronto, Ontario M6B-1GB (416) 787-2411

A. State Manifest Document Number N211219

B. State Generator's ID SAME

5. Transporter 1 Company Name	6. US EPA ID Number	C. State Transporter's ID
Frank's Vacuum Truck Service, Inc.	N Y D 9 8 2 7 9 2 8 1 4	54424D
7. Transporter 2 Company Name	**8. US EPA ID Number**	**D. Transporter's Phone** (716) 284-2
Frank's Vacuum Truck Service, Inc.	N Y D 9 8 2 7 9 2 8 1 4	E. State Transporter's ID 94170
		F. Transporter's Phone (716) 284-2

9. Designated Facility Name and Site Address	10. US EPA ID Number	G. State Facility's ID
Northeast Chemical 3301 Monroe Avenue Cleveland, OH 44113	O H D 9 8 0 6 8 1 5 7 1	H. Facility's Phone (216) 961-8618

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	L Waste
a. N/H Waste Latex Paint		001	TT	03753	gal US	—
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above
In case of emergency call Network (416) 299-0126
reference 3823-90-5050

K. Handling Codes for Wastes Listed Above
a.

AUTHENTICATED U.S. CUSTOMS BUFFALO/N. FALLS, N.Y. SEP 1 1991

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day
MERWYN F. CARTER	Merwyn F. Carter	08	22

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day
Richard Goodman	Richard Goodman	08	22

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day
Brad L Reed	Brad L Reed	09	25

19. Discrepancy Indication Space
Rejected returned to generator on transporter 2. 09-12-91 Theron R. Brayman NEC
Material had a flashpoint of 125*: is an ignible waste/Region V was not notified of prior arrival to USA

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day

GENERATOR — TRANSPORTER — FACILITY

HAZARDOUS WASTE TRANSPORTER/EXPORTER CHECKLIST

Rev.3

Date: _____ Time: _____ Inspected By: _____

TRANSPORTER INFORMATION EPA ID# _____

Transporter Name/Location _____

DOT License. #s _____ _____ _____

Plate # _____ State ___ Driver's Name _____

Destination: [ ] Stablex [ ] Other _____

Truck Type: [ ] Bulk Solids [ ] Bulk Liquid [ ] Drums Tot. Qty _____ Units _____

Placarding: Hazard Class _____ UN/NA # _____ Other: _____

Are containers labeled/marked properly? [ ]Yes [ ]No Container condition [ ] Good [ ] Poor

Comments/Discrepencies:

MANIFEST INFORMATION Manifest # _____

Manifest ___ of ___ Date _____ Additional copy for U.S. Customs? [ ]Yes [ ]No

Generator Name _____

EPA ID # _____ City _____ State ___ ZIP _____

11a) Waste Codes [ ][ ][ ] Qty _____ G T P (circle units)
Description _____

11b) Waste Codes [ ][ ][ ] Qty _____ G T P (circle units)
Description _____

11c) Waste Codes [ ][ ][ ] Qty _____ G T P (circle units)
Description _____

11d) Waste Codes [ ][ ][ ] Qty _____ G T P (circle units)
Description _____

ITEM 15. Does manifest identify the point of departure from the U.S.? [ ] Yes [ ] No

ITEM 16. Does certification language include "*. . . and conforms to the terms of the attached EPA Acknowledgement of Consent*"? [ ] Yes [ ] No

Is Acknowledgement of Consent (AOC) attached to manifest? [ ] Yes [ ] No

Is LDR Notification attached to manifest? [ ] Yes [ ] No

ACKNOWLEDGEMENT OF CONSENT (AOC) INFORMATION

List AOC Waste Codes: [ ][ ][ ][ ][ ][ ][ ][ ]
[ ][ ][ ][ ][ ][ ][ ][ ]
[ ][ ][ ][ ][ ][ ][ ][ ]

AOC expiration date: _____ Do AOC waste codes agree w/manifest? [ ] Yes [ ] No

Comments/Discrepencies:

State of California
Department of Toxic Substances Control

INSPECTOR'S CHECKLIST for TRANSPORTER COMPLIANCE EVALUATION INSPECTION

Inspection No. _____ Date(s) _____

Transporter: Company Name _____

EPA/State ID No.(s)_____ Transporter No._____
Waste Handled: RCRA ____ Non-RCRA ____ Both ____

Inspection Site: Name_____

Address_____

EPA/State ID No._____ Type of Facility_____

Inspection Type: Transporter-Only CEI?____
Transporter Component of Larger CEI? (specify):
Generator____ TSDF____ Other_____

Purpose: Enforcement Proceeding____ Complaint____ Routine____
Other (explain)_____

Lead Inspector:_____ Region_____

INDEX TO TRANSPORTER CHECKLIST

Subject	Page	Subject	Page
Applicability Key	2	Operation/Manifesting	8
General Requirements	4	Water Transport	11
Registration/Insurance	4	Rail Transport	12
Vehicle Certification	5	Small Quantity Reclamation	14
HW Discharges	6		

Instructions to Inspector: This checklist should be used along with the statutes and regulations. Each question is followed by a citation of the relevant State or federal section(s), in brackets. Before answering each question, you should refer to and understand the section(s) cited. Citations are of 22 CCR, unless otherwise specified. Usually, an equivalent 40 CFR section exists which has a number consistent with the 22 CCR numbering format (except lacking the first two digits, "66"), so that its citation is not needed. Relevant federal sections not correspondingly numbered are cited, following a slash: [66263.18/263.12]. A dash (-) before or after a slash denotes there is no corresponding State or federal section, respectively. Relevant Health and Safety Code sections are cited using the acronym "HSC".

KEY TO CHECKLIST APPLICABILITY

This checklist is for inspections of hazardous waste transporters operating in California, with certain exceptions. The questions on this page are for keying puposes, to help you determine if this checklist applies to the transporter being inspected, or if other checklists may also apply. A "no" answer to a question in this "applicability" part does not necessarily indicate a violation.

	Yes	No	Comment
1. Has consent been obtained from an authorized company representative before conducting the inspection? [DHS Management Memo (MM) 91-4R/-]	___	___	_____
2. If consent has been refused, has a warrant first been served on the company? [MM 91-4R/-]	___	___	_____
3. Is hazardous waste (HW) transported within or through California, and does it require a manifest under HSC 25160? [66263.10 (a)]	___	___	_____

If NO, this checklist does not apply.

4. Is any HW transported <u>other</u> than on-site at a generator's facility or on-site at a permitted/interim status (P/I) TSDF? [66263.10 (b)]	___	___	_____

If NO, this checklist does not apply.

5. Does the transporter handle only RCRA HW from a 100-1000 kg/mo. generator according to a reclamation agreement? [-/262.20(e)]	___	___	_____

If YES, then the "Operation/Manifesting Procedures" section of this checklist does not apply. In its place, complete the "Small Quantity Reclamation" section, page 14.

6. Is the transporter a rail or water (bulk shipment) transporter?	___	___	_____

If YES, then some parts of the "Operation/Manifesting Procedures" section may not apply, and additional special provisions in the "Water Transport" (p. 11) or "Rail Transport" (p. 12) sections do apply.

	Yes	No	Comment
7. Is the transporter operating under a variance?	___	___	_____

If YES, some parts of this checklist may not apply. The inspector should use a copy of the variance with this checklist to check compliance with the special variance provisions and with the applicable regulations.

8. Is the transportation only of an exempt recyclable material? [HSC 25143/261.6]	___	___	_____

If YES, parts of this this checklist may not apply. See the referenced sections.

9. Is the transportation only of used oil under the modified manifesting procedure provided by HSC 25250.8? [HSC 25250.8/-]	___	___	_____

If YES, parts of the "Operation/Manifesting Procedures" section of this checklist do not apply. See the referenced sections.

10. Does the transporter ship HW to California from abroad, or mix HW of different DOT shipping descriptions by placing them in a single container? [66263.10(c)(1),(2)]	___	___	_____

If YES, then the transporter is also a generator and must also comply with Chapter 12, 22 CCR standards (see also "Generator Checklist").

11. Does the transporter perform mixing, repackaging, bulk transfer or storage in excess of 144 hours of manifested HW? [66263.18; HSC 25123.3/263.12]	___	___	_____

If YES, then the transfer facility is required to be a permitted/interim status TSDF (see also "Facility Checklist").

Note: In following parts of this checklist, the questions are designed to determine compliance with the section(s) cited, and a "no" answer would indicate a violation of the section(s) cited.

TRANSPORTERS: GENERAL REQUIREMENTS FOR OPERATION
This section must be completed for all transporters of HW.

	Yes	No	Comments
Transporter/Vehicle Registration			
12. Is the transporter registered with the Department and have an EPA/State ID No., or if not, is he operating under emergency authorization? [66263.11, 66263.17, 66263.30(b)/-]	___	___	_____
13. Is each vehicle used to transport HW registered to the transporter or under his control pursuant to a lease? [66263.11(a)(2)/-]	___	___	_____
Insurance Requirements			
14. Does each vehicle have adequate insurance coverage for the type of HW transported, as specified by the following table: [66263.11(a)(3); HSC 25169(a),(b)/49 CFR Part 387]	___	___	_____

Vehicle Type/Commodity Transported	Combined Single Limit Coverage
(a) All HW, except as specified in (b) below, transported by highway vehicles with a gross weight rating of less than 10,000 lbs.	$600,000
(b) Waste petroleum or petroleum products transported in tank or vacuum-type trucks or trailers, by highway, rail, vessel or air, regardless of vehicle size.	$1,200,000
(c) For highway vehicles, rail vehicles, vessels or aircraft with a gross weight rating of 10,000 lbs. or more:	
(1) Oil listed in 49 CFR 172.101; hazardous materials and hazardous substances defined in 49 CFR 171.8 and listed in 49 CFR 172.101, but not mentioned in (3) below.	$1,000,000
(2) Hazardous waste as defined in HSC 25117 and 22 CCR, but not mentioned in (3) below.	$1,000,000

(3) Hazardous substances, as defined in 49 CFR 171.8, or liquified compressed gas or compressed gas, transported in cargo tanks, portable tanks, or hopper-type vehicles with capacities in excess of 3,500 water gallons.....$5,000,000

	Yes	No	Comments
15. Is a copy of the insurance policy kept at the transporter's principal place of business? [66263.11(a)(3)(A)/-]	___	___	_____
Highway Vehicle/Container Certification			
16. Was each vehicle, or container over 118.9 gallons, used to transport HW inspected by the CHP? [66263.23(d); HSC 25163(e), HSC 25191/-]	___	___	_____
17. Did such vehicles/containers display a current Certificate of Compliance? [HSC 25169.1(b), 25168.3(a), 25191(c)(1)/-]	___	___	_____
18. Is the Certificate of Compliance displayed on the front right-hand side of the load-carrying portion of the vehicle? [66263.14/-]	___	___	_____
19. Is the transporter displaying the Certificate of Compliance registered with DHS? [66263.14(b)/-]	___	___	_____
Vehicle/Container Condition			
20. Are the vehicles/containers in sound condition and designed to contain HW? [66263.13(f)/-]	___	___	_____
21. Are the vehicles/containers designed/constructed, and the contents so limited, that no HW is released during normal transportation conditions? [66263.16(a)/49CFR 173.24]	___	___	_____
22. Are the vehicles/containers free of leaks and are all discharge openings securely closed during transportation? [66263.16(b)/-]	___	___	_____

	Yes	No	Comments
23. Does the transporter use covered containers for HW that are subject to volatilization or wind dispersal? [66263.23(c)/-]	___	___	_____
Vehicle/Container Marking			
24. Is the firm name or trademark on each side of the vehicle or container and is it legible from 50 feet? [66263.23(e)/-]	___	___	_____
25. Does the transporter comply with applicable CHP and/or DOT regulations regarding containers, packing, labels, vehicle placards, shipping papers, loading, shipping certificates and incident reporting? [66263.23(a)/-]	___	___	_____
Reporting Requirements			
26. Did the transporter report to the Department within 30 days any:			
a. Change in majority ownership, name or location? [66263.15(a)(1)/-]	___	___	_____
b. Change in ownership or control of a certified vehicle/container? [66263.15(a)(2)/-]	___	___	_____
c. Vehicle involvement in a spill or accident which may have rendered the vehicle in non-compliance? [66263.15(a)(3)/-]	___	___	_____
d. Loss of liability coverage? [66263.15(b)/-]	___	___	_____
Hazardous Waste Discharges			
27. If a HW discharge occurred during transportation, did the transporter take appropriate immediate action to protect human health and the environment (e.g., notify local authorities, dike the discharge area)? [66263.30(a)]	___	___	_____

	Yes	No	Comments
28. Did the transporter who discharged hazardous waste [66263.30 (c)]:			
a. Notify the National Response Center (800-424-8802) if required by 49 CFR 171.15? and:	___	___	_____
b. Report in writing (if required by 49 CFR 171.16) to the DOT, Office of Hazardous Materials Regulations?	___	___	_____
29. Did the transporter clean up the HW discharge or take all other action as required by Federal, State or local officials to prevent a hazard to human health and the environment? [66263.31]	___	___	_____
Transporter Compliance with Inspection: Does the transporter:			
30. Allow the inspection of records? [66263.13(a)(3)/-]	___	___	_____
31. Not interfere with the gathering of evidence? [HSC 25195(c)/-]	___	___	_____
32. Not impede a DHS representative's enforcement activities? [HSC 25195(a)/-]	___	___	_____
33. Not possess altered or concealed records? [HSC 25191(a)(2)/-]	___	___	_____
34. Not make false statements or representations on a manifest or any document required by Ch 6.5, Div. 20 of the HSC? [HSC 25191(a)(1)/-]	___	___	_____
35. Not withhold information regarding danger to public health or safety? [HSC 25191(a)(4)/-]	___	___	_____

[66263.20(a)] ____ ____ _____

Transport of HW: Does the transporter:

39. Not transport, or authorize the transport of, any HW without a manifest (and AOC, if applicable)? [66263.20(c),(d); HSC 25160(d)(1), 25162(e)(1), 25191(c)(2)] ____ ____ _____

Transfer Facilities: Does the transporter:

40. Not store manifested HW at a non-permitted transfer facility for more than 144 hours? [66263.18; HSC 25123.3/-] ____ ____ _____

41. Not perform mixing, repackaging or bulk transfer of HW at a non-permitted transfer facility? [66263.18/-] ____ ____ _____

	Yes	No	Comments
Delivery of HW: Does the transporter:			
42. Not transfer custody of HW to an unregistered transporter? [HSC 25163(a)(1)/-]	___	___	_____
43. Not deliver HW to any facility not permitted or otherwise authorized to receive the HW? [66263.23(b); HSC 25162/-]	___	___	_____
44. Deliver the entire quantity of HW accepted to either: [66263.21 (a)]			
a. The designated facility listed on the manifest?	___	___	_____
b. The alternate designated facility if an emergency prevents delivery to the designated facility?	___	___	_____
c. The next designated transporter?	___	___	_____
45. Upon delivery to the designated facility or next designated transporter, did the transporter: [66263.20(g)]			
a. Obtain the date of delivery and signature from that facility or transporter?	___	___	_____
and			
b. Keep a copy of the manifest? and:	___	___	_____
and			
c. Give the remaining copies of the manifest to that facility or transporter?	___	___	_____
46. If HW could not be delivered, did the transporter contact the generator for instructions and revise the manifest per those instructions? [66263.21 (b)]	___	___	_____

	Yes	No	Comments
Transport Out of State/Country:			
47. For HW transported out-of-state, did the transporter submit a copy of the manifest completed by the generator, transporter and facility operator within 15 days to DHS? [66263.20(f)/-]	___	___	_____
48. Did the transporter who transported HW out of the U.S.: [66263.20(j)]			
a. Indicate on the manifest the date the HW left the U.S.?	___	___	_____
and			
b. Sign the manifest and keep one copy?	___	___	_____
and			
c. Return a signed copy to the generator ?	___	___	_____
and			
d. For RCRA HW, give a copy of the manifest to the U.S. Customs official at the point of departure from the U.S. ?	___	___	_____
Recordkeeping			
49. Does the transporter keep a copy of the manifest signed by himself, the generator and the designated facility or next designated transporter for 3 years after accepting the shipment? [66263.22]	___	___	_____
50. Does the transporter who transported HW from the State out of the U.S. keep a copy (indicating that the HW left the country) for 3 years? [66263.22 (a)]	___	___	_____

WATER TRANSPORT: SPECIAL REQUIREMENTS

For shipments involving water transport, this section must be completed in addition to the "Transporters: General Operation and Manifest Procedures" section.

	Yes	No	Comments
For water (bulk) shipments, does the transporter comply with the following: [66263.20 (h)/263.20(e)]			
51. If an initial transporter, obtain a date of receipt and signature from the water transporter on the manifest and forwards it to the designated facility?	___	___	_____
52. For water transport, accompany the waste with a shipping paper containing all manifest information except EPA/State ID Nos., generator certification and signatures?	___	___	_____
53. If a final transporter, deliver the HW to the facility designated on the manifest?	___	___	_____
54. If a final transporter, obtain a date of delivery and signature from the designated facility on either the manifest or shipping paper?	___	___	_____
55. Retain a copy of the manifest or shipping paper for 3 years? [66263.22(b)]	___	___	_____
56. If a spill of oil or hazardous substances occurred, did the water transporter give notice as required by 33 CFR 153.203? [66263.30(d)]	___	___	_____

and

(b) Return a signed copy to the non-rail transporter? ___ ___ _____

and

(c) Forward at least 3 copies to:

(1) The next non-rail transporter? ___ ___ _____

or

(2) The designated facility? ___ ___ _____

or

(3) The last rail transporter designated to handle the HW in the U.S.? ___ ___ _____

58. Did the initial rail transporter keep copies of manifests or shipping papers for 3 years after pickup? [66263.20(i), 66263.22(c)(A)/ 263.20(f)] ___ ___ _____

59. Did the rail transporter ensure that a shipping paper containing all manifest information (except EPA ID Nos., generator certification, and signatures) accompanied the HW at all times? [66263.20(i)(2)/263.20(f)] ___ ___ _____

60. If delivering HW to the designated facility, did the rail transporter obtain the date of delivery and operator's signature? [66263.20(i)(3)/263.20(f)(3)] ___ ___ _____

61. If delivering HW to a non-rail transporter, did the rail transporter obtain the date of delivery and non-rail transporter's signature? [66263.20(i)(4)/263.20(f)(4)] ___ ___ _____

	Yes	No	Comments
62. Did the final rail transporter keep copies of the manifest or shipping paper for at least 3 years after delivery? [66263.20(i)(3)(B), 66263.20(i)(4)(B), 66263.22/ 263.20(f)]	___	___	_____

SMALL QUANTITY RECLAMATION TRANSPORTERS

For transporters operating under a RCRA Small Quantity Reclamation Agreement, complete this section in lieu of the "Transporters: General Operation and Manifest Procedures" section.

	Yes	No	Comments
62. Did the transporter record on a log or shipping paper the following information for each shipment? [-/263.20 (h)(1), (2)]			
a. The name, address and ID No. of the generator?	___	___	_____
b. The quantity of waste accepted?	___	___	_____
c. All DOT-required shipping information?	___	___	_____
d. The date the waste is accepted?	___	___	_____
63. Did the transporter carry this information during the transport? [-/263.20 (h)(4)]	___	___	_____
64. Does the transporter keep copies of these records for at least three years after termination or expiration of the agreement? [-/263.20 (h)(4)]	___	___	_____

District 1 Brian Bilbray
District 2 George Bailey
District 3 Susan Golding
District 4 Leon Williams
District 5 John MacDonald

County of San Diego
Department of Health Services
Environmental Health Services
Hazardous Materials Management Divis
P. O. Box 85261
San Diego, CA 92186-5261

TOXIC TIPS HOTLINE

The San Diego County Hazardous Materials Management Division is concerned about the illegal transportation and dumping of Toxic Waste (hazardous waste) in San Diego County and in other communities. The improper handling of toxic waste can pollute the environment and can be a threat to the public health and safety of citizens in this region.

IF YOU KNOW OF A BUSINESS OR AN INDIVIDUAL THAT IS:

- Transporting toxic waste illegally into or out of Mexico
- Dumping toxic waste into the environment
- Mismanaging their toxic waste

THEN

CALL THE TOXIC TIPS HOTLINE RIGHT NOW!!!

(619) 338-2284

All information received, including your name will remain CONFIDENTIAL.

HELP PROTECT THE ENVIRONMENT!

SECRETARIA DE DESARROLLO URBANO Y ECOLOGIA
SUBSECRETARIA DE ECOLOGIA
DIRECCION GENERAL DE PREVENCION Y CONTROL DE LA CONTAMINACION AMBIENTAL

SEDUE

MANIFIESTO DE ENTREGA TRANSPORTE Y RECEPCION DE RESIDUOS PELIGROSOS

GENERADOR

1. IDENTIFICACION	No. DE REGISTRO SEDUE	No. DE MANIFESTO	2. PAGINA
	6092	0007	1 DE 1

3. RAZON SOCIAL DE LA EMPRESA: MODINE TRANSFERENCIA DE CALOR, S.A. DE C.V.
DOMICILIO Y C.P.: PARQUE IND. 2 LAREDO MPIO.: NUEVO LAREDO EDO.: TAMAULIPAS

4. TELEFONO: _____ LICENCIA DE SEDUE No.: _____

5. DESCRIPCION (Nombre del Residuo y Caracteristicas CRETI)	CONTENEDOR No. CANTIDAD	CONTENEDOR TIPO	CANTIDAD TOTAL DE RESIDUO	UNIDAD VOL./PESO
RESIDUO DE ACEITES LUBRICANTES	80	BARRIL	16 666	LITROS

6. INSTRUCCIONES ESPECIALES E INFORMACION ADICIONAL PARA EL MANEJO SEGURO
CERCLA/SARA RQ IS 1000 LBS

7. CERTIFICACION DEL GENERADOR:
Declaro que el contenido de este lote está total y correctamente descrito mediante el nombre del Residuo, caracteristicas CRETI, bien empacado, marcado y rotulado; y que se han previsto las condiciones de seguridad para su transporte por via terrestre de acuerdo a la Legislación Nacional vigente.
NOMBRE Y FIRMA DEL RESPONSABLE: BRIAN H. SELDEN

TRANSPORTISTA

8. NOMBRE DE LA EMPRESA TRANSPORTADORA: AUTOTRANSPORTE INTL. SINA, S.A. DE C.V. No. DE REG. S.C.T.: ER TRANSITE
DOMICILIO: MENDOZA 1213 TEL.: 2-22-58, 2-36-54

9. RECIBI LOS MATERIALES DESCRITOS EN EL MANIFIESTO PARA SU TRANSPORTE
NOMBRE _____ CARGO _____ FIRMA _____
FECHA DE EMBARQUE _____ dia mes año

10. RUTA DESDE LA EMPRESA GENERADORA HASTA SU ENTREGA
CALZ. MEXICO - BOULEVARD RIVERERA - PUENTE INTL. I - LDO, TX

11. TIPO DE VEHICULO _____ No. DE PLACA _____

DESTINATARIO

12. NOMBRE DE LA EMPRESA: SAFETY KLEEN CORP. - DENTON, TX No. DE REG. SEDUE _____
DOMICILIO: 1722 COOPER CREEK RD. TEL. _____

13. RECIBI LOS RESIDUOS DESCRITOS EN EL MANIFIESTO:
OBSERVACIONES _____
NOMBRE _____ CARGO _____ FIRMA _____
FECHA _____

APR 1992 Received EPA

TRANSPORTISTA → DESTINATARIO → GENERADOR

NOTICE OF LAND DISPOSAL RESTRICTION OF WASTE

TO: SAFETY-KLEEN CORP EPA ID NO: TXD077905871

1722 COOPER CREEK ROAD

DENTON, TX 76201

Under manifest number 00557438 line number 11a (enter 11a, 11b, 11c, OR 11d) the Generator noted below is shipping to you a waste determined to be restricted under 40 CFR Part 268. In accordance with 40 CFR 268.7, the generator hereby provides notice that the waste is restricted and the EPA waste code and the appropriate treatment standards are as follows:

EPA Waste Codes: F001

F001-F005 Spent Solvents Regulated Hazardous Constituent	TREATMENT STANDARDS (mg/l) Wastewater w/Solvents	All Other Solvent Wastes	Check All That Apply
Acetone	0.05	0.59	
Benzene	0.07	8.7	
n-Butyl alcohol	5.0	5.0	
Carbon disulfide	1.05	4.81	
Carbon tetrachloride	0.05	0.96	
Chlorobenzene	0.15	0.05	
Cresols (and cresylic acid)	2.82	0.75	
Cyclohexanone	0.125	0.75	
1,2-Dichlorobenzene	0.06	0.125	
Ethyl acetate	0.05	0.75	
Ethyl benzene	0.05	0.053	
Ethyl ether	0.05	0.75	
Isobutanol	5.0	5.0	
Methanol	0.25	0.75	
Methylene chloride	0.2	0.96	X
Methylene chloride(from Pharm. Industry)	0.44	0.96	
Methyl ethyl ketone	0.05	0.75	
Methyl isobutyl ketone	0.05	0.33	
Nitrobenzene	0.06	0.125	
Pyridine	1.12	0.33	
Tetrachloroethylene	0.079	0.05	
Toluene	1.12	0.33	
1,1,1-Trichloroethane	1.05	0.41	
1,1,2-Trichloroethane	0.05	7.6	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.05	0.96	
Trichloroethylene	0.062	0.091	
Trichlorofluoromethane	0.05	0.96	
— Xylene	0.05	0.15	

California List Prohibited Wastes	Level (mg/l)	Treatment Standard		
Halogenated Organic Compounds	1000.0	Incineration		These treatment standa
Arsenic (As) Nonwastewaters	500.0	None		do not preclude solver
Mercury (Hg) Nonwastewaters	20.0	None		recovery prior to disp
Nickel (Ni)	134.0	None		Subsequent disposal of
Thallium (Tl)	130.0	None		unrecovered waste is
Chlorinated Biphenyls (PCB's)	50.0	Incineration		subject to these stand

Waste Descriptions and/or Treatment Subcategory Waste Code Description	Treatment Standards Reference in 40 CFR and Technology Codes for 40 CFR 268.42(a) Wastewaters		Nonwastewaters		Check All That Apply
D001: Wastewaters (<10 wt% TOC and TSS)	268.42(a) DEACT		NA		
Low TOC Ignitable Liquids (<10 wt% TOC)	NA		268.42(a) DEACT		
High TOC Ignitable Liquids (>10 wt% TOC)	NA		268.42(a) RORGS, FSUBS, or INCN		
D002 Corrosives, all subcategories & CA list	268.42(a) DEACT		268.42(a) DEACT		
D004 Arsenic (As)	268.43(a)		268.41(a)		Variance until 5-8-92
D005 Barium (Ba)	268.43(a)		268.41(a)		
D006 Cadmium (Cd)	268.43(a)		268.41(a)		
D007 Chromium (Cr)	268.43(a)		268.41(a)		
D008 Lead (Pb)	268.43(a)		268.41(a)		
D009: Low Mercury Subcategory (<260 ppm Hg)	268.43(a)		268.41(a)		Variance until 5-8-92
High Mercury Subcategory (>=260 ppm Hg)	268.43(a)		268.42(a) RMERC		Variance until 5-8-92
D010 Selenium (Se)	268.43(a)		268.41(a)		
D011 Silver (Ag)	268.43(a)		268.41(a)		
Other Codes See attachment for supplemental list					

Generator Name: MODINE HEAT TRANSFER EPA ID: TXD988044838

Generator Representative Signature: Brian H. Selden

Name & Title of Representative: Brian H. Selden, Q. A. Manager

Safety-Kleen Sample Number: 220884 Control Number: 0128001

NOTE: The USEPA has not determined treatment standards for the new TCLP EPA Waste Numbers: D018 through D043.

APR 19 Receiv E.P.A.

SECRETARIA DE DESARROLLO URBANO Y ECOLOGIA

SUBSECRETARIA DE ECOLOGIA

DIRECCION GENERAL DE PREVENCION Y CONTROL DE LA CONTAMINACION AMBIENTAL

MANIFIESTO
NO. _____
EDO. _____
MPIO. _____

MANIFIESTO PARA LA IMPORTACION O EXPORTACION DE MATERIALES O RESIDUOS PELIGROSOS

NOMBRE DEL GENERADOR _____
_____ No. _____
UBICACION _____
_____
RESPONSABLE _____
CARGO _____ TELEFONO _____
NOMBRE DEL MATERIAL O RESIDUO _____
_____
_____
_____

ADUANA _____
DESTINATARIO
NOMBRE DE LA EMPRESA _____
_____ No. _____
UBICACION _____
_____
RESPONSABLE _____
CARGO _____ TELEFONO _____
PROCESO PARA LA UTILIZACION DEL MATERIAL O RECUPERACION DE:
_____
_____
(ANEXAR DESCRIPCION COMPLETA CON DIAGRAMA DE FLUJO)

A.- CARACTERISTICAS FISICAS DEL MATERIAL

COLOR

OLOR ☐ NO ☐ SI ☐ FUERTE
DESCRIBO _____

ESTADO FISICO A 21° C
☐ SOLIDO ☐ SEMISOLIDO
☐ LIQUIDO

☐ MULTICAPAS
☐ BI-CAPAS
☐ FOSA SIMPLE

LIQUIDOS LIBRES
☐ SI ☐ NO
VOLUMEN _____

pH. ☐ < 2 ☐ 2 - 4 ☐ 4.1 - 6.9 ☐ 7 ☐ 7.1 - 10 ☐ 10.1 - 12.5 ☐ > 12.5 ☐ EXACTO _____

GRAVEDAD ESPECIFICA ☐ < 0.8 ☐ 0.8 - 1.0 ☐ 1.1 - 1.2 ☐ EXACTO _____ ☐ 1.3 - 1.4 ☐ 1.5 - 1.7 ☐ > 1.7

PUNTO DE FLAMA ☐ < 21°C ☐ 21 - 30°C ☐ 39 - 59°C ☐ 60 - 99°C ☐ > 99°C ☐ NO INFLAMABLE ☐ EXACTO _____ ☐ CAPA ☐ CAPA

B. COMPOSICION QUIMICA (SUMA TOTAL HASTA 100%)

_____ _____ %
_____ _____ %
_____ _____ %
_____ _____ %
_____ _____ %
_____ _____ %
_____ _____ %
_____ _____ %
_____ _____ %
_____ _____ %

D. METALES (TOTAL (PPM) Y PRUEBAS DE EXTRACCION) ( )

ARSENICO (As) _____ SELENIO (Se) _____
BARIO (Ba) _____ PLATA (Ag) _____
CADMIO (Cd) _____ COBRE (Cu) _____
CROMO (Cr) _____ NIQUEL (Ni) _____
MERCURIO (Hg) _____ ZINC (Zn) _____
PLOMO (Pb) _____ TALIO (Th) _____
CROMO HEXAVALENTE (Cr+6) _____

E. OTROS COMPONENTES TOTAL (PPM)

CIANUROS _____ BPC'S _____
SULFITOS _____ FENOLICOS _____

C. INFORMACION DE EMBARQUE

EMPRESA TRANSPORTADORA _____
UBICACION _____
TIPO DE TRANSPORTE _____
TIPO DE CONTENEDOR _____ CAP. _____
RUTA A SEGUIR _____
MATERIALES O RESIDUOS PELIGROSOS ____ ☐ SI ____ ☐ NO
RIESGO INVOLUCRADO _____
_____
ESTADO EN QUE SE TRANSPORTA _____
☐ VOLUMEN LIQUIDO _____ ☐ VOLUMEN SOLIDO _____
TOTAL _____

G. CARACTERISTICAS PELIGROSAS

REACTIVIDAD
☐ SENSIBLE A CHOQUE
☐ REACCIONA CON EL AGUA
☐ PIROFORICO
☐ RADIACTIVO
☐ OTROS
☐ CORROSIVO
☐ EXPLOSIVO
☐ TOXICO
☐ INFLAMABLE
☐ NINGUNA

H. INFORMACION DE MANEJO ESPECIAL

_____
_____
_____
(ANEXAR PAGINAS ADICIONALES)

POR ESTE MEDIO CERTIFICO QUE TODA LA INFORMACION INCLUIDA EN ESTE Y TODOS LOS DOCUMENTOS ADICIONALES ES COMPLETA, VERIDICA Y QUE TODOS LOS PELIGROS CONOCIDOS O POSIBLES HAN SIDO INCLUIDOS

_____
NOMBRE Y FIRMAS AUTORIZADAS DEL GESTOR

_____
NOMBRE Y FIRMA DEL TECNICO RESPONSABLE DE LA EMPRESA

FECHA DE AUTORIZACION _____

PRORROGA
No. _____ FECHA _____

- TELEFONO.- Anotar el número o números telefónicos del responsable de la empresa generadora incluyendo según sea el caso extensión y clave lada.

- NOMBRE DEL MATERIAL O RESIDUO.- Anotar el nombre químico común, y sinonimia del material o residuos que la empresa generadora deberá reportar.

- ADUANA.- Anotar la localización del puerto terrestre, marítimo o aéreo por donde se solicita el ingreso o salida de los materiales o residuos peligrosos, en caso de importación o exportación respectivamente.

DESTINATARIO (CONCESIONARIO)

NOMBRE DE LA EMPRESA.- Anotar el nombre, razón social de la empresa o persona física o moral a quien van destinados los materiales o residuos peligrosos.

No. PARA USO EXCLUSIVO DE LA SEDUE.

UBICACION.- Anotar el nombre del corredor, parque o ciudad industrial, la calle donde se ubica la empresa destinataria, así como el número exterior interior, las callesentre las que se encuentra ubicada, la colonia, ciudad, municipio, código postal

RESPONSABLE.- Anotar el apellido paterno, materno y el nombre completo de la persona física o moral responsable de la empresa concesionaria.

CARGO.- Anotar el nombre del cargo que ocupa la persona física o moral responsable de la empresa destinataria.

TELEFONO.- Anotar el número o números telefónicos del responsable de la empresa destinataria incluyendo según sea el caso extensión y clave lada

PROCESO PARA LA UTILIZACION DEL MATERIAL O RECUPERACION DEL RESIDUO.- Anexar la descripción del proceso para la utilización de los materiales

o recuperación de los residuos peligrosos.

B.- CARACTERISTICAS FISICAS DEL MATERIAL

COLOR.- Anotar el color visual lo más preciso posible, considerando tonalidad del material o residuo.

ESTADO FISICO A 21°C.- Cruzar el cuadro perteneciente al estado físico del material o residuo.

CAPAS.- Cruzar el cuadro correspondiente al número de capas o estratos de residuos transportados.

LIQUIDOS LIBRES.- Cruzar el cuadro perteneciente al material o residuo y anotar en caso positivo el volúmen porcentual del líquido libre.

PH.- Cruzar el cuadro perteneciente al PH que más se acerque a la medición realizada del material o residuo y anotarlo con exactitud en el rengión correspondiente.

GRAVEDAD ESPECIFICA.- Cruzar el cuadro perteneciente a la gravedad especifica que más se acerque a la medición realizada del material o residuo y anotarlo con exactitud en el rengión correspondiente.

PUNTO DE FLAMA.- Cruzar el cuadro perteneciente a la temperatura que más se acerque al resultado obtenido del material o residuo, así mismo indicar si fué realizado en copa abierta o cerrada, anotando el dato exacto en el rengión correspondiente.

C.- COMPOSICION QUIMICA.-

Anotar en cada uno de los renglones la fórmula química y porcentajes de cada uno de los componentes químicos de que conste el material o residuo, estos datos deberán corresponder exactamente al análisis físico-químico realizado por

RIESGO INVOLUCRADO.- Anotar el riesgo o riesgos asociados en el transporte de los materiales o residuos peligrosos.

ESTADO EN EL QUE SE TRANSPORTA.- Anotar el estado físico del material o residuo que se transporte cruzando posteriormente el cuadro correspondiente.

G.- CARACTERISTICAS PELIGROSAS.-

REACTIVIDAD.- Cruzar el cuadro correspondiente a las características del material o residuo.

H.- INFORMACION DE MANEJO ESPECIAL.-

Anexar la información necesaria para el manejo del material o residuo si requiere de un trato especial.

I.- Los movimientos transfronterizos de materiales o residuos peligrosos, ya sea para importación o exportación, que queden sujetos al Vo. Bo. por parte de la SEDUE con Guía Ecológica, deberán anexar conjuntamente con la solicitud Fianza o Seguro por Responsabilidad Civil para la reparación del daño en caso de un accidente en el territorio nacional o en el extranjero.

La Fianza o Seguro será fijado por SEDUE de acuerdo con el artículo 17 del decreto del 19 de enero de 1987, tomando en consideración lo siguiente:

- El máximo evento esperado, esto quiere decir que se tomará en cuenta el volúmen o peso del máximo movimiento transfronterizo.

- Para el grado de peligrosidad de los residuos se tomará en cuenta los criterios de la Norma NTE-CRP-001/88 (corrosividad, reactividad explosividad, toxicidad e inflamabilidad), y para los materiales peligrosos se tendrá en cuenta los criterios internacionales de peligrosidad de las Naciones Unidas.

PARA LA POLIZA DE COBERTURA DE RESPONSABILIDAD CIVIL, DEBERA LLEVAR LA SIGUIENTE LEYENDA:

Cobertura de responsabilidad civil, por afectación a terceros en su persona o en sus bienes o daños a la Ecología por derrame o escape en el manejo del material o residuo para que se haya obtenido la Guía Ecológica o por el documento en cuestíon; la poliza de seguro deberá ser expedida a favor de la Secretaría de Desarrollo Urbano y Ecología.

HAZARDOUS WASTE EXPORTS CHECKLIST

TRANSPORTER INFORMATION

1. Transporter: _____
2. EPA ID No.: _____
3. Driver's Name: _____
4. Driver's License No.: _____
5. Truck Description: _____
6. Tractor License No.: _____ State: _____
7. Trailer License No.: _____ State: _____

ACKNOWLEDGMENT OF CONSENT INFORMATION

1. Copy of Acknowledgment with Shipment? ___ Yes ___ No
2. EPA Acknowledgment of Consent Date: _____
3. EPA Notice No.: _____
4. Waste Description Matches Shipment? ___ Yes ___ No
5. Discrepancies _____

_____

MANIFEST INFORMATION

1. Manifest No.: _____
2. Customs' Copy With Shipment? ___ Yes ___ No
3. Customs' Copy is Complete? ___ Yes ___ No
4. Port of Exit Shown? ___ Yes ___ No
5. Certification Included? ___ Yes ___ No
6. Other Manifest Violations? ___ Yes ___ No
7. Description of Violations: _____

_____

_____

_____

_____

U.S. Customs Service
1[illegible] onstitution Avenue, N.W.
[illegible]ton, D.C. 20229
(202) [illegible]6-8195

U.S. Customs DIRECTORY

COMMISSIONER OF CUSTOMS
Carol Hallett
(202) 566-2101

DEPUTY COMMISSIONER
Michael H. Lane
(202) 566-2145

COMMISSIONER'S STAFF
Kimberly Bleck
(202) 566-2101

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Executive Assistant to the Commissioner
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William G. Lawrence
Director Congressional Affairs
(202) 566-5644

William A. Anthony
Special Assistant for Media Affairs
(202) 566-5286

William S. Heffelfinger III
Executive Director
Border Interdiction Committee
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(202) 566-2414

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Customs Publication No. 5081
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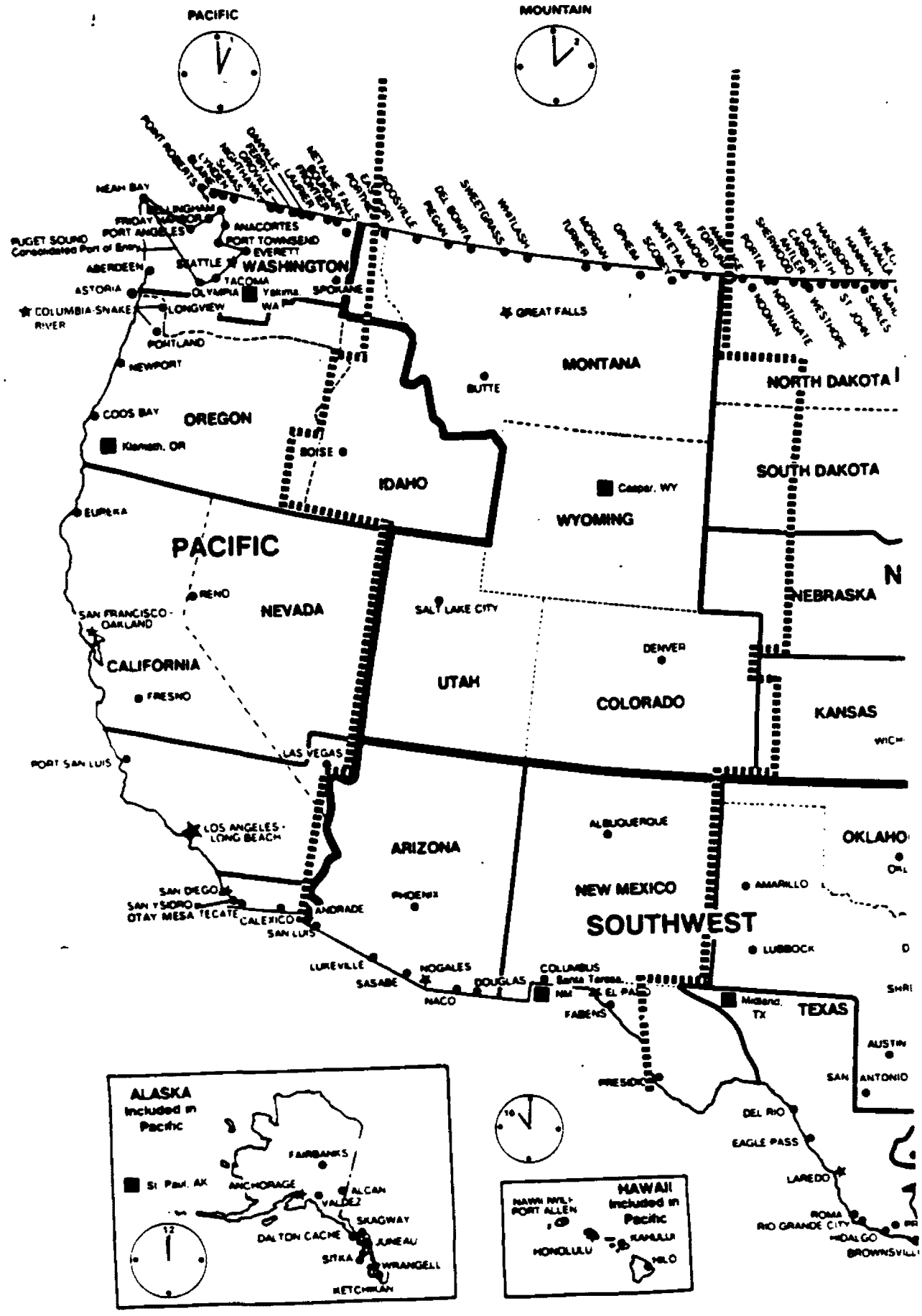
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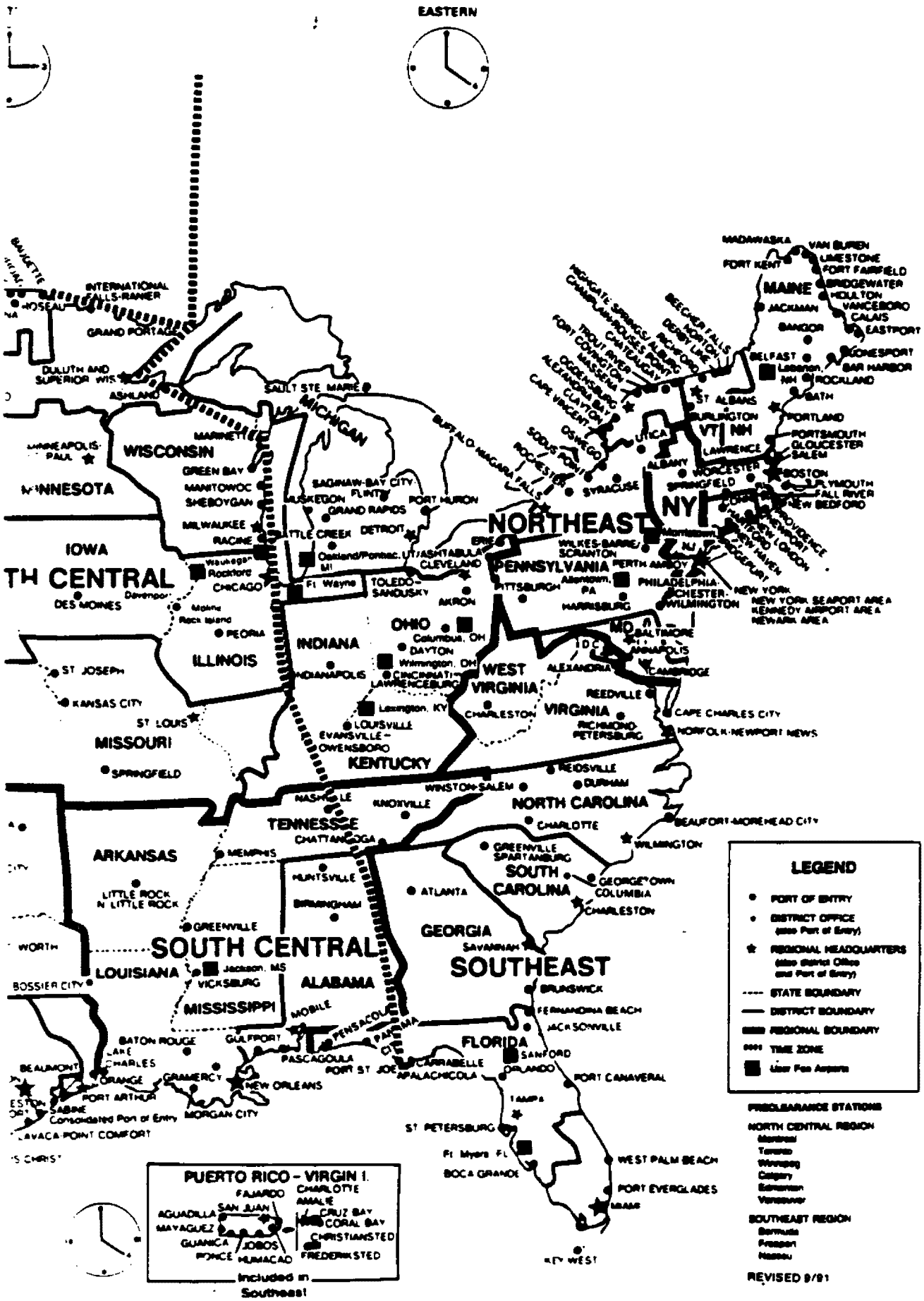
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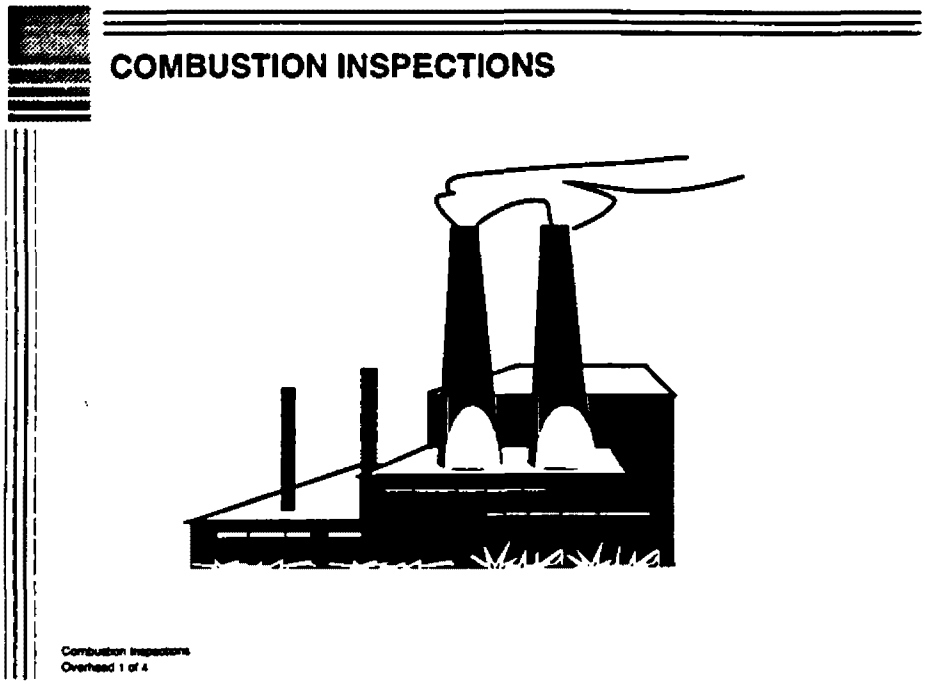


OVERHEAD #1

TITLE: Combustion Inspections

KEY POINTS:

- You may be wondering why combustion inspections merit their own presentation. The reason we spend time on this topic is that the devices are unlike any other waste treatment processes. In addition, under the Land Disposal Restrictions, incineration is considered the Best Available Technology for the treatment of many hazardous wastes. The regulations and guidelines applicable to these devices are equally unique. The standards for combustion units are based on risk and demonstrated through the performance of the unit. For example, a tank requires secondary containment, whereas an incinerator must demonstrate destruction and removal efficiency of four or six nines.

- Therefore, we believe that it will be useful to devote this time to discussing inspections of incinerators, boilers, and industrial furnaces, and some of the problems that may be encountered during these inspections.

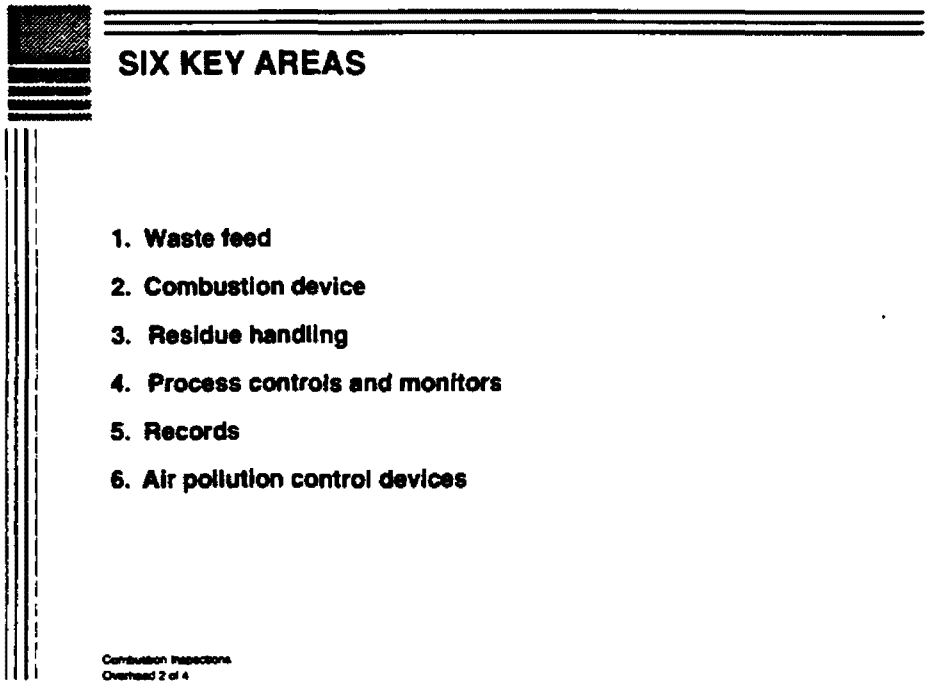
- Using a slide presentation, we will conduct inspections of both an incinerator and a BIF. The slide presentation will parallel a facility walk-through, with most of the discussion focusing on five key areas of combustion facilities.

OVERHEAD #1

TITLE: Combustion Inspection (continued)

KEY POINTS:

- Through our discussion, many questions will be raised that may not have immediate answers. The purpose of this presentation is to provide you with some information and to get you thinking about some of the more difficult issues. At the end of the session we will review a list of references for combustion issues. You can use these references to explore some of the issues we raise today.



OVERHEAD #2

TITLE: Six Key Areas

KEY POINTS:

- These six areas are critical to the operation of the unit. In addition, based on the information that enforcement personnel have gathered over the years, we find that the most difficulties for inspectors arise at one of these six areas.
- Due to time limitations, we will not address air pollution control devices in today's session. Rather, we will focus on the first five areas. EPA does, however, offer many courses that concentrate on air emissions and such devices.
- Each of these areas must be examined within the context of the whole facility inspection. Many problems and violations are encountered in relation to the waste feed parameters, the facility's recordkeeping practices, the process controls and monitors, residue testing and analysis, and, of course, itself.
- The presentation is divided into two parts: incinerators and BIFs. We will go through the key points of an incinerator inspection, then the key points of a BIF inspection. Note that the discussion of records for incinerators and BIFs is grouped together and will be addressed at the end of the BIF inspection section.

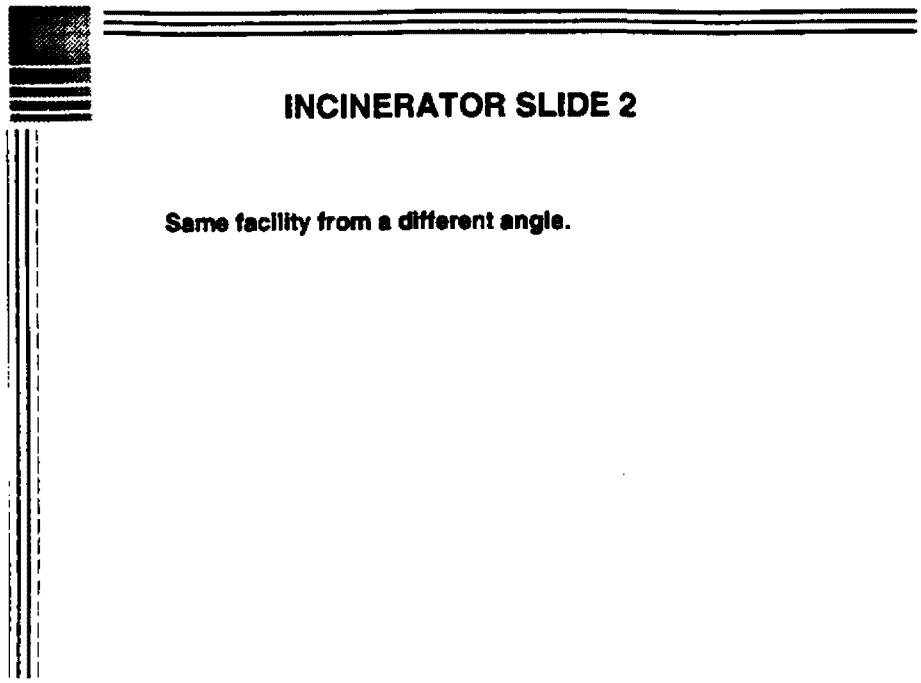
INCINERATOR SLIDE 1

This slide shows an aerial view of a large facility that includes an incinerator.

INCINERATOR SLIDE 1

KEY POINTS:

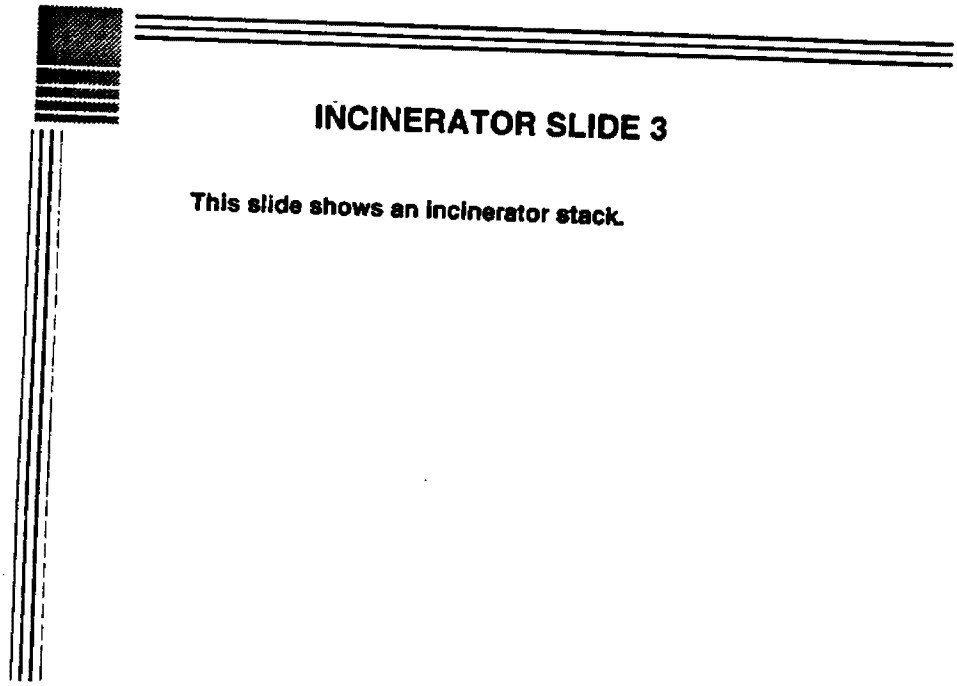
- We start our incinerator inspection with an aerial view of the incinerator. This allows the inspector to gain a perspective of the facility and its surrounding area. During an actual inspection, this is more likely to be gained by simply driving to and around the facility and looking at facility maps.
- Notice the surrounding area, which includes:
  - — Wetlands
  - — Surface water
  - — Vegetation
  - — No residential areas or homes.
- Why are these things important? What condition do they appear to be in?
  - — Stressed vegetation may indicate contamination from the facility
  - — Unusual films on waterways may indicate spills.
- What kinds of activity do you engage in pre-inspection?
- Confer with Air program inspector to ensure facility does not have requirements inconsistent with RCRA.



INCINERATOR SLIDE 2

KEY POINTS:

- This slide gives us a view of the same facility from another angle.
- During an actual facility inspection, the inspector may not be able to see all of the areas at the facility this clearly, but this does allow us to become familiar with the facility.
- As we move closer to the facility, we can again notice the surrounding environment. We also can observe other activities at the facility, such as:
  - Wastewater treatment
  - Surface impoundments
  - Waste storage
  - Transportation.
- The inspector should be aware that the facility may have other regulated units which need to be addressed during the inspection.



INCINERATOR SLIDE 3

KEY POINTS:

- This slide depicts a very revealing portion of the facility—the stack.
- Notice the color and consistency of the plume. It is white and billowy because it contains mostly steam. Keep this in mind as we look at the next slide.

INCINERATOR SLIDE 4

This slide shows an incinerator stack with emissions.

INCINERATOR SLIDE 4

KEY POINTS:

- This slide also depicts an incinerator stack.
- Notice the color and consistency of the plume here. It is black and thick.
- What might this indicate about the operation of this unit?
  - — Maintenance problems
  - — Possibly exceeding allowable emissions
  - — May not be operating efficiently
  - — Presence of combustion monitoring equipment.
- Note that RCRA inspectors may not be certified to "read" plumes; however, general observations such as this can be very useful.

INCINERATOR SLIDE 4 (continued)

KEY POINTS:

- In addition, the following training courses are available for an inspector to become certified to read plumes:

  — Air Pollution Training Institute
  Research Triangle Park, N.C.

  — Air Pollution Compliance Training
  Demonstration Center, New Brunswick, N.J.

INCINERATOR SLIDE 5

This slide shows a container storage area at a facility.

INCINERATOR SLIDE 5

KEY POINTS:

- Now that we are generally acquainted with the incinerator facility, we will begin to look at the incinerator operations. First, we are going to trace the hazardous waste from storage to its introduction into the combustion unit.

- This slide shows an outdoor container storage area. This area would be subject to specific container requirements for TSDFs.

- Requirements to look for include:

  — Condition of containers, including open containers
  — Aisle space
  — Precipitation run-on prevention
  — Secondary containment
  — Storage of ignitable and reactive wastes
  — Proper labeling.

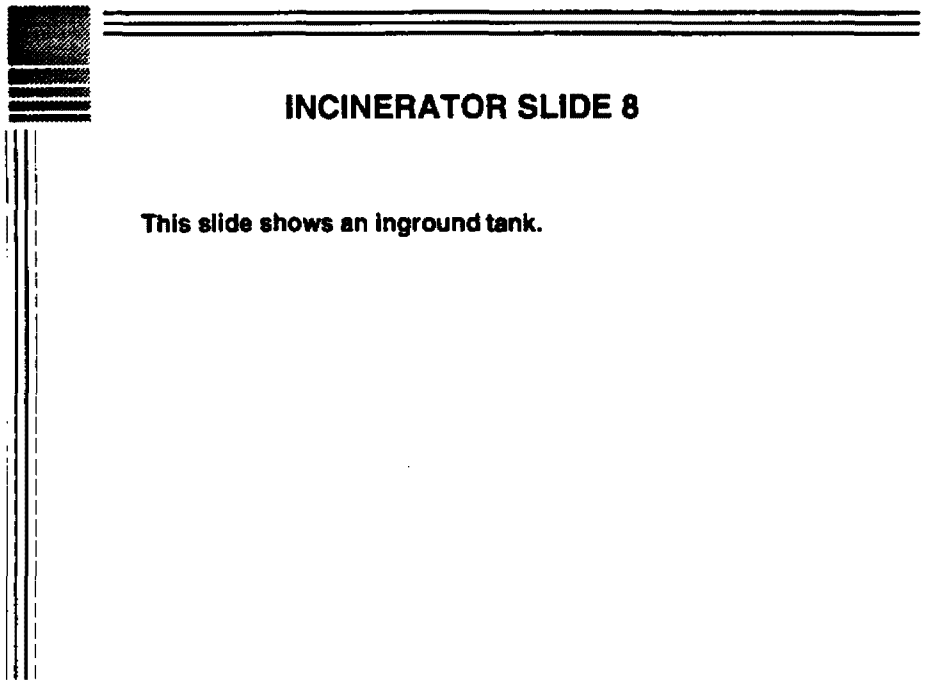
INCINERATOR SLIDES 6 AND 7

These slides show an aboveground tank farm.

INCINERATOR SLIDES 6 AND 7

KEY POINTS:

- These are aboveground storage tanks.
- Things to inspect for include:
  - Labeling
  - General condition
  - Secondary containment
  - Leak detection.
- This slide shows a close-up of the piping or ancillary equipment connected to the storage tank. It must be equipped with secondary containment, which could include trench, jacketing, or double-walled piping.



INCINERATOR SLIDE 8

KEY POINTS:

- This storage tank is inground and shows extensive piping, pumps, and monitoring equipment.
- Things to look for include labeling, secondary containment, and spill prevention.

INCINERATOR SLIDES 9 AND 10

These slides show waste transfer equipment such as pumps.

INCINERATOR SLIDES 9 AND 10

KEY POINTS:

- The following two slides depict transfer equipment and waste transfer activities.
- This slide depicts a transfer pump, located between the hazardous storage tank and the actual combustion unit.
- It is important for the inspector to follow the flow of hazardous waste from storage to the combustion unit to detect the possibility of any releases along the way, or any other potential problems.
- These are areas at a facility that are prone to spilling and leaking and require special attention during an inspection.

- In these slides we should look for secondary containment and spill prevention.
  - Condition of the pumps and containment devices is also critical, as well as the appearance of the surrounding area. The presence of waste or waste oil around the transfer equipment may be an indication of a problem.
  - Also notice the safety equipment found nearby and any emergency alarms or cutoffs.

INCINERATOR SLIDE 11

This slide shows direct transfer activities.

INCINERATOR SLIDE 11

KEY POINTS:

- This slide shows direct transfer activities at an incinerator facility.
- Notice the buckets used to collect any drippage.
- Direct transfer areas should always be closely inspected for safety features, including handling of the waste in a manner that will prevent fire or explosion.
- What would you be looking for here?

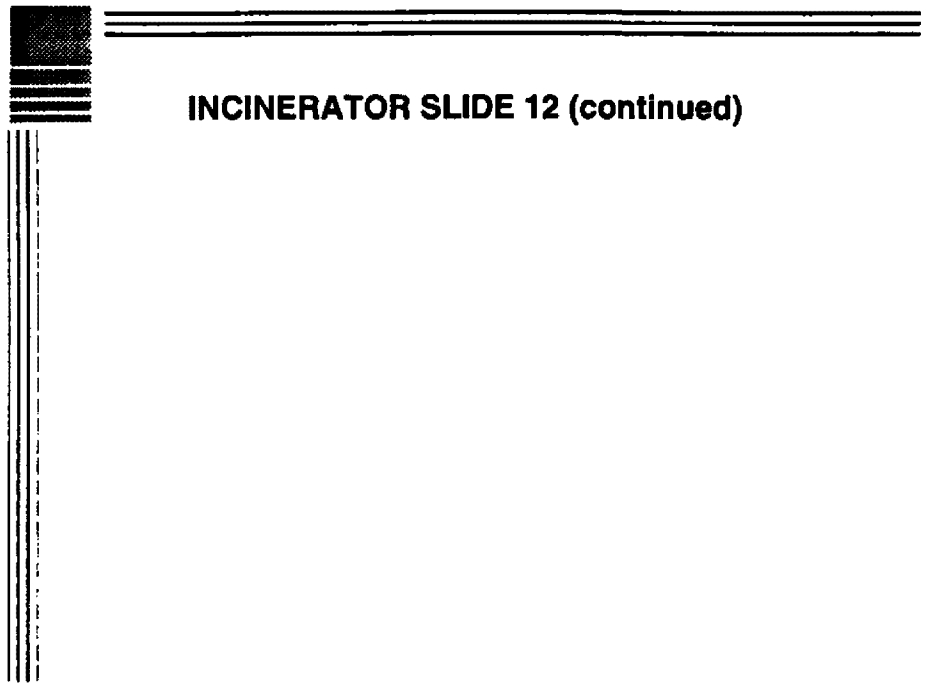
INCINERATOR SLIDE 12

This slide shows a liquid injection nozzle.

INCINERATOR SLIDE 12

KEY POINTS:

- In this slide the hazardous waste has reached the actual combustion device.
- This is a pressure nozzle, or gun, at a liquid injection incinerator. It represents only one of the many mechanisms used to feed hazardous waste into an incinerator. The "gun" is a device that uses high pressure or steam to atomize liquid waste for more complete destruction in a liquid injection incinerator. Usually, this is a continuous feed process as opposed to drum feeding, which is considered a batch process.
- Notice the general condition of the device. The atomizer must be maintained well, as it is prone to clogging.
- Some of the parameters that should be noted include atomizer fluid pressure, flow rate, and waste feed cutoff mechanism because they are often specified in the permit.
- Waste feed cutoff is a critical aspect of any incinerator. The purpose of the automatic waste feed cutoff (AWFCO) system is to shut off waste feed to the incinerator whenever the operating parameters deviate from the limits set in the permit.
- Waste feed cutoff for a liquid feed is generally accomplished by the activation of a cutoff valve, which should be interlocked to all of the required continuous monitoring devices. These include monitors of temperature, combustion gas velocity, and carbon monoxide in the stack gas.



INCINERATOR SLIDE 12 (continued)

INCINERATOR SLIDE 12 (continued)

KEY POINTS:

- The permit should include a provision that establishes both a range and a level, somewhat beyond that range, at which the AWFCO system must be activated.
- Incinerator regulations require weekly testing of the AWFCO system. The inspector should be able to find evidence of this testing in the facility's log.
- In addition, the inspector should witness simulated and actual cutoffs.
- The facility should have records documenting cutoffs and their causes. The frequency of cutoffs is sometimes an indicator of the unit's ability to operate under steady state conditions, i.e., several cutoffs may indicate non-steady state operation of the unit. Frequent cut-offs could also be triggered by faulty monitoring equipment.

INCINERATOR SLIDES 13 AND 14

These slides show hazardous waste drums being fed to a rotary kiln incinerator.

INCINERATOR SLIDE 13 AND 14

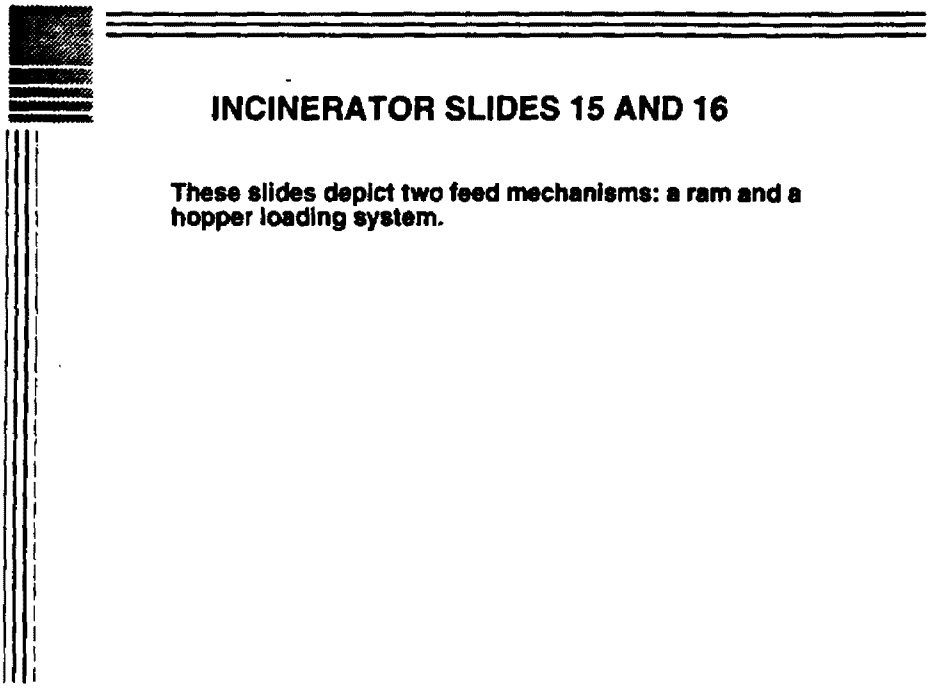
KEY POINTS:

- The following slides show drums being fed into a rotary kiln incinerator.
- This first slide also includes some direct transfer activity. A liquid waste being piped from a tanker truck to, possibly, an underground tank. This may indicate another regulated unit. Notice also the different types of drums, fiber and metal. Feeding different types of material may affect the temperature and efficiency of the unit.
- Drums being fed may increase the chances of puffing around kiln seals, possibly leading to fugitive emissions.
- This type of waste feed system is not fully automated; the drums must be loaded onto the conveyor by forklift.
- This type of drum feed is considered a batch process as opposed to the continuous liquid feed we have just looked at. Because of this, the cutoff issue is different. The facility should not feed hazardous waste into the kiln if any of the cutoff-related parameters are exceeded. They can do so only if all operating parameters are back to normal.

INCINERATOR SLIDE 13 AND 14 (continued)

KEY POINTS:

- For permitted incinerators, there may be language in the permit that specifically addresses how AWFCOs should be handled (e.g., "other operating parameters must be maintained while hazardous waste is being treated in the unit").



INCINERATOR SLIDE 15 AND 16

KEY POINTS:

- This slide shows a ram feed. The guillotine fire door closes, cutting off the waste feed from the combustion chamber.
- This slide shows a hopper loading system. The waste is loaded into the top portion of the hopper, then the trap door is opened to allow the waste to fall into the combustion chamber.
- These systems would also be considered batch feeds. How might a waste feed cutoff be accomplished for a ram or hopper feed mechanism?
  - — Fire door

INCINERATOR SLIDES 17 AND 18

These slides show a liquid injection incinerator (photo and schematic).

INCINERATOR SLIDES 17 AND 18

KEY POINTS:

- This slide depicts a liquid injection incinerator.
- Liquid injection incinerators are usually single chamber units, either vertical or horizontal.
- Liquid injection incinerators are used primarily for the destruction of liquid organic wastes. These units require minimal labor because of the relative ease of handling pumpable liquids compared to solids.
- Effective atomization is key to successful operation of a liquid injection incinerator. The viscosity of the waste liquid should be less than 750 SSU (Saybolt second units) to permit the atomizer to break the liquid into small droplets.
- The incinerator typically runs at an equilibrium temperature of approximately 1500 degrees Fahrenheit. The combustion zone temperature range for a given unit will be specified in the facility permit.
- Liquid injection incinerators are typically equipped with transfer stations, like the ones we have looked at, as well as storage and blending tanks.

INCINERATOR SLIDES 17 AND 18 (continued)

KEY POINTS:

- Liquid injection incinerators are typically equipped with transfer stations, like the ones we have looked at, as well as storage and blending tanks.

- Ash-removal systems are generally unnecessary for liquid injection incinerators because of the low ash content of most liquid wastes.

INCINERATOR SLIDES 19 AND 20

These slides show a rotary kiln incinerator (photo and schematic).

INCINERATOR SLIDES 19 AND 20

KEY POINTS:

- This slide depicts a rotary kiln incinerator.
- Rotary kiln incinerators are used for the destruction of both solid and liquid hazardous wastes. They can be used for the destruction and ultimate disposal of any form of waste. Whole drums can be fed by a conveyor belt into the kiln as we have already seen during discussion of the waste feed area.
- Poor candidates for incineration in a rotary kiln are wastes with high moisture content or high concentrations of toxic metals.
- The primary combustion chamber is typically operated from 1470 to 2900 degrees Fahrenheit. The system is generally equipped with a secondary combustion chamber to allow for the oxidation of combustible solids suspended in the gas streams from the kiln.
- Rotation of the shell provides transportation of the waste through the kiln and enhances mixing of the waste with combustion gases.

INCINERATOR SLIDES 19 AND 20 (continued)

KEY POINTS:

- Two types of rotary kilns are common: cocurrent and countercurrent. In cocurrent rotary kilns, the burner is located at the front end where the waste is fed (pictured). In countercurrent rotary kilns, the burner is located at the end opposite the feed.

- Because rotary kiln incinerators are often used to incinerate wastes with high solids content, most are equipped with ash-collection systems.

INCINERATOR SLIDES 21 AND 22

These slides depict a fixed hearth incinerator (photo and schematic).

INCINERATOR SLIDES 21 AND 22

KEY POINTS:

- A third type of incinerator is pictured here. This is a fixed hearth incinerator.
- The combustion chamber consists of an immobile bed. A grate system allows air to flow over and under the waste to enhance combustion. The combustion chamber is typically rectangular or cylindrical in shape.
- The fixed hearth incinerator may handle a variety of wastes including both solids and liquids. Hydraulic ram or hopper systems usually load 400 to 2400 pounds per hour of waste into the combustion chamber, although smaller units are often loaded manually.

INCINERATOR SLIDES 23 AND 24

These slides depict a fluidized bed incinerator (photo and schematic).

INCINERATOR SLIDES 23 AND 24

KEY POINTS:

- This slide depicts a fluidized bed incinerator. Although fluidized bed incinerators represent only a small fraction of existing incinerators, some design and operating advantages are likely to result in increased use of these units.

- Fluidized bed incinerators are typically small, compact combustors that provide efficient destruction of a variety of wastes, including solid, liquid, and gaseous waste.

- The main combustion chamber consists of a bed of hot inert material which is fluidized with air. Gas is passed upwards through a column of fine particulates at a sufficient velocity to cause the solids/gas mixture to behave like a liquid. Bed temperature is typically maintained from between 840 and 1650 degrees Fahrenheit. Waste incineration occurs in and above the bed where temperatures can reach 1800 degrees.

- Aside from the temperature, the primary design factor to be considered is the gas velocity, which must be high enough to maintain bed fluidization, but low enough to prevent bed attrition.

INCINERATOR SLIDES 23 AND 24 (continued)

KEY POINTS:

- It is generally accepted that fluidized beds meet the definition of incinerator, although there may have been some confusion in the past.

INCINERATOR SLIDE 25

This slide depicts a mobile incinerator.

INCINERATOR SLIDE 25

KEY POINTS:

- A type of incinerator that is somewhat of an anomaly in terms of inspection is the mobile unit.
- Mobile incinerators are typically employed for site cleanup or remediation and may be transported from site to site and set up relatively quickly.
- The units themselves may be rotary kilns, infrared, or fluidized bed incinerators. The specifics of the inspection depend on which type of combustion unit the mobile incinerator actually is.
- While the units are often used for the combustion of contaminated soil, they may handle a variety of wastes depending on the design.
- Mobile incinerators are permitted for each individual site at which they operate, unless the site is a Superfund site, in which case the unit need only meet the equivalent operating conditions. Individual states may still require a permit at Superfund sites.

INCINERATOR SLIDE 26 AND 27

These slides depict a modern control panel.

INCINERATOR SLIDES 26 AND 27

KEY POINTS:

- Now we will address the process controls and monitors.
- These slides should enable you to become familiar with some of the process controls and monitoring systems present at combustion facilities.
- This is a state-of-the-art control and monitoring panel at an incinerator facility. It allows you to look at the entire process flow from waste feed to stack, providing monitoring information at many different points in the process.
- The most important point is that monitoring equipment must be functional. Facility operators are required to perform regular maintenance and testing of equipment at the facility. Records of inspections and maintenance should appear in the facility operating records. What can an inspector do to verify that the maintenance schedule is maintained? What are some indicators that a facility is not performing maintenance and testing on process monitors and controls?
  - — Check facility log
  - — Inconsistent inspection/testing records
  - — Compare gauge readings taken on the unit with control room readings.

INCINERATOR SLIDES 26 AND 27 (continued)

KEY POINTS:

- We see the waste feed cutoff indicator and other emergency signals. Computers at the facility generate records from this information.

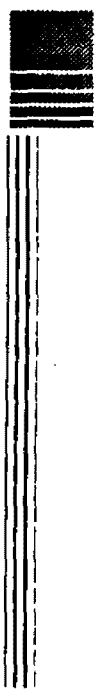
INCINERATOR SLIDE 28

Slide depicting an older control monitor.

INCINERATOR SLIDE 28

KEY POINTS:

- These slides illustrate the variety of monitors that may be encountered at different facilities by showing older types.
- When relying solely on these controls, as opposed to modern control panels which illustrate the entire process, it is difficult for facility operators to visualize the process flow. It is critical that the inspector be able to make the connection between the reading on a monitor and the part of the unit the monitor actually relates to.
- How are records generated from these panels?
  - — Often by an operator taking a reading as shown in the slide
- What might be a potential problem associated with using these monitors?
  - — Human error in recording



INCINERATOR SLIDE 29 AND 30

This slide shows strip charts.

INCINERATOR SLIDES 29 AND 30

KEY POINTS:

- These are examples of continuous monitors that produce a document referred to as a strip chart. The inspector can take an instantaneous reading during the inspection and will also examine the charts in the facility records for peaks indicating an abnormality, an exceedance, or a potential violation.
- This chart shows several parameters. The inspector must be conscious of what each line represents.
- At a minimum, combustion temperature, waste feed rate, combustion gas velocity, and CO must be monitored continuously. In addition, any other parameters can be specified in the permit.

INCINERATOR SLIDE 31

This slide depicts ash handling at an incinerator.

INCINERATOR SLIDE 31

KEY POINTS:

- These slides depict the removal of ash from an incinerator and ash storage at a facility.
- At many incinerators, ash resulting from combustion is removed from the unit into a hopper resembling a garbage dumpster, like the one pictured in this photo.
- The handling of ash at a facility can be critical because of the physical and chemical nature of the material. Physically, it is an extremely fine material and tends to disperse around the facility and surrounding area if not handled properly.

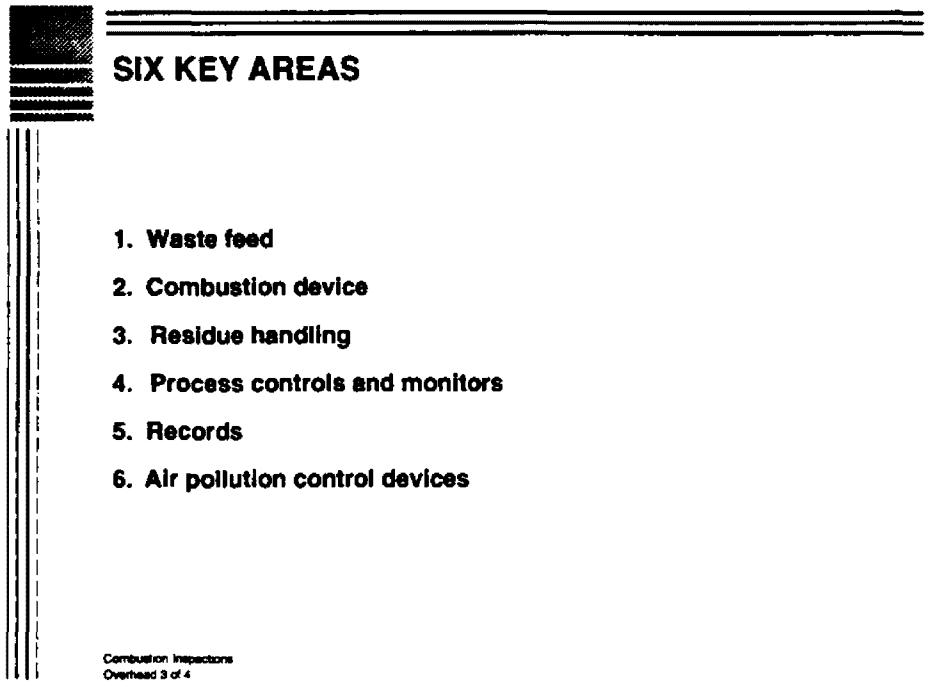
INCINERATOR SLIDE 32

This slide depicts ash handling at an incinerator.

INCINERATOR SLIDE 32

KEY POINTS:

- This slide depicts a similar ash handling practice. Notice the hood to prevent dispersion of ash at removal.
- The facility must also comply with waste identification requirements as this is a new point of generation. If the ash is derived from the treatment of listed hazardous waste(s), it would also carry any applicable listing(s).
- If the ash is not derived from a listed waste, the facility operator would have to determine, either through testing or application of knowledge, whether the ash exhibits a characteristic or not.
- In addition, for any ash classified as a hazardous waste, land disposal restriction standards, including paperwork, must be considered.
- What issues might arise regarding LDR applicability when inspecting a facility?
  - Recordkeeping
  - Treatment standards
  - Testing
  - Recordkeeping.

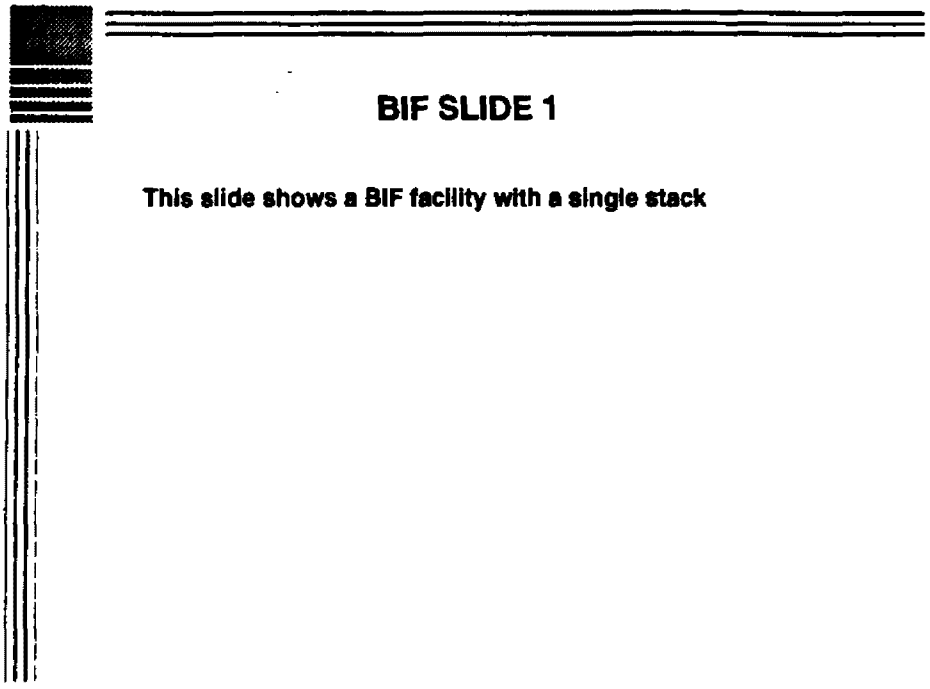


OVERHEAD #3

TITLE: Six Key Areas

KEY POINTS:

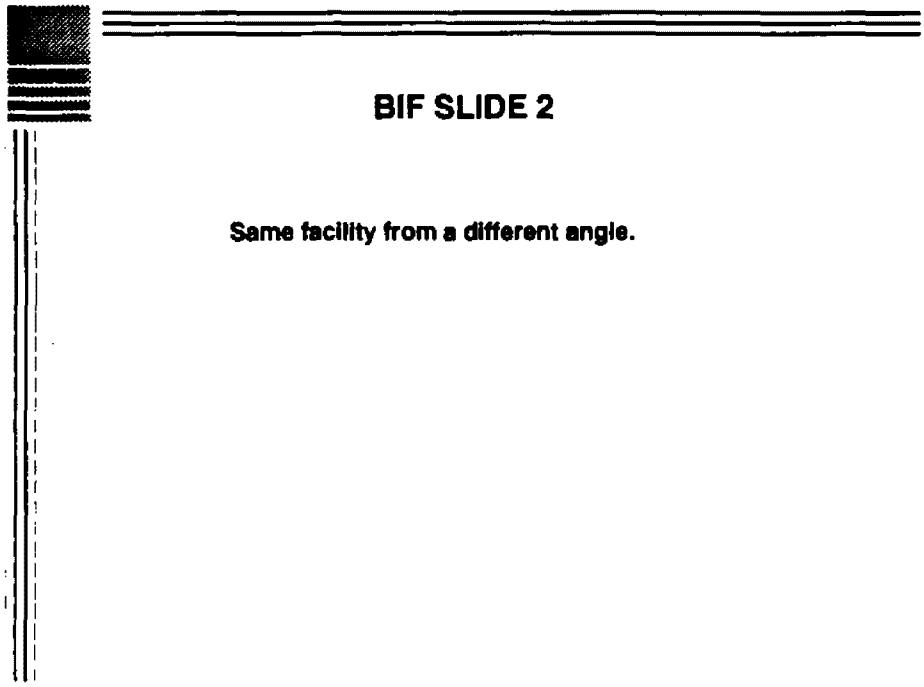
- Again, to reiterate, there are six key areas for a combustion inspection.
- We're now going to address several key aspects of the BIF inspection: waste feed combustion device, residue handling, and process controls and monitors.
- Note again that records for BIFs and incinerators has been combined and will be discussed at the end of the BIF inspection.



BIF SLIDE 1

KEY POINTS:

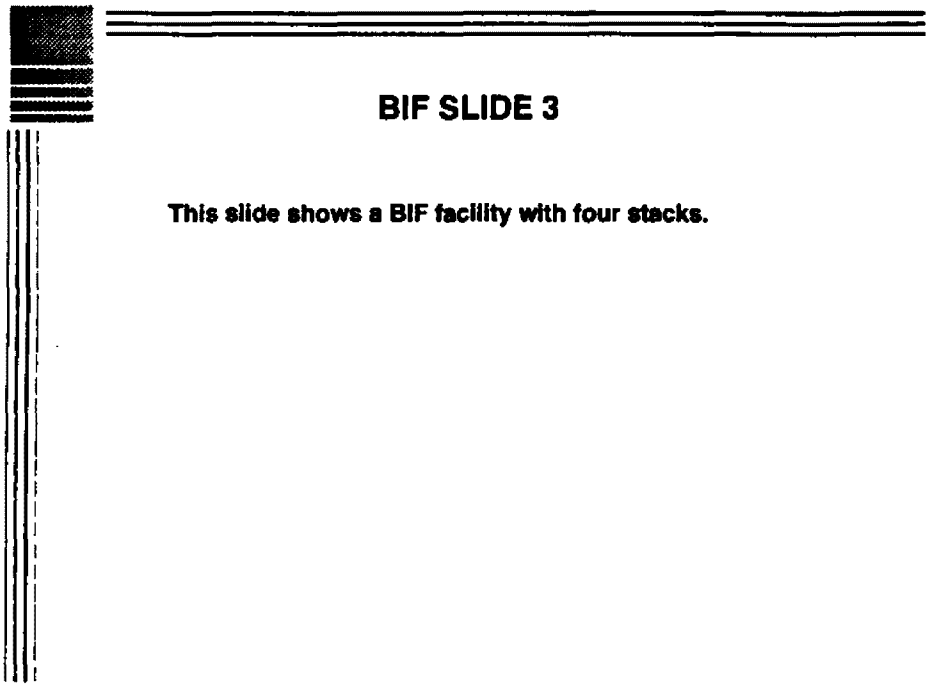
- This slide begins our inspection of a BIF facility. It gives us a general view of a BIF facility.
- Again we should look at the surrounding area, the emissions, and the general appearance of the facility.
- What are some of the other things we might pay attention to?
  - — Odor
  - — Animal life
  - — Disease vector.
- What are some of the things you might do differently when preparing for a BIF inspection as opposed to an incinerator inspection?
  - — Analyze upstream processes
  - — Check certification of compliance.



BIF SLIDE 2

KEY POINTS:

- This is the same facility from a different angle.
- What additional things can we see from this view?
  - — Storage tank



BIF SLIDE 3

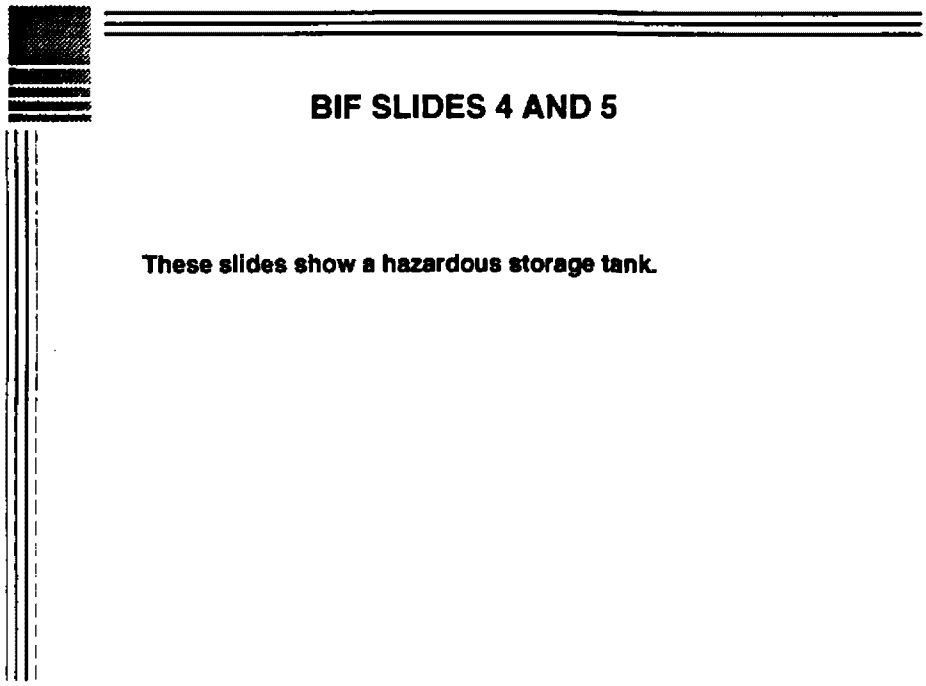
KEY POINTS:

- This slide shows a BIF facility with four stacks. What does the number of stacks tell us about the facility?

  — More than one unit
  — Allows you to confirm information found during pre-inspection activities.

- As I have already mentioned, it is helpful to take note of the emissions from the stack, as these can often be a good indication of the operating condition of a given unit.

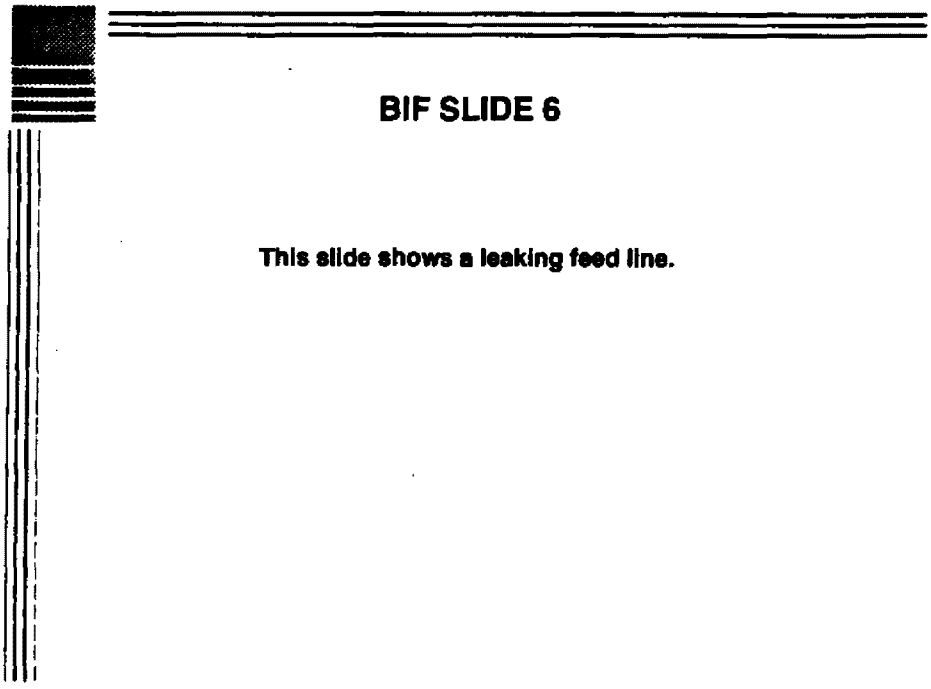
- Refer to page IV-27 of the BIF Inspection Checklist. Please note that all references given are for interim status BIFs, since these are the majority of the facilities you will be inspecting. The BIF Inspection checklist also contains guidelines for permitted facilities.



BIF SLIDES 4 AND 5

KEY POINTS:

- These slides show a hazardous waste storage tank located outside the facility (in this case a boiler).
- Once again, the inspector should follow the flow of hazardous waste from the storage area to the combustion unit.
- What type of requirements would this tank be subject to?
  - — Secondary containment
  - — Release detection
  - — Inspections
  - — Tags required by air emission standards for equipment leaks.
- Note that there may be multiple lines feeding into the BIF. Some facilities feed off gases into BIFs; this activity should be reported.



BIF SLIDE 6

KEY POINTS:

- What does this indicate?
  - — Faulty equipment
  - — Lack of inspections.
- The facility inspection log should be checked. The leaking feed line may indicate inadequate inspection throughout the entire unit.

BIF SLIDES 7 AND 8

These slides show the waste feed pump and flow meter.

BIF SLIDES 7 AND 8

KEY POINTS:

- This slide depicts a waste feed pump at a BIF.
- Details which enable the inspector to assess the waste feed pump include:
  - The general condition of the pump and the surrounding area
  - Associated gauges and monitors
  - Container storage space nearby.
- What is the waste feed cutoff mechanism associated with this feed pump?
  - Cutoff valve
- These slides depict the waste flow meter on a BIF. Typical flowmeters used to monitor liquid feed rates include rotameters, orifice meters, vortex shedding meters, positive displacement meters, and mass flowmeters. Different meters are used depending on the viscosity of the waste and the turbulence of the flow conditions.

BIF SLIDES 7 AND 8 (continued)

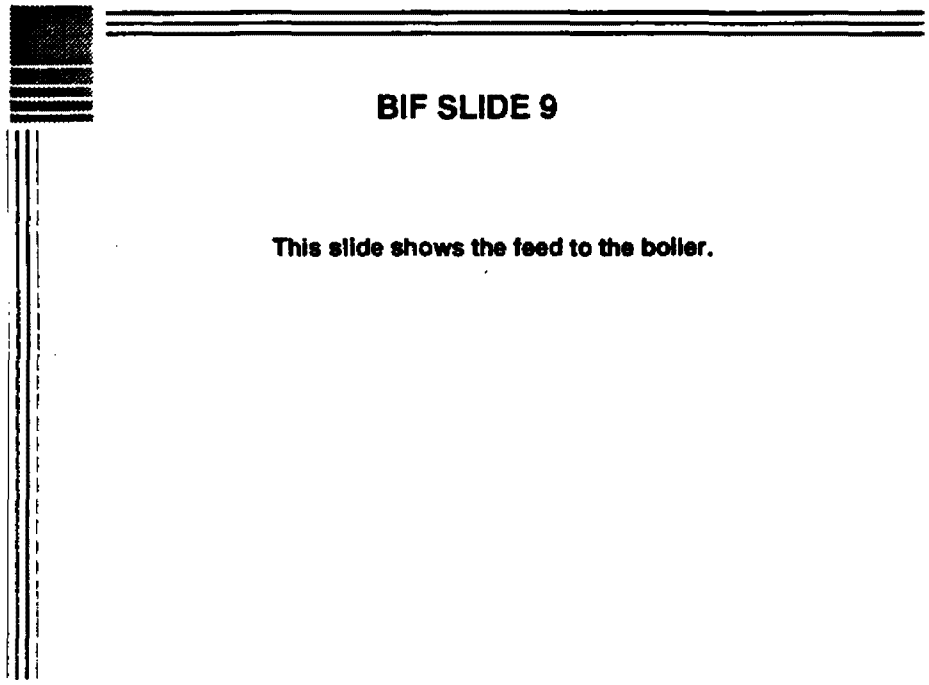
KEY POINTS:

- Flow rate must be carefully monitored and controlled, as it is critical to the operation of the unit. BIF regulations require a limit on feed rate. The feed rate is calculated by knowing the flow rate and the concentration of given constituents in the feed.

- What other information do you need, and why?

  — Whether this is the hazardous waste flow meter or a measure of the fuel mixture.

- If possible, you should obtain a reading from the flow meter at the pump and compare with the control room readings.



BIF SLIDE 9

KEY POINTS:

- The next few slides depict a waste feed mechanism at a BIF.
- BIFs use high heating value hazardous waste as a supplement or substitute for regular fuel. You should verify that the feed mechanism employs both a fuel oil line and a waste fuel line. If not, the facility may be starting up with hazardous waste under conditions not specified in their certification of compliance or permit.
- The general condition of the feed is good. Note the gauges showing flow rate.
- The cutoff mechanism, again, is critical to the operation of the unit. Waste fuel sampling and analysis may be in question. BIF regulations require extensive feed analysis including hazardous waste analysis, total feed analysis (hazardous and nonhazardous), and pumpable hazardous waste feed analysis, depending on the particular facility.

BIF SLIDE 10

Slide showing feed nozzle from inside the burner.

BIF SLIDE 10

KEY POINTS:

- This slide shows the hazardous waste feed nozzle from inside the combustion chamber.
- Note the condition of the nozzle. Is it damaged or clogged?

BIF SLIDES 11 AND 12

These slides show waste feed and auxiliary fuel feed lines.

BIF SLIDES 11 AND 12

KEY POINTS:

- This slide allows the inspector to follow the waste and auxiliary fuel feed lines to their input into the combustion chamber.
- Both lines carry hazardous waste to the main feed.
- This slide depicts the same feed lines a little bit further along. Here we can actually see the lines entering the combustion chamber.
- The thinner line here is carrying the hazardous waste fuel, while the wider pipe is feeding coal into the kiln.

BIF SLIDE 13

This slide shows a flow meter and automatic waste feed cutoff mechanism.

BIF SLIDE 13

KEY POINTS:

- This slide shows two very important devices along the waste feed line. One is the flow meter and the other is the automatic waste feed cutoff mechanism.
- Here the flow of hazardous waste is continuously monitored. The cutoff device is "downstream" of the flow meter. If at any time the flow rate exceeds parameters established in the BIF's Certification of Compliance, the automatic waste feed cutoff mechanism should be activated.
- The principles of the AWFCO system for a BIF are essentially the same as for an incinerator. One difference relates to the parameters that the system is hooked up to. At a BIF, one of the parameters is the production rate. This would not need to be monitored at an incinerator.
- Depending on the facility and on measurement capabilities, the appropriate units for measuring production rate may be represented as the raw materials feed rate, thermal input, or production rate. For example, a boiler may measure steam production.

BIF SLIDE 14

This slide shows a hydraulic gun feed mechanism.

BIF SLIDE 14

KEY POINTS:

- This slide shows a hydraulic gun feed mechanism. It is used to feed one-gallon, plastic jugs of hazardous waste (most often laboratory waste) into the kiln.
- The containers are placed into the device at one end and then "shot" into the combustion chamber.
- The device is portable and can be connected to the kiln whenever needed.
- It is important to identify this type of waste feed. This may not have been accounted for as a feed stream.
- Refer to page IV-22 through IV-23 and IV-27 of the BIF Inspection Checklist for more information on waste feed and AWFCO.

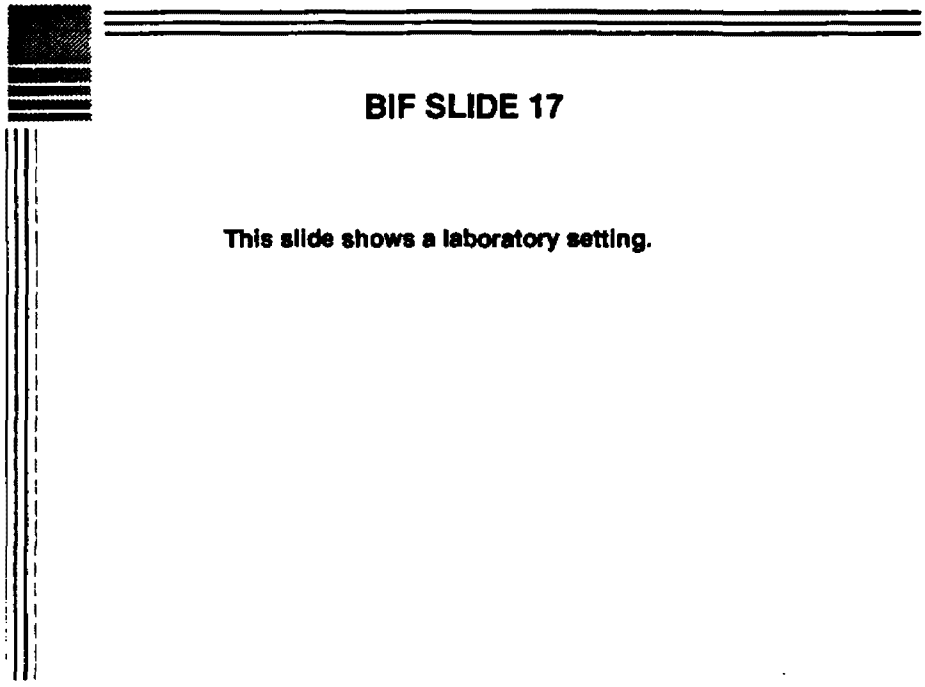
BIF SLIDES 15 AND 16

Slides showing direct transfer areas at a BIF.

BIF SLIDES 15 AND 16

KEY POINTS:

- These slides depict direct transfer areas at BIF facilities.
- While the operations are not visibly different from direct waste transfer at an incinerator, BIF regulations require management standards for direct transfer operations.
- The requirements are similar in substance to container and tank storage standards. Included are requirements for the condition of containers, spill prevention, secondary containment, and inspections and maintenance.
- EPA identified problems associated with the practice of feeding waste from transport vehicles to BIFs. These concerns include the potential for fires, explosions, and spills during transfer operations and the stratification of waste in the transport container and the potential for waste fuel flow interruptions which in turn, could affect the ability of the burner to consistently provide efficient combustion of the waste.
- Pages VI-1 through VI-4 of the BIF Inspection Checklist discuss direct transfer.



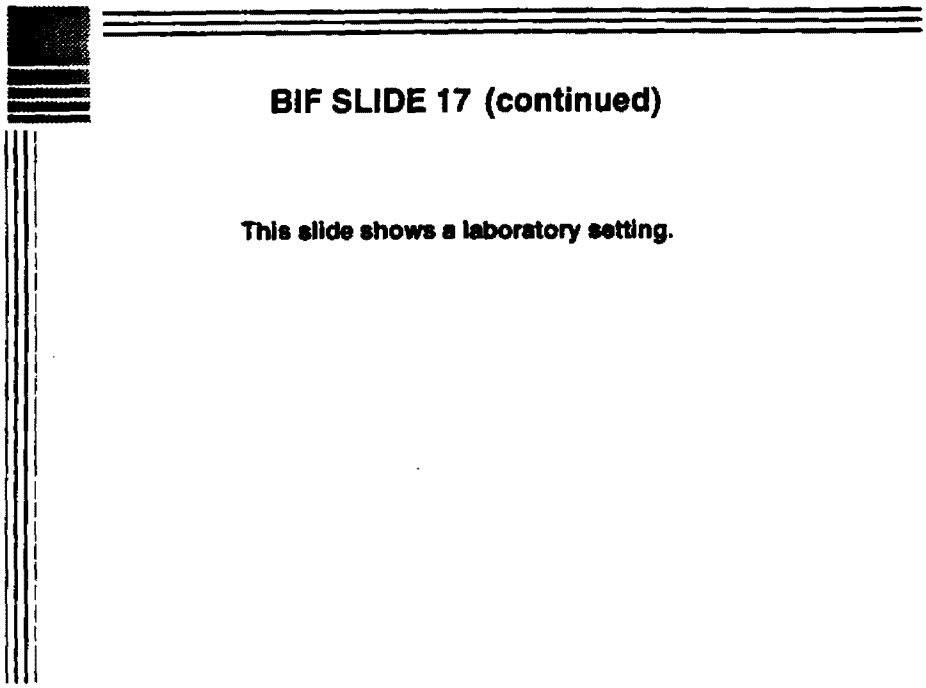
BIF SLIDE 17

This slide shows a laboratory setting.

BIF SLIDE 17

KEY POINTS:

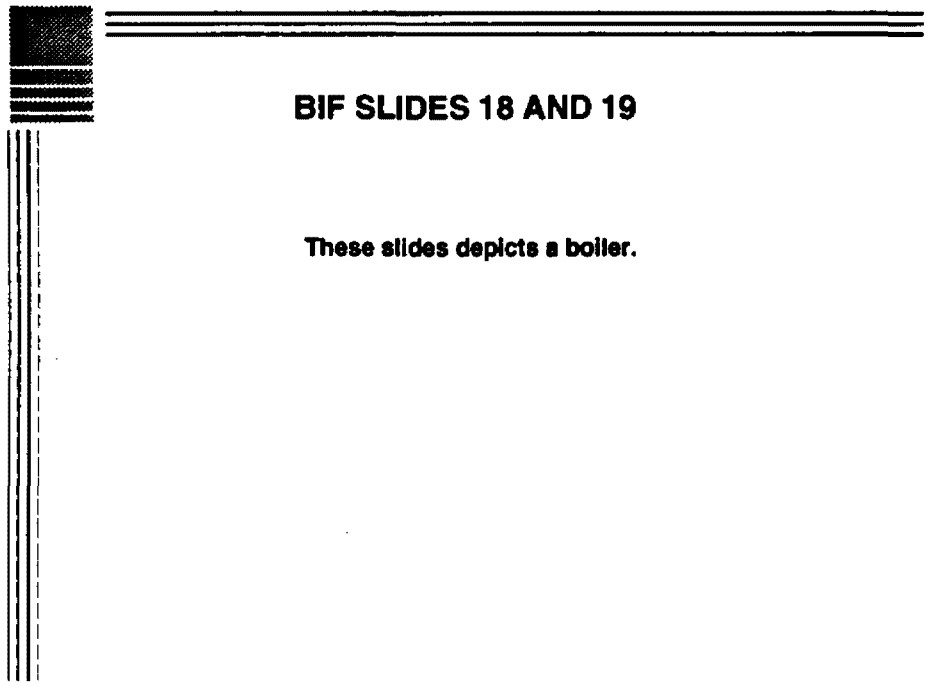
- This slide shows laboratory testing of waste. It is possible to devote an entire course to waste analysis and the waste analysis plan, but we cannot do that here. One key point: it is critical to look behind the numbers offered by a facility, focusing specifically in this case on ppm.
- A permitted facility will have an approved Waste Analysis Plan (WAP). The key for the inspector is to determine whether the facility is properly following the WAP.
- Most BIFs, on the other hand, are operating under interim status and you will need to closely examine the facility's WAP to determine its sufficiency.
- The WAP is a facility-specific document that grows and changes with the facility. It is required for all TSDFs. Waste analysis ensures compliance with the facility permit, as well as the the proper operation of the combustion device.
- Some of the factors in waste analysis include:
  - — Quantity and description of each shipment received
  - — Physical and chemical characteristics of the waste
  - — Dates and methods of treatment
  - — Sampling and testing frequency.
- The feed rate of hazardous waste into the device should be monitored and recorded. If required by the permit, specific constituents (e.g., chlorine and metals) should also be monitored and recorded.



BIF SLIDE 17 (continued)

KEY POINTS:

- Why is waste analysis important?
  - — Compliance with permit limits
  - — Proper operation of combustion device.
- The inspector should be able to determine an instantaneous feed rate. An hourly rolling average feed rate, if required, should be determined by looking at facility records.
- Look for facilities burning hazardous waste before receiving the waste analysis. This may indicate the facility is using statistical analysis to determine waste composition; this may not be appropriate at commercial BIFs such as cement kilns.
- See pages IV-3 of the BIF Inspection Checklist for more details on WAPs.



BIF SLIDES 18 AND 19

These slides depicts a boiler.

BIF SLIDES 18 AND 19

KEY POINTS:

- The term BIF actually encompasses a variety of combustion devices. The diversity of devices covered under this umbrella means that the inspector has to be especially aware of the design of the unit. While units may appear similar, it is important to note the differences.

- For purposes of this discussion, we will concentrate on boilers and cement kilns, as they make up the largest portion of the BIF regulated universe.

- First, let's take a look at boilers. Approximately 160 boilers are burning hazardous waste and are in the permitting process. A boiler is an enclosed, pressurized device constructed to produce steam or hot water for electrical generation or for on-site process needs.

- Boilers are classified either by the method of heat transfer or the fuel firing system employed.

- The two major types of fuel firing mechanisms are stoker and suspension firing. Stoker-fired boilers are designed to burn solid fuels, primarily coal, on a bed. These can be underfeed, overfeed, or spreader feed, depending on where and how the fuel is introduced into the boiler.

BIF SLIDES 18 AND 19 (continued)

KEY POINTS:

- Suspension-fired boilers typically have the capacity to burn gas, oil, pulverized coal, or a combination of these fuels. They can be subdivided into single and opposed-wall-fired boilers, tangential boilers, and cyclone-fired boilers, depending on where the burners are mounted in the device.

BIF SLIDE 20

Schematic of watertube boiler.

BIF SLIDE 20

KEY POINTS:

- The three major types of heat transfer mechanisms are watertube, firetube, and cast iron.
- This slide depicts a watertube boiler. In a watertube boiler, hot combustion gases flow around heat transfer tubes containing water, which is heated and/or converted to steam.
- The heated water or steam exits the tubes into common channels or steam outlets.
- With typical thermal efficiencies of about 80 percent, the steam/hot water production capacity of a watertube boiler ranges from 10,000 lb/hr to 250,000 lbs/hr.
- Watertube boilers may burn coal, gas, and other fossil and non-fossil fuels.

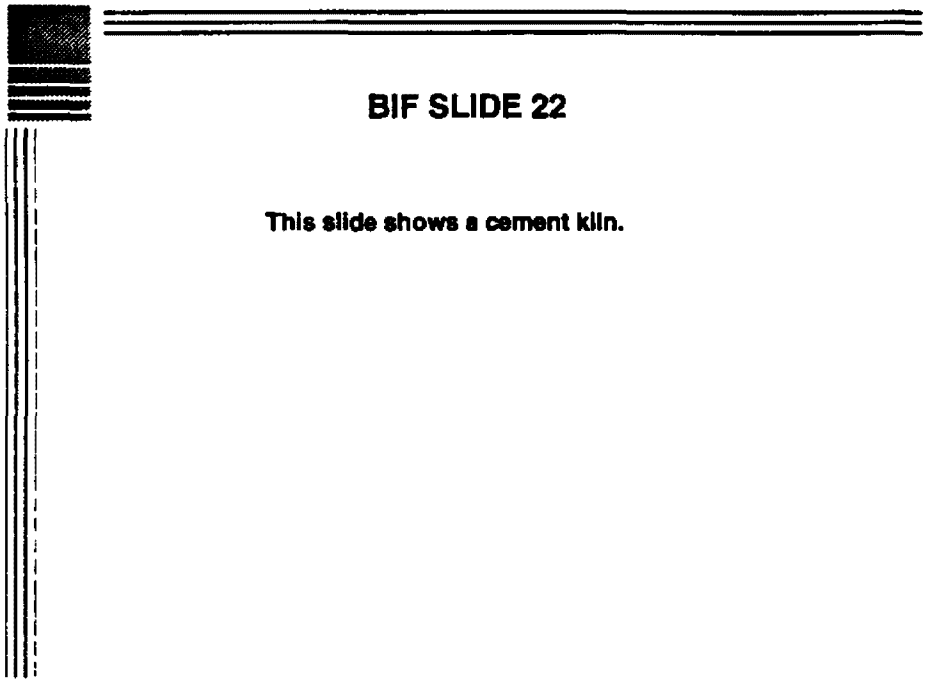
BIF SLIDE 21

Schematic of firetube boiler.

BIF SLIDE 21

KEY POINTS:

- This slide depicts a firetube boiler. In a firetube boiler, hot combustion gases flow through the inside of tubes, while water, steam, or other fluids to be heated flow outside and around the tubes.
- Firetube boilers are usually limited to a thermal input of 30 million Btu/hour, and the pressure of steam produced ranges from 165 to 265 pounds per square inch.
- Firetube boilers generally have substantially smaller capacities than watertube boilers and primarily burn oil or gas.
- Finally, cast iron boilers (not pictured) utilize irregularly shaped heat exchangers and, therefore, cannot be classified as either firetube or watertube. They generally are used to produce low pressure steam or hot water for commercial or institutional establishments.



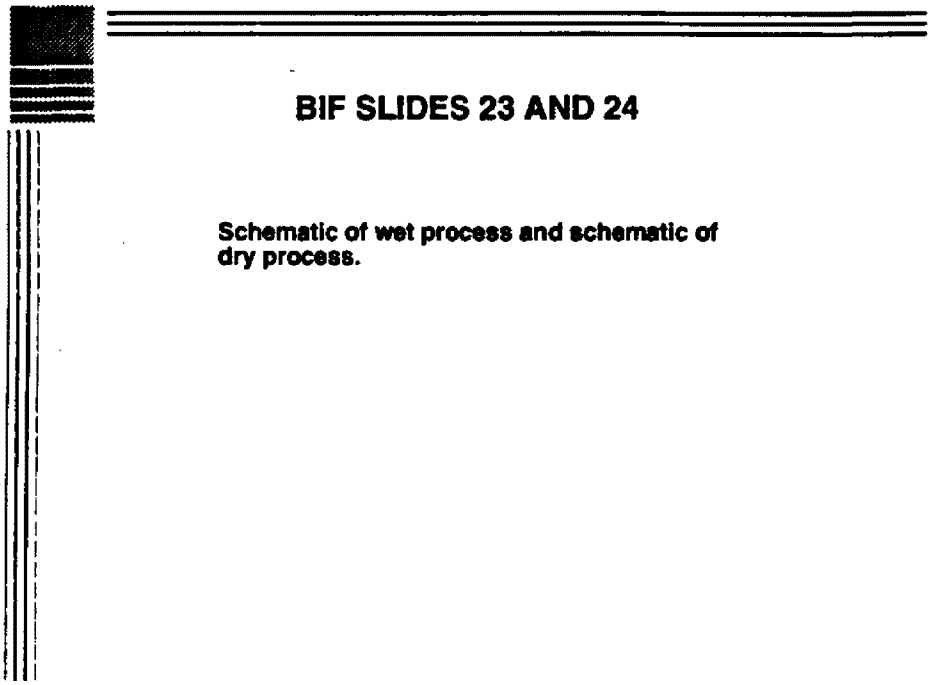
BIF SLIDE 22

This slide shows a cement kiln.

BIF SLIDE 22

KEY POINTS:

- The regulatory definition of industrial furnace includes 12 devices. For the purposes of this discussion we will concentrate on cement kilns, shown on this slide, as they are the most prevalent.
- Cement kilns are horizontally inclined rotating cylinders, refractory lined and internally fired, to calcine a blend of limestone and shale to produce Portland cement.
- Combustion gases and raw materials move counterflow in kilns. The kiln is inclined, and raw materials are fed into the upper end while fuels are normally fed into the lower end. The raw materials eventually begin to blend between 2250 and 2700 degrees Fahrenheit to form clinker product.
- Cement kilns range from 60 to 760 feet long and 6 to 25 feet in diameter.
- Kiln emissions are typically controlled by fabric filters or electrostatic precipitators (ESPs).
- There is a dry and a wet process.



BIF SLIDES 23 AND 24

KEY POINTS:

- In the wet process, limestone and shale are ground, mixed with water, and fed into the kiln in slurry form. This slurry usually contains 30 to 35 percent water.
- Wet process plants use longer kilns than dry process plants. On average, they are 450 to 750 feet, to obtain the necessary heat transfer for water evaporation.
- With wet processes, it is important to verify that hazardous waste is not being substituted for water.
- This is the dry process. In the dry process, raw materials are ground dry and fed into the kiln. At some facilities a preheater and/or precalciner is used.
- Dry kilns are typically more thermally efficient than wet kilns.
- The average dry process kiln has a capacity of 360,000 tons of clinker per year, while the wet process kiln produces on average 260,000 tons of clinker per year.

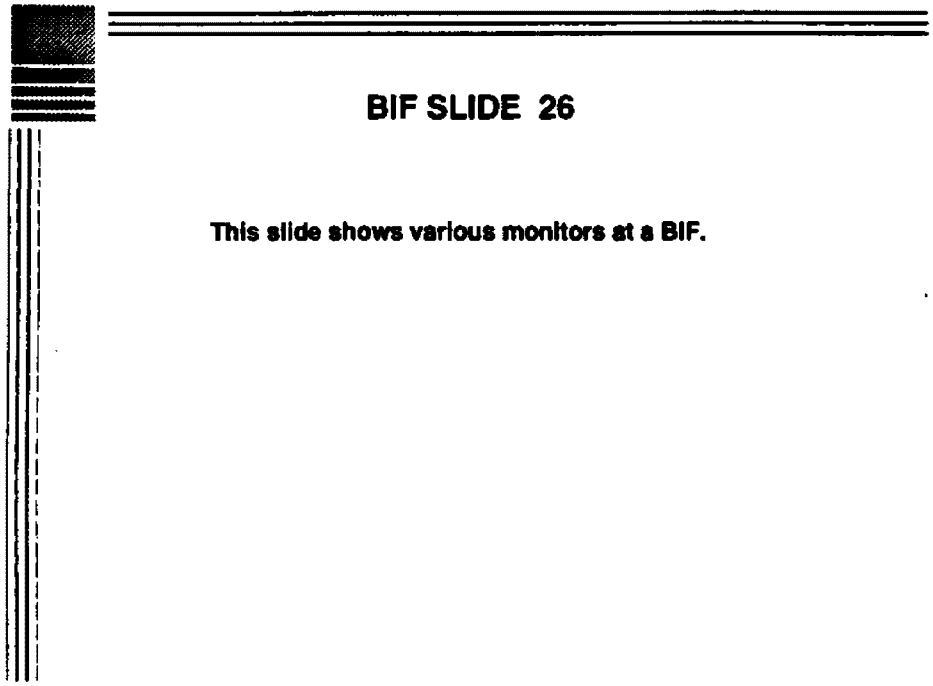
BIF SLIDES 25

These slides show an optical pyrometer at a cement kiln.

BIF SLIDE 25

KEY POINTS:

- These slides show an optical pyrometer at a cement kiln.
- Optical pyrometers are typically used to measure the temperature of the furnace wall or an object within the furnace, but also can be used to measure the combustion gas temperature.
- The pyrometer will normally require calibration. The effects of cement kiln dust should be considered when calibrating, but in most cases, kiln dust should not affect the ability of the pyrometer to detect changes in combustion zone temperature.
- In most cases, optical pyrometers and thermocouples are used together. The inspector can then compare readings between the two.



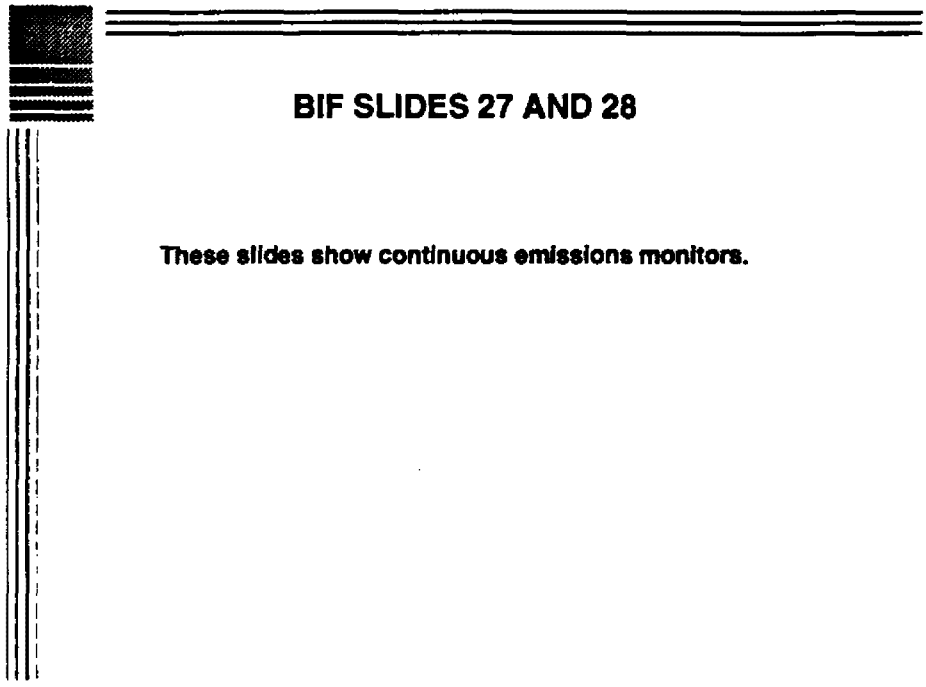
BIF SLIDES 26

KEY POINTS:

- These slides show various monitors at a BIF facility. The monitors, including actual gauges and meters, do not differ significantly from incinerators.

- One aspect that differs slightly is the requirement for process monitoring. Parameters include the following as appropriate:

  — Feed rate of total hazardous waste
  — Feed rate of total pumpable hazardous waste
  — Feed rate of metals
  — Total hazardous waste feed streams
  — Total pumpable hazardous waste feed streams
  — Total feed rate ash in all feed streams
  — Maximum combustion chamber temperature
  — Production rate
  — Maximum flue gas temperature entering PM control devices.



BIF SLIDES 27 AND 28

These slides show continuous emissions monitors.

BIF SLIDES 27 AND 28

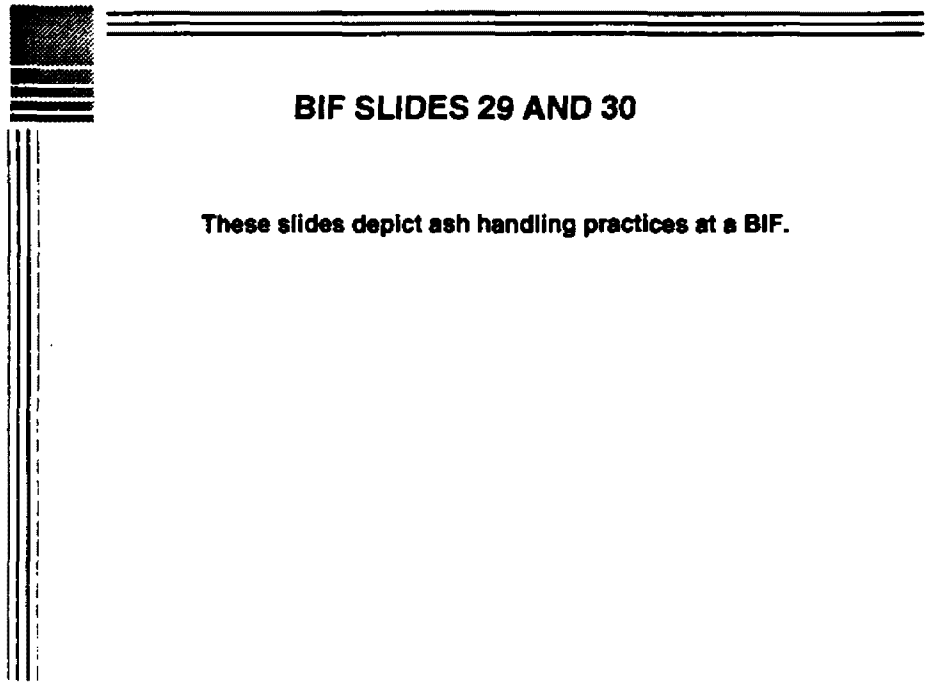
KEY POINTS:

- This slide shows CEMs at a BIF. Continuous emissions monitoring is required for CO and O_2, and under certain conditions, hydrocarbons.
- Performance specifications for CEMs are provided in detail in Appendix IX of the BIF rule.
- The owner or operator must establish a QA program for the evaluation and monitoring of CEM system performance. At a minimum this must include:
  - — Daily calibration checks
  - — Daily system audit
  - — Quarterly calibration error (CE) test
  - — Annual performance specification test.
- Calibration seems to cause difficulties for both inspectors and facility personnel. It is often not performed accurately by facility personnel. The facility should always properly follow manufacturer's instructions for calibration.
- The facility may continue normal operations, including hazardous waste feed, during the short calibration period needed by state-of-the-art CEMs. A calibration time of 15 to 20 minutes is typical for each CEM.

BIF SLIDES 27 AND 28 (continued)

KEY POINTS:

- What should be done to verify calibration of equipment while on an inspection?
  - — Check records for evidence of inspection and maintenance.
  - — Test the monitor yourself or ask to see the person who normally performs calibration do an actual calibration.
  - — Check to see if the facility has a procedure for calibrating equipment. Are they aware of the manufacturer's recommendations?
  - — Compare actual calibration procedures with manufacturer's recommendations.
- Refer to page IV-4 of the BIF Inspection Checklist.



BIF SLIDES 29 AND 30

These slides depict ash handling practices at a BIF.

BIF SLIDES 29 AND 30

KEY POINTS:

- Although many of the residual materials will be the same at a BIF as at an incinerator, the regulations for BIFs subject the operator to some additional requirements.

- When conducting the residue handling portion of the inspection, it is important to keep in mind the Bevill exemptions from the definition of hazardous waste. What are these exemptions?

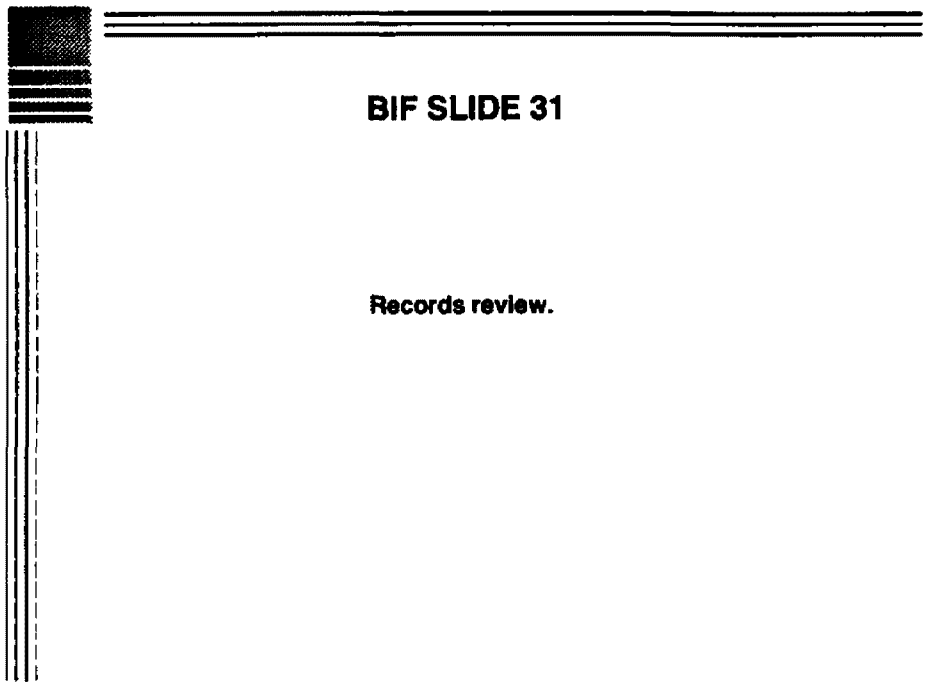
  — Utility waste
  — Mineral processing waste
  — Cement kiln dust.

- The issue arises as to whether the residue should qualify for the exemption when it is generated partially from the processing of hazardous waste. EPA determined that if the operator can show that residues generated from the co-processing of hazardous waste do not differ significantly from residues generated without processing hazardous waste, then the exemption should hold.

BIF SLIDES 29 AND 30 (continued)

KEY POINTS:

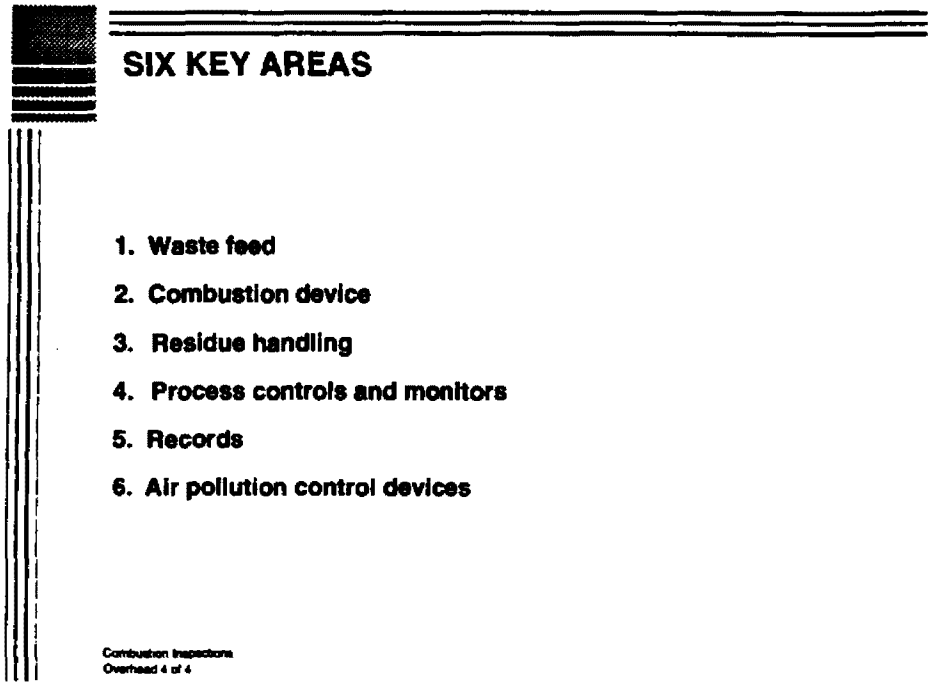
- The operator has two options. He or she can compare constituent content in residues from hazardous waste co-processing with normal residues or compare the constituent content with pre-established health-based limits.
- If the facility is using the first option, it is important for the inspector to check the comparisons closely.
- When sampling and analyzing residues, facilities must follow proper sampling procedures, such as the number of samples and the frequency of sampling.
- Residues are addressed in Section VII of the BIF Inspection Checklist.



BIF SLIDE 31

KEY POINTS:

- Now we will address some other issues relating to the facility records for incinerators and BIFs.
- This slide depicts one of the vital aspects of a facility inspection—the review of facility records.
- Operating record requirements are found in pages IV-3 through IV-6 of the BIF Inspection Checklist.
- Now we will go through an exercise that will allow you to experience hands-on the examination of incinerator and BIF records.



OVERHEAD #4

TITLE: Six Key Areas

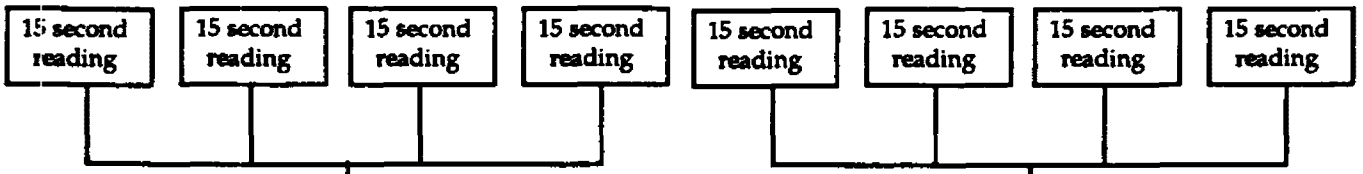
KEY POINTS:

- Now that we have completed our inspection of combustion facilities, let's take a moment to review the highlights of the inspection.
- We have raised many issues and identified scores of potential problems. The inspector must be aware of the difficulties that can arise and must take time to fully prepare for the inspection, particularly combustion facility inspections.
- As relates to incinerators and BIFs, there are six key areas: waste feed, process controls and monitors, recordkeeping, the combustion unit itself, residue testing and disposal, and Air Pollution Control Devices. Each is critical to the general operation of the facility. However, for practical purposes, we focused on the first five areas.
- As has been addressed in other modules, good evidence gathering to support any case is key to a successful inspection.
- The inspector must also keep in mind the vast amount of supporting information and resources available, both in written form and in the form of experienced personnel.
- Your Participant's Manual contains a list of additional training and other resources available to you regarding combustion inspections. Let's look at those for a moment. Do you know of any additional resources that may be available?

FACT SHEET: HOURLY ROLLING AVERAGES

I. HOURLY ROLLING AVERAGE CALCULATION

1) INSTANTANEOUS READINGS: One reading every 15 seconds

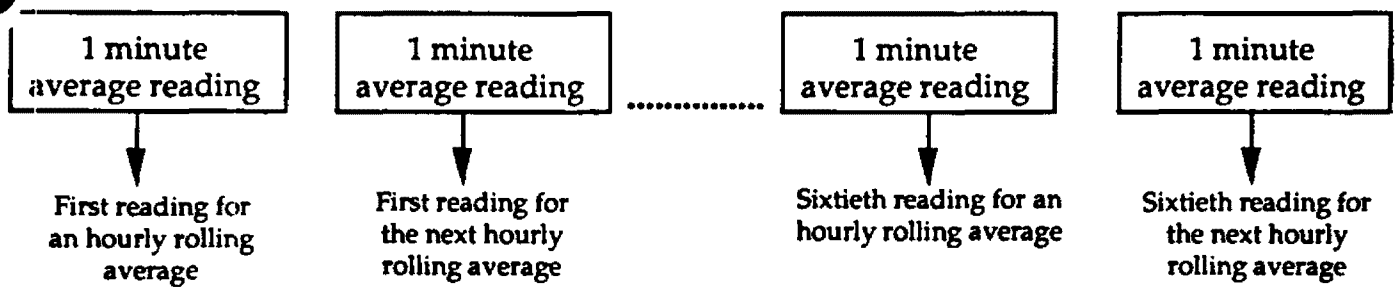


2) ONE MINUTE AVERAGE READINGS: Average of four 15 second readings

3) HOURLY ROLLING AVERAGES: Average of the sixty most recent 1 minute average readings

$$\text{1 Hourly rolling average} = \frac{\text{Sixty most recent 1 minute average readings}}{60}$$

4) SIXTY MOST RECENT ONE MINUTE READINGS:



II. HOURLY ROLLING AVERAGE FEED RATES

1) FEED RATE: based on the flow rate (for an hourly rolling average) and the concentration of the constituent of concern during that hourly rolling average period.

Feed rate (weight/time) = Flow rate (volume/time) X Concentration of Constituent in the Flow (weight/volume)

2) DATA FOR THIS CALCULATION:

a) Flow rate - continuous monitoring equipment data recorder

b) Concentration of Constituent - operating records for waste analysis for the time period of the hourly average

3) CONCERNS FOR THE INSPECTOR:

a) Concentrations and hourly rolling averages for flow rates are for the same time period

b) Units for the calculations

REFERENCES FOR BIF INSPECTIONS

Background Information: Document for the Development of Regulations to Control the Burning of Hazardous Wastes om Boilers and Industrial Furnaces, January 1987. EPA 530-SW-87-014A.

Final Enforcement Strategy for Burning Hazardous Waste in Boilers and Industrial Furnaces (includes inspection checklist), July 1992. OSWER Directive 9941.0.

Methods Manual for Compliance with BIF Regulations-Burning Hazardous Waste in Boilers and Industrial Furnaces, December 1990. EPA 530-SW-91-010.

RCRA Permit Policy Compendium, March 1992. NTIS No. PB92-111-707.

REFERENCES FOR INCINERATOR INSPECTIONS

Engineering Handbook for Hazardous Waste Incinerators, September 1988. NTIS No. PB81-248163.

Hazardous Waste Incineration Guidance Series:

Volume 1—Guidance Manual for Hazardous Waste Incinerator Permits, July 1983. NTIS No. PB84-100577.

Volume 2—Guidance on Setting Conditions and Reporting Trial BurnResults, January 1989. ORD 625/6-89-019.

Volume 3—Hazardous Waste Incineration Measurement Guidance Manual, June 1989. ORD 625/6-89-021.

Volume 4—Guidance on Metals and Hydrogen Chloride Controls for Hazardous Waste Incineration, 1988. Docket No. F-89-BBSP-S008.

Volume 5—Guidance on PIC Controls for Hazardous Waste Incinerators, 1989. Docket No. F-89-BBSP-S-0009.

Volume 7—Proposed Methods for Measurement of CO, O_2, THC, HCl, and Metals at Hazardous Waste Incinerators, 1989. Docket No. F-89-BBSP-S-0091.

Hazardous Waste Incineration Permitting Study, August 1986. NTIS No. PB87-202420.

Hazardous Waste Incineration, A Resource Document, 1988. American Society of Mechanical Engineers (ASME).

Hazardous Waste Incinerator Inspection Manual, April 1989. OSWER Directive 9938.6.

Hazardous Waste Incinerator Questions and Answers, April 1988. EPA 530-SW-88-018.

Incineration Standards: Standards Applicable to Owners and Operators of Hazardous Waste TSDFs under RCRA Subtitle C Section 3004, December 1980. NTIS No. PB81-190092.

Metals Control Efficiency Test at a Dry Scrubber and Baghouse Equipped Hazardous Waste Incinerator, September 1990. NTIS No. PB-91-101805.

Permit Writer's Guide to Test Burn Data: Hazardous Waste Incineration, September 1986. EPA 530-SW-88-024.

Permitting Hazardous Waste Incinerators, April 1988. EPA 530-SW-88-024.

RCRA Permit Policy Compendium, NTIS No. PB92-111707.

Seminar Publication: Permitting Hazardous Waste Incinerators, September 1986. ORD No. 625/4-87-017.

Small Modular Incinerator Systems with Heat Recovery, November 1979. SW-797.

Trial Burn Observation Guide, March 1989. NTIS No. PB89-179543.

Ordering Information:

NTIS	(800) 553-6847 (703) 487-4650
ORD	(513) 569-7562
RCRA Docket	(202) 260-9327

Review of Monitoring Records

A. HW Incinerator

Exercise 1: **Using the attached chart and checklist, determine if this unit has violated any of the permit conditions listed on the checklist. Below is the key for the strip chart. Please note any problems you have determining compliance based on this information.**

Strip Chart Key:

3	Organic waste / 0-12 LPM
4	Kero. flow / 0-10 LPM
5	Total air / 0-3000 SCFM
6	CO / O - 750 PPM / 1 hour avg.
7	Q tank recirc. / 0-200 LPM
9	Venturi recirc / 0-400 LPM
10	NaOH / 0-5 LPM
11	Quench make-up / 0-200 LPM
13	O_2 / 0-5 %
15	AQ waste / 0-27.5 LPM
16	Venturi diff. / 0-100"
17	C. temp. / 0-1200 degrees C
21	Venturi blowdown / 0-12

ID # _____
Date _____

II. COMPARISON OF PERMIT AND OPERATING CONDITIONS

Date _____
Time Readings Began _____
Time Readings Ended _____

A. Permit Operating Parameters	Permitted Maximum (units)	Permitted Minimum (units)	Observed Reading(s) (units)	Calculated Value
✓ 1. Temperature measured at each combustion chamber exit				
a. Primary	NA	914°C	_____	NA
b. Secondary	NA	_____	_____	NA
c.	NA	_____	_____	NA
d.	NA	_____	_____	NA
✓ 2. CO emissions measured at the stack or other appropriate location (location: stack)	100ppm (hrly rolling avg)			_____
3. O_2 emissions (location): _____	_____	_____	_____	_____
4. Flue gas flow rate or velocity measured at stack or equivalent method: (_____)	_____	NA	_____	_____

- Does CO monitor automatically correct all readings to 7% O_2 based on actual O_2 stack concentration? _____yes _____no

If no, does permit require O_2 correction? _____ Does permit specify the correction factor to be used? _____ If so, list it. _____
Date correction factor last determined _____ Describe any changes made in O_2 correction factor. _____

Permit-specified frequency for verifying O_2 correction factor _____

- If a 60-minute rolling average is required, does the observed reading reflect a 60-minute rolling average?
  _____yes _____no _____not applicable
  If no, attach data and calculate the average. _____

CHECKLIST NO. 1 (continued)

Permit Operating Parameters	Permitted Maximum (units)	Permitted Minimum (units)	Observed Reading(s) (units)	Calculated Value
5. Feed rate of each waste stream to each combustion chamber.				
Containerized waste feeds covered under item 10? _____yes _____no				
Chamber / Waste Stream (Name or Identifier)				
a. _____ organic	6.5 L/min	NA	_____	_____
b. _____ aqueous	22.0 L/min	NA	_____	_____
c. _____ _____	_____	NA	_____	_____
d. _____ _____	_____	NA	_____	_____
e. _____ _____	_____	NA	_____	_____
f. _____ _____	_____	NA	_____	_____
6. Pressure in primary chamber	_____	_____	_____	_____
7. Air pollution control:				
a. Liquid flow rate (or liquid/gas ratio) to absorber	NA	_____	_____	_____
b. Nozzle pressure in absorber	_____	_____	_____	_____
c. pH of liquid to absorber	_____	_____	_____	NA
d. Differential pressure across venturi scrubber	NA	_____	_____	_____
e. Differential pressure across baghouse	_____	_____	_____	_____
f. kV values for ESP or ionizing wet scrubbers	NA	_____ (minimum)	_____	_____
g. Current for ESP or ionizing wet scrubbers	NA	_____ (minimum)	_____	_____

B. BIF

Exercise 2: **Using the information provided, determine if this cement kiln is in compliance with the values on the completed checklist. Please note any problems you have detemining compliance.**

KEY:

KSPD	=	kiln rotational speed in rpm
COAL	=	feed rate of 1 degree fuel in tph
SUPFUL	=	feed rate of pumpable waste-derived fuel in gal/hr
FEED	=	feed rate of hazardous waste mix in tph
BZTMP	=	burn zone temperature in degrees Fahrenheit
Oxygen	=	percent O_2 at kiln exit
KEXT	=	kiln exit temperature in degrees Fahrenheit
BAGHT	=	baghouse inlet temperature in degrees Fahrenheit
CZNT	=	calcine zone temperature in degrees Fahrenheit
BHSP	=	baghouse pressure drop in inches H_2O
O2BIF	=	O_2 readings from CEM
NOBIF	=	NO reading from CEM
COBIF	=	CO reading from CEM

Note: Feed rate limits are based on hourly rolling average values.

Interim Status BIF Inspection Checklist

	Feed Stream Desription:				
Constituent	concentration (ppm)	flow rate	conv. factor (from App. A)	Actual Feed Rate	Allowable Limit
Ash					
Chlorine/Chloride					363,000 g/hr
Antimony					3630 g/hr
Arsenic					3630 g/hr
Barium					36,300 g/hr
Berryllium					726 g/hr
Cadmium					1450 g/hr
Chromium					10,900 g/hr
Lead					21,800 g/hr
Mercury					726 g/hr
Silver					3630 g/hr
Thallium					3630 g/hr

Interim Status BIF Inspection Checklist

Parameter	Allowable	Observed	Comments
CO concentration in stack gas			
HC concentration in stack gas			
Maximum cumbustion chamber temperature	2600 degrees F		
Maximum flue gas temperature entering a PM control device			

DAL	SLIPFUL	* FEED	BZ TMP	C 7M T	BG HS T	B HS P	O2 BIF	NO BIF	CO BIF	HC BIF	MR
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
0.21	941.62	148.01	2330.40	1824.71	495.13	1.74	4.89	746.95	1392.35	HI	
0.24	459.30	147.75	2259.68	1776.30	483.55	1.71	4.80	671.07	1313.32	LO	
[illegible]	906.20	147.93	2308.05	1849.68	479.67	1.80	5.15	850.75	1259.59	2	
[illegible]	910.17	147.99	2339.19	1851.37	492.53	1.80	5.16	857.75	1378.71	HI	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	905.82	147.77	2201.69	1837.64	401.45	1.77	4.99	817.65	1429.96	3	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
0.94	903.85	147.74	2184.30	1837.64	479.67	1.77	4.98	917.65	1253.05	LO	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1.07	909.69	147.94	2290.09	1837.64	487.39	1.79	5.27	857.05	1429.96	HI	
1.03	905.97	147.71	2201.69	1828.62	476.99	1.77	4.99	764.57	1169.94	LO	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1.01	907.50	154.78	2200.70	1819.83	486.75	1.84	5.10	817.25	1270.30	5	
1.00	907.54	154.78	2286.70	1828.62	494.34	1.85	5.27	854.44	1319.78	HI	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
0.79	748.32	157.54	2404.52	1821.99	489.00	1.67	4.83	944.22	740.36	6	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
0.97	708.54	154.76	2200.76	1819.83	410.25	1.67	4.53	817.26	536.24	LO	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
0.75	698.36	157.79	2706.56	1821.99	500.05	1.72	5.03	1314.96	760.97	HI	
0.97	748.32	157.44	2404.52	1819.69	488.00	1.67	4.42	944.22	413.74	LO	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
0.8	28.70	157.35	2718.72	1781.31	-478.72	1.60	5.52	528.77	81.20	8	
0.8	916.90	157.62	2792.29	1815.69	496.50	1.71	5.74	547.90	81.20	HI	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	449.80	157.44	2693.40	1743.88	500.98	1.55	5.21	565.43	191.68	9	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	0.00	157.24	2606.37	1743.88	478.72	1.55	5.19	524.49	81.20	LO	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	157.5[illegible]	2752.17	1743.88	500.98	1.60	6.80	574.57	527.37	HI	
3	[illegible]	157.27	2693.40	1725.35	491.60	1.56	5.21	411.82	564.40	LO	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	686.79	158.57	2691.77	1713.22	479.89	1.49	6.72	494.04	59.56	11	
	7.93	159.36	2715.04	1718.43	491.13	1.57	6.72	507.99	59.56	HI	
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	5.78	154.75	2450.15	1795.44	467.01	1.65	5.13	298.62	273.75	12	
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	5.27	146.32	2450.16	1712.14	473.12	1.49	4.21	298.77	59.56	LO	
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	5.13	147.44	2450.16	1795.72	483.75	1.62	6.06	549.28	459.45	HI	
	5.27	147.35	2507.45	1795.64	492.01	1.62	6.01	298.62	315.77	LO	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	4.77	143.74	2265.96	1807.78	482.12	1.63	5.25	618.41	438.38	14	
	5.44	145.30	2507.45	1809.75	505.00	1.69	6.70	618.41	439.65	HI	
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	5.06	147.77	2307.72	1820.64	478.25	1.79	5.40	702.15	711.00	15	
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	5.40	143.66	2249.44	1807.78	489.80	1.62	5.18	618.41	711.00	LO	
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	5.36	143.74	2267.72	1842.35	492.96	1.82	5.55	702.15	711.00	HI	
	5.35	143.64	2279.02	1815.93	478.28	1.76	5.40	673.55	522.52	LO	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	806.72	147.84	2293.50	1811.20	476.25	1.79	5.98	641.22	583.52	17	
	90[illegible].91	148.09	2297.64	1815.93	491.04	1.79	6.14	724.04	666.19	HI	
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	150.34	2455.94	1799.23	486.23	1.69	5.67	701.19	709.64		
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible] USED AS CREATED
[illegible] AVERAGE

BIF #2

ANDERSON ENVIRONMENTAL CORPORATION
TECHNICAL DIVISION
BIF COMPLIANCE PROGAM

Procedure: **Elemental Analysis by Flame and Graphite Furnace Atomic Absorption. Mercury Analysis by Cold Vapor Atomic Absorption.**

Reporting Units: mg/L
Month: December

	Cd	Cr	Pb	As	Ba	Tl	Ag	Be	Sb	Hg	Total Chloride
OHIO Kiln #1											
coal	<0.5	33.0	5.0	27.8	47.0	4.4	0.30	1.3	4.4	<0.5	0.53
raw feed	<0.5	15.0	<2.0	<0.5	47.0	<0.5	0.56	<0.5	<0.5	<0.5	0.97
WDF	30.9	226.0	930.0	8.4	687.0	0.6	4.32	<0.5	89.6	<0.5	2.30
CKD	28.3	64.0	494.0	14.0	340.0	4.80	2.20	1.3	10.6	<0.5	2.66
OHIO Kiln #2											
coal	<0.5	33.0	5.0	27.8	47.0	4.4	0.30	1.3	4.4	<0.5	0.53
raw feed	<0.5	15.0	<2.0	<0.5	47.0	<0.5	0.56	<0.5	<0.5	<0.5	0.97
WDF	28.9	176.0	786.0	12.0	650.0	<0.5	3.04	<0.5	83.4	<0.5	2.48
CKD	28.3	64.0	494.0	14.0	340.0	4.80	2.20	1.3	10.6	<0.5	2.66
MICHIGAN Kiln #22											
coal	<0.5	30.0	<2.0	12.6	49.0	<0.5	0.68	<0.5	1.2	<0.5	0.71
raw feed	<0.5	25.0	31.0	10.2	158.0	<0.5	<.02	0.7	<0.5	<0.5	0.35
WDF	13.4	205.0	811.0	14.6	382.0	<0.5	2.52	<0.5	42.3	2.65	2.97
CKD	7.6	35.0	485.0	29.4	379.0	12.0	1.08	1.2	3.20	<0.5	5.34
MICHIGAN Kiln #23											
coal	<0.5	30.0	<2.0	12.6	49.0	<0.5	0.68	<0.5	1.2	<0.5	0.71
raw feed	<0.5	24.0	14.0	10.0	152.0	<0.5	<.02	0.9	<0.5	<0.5	0.53
WDF	13.4	205.0	811.0	14.6	382.0	<0.5	2.52	<0.5	42.3	2.65	2.97
CKD	7.4	34.0	399.0	19.4	362.0	10.6	0.92	1.1	4.0	<0.5	3.10

B. BIF (cont'd)

Exercise 3: **Using the information provided, determine if the unit is in compliance with the values indicated on the checklist. Please note any problems you have determining compliance.**

Note: The feed rate limits are based on hourly rolling averages

Bif #3

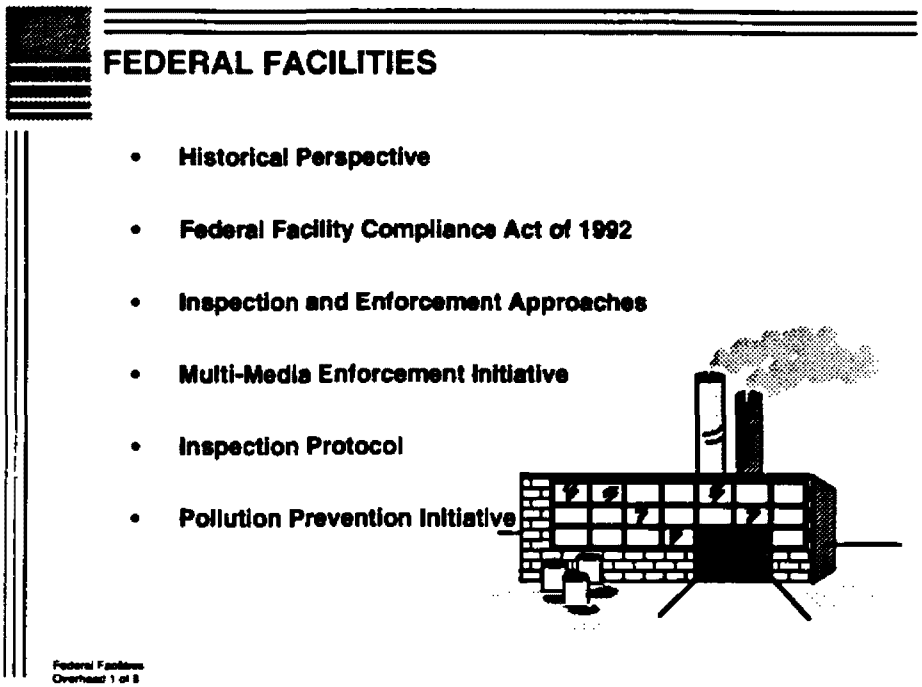
Hazardous Waste Feed Stream #1

Total Metals Input for Kilns 1-4 Month: 3 Day: 6 , 1992

Kilns# 1-4	HOUR	Ag gms/hr	As gms/hr	Ba gms/hr	Be gms/hr	Cd gms/hr	Cr gms/hr	Hg gms/hr	Pb gms/hr	Sb gms/hr	Tl gms/hr	CL gms/hr
Combined	1	0	0.0	6990	0 0	0	1795	1685	1102	24	0	96650
	2	0	0.0	7128	0.0	0	1848	1747	1018	22	0	89640
	3	0	0.0	7341	0.0	0	1863	1790	729	16	0	68130
	4	0	0.0	8309	0.0	0	2094	2020	738	16	0	71541
	5	0	0.0	10709	0.0	89	2267	2114	960	30	0	66061
	6	0	0.0	19760	0 0	472	2655	2174	1744	87	0	29128
	7	0	0 0	16507	0.0	332	2579	2239	1236	61	0	29122
	8	0	0.0	8700	0.0	0	2323	2319	25	0	0	28750
	9	0	0.0	9121	0.0	0	2407	2366	409	9	0	55086
	10	0	0.0	9643	0.0	0	2531	2428	1034	23	0	99399
	11	0	0.0	9622	0.0	16	2534	2428	1279	17	0	90442
	12	0	0.0	9254	0.0	51	2447	2353	1594	0	0	57195
	13	0	0.0	9591	0.0	56	2514	2409	1764	0	0	61970
	14	0	0.0	9464	0.0	59	2474	2364	1855	0	0	63660
	15	0	0.0	9097	0.0	35	2340	2274	1110	18	2	57248
	16	0	0.0	9035	0.0	0	2338	2338	0	90	12	73027
	17	0	0.0	9044	0.0	0	2364	2364	0	101	13	78561
	18	18	0.0	9197	0.0	0	2441	2412	181	49	7	78621
	19	56	0.0	9416	0.0	0	2514	2424	573	0	0	113514
	20	8	0.0	9188	0.0	0	2455	2443	78	0	0	35135
	21	32	0.0	9248	0.0	3	2456	2444	42	0	0	34645
	22	43	0.0	9201	0.0	4	2459	2442	58	0	0	38594
	23	2	0.0	9135	0.0	0	2460	2442	2	0	0	183271
	24	0	0.0	8940	0.0	0	2383	2360	0	0	0	242880

Interim Status BIF Inspection Checklist

	Feed Stream Desription:				
Constituent	concentration (ppm)	flow rate	conv. factor (from App. A)	Actual Feed Rate	Allowable Limit
Ash					
Chlorine/Chloride					250,000 g/hr
Antimony					20 g/hr
Arsenic					0 g/hr
Barium					20,000 g/hr
Berryllium					0 g/hr
Cadmium					500 g/hr
Chromium					3000 g/hr
Lead					1900 g/hr
Mercury					2500 g/hr
Silver					60 g/hr
Thallium					20 g/hr

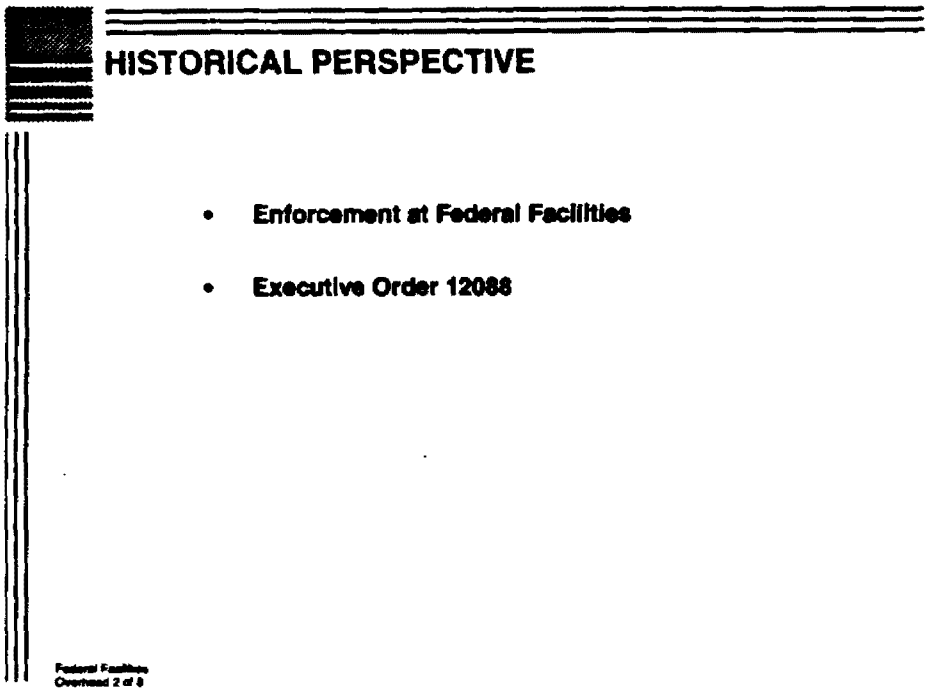


OVERHEAD #1

TITLE: Federal Facilities

KEY POINTS:

- During this presentation, we will discuss:
  - — Types of agreements entered into with Federal facilities, such as Notices of Noncompliance (NONs) and Federal Facility Compliance Agreements (FFCAs)
  - — The Federal Facilities Compliance Act
  - — Enforcement actions that can (and may not) be taken when violations occur at Federal facilities
  - — Protocol for conducting inspections at Federal facilities
  - — Various innovative initiatives relating to Federal facilities.



OVERHEAD #2

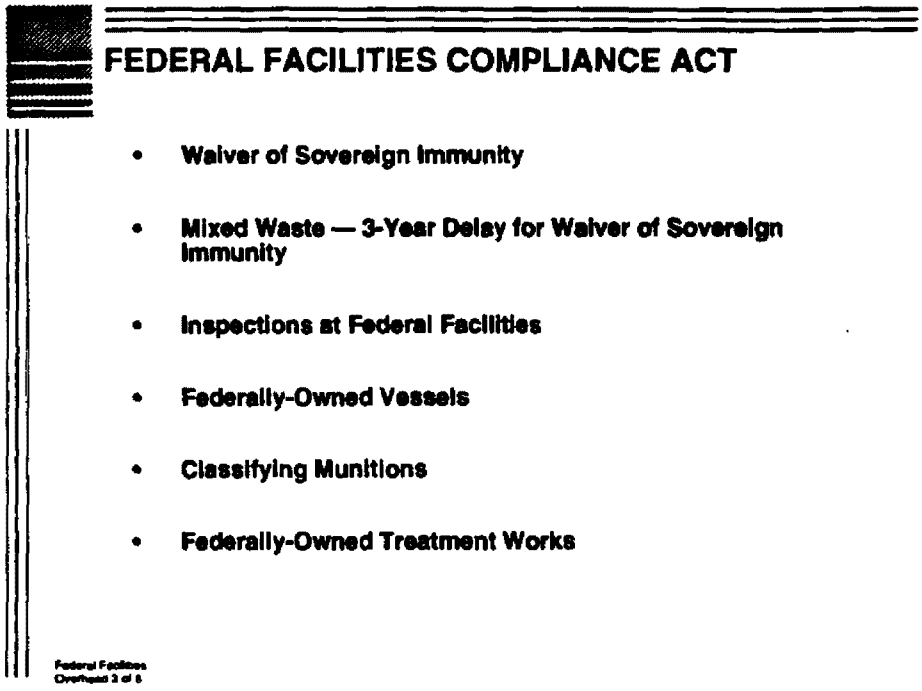
TITLE: Historical Perspective

KEY POINTS:

- Before we begin these discussions, let's look at the history behind inspections at Federal facilities.

  — According to the Department of Justice, in the past, EPA could not use certain enforcement tools such as civil judicial actions or imposition of civil penalties against Federal agencies. This has changed recently with passage of the Federal Facility Compliance Act of 1992, which we will discuss shortly.

  — Environmental compliance programs and initiatives have been developed and implemented in response to Executive Order 12088, issued on October 13, 1978, which established the framework for ensuring Federal agency compliance with Federal, state, and local pollution control requirements issued. Each Federal agency must fully cooperate with EPA, state, interstate, and local agencies to prevent, control, and abate environmental pollution.



OVERHEAD #3

TITLE: Historical Perspective

KEY POINTS:

— The recently-passed Federal Facilities Compliance Act (FFCA), signed October 6, 1992, amends RCRA to clearly state that the Federal government is part of the regulated community and Federal facilities are subject to all RCRA requirements, penalties, or fines. The FFCA ensures compliance at Federal facilities with RCRA and creates enforcement tools by clearly waiving Federal agencies' immunity to existing enforcement actions such as issuance of §3008(h) Unilateral Orders and §3008(a) Compliance Orders. Passage of this Act essentially negates the Ohio v. DOE Supreme Court decision. The FFCA also permits states to fine Federal facilities for RCRA violations and empowers EPA to seek administrative fines and penalties to correct violations.

— The waiver of sovereign immunity was delayed for three years for Federal facilities that violate §3004(j), relating to mixed waste storage, as long as such waste is managed in compliance with all other applicable requirements. Federal facilities will be liable for RCRA violations for mixed wastes other than under §3004(j). Additionally, even while the three-year delay is in effect, Federal facilities will be subject to injunctive relief for violations

OVERHEAD #3

TITLE: Historical Perspective (continued)

KEY POINTS:

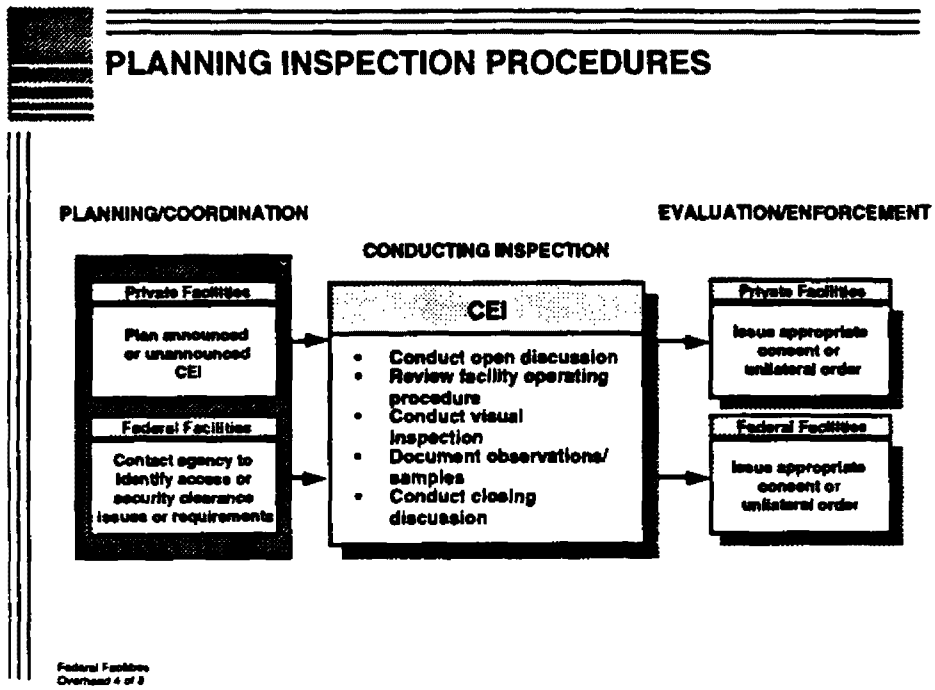
under §3004(j). The FFCA also requires that DOE submit an inventory, on a state-by-state basis, of mixed waste. This inventory must include information regarding the types and amount of mixes waste generated, treatment capacity, treatment facilities, and supporting information.

— With passage of the FFCA, Congress intended to increase EPA's enforcement presence at Federal facilities. Therefore, although the Act is not completely clear on this point, it may now require EPA to undertake inspections at all TSDs; in the past, it appears that states could conduct these required inspections on behalf of EPA. However, with the addition of the requirement for other agencies to reimburse EPA, the inspection provision could be interpreted to mean an inspection program that automatically expands as the Federal facility universe expands.

— Hazardous wastes generated on Federally-owned vessels will not be subject to RCRA until the waste is transferred to a shore facility, unless the ship is placed in reserve, or the waste is transferred to another vessel. This provision was intended to address DOD concerns that military vessels performing their duties should not be subject to RCRA.

— EPA has ultimate responsibility for classifying munitions. EPA will take the lead in establishing a task force with DOD experts to identify when munitions become hazardous waste under RCRA. EPA plans to issue a proposed rule in the late summer of 1993, and a final rule by October 1994.

— Federally-owned treatment works that meet certain criteria now are given the same exemption afforded to POTWs.

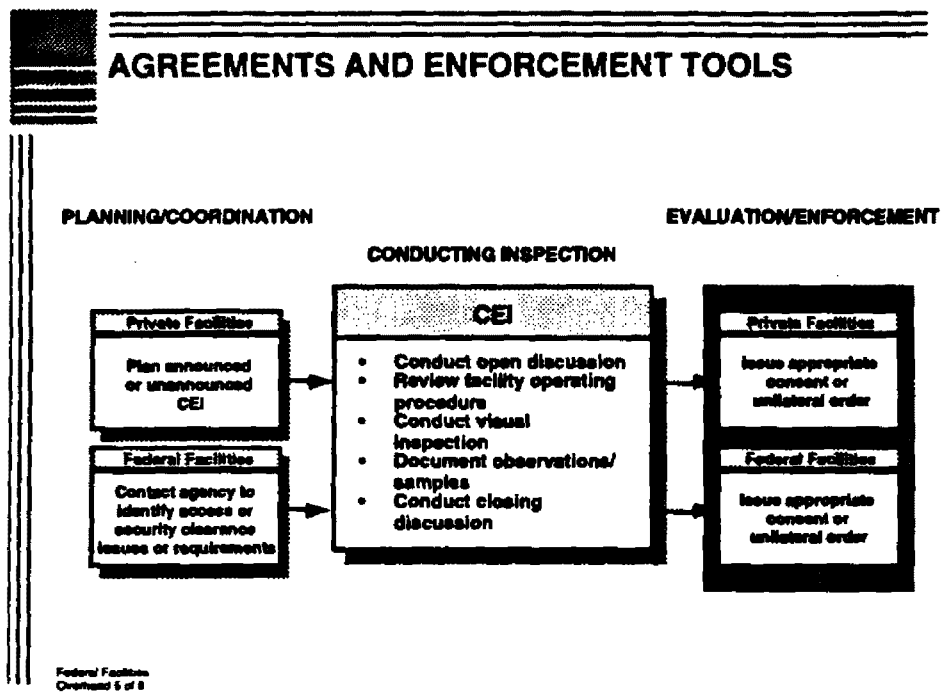


OVERHEAD #4

TITLE: Planning Inspection Procedures

KEY POINTS:

- This diagram is designed to illustrate the basic differences in planning an approach for inspections of private and Federal facilities.
- As you can see, aside from the special care taken in following the appropriate protocol, CEIs at Federal facilities do not differ significantly from those conducted at private facilities.
- Many Federal facilities may have restricted access. In order to plan a CEI, the inspector may have to contact the facility or Federal agency that operates it to acquire the appropriate security clearance or facility pass.



OVERHEAD #5

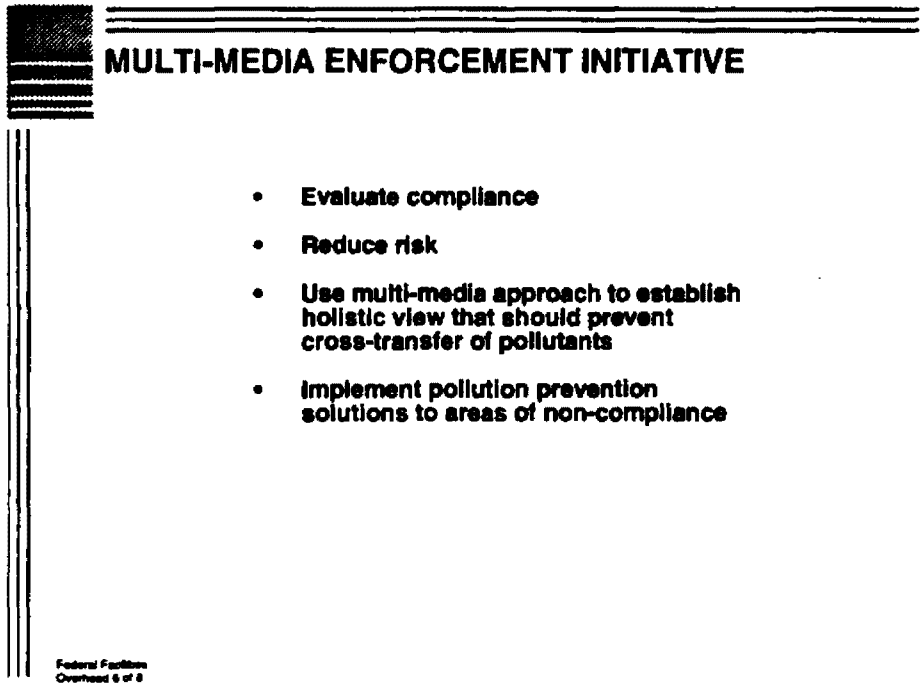
TITLE: Agreements and Enforcement Tools

KEY POINTS:

- Whether a Federal facility could be sued or fined used to be an issue but, with the enactment of the FFCA, the authority to issue orders to and levy penalties on Federal facilities is clear. The following enforcement tools have been used to ensure compliance at Federal facilities:

  — All Federal facilities and government-owned/contractor operated (GOCO) facilities are subject to the same compliance and enforcement actions as private facilities, such as §3008(h) or §3008(a) orders.

  — Compliance at a Federal facility also may still be attained through three-party Inter-Agency Agreements between a state, EPA, and the agency operating a Federal facility.



OVERHEAD #6

TITLE: Multi-Media Enforcement Initiative

KEY POINTS:

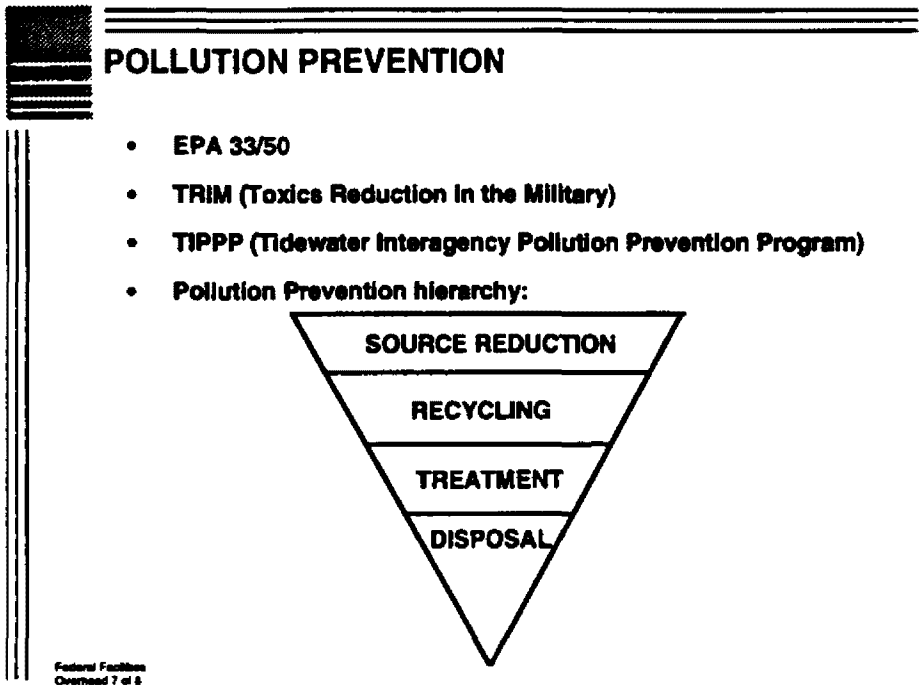
- The Federal Facilities Multi-Media Enforcement Initiative is being implemented because, among other reasons, Federal facilities are a highly visible sector of the regulated community.
- The primary goals of the Initiative are those indicated in the overhead.
- The Initiative is coordinated by the Office of Federal Facilities Enforcement (OFFE) in the Office of Enforcement at EPA Headquarters, with the support of the Regional Federal Facilities Coordinators, Offices of Regional Counsel, Environmental Services Divisions, Regional Program Offices, NEIC, and states.
- The Initiative seeks to evaluate compliance first by:
  - — Using a multi-media approach to environmental enforcement
  - — Increasing the level of technical assistance to Federal agencies (Executive Order 12088)
  - — Increasing environmental awareness and commitment to environmental issues and promote environmental stewardship by Federal agencies
  - — Implementing pollution prevention solutions to non-compliance issues and violations.

OVERHEAD #6

TITLE: Multi-Media Enforcement Initiative (continued)

KEY POINTS:

- The two-year Initiative has begun with inspections and enforcement actions in FY93.
- During the Initiative, Regions will each identify ten significant Federal facilities within their jurisdiction that warrant multi-media enforcement. Selection will be based on compliance history; risk posed by a facility; Headquarters, Regional, and state priorities and initiatives; and the opportunity to implement pollution prevention.
- These facilities will be inspected in a four-phase nationally coordinated effort:
  - — Each year Regions may submit a new list of candidate facilities to ensure continued compliance and enforcement (if necessary).
  - — At the end of the two-year Initative, OFFE will release a comprehensive report describing the national trend in compliance rates at Federal facilities.
- The Initiative is strengthened by the FFCA because Federal facilities will need to comply with applicable regulations in the same manner as private facilities.



OVERHEAD #7

TITLE: Pollution Prevention

KEY POINTS:

- The pollution prevention strategy for Federal facilities responds to the mandate of the Pollution Prevention Act of 1990 and the National Pollution Prevention Strategy. The Pollution Prevention Initiative is led by EPA with the cooperation of other Federal agencies.

- The goals of the Pollution Prevention Initiative for Federal facilities are to:

  — Reduce solid and manufacturing wastes
  — Improve energy efficiency at installations
  — Test use of alternate, environmentally protective materials that meet research and military specifications
  — Improve procurement practices and inventory controls
  — Reduce nonpoint source environmental problems.

- Examples of interagency cooperation among the Departments of Agriculture, Defense, Energy, and Interior, and other agencies, to implement the Pollution Prevention Initiative include:

  — Achieving a 50% reduction in releases of 17 priority chemicals at all government-owned/contractor-operated (GOCO) facilities by the end of 1995 through EPA's 33/50 Program (Industrial Toxics Project). The Department of Energy has committed to the 33/50 program.

OVERHEAD #7

TITLE: Pollution Prevention (continued)

KEY POINTS:

— Making a commitment, as the Department of Energy did, to report toxic emissions under the 1986 Emergency, Planning, and Community Right-To-Know Act, setting a strong precedent for bringing other Federal agencies into the reporting program.

- Pollution prevention activities at DOD resulted in more than a 50% reduction in hazardous waste disposal between 1987 and 1992. DOD continues to focus on pollution prevention through the following programs:

  — The Toxics Reduction in the Military (TRIM) program, which encourages the voluntary participation of its GOCO facilities to reduce 17 priority chemicals by 50% in accordance with EPA's 33/50 Program — this program is still under development

  — The voluntary reporting of all Toxic Release Inventory (TRI) chemicals for DOD's major Government-Owned/Government-Operated facilities

  — Tidewater Interagency Pollution Prevention Program (TIPPP), which is a comprehensive environmental management initiative of the DOD, EPA, NASA, Army, Navy, and Air Force to implement and develop a demonstration pollution prevention model community. Examples of activity under this initiative include:

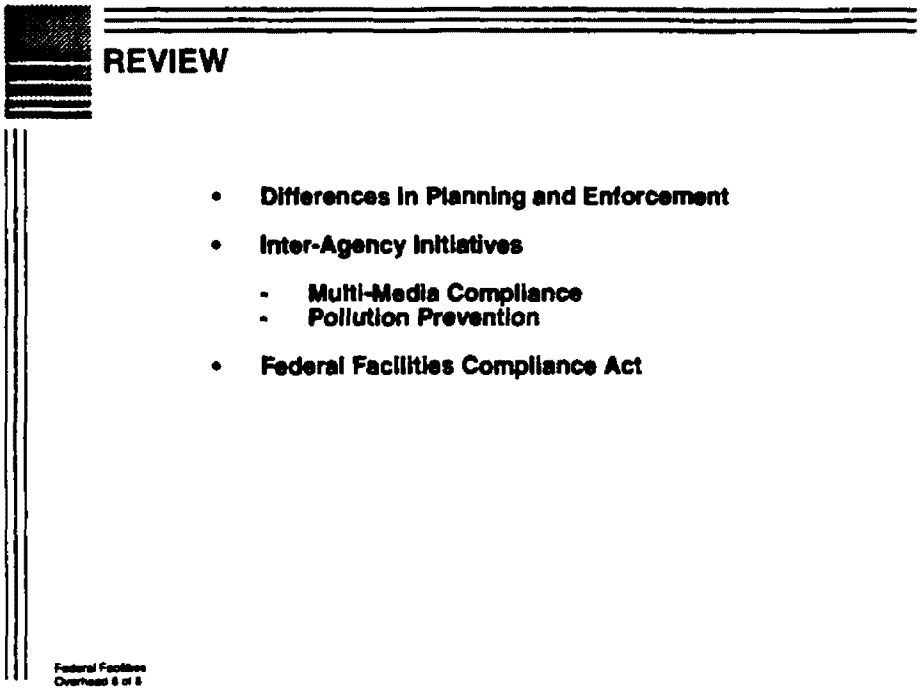
    •• Developing multi-agency generic guidelines to implement pollution prevention programs and techniques

    •• Initiating a network at Federal facilities to transfer technical information concerning pollution prevention

    •• Producing quarterly reports on the progress of TIPPP.

- For more information on Pollution Prevention Initiatives at Federal facilities, contact the Pollution Prevention Information Clearinghouse (PPIC) to receive facility-specific or agency pollution prevention reports, articles, directives, guidance documents, and document-ordering information. The Clearinghouse's address and their phone number are included in the copy of this presentation that you will be receiving.

PPIC
Federal Agencies Mini-Exchange
7600-A Leesburg Pike
Falls Church, VA 22043
(703) 821-4800



OVERHEAD #8

TITLE: Review

KEY POINTS:

We would like to review several key pieces of information at this point.

- Because EPA may not have the correct security clearances to conduct CEIs at Federal facilities, inspectors must plan to coordinate with the appropriate authority to conduct an inspection. Plans must take into consideration whether the facility is Federal, private, or GOCO.

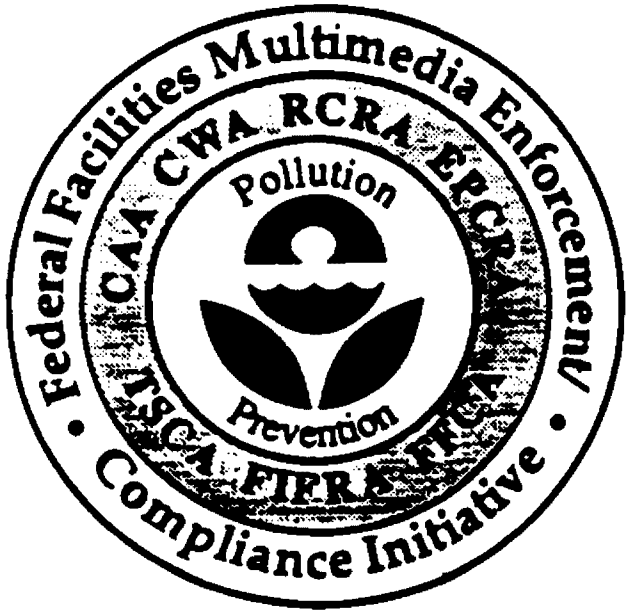
- EPA and other Federal agencies are cooperating to implement more comprehensive environmental compliance programs and to reduce pollution at Federal facilities. RCRA inspectors should be prepared to incorporate these initiatives into their inspection strategies.

- Congress passed the Federal Facilities Compliance Act, which enhanced the enforcement tools that can be used to achieve compliance with RCRA and other environmental laws at Federal facilities.

- When conducting inspections, be aware of special protocols, including the fact that Federal facilities often require that inspectors obtain a security clearance before entering the facility.

FY 1993/1994 FEDERAL FACILITIES MULTI-MEDIA ENFORCEMENT/COMPLIANCE INITIATIVE

IMPLEMENTATION GUIDANCE



Developed by:

U.S. Environmental Protection Agency
Office of Federal Facilities Enforcement
401 M Street S.W.
(OE-2261)
Washington, D.C. 20460

March 1993

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LIST OF ATTACHMENTS

Attachments

I List of Federal Facility Coordinators for the Regions and NEIC (included in current document)

II Definitions of Inspection Categories From the NEIC Multi-media Investigation Manual

III Final Addendum on Multi-Media Enforcement to the Policy Framework on State/Federal Enforcement Agreements, May 13, 1992

IV Guidance for the FY 1993 State/EPA Enforcement Agreements Process, July 10, 1992

V Policy on the Use of Supplemental Enforcement Projects (SEP) in EPA Settlements, February 12, 1991

VI Interim Policy on the Inclusion of Pollution Prevention and Recycling Provisions in Enforcement Settlements, February 25, 1991

VII Article by Assistant Administrator Tate – "EPA's Enforcement Priorities for Fiscal Year 1992" – in National Environmental Enforcement Journal, February, 1992

VIII Response to Comments on the Draft Implementation Guidance

DRAFT IMPLEMENTATION GUIDANCE FOR THE FY 1993/1994 FEDERAL FACILITIES MULTI-MEDIA ENFORCEMENT/COMPLIANCE INITIATIVE

I. Background

Federal facilities are a highly visible sector of the regulated community. They are of great environmental significance and have become an Administration priority. While committed to improved environmental performance, the compliance rates for Federal agencies have traditionally been lower in all media than those of private facilities. This initiative is designed not only to assist Federal agencies in reducing environmental risks, but also to improve their compliance status by providing holistic environmental multi-media facility evaluations aimed at preventing the cross-media transfer of pollutants and emphasizing pollution prevention based solutions to environmental compliance problems.

The Enforcement Management Council (EMC) has selected the Federal Facilities Multi-Media Enforcement/Compliance Initiative (FMECI) as one of the only three Agency-wide initiatives for FY 1993 and FY 1994. This decision will strengthen the focus given to Federal agencies and their compliance with environmental laws. EPA, working in close coordination with the States, is in a unique position to lead a national initiative addressing historical non-compliance while reducing the environmental threats posed by many of these facilities.

II. Scope of the Initiative

The FMECI will assess the compliance of Federal facilities with environmental laws using multi-media inspections and enforcement to address areas of non-compliance. This initiative will consist of a series of coordinated multi-media team inspections conducted by all ten EPA Regional offices at highest risk Federal facilities throughout the nation. Specifically, all Regions will perform their field activities in accordance with an implementation strategy that will require each of them to perform a specified minimum number of inspections in FY 1993 and FY 1994. Since traditional judicial case filings or cluster filings are not an option at Federal facilities, this is a major break from the normal initiative approach which calls for cluster filing with the Department of Justice. However, an effective communications strategy will provide a deterrent effect that may prove to be as effective as the current private sector enforcement approach. Publicity has also proven to be a useful mechanism to increase the knowledge of those who need to comply with environmental regulations.

Facilities will be selected for multi-media inspections based upon pre-established selection criteria which examine past compliance records, Regional and State risk rankings, selected national, Regional, and State program priorities and pollution prevention opportunities. The plan is for four sets of at least ten inspections to be conducted in a coordinated manner by all Regions in FY 1993/1994. In other words, each Region should conduct two multi-media inspections per year at Federal facilities in FY 1993 and FY 1994. It is projected that enforcement actions should be completed in one year from the completion of inspection activities. Completion means that resolution and settlements have been achieved or that proper protocol for dispute resolution outside the Region has been initiated. OFFE will work closely with the Regions, States, and affected agencies to determine if and how enforcement processing time can be further expedited. OFFE believes the one-year time frame will help maintain the framework for timely and appropriate enforcement actions. Upon request OFFE will provide assistance to the Regions/States in expediting enforcement actions.

Although the main focus of this initiative is to improve environmental compliance at the selected Federal facilities, this initiative will provide numerous benefits to Federal agencies as a whole. First, the initiative will create greater efficiencies for EPA, States, and Federal installations by eliminating the resource burden of multiple single media inspections by consolidating inspection activities using a multi-media approach. When possible, emphasis will be placed on using multi-media enforcement settlements to address multiple violations under various statutes. The initiative will also serve as an excellent training ground for Federal agency environmental staffs through enhanced EPA/State technical assistance. This and other related initiative activities will promote improved environmental management at each facility by providing a holistic view of compliance problems and creative opportunities to implement environmentally protective solutions.

III. Goals of the Initiative

The goal of the initiative is to improve Federal agency compliance with environmental statutes and regulations. The initiative also seeks to include reduction of environmental risks from Federal facilities through increased use of multi-media inspections; efficient utilization of all available enforcement authorities; enhanced use of innovative pollution prevention (P2) approaches to solving compliance problems.

This initiative should highlight the benefits of multi-media approaches in environmental enforcement; increase the level of technical assistance to Federal agencies; and increase the level of environmental awareness and commitment by Federal agencies to protection of human health and the environment.

IV. Objectives of the Initiative

In addition to the goals of the initiative that are listed above, the initiative also has several objectives that OFFE believes will enable EPA and the States to focus their efforts toward these goals. The primary objectives of this initiative are to:

a. Improve compliance in each media and their corresponding programs, with an emphasis on RCRA, CWA, CAA, EPCRA (this applies primarily to government-owned contractor-operated (GOCO) facilities), and TSCA.

b. Reduce threats and risks to the environment posed by releases, discharges, and the cross-media transfer of pollutants.

c. Demonstrate the resource efficiency and the environmental benefits of multi-media inspections and enforcement actions at Federal facilities.

d. Maximize the identification and use of P2 opportunities in inspections and enforcement actions to solve environmental compliance problems.

e. Enhance and expand upon Regional/State coordination in multi-media enforcement settlements for violations that are identified.

f. Increase the use of cross-statutory provisions to obtain facility-wide environmental improvements through settlements that integrate pollution prevention projects.

g. Increase the overall efficiency of the enforcement process by conducting multi-media inspections in lieu of independent single-media inspections.

h. Increase awareness and support for multi-media enforcement through outreach to all levels of

the Federal sector.

i. Increase environmental awareness through staffing, budgeting, and environmental management infrastructure.

j. Increase and improve the consideration of environmental equity factors.

V. Measurements of Success & Accountability

The success of this initiative depends largely on the support for and effective implementation of a multi-media enforcement program by the appropriate Regional and State programs. Several of the measures of success mentioned below identify improvements in facility operations that yield sound environmental management results, while others highlight Regional and State implementation of multi-media enforcement activities at Federal facilities. The following is a list of measures which the Office of Federal Facilities Enforcement (OFFE) believes will demonstrate progress towards the initiative's stated goals and objectives:

a. Improved compliance rates and/or the identification of deficiencies in environmental compliance. The measurement of the change in compliance rates will be evaluated by comparing compliance rates before and after the initiative. Regions and States should use existing definitions of non-compliance.

b. Reduced pollutant emissions and discharges.

c. Number of administrative enforcement cases completed within the time frame established under this initiative.

e. Increased number of multi-media inspections and administrative settlements.

f. Extensive use of P2 projects that reduce emissions and discharges of pollutants and address non-compliance problems and violations in all enforcement settlements.

An interim report and final report will be developed by OFFE identifying the successes and limitations identified during the initiative with a strong emphasis on the Regional/State perspective of the environmental status of selected Federal facilities. It should be noted that these measures of success are a guide for Regions and States, and may be further expanded in their evaluation of the successes of the initiative. Other measures of success that the Regions and States may identify are also acceptable for this initiative in order to highlight unique Regional/State accomplishments.

Regional offices should be familiar with the new Strategic Targeting Activities Reporting System (STARS) measures for reporting multi-media enforcement activities, which are outlined in the FY 1993 Agency Operating Guidance (EPA 230-B-92-001, July 1992). STARS code "E/C-8" encourages the use of multi-media enforcement approaches. Specifically, measure "1c" measures the number of consolidated multi-media inspections at Federal facilities, and measure "2c" measures the number of coordinated multi-media inspections at Federal facilities. Under the FMECI, Regions will be able to report Federal facility enforcement numbers for both of these inspection measures. The initiative will also allow the Regions to report their judicial referrals for GOCO Federal facilities and administrative enforcement actions at all Federal facilities under STARS code "E/C-8".

VI. Initiative Implementation

This section provides general guidance on implementation of the initiative and a summary of the Federal Facility Compliance Act, a new law that amends RCRA and that will have a profound effect on the implementation of the initiative.

a. General Implementation Guidance

As Regional experiences have indicated, implementing an effective multi-media program requires extensive coordination and communication among all participants. Activities ranging from establishing inspection targets, to coordinating with State inspectors, to ensuring timely preparation of multi-media enforcement cases, involve numerous parties and require planning and leadership. Each Region has chosen to implement multi-media programs using a management approach which is most appropriate to their needs. This initiative seeks to work within these existing structures as a means of strengthening existing Regional programs.

Accordingly, all planning and implementation activities should be conducted through existing multi-media structures, such as through the designated Regional multi-media coordinator and through the Regional multi-media targeting/screening committees. As Federal facilities can present unique management concerns, the Regional Federal Facilities Coordinator (FFC) should also be actively involved in the initiative. For example, the FFC should coordinate or assist with facility selection, as well as with any subsequent coordination.

In order to ensure that Headquarters is able to effectively communicate with the Regions on essential matters related to this initiative, each Region should have designated a single point of contact for this initiative. Regions are encouraged to designate the FFC as this contact, to the extent such designation is compatible with Regional structures. However, this person could also be the Regional multi-media coordinator, a person on the Deputy Regional Administrator's staff, the multi-media coordinator within the Office of Regional Counsel, a multi-media coordinator within a media office, or any other appropriate person. This contact should be able to respond to Headquarters inquiries regarding the status of selection efforts, inspections, enforcement efforts, pollution prevention efforts, and other general matters relating to the progress of the initiative. The name of the Regional contact should be provided to the Headquarters contact, who will be responsible for the same information from Headquarters' perspective. The Headquarters' contact is Jim Edward, Director of the Strategic Planning and Prevention Division of the Office of Federal Facilities Enforcement, and the lead staff contact for this initiative is Reggie Cheatham (202/260-4641). Attachment I to this guidance document contains a list of assigned contacts for the FMECI for the Regional offices and the National Enforcement Investigations Center (NEIC).

b. Federal Facility Compliance Act (FFCA)

The implementation of this initiative will be aided by the passage of the Facility Compliance Act (FFCA). On October 6, 1992, President Bush signed the FFCA into law. This new Act amends the Solid Waste Disposal Act. There are several new authorities that will make Federal facility enforcement actions more consistent with actions currently used in the private sector. To the extent possible, EPA will be seeking to maximize the use of the new enforcement authorities and requirements of the FFCA in this multi-media initiative.

One of the major changes of the FFCA is the waiver of sovereign immunity for fines and penalties for violations of hazardous and solid waste requirements. While the States have always had injunctive authority, it now appears that States have the ability to sue the Federal government for fines and penalties. In addition, as the States have penalty authority, it appears that EPA, likewise, has penalty authority. RCRA

Another significant change added by the FFCA is that EPA clearly has administrative Section 3008(a) order authority. Congress stated that EPA shall initiate administrative enforcement actions against the Federal

government in the same manner and under the same circumstances as an action would be initiated against any other person. EPA interprets this to mean that EPA will issue Section 3008(a) compliance and compliance orders to the Federal government for compliance violations. ^RCRA

Congress, though, added an additional provision which EPA is gathering comment on to determine the appropriate interpretation. Congress stated that no administrative order to the Federal government shall become final until the Federal government has had the opportunity to confer with the Administrator. The question for the Agency to consider is when should this opportunity to confer occur and with whom. EPA sent out proposed guidance on October 13, 1992 and has received comments from the Regions (and the Department of Justice) regarding the proposal. The Final Implementation Guidance should be issued by the second quarter of FY 93.

The FFCA also requires the Administrator to undertake inspections at all Federal facilities that treat, store, and dispose of hazardous waste. The Office of Waste Programs Enforcement (OWPE) plans to send out a proposed guidance on these inspections to the Regions for comment in March 1993. The proposed guidance includes this multi-media initiative as one of the criteria for priority setting in conducting ground water monitoring inspections at Federal facilities. In addition, the Federal agencies must reimburse EPA for the cost of these inspections. OFFE is working with the other affected offices and the Office of Management and Budget (OMB) to develop the appropriate interpretation regarding reimbursement. *

The Land Disposal Restrictions require treatment technologies and capacity be developed for mixed waste. DOE has stated that three years are necessary and adequate to develop treatment capacities and treatment technologies for mixed waste. The statute provides that the waiver of sovereign immunity for fines and penalties for violations of only RCRA Section 3004(j) (storage of mixed waste) does not apply for three years provided DOE complies with all other applicable requirements.

The FFCA requires DOE, within 180 days of October 6, to submit two inventory reports: 1. a national inventory of all its mixed wastes, regardless of the time they were generated, on a state-by-state basis and 2. a national inventory of its mixed waste treatment capacities and technologies. DOE will submit these reports to EPA and the appropriate State. Both EPA and the State have 90 days to comment. DOE shall consider and publish the comments before finalizing the two inventories. DOE will then develop a PLAN for developing treatment technologies for treating the inventory wastes where no treatment exists and also for developing more treatment capacities where technologies are available. Once DOE completes these plans, DOE will submit them to the State (provided the State has the requisite authority) for review, approval, disapproval, or modification within 6 months of receipt. If the State does not have the necessary delegated authority, DOE will submit the plan to EPA for similar action within the same timeframe. Depending on which entity has the lead authority under RCRA, the State or EPA will announce the availability of the plan to the public. If the plan is approved, EPA or the delegated State shall issue an order requiring compliance with the approved plan. OFFE has convened a workgroup to address the various requirements of the mixed waste provisions of the FFCA. At this time, the group is concentrating on the components of the inventory.

In another provision of the FFCA, Congress instructed EPA to create new regulations for munitions regulations. The proposal for new regulations should be promulgated no later than 6 months from October 6, 1992. The provision states that the Administrator shall propose, after consulting with the Secretary of Defense and appropriate State officials, regulations identifying when military munitions become hazardous waste. Within 24 months of April 6, 1992, EPA shall promulgate the regulations. The Office of Solid Waste has convened a workgroup to address the munitions requirements, and the workgroup has already met once with representatives from the Department of Defense.

Congress further provided in the FFCA that the Federal government is now eligible for the domestic sewage exclusion provided that the exempted material meets pretreatment standards of Section 307 of the Clean Water Act. There are other parameters provided in the FFCA that the treatment works can meet and continue to be eligible for the exclusion. OFFE has formed a workgroup to develop guidance in order to implement this

new Federally Owned Treatment Works (FOTW) provision. Moreover, OFFE is considering proposing a rulemaking to ensure proper monitoring of the FOTW by the Federal agency. This new provision should be emphasized in multi-media inspections as an excellent opportunity for cross media enforcement. (e.g. using the new RCRA order authority to address pretreatment requirements of the CWA).

Finally, the FFCA states that public vessels are not subject to RCRA requirements until the waste is transferred to shore. This exemption disappears if the waste is stored on a vessel for more than 90 days when the vessel is placed in reserve or the waste is transferred to another public vessel within the territorial waters of the United States and is stored on such vessel or another public vessel for more than 90 days after the date of transfer.

For further information, contact Sally Dalzell (202/260-9808), Acting Director of OFFE's Enforcement Division, Reggie Cheatham (202/260-4641) of OFFE, or your Regional Federal Facilities Coordinator.

VII. Selection Criteria

The Regions will take the lead in facility selection to ensure the maximum degree of Regional involvement and support for the initiative. Based on a Regionally-developed list of targeted candidate facilities, each Region should conduct a minimum of two multi-media inspections per year. OFFE provided data support as an attachment to the draft guidance to assist Regions in identifying candidate facilities. The five criteria for facility selection outlined in Exhibit I are:

- Compliance record
- Regional risk ranking, including NEIC ranking, or other identified impacts of human health, and threats to aquatic systems
- Significance with respect to other national, Regional, or State priorities/initiatives
- Environmental equity
- Opportunity for pollution prevention

These ranking factors are intended to be a guide for the Regions and States to use in selecting Federal facilities for the initiative in a uniform and consistent manner. Thus, the intention of the selection criteria is not to be prescriptive. They are meant to complement existing Regional approaches for selecting Regional targets, while ensuring a consistent set of priorities are considered during the implementation of the initiative. They are intended to provide the Regions and States with the maximum amount of flexibility while still maintaining national consistency. Regions, in conjunction with the States to the extent possible, are to take the lead in targeting facilities. This initiative should not hinder the Regions and States from conducting Federal facilities inspections which they consider to be a priority within their jurisdictions. OFFE will continue to seek Regional input into the development of the prioritization factors. In response to comments received on the Draft Implementation Guidance, environmental equity has been added to the selection criteria to ensure that environmental equity concerns are factored into the facility selection process for FY 94. Since the initial facility selections were based on the criteria outlined in the Draft Implementation Guidance, many Regions did not incorporate environmental equity concerns into their FY 93 facility selections.

The facility selection process consists of two phases. In phase I, the Regions should identify the ten most significant Federal facilities, based on the first four criteria described above for the initiative. The Regions are encouraged to develop their initial list of ten facilities for submission to OFFE for additional evaluation based on factors that will maintain the national consistency of the initiative.

Phase I

Exhibit 1: Selection Criteria for Federal Facilities Initiative

In the FY 1993 and FY 1994 initiative, Federal facilities should be targeted based on the following ranking factors, listed in descending order of significance:

Compliance Record :

Facilities should be evaluated for the extent of significant non-compliance (SNC) under each of the media statutes. Federal facility coordinators should remain flexible in the use of historic non-compliance data. If the data accurately reflect the status of the facility, then use it. Included as Attachment II to this guidance is a list of facilities, sorted by Region, which indicates the number of SNC RCRA violations which provides some of this information. This material is derived from the Integrated Data for Enforcement Analysis (IDEA) system, which can provide additional compliance information. Regions should consider the extent to which non-compliant facilities are currently being handled, and if they are subject to an enforceable agreement or settlement.

Risk:

OFFE supports the use of existing Regional risk- based targeting system or the NEIC ranking system (i.e., the Red Book, 1988), which is available for 9 out of 10 Regions (contact the Regional FFC for copies).

National/ Regional/State Priorities:

OFFE encourages the Regions to incorporate Regional/State initiatives, as well as program- specific initiatives, into the selection process (e.g., Great Lakes Initiative, land disposal restrictions (LDR), National Pollutant Discharge Elimination System (NPDES) pre-treatment). This should assist the Regions in accomplishing other Agency priorities and initiatives as a part of this initiative.

Environmental Equity :

OFFE strongly encourages the Regions and States to consider environmental equity when selecting facilities for this initiative. Environmental equity refers to the distribution of environmental risks across population groups and the policy responses to those distributions. OFFE is aware of at least one instance in Region VIII in which the Region incorporated the use of the Geographic Information System (GIS) to identify economic or socioeconomic groups that may have been subjected to environmental inequities. For further information on environmental equity, please contact your Regional environmental equity coordinator or Sherry Milan (202/260-9807) of OFFE.

Pollution - Prevention:

OFFE will work with the Regions in determining specific pollution prevention opportunities for specified facilities. Information to be considered includes amounts of chemicals discharged, as reported under RCRA Section 3016 or EPCRA, use of chemicals identified under the 33/50 program, as well as processes (e.g., electro-plating) that have shown potential for pollution prevention projects. ORD's pollution prevention assessments may be used in targeting the facilities.

here II

Phase II of the selection process will start with OFFE assistance to the Regions in the identification of pollution prevention opportunities by using EPA pollution prevention and waste minimization facility data. This means that the order of the initial 10 targeted facilities submitted by each Region may change based on the opportunity or potential to implement pollution prevention solutions to compliance problems. The Regions then should establish their final list of ten facilities based on this feedback, of which at least four should be targeted for inclusion in the two-year initiative. The Regions should identify these four facilities in their final submission and provide a narrative overview of why each facility is significant to the Regional participation in the initiative.

OFFE provided the Regions with an initial list of Regional compliance profiles in the draft guidance, as identified by the Integrated Data for Enforcement Analysis (IDEA) database. Based on this information, the Regions will develop an initial list of ten facilities. OFFE will then provide pollution prevention profiles to the Regions to assist them in developing a final list of ten facilities. This process should be repeated in mid-FY 1993 to ensure that each Region has the proper mixture of facilities, including a proper mixture of defense and non-defense facilities.

OFFE strongly encourages the Regions to continue to conduct multi-media inspections as part of this initiative at other Federal facilities beyond the two-per-year minimum level established under this initiative. If more than two multi-media inspections are performed at Federal facilities, information and results of these enforcement activities should be submitted to OFFE.

VIII. Multi-Media Inspections

It is anticipated that the initiative will be conducted using four phases of multi-media inspections and corresponding enforcement activities. Each phase of inspections will be coordinated Regionally, using the national goals and objectives of the initiative. This coordination will allow enforcement settlements to be implemented quickly and consistently in the Regions, which will enhance the deterrent effect of the initiative. U.S. EPA Region I has developed a Federal Facility Multi-Media Inspections Standard Operating Procedures which addresses many of their Regional protocols for performing multi-media activities. Regions/States who are interested should contact the Region I Federal Facility Coordinator for more information. OFFE intends for the Regions and States to utilize the initiative to complement Regional and State inspection priorities.

To further enhance the Regional enforcement efforts at Federal facilities, the implementation strategy for conducting field activities calls for each Region to conduct a minimum of two multi-media inspections per year at Federal facilities in FY 1993 and in FY 1994. This approach gives the initiative national consistency through some participation by all Regions, while leaving flexibility for those Regions that historically perform more than two multi-media inspections at Federal facilities each fiscal year to continue these efforts. This means that the initiative will use current and historical Regional enforcement practices at Federal facilities and the resources associated with these efforts. Each Region is requested to inform OFFE of the number of multi-media inspections they plan to conduct annually under this initiative through the points of contact designated under section VI of this document.

The most desirable category of multi-media inspection to be conducted at Federal facilities for this initiative is category "D" multi-media team inspections. This is the category of inspection currently used by NEIC and several Regional Environmental Services Divisions (ESDs).

Due to external and internal limitations within each Region, category "C" multi-media inspections are also an acceptable category to satisfy the principles of this initiative. It is also important to note that category "C & D" multi-media inspections are the only levels recognized by the STARS reporting system. Under this initiative, OFFE intends to maintain a level of consistency with those Agency measures outlined in STARS measure E/C-8. The definitions for each category can be found in the NEIC Multi-Media Investigations Manual

(EPA-330/9-89-003-R, March 1992). These definitions also have been attached in Attachment II to this guidance. Regional policies for the use of announced or unannounced inspections should be followed to provide the maximum amount of control of initiative activities at the Regional level.

OFFE recognizes the limited inspection resources available for inspections in the Regions. OFFE is working now to provide the Regions additional resources for activities related to the initiative. However, resource efficiencies may be realized by combining the logistics needed to support multiple inspections into one inspection effort. EPA Regional resources will also be enhanced by those States who wish to participate in the initiative. Some Regions may find the need for additional assistance and expertise in evaluating facilities in their jurisdiction. NEIC has committed to assisting the Regions on a limited basis under this initiative. NEIC has valuable experience in Federal facility inspections and compliance evaluations. In requesting assistance from NEIC, Regions should follow normal procedures for requesting NEIC assistance during the fourth quarter of FY 1992 for FY 1993 and during the fourth quarter of FY 1993 for FY 1994 to allow sufficient time for scheduling and pre-inspection activities.

It is important to note that all inspections should follow Regional protocol for conducting multi-media inspections. In addition, the inspection teams should make provisions for conducting an outbriefing summarizing the preliminary findings of the inspection. An annotated outline for conducting inbriefings and outbriefings under the initiative has been provided to the Regions. Regions are encouraged to use their resources creatively and to take innovative approaches to reduce the time and personnel utilized throughout the inspection to settlement process. One example of an innovative approach in the enforcement process is the active participation of Office of Regional Counsel (ORC) personnel during the inspection process. This gives the ORC personnel the opportunity to participate in inspection planning process and to assist inspection personnel in the scoping of the inspection. In addition, the ORC representative may wish to attend the in-briefing and/or exit- briefing. This may help ORC personnel to gain a greater understanding of the problems at Federal facilities and serve as a foundation for developing comprehensive multi-media settlements.

IX. EPA/State Multi-Media Enforcement Actions

The success of this initiative depends upon the enhancement of coordination between State and Regional multi-media inspection and enforcement actions. Each Region has developed or is in the process of developing an approach to ensuring successful multi-media enforcement programs. Headquarters has provided several documents which can assist Regions in developing such programs. Two such memorandums which have been issued recently and which are important resource documents for Regions participating in this initiative are:

- Final Addendum on Multi-Media Enforcement to the Policy Framework on State/Federal Enforcement Agreements, Herbert H. Tate, Jr., May 13, 1992 (this document is provided in Attachment III to this guidance), and

- Guidance for the FY 1993 State/EPA Enforcement Agreements Process, F. Henry Habicht II, July 10, 1992 (this document is provided in Attachment IV to this guidance).

This initiative encourages joint EPA/State multi-media enforcement activities to the maximum extent practicable. In all cases, delegated States should be invited to participate in the multi-media inspections under this initiative. In appropriate cases, State authorities may provide the most efficient avenue for taking an enforcement action against a Federal facility and State authorities should be used. Also, these joint efforts will serve as an excellent training ground for establishing the Regional protocol for the quality of State-lead multi-media inspections. Finally, it is important to recognize that all necessary provisions should be identified in the State/EPA agreements for participation in the initiative to ensure that there is a clear understanding of each party's roles and responsibilities in accordance with the guidance mentioned above. This multi-media initiative was identified as a high priority area for negotiation in the document "Guidance for FY 1993 State/EPA

Enforcement Agreements Process".

a. State Has the Delegated Authority

When a violation is detected during an inspection, EPA's response typically depends upon whether the violation cited is part of a State-delegated program. For example, if EPA detects RCRA labelling and manifest violations, most States have RCRA juriadiction over these violations. Therefore, EPA would typically refer the case to the State for action. Depending on the Memorandum of Agreement between the EPA Region and the State and the Region's working relationship with the State, the State would probably have a specified amount of time to take an enforcement action. If the State fails to take action within its allotted amount of time after referral, then EPA would determine whether it will take an action.

Waiting for a State's decision at this point in the enforcement process may cause unnecessary delays and hinder progress toward a sound settlement agreement. Resource efficiencies would be realized if the Regions coordinate with the affected States as soon as the targeted facilities are selected, and if possible include the States in the targeting process. At that time, the State should determine whether it has the resources to fully participate in the initiative. EPA hopes that the States will have the resources to participate in the inspections and conduct/support the enforcement actions where authority has been delegated.

b. EPA-lead Enforcement Actions

When EPA detects a violation which is NOT part of a State-delegated program, or, if the State decides that EPA should be the lead (based on coordination between EPA and the States when the facility is selected), EPA will take the appropriate enforcement actions.

If EPA has the lead in the enforcement action, the next issue is what enforcement authority EPA should use. For those statutes under which EPA has order authority (e.g., RCRA, CAA), OFFE encourages EPA to exercise such authority. EPA may then choose to negotiate one administrative settlement under the various statutes where violations have been detected, if the Region deems that appropriate. The proper application of various statutes can provide leverage to the Regions/States, which may streamline the enforcement process.

For those violations for which EPA currently does not have order authority and EPA is the lead, EPA would first issue a Notice of Non-compliance and then follow up with a Federal facility compliance agreement.

EPA and States also should exercise statutory penalty authorities against Federal facilities where they clearly exist (e.g., RCRA). The recent Supreme Court decision held that the State of Ohio could not assess and collect penalties for past violations of RCRA or the CWA. Instead, States are eligible to collect coercive penalties only, or penalties for future violations. This may present opportunities for increased use of stipulated penalties in Federal facility compliance agreements or State enforcement actions. The recent FFCA overturns this Supreme Court decision as it applies to RCRA.

Where the initiative is conducted at a government-owned contractor-operated facility (GOCO), EPA may use the same enforcement authorities that are available at any private party site. This would include the authority to issue compliance orders as well as to assess and collect penalties. These authorities should be exercised at GOCO facilities, where appropriate, to the same extent as such authorities are exercised at private party sites.

c. Multi-media Enforcement Settlements/Actions:

State- or EPA-lead enforcement activities may generate cases where violations exist under more than one statute. This multi-media initiative will likely present cases of this nature. In cases where violations occur under various statutes, it is an objective of this initiative for EPA and the States to address all violations under

one enforceable settlement agreement.

Multi-media settlements should help streamline the enforcement process by eliminating the need for individual settlements for each statute or media. For example, there may be cases where EPA identifies Federal installations that are out of compliance with certain provisions of both RCRA and CWA. Regions and States should work to negotiate one multi-media enforcement settlement incorporating all violations identified under each program. Regions and States should follow the guidance outlined in the document "Final Addendum on Multi-Media Enforcement to the Policy Framework on State/Federal Enforcement Agreements."

d. Negotiations of Enforcement Settlements

If negotiations are not proceeding in a timely manner (i.e., completion of negotiations within 90-120 days of the identification of the violation(s)) and order authority exists, EPA may choose to proceed with an administrative order without negotiating it, using a schedule imposed by the Region. In other words, if there is a lack of cooperation from the Federal Agency (or facility) during negotiations, EPA or the State may determine not to pursue a single settlement addressing the various media violations. Instead, EPA and the State may pursue separate enforcement actions. We believe that the Federal Agency's desire to obtain one multi-media settlement covering all media violations will encourage Federal Agencies to negotiate in a timely manner.

X. Environmentally Beneficial Projects

As stated, one of the primary goals of the initiative is to enhance P2 activities at Federal facilities. Specifically, pollution prevention should be included in all enforcement settlements under this initiative, to the extent that they are appropriate. One objective is to utilize pollution prevention approaches or solutions as the primary means of addressing compliance problems and violations identified during the multi-media inspections.

This goal is consistent with the President's and the Congress' vision that pollution prevention is the most desirable environmental management strategy. Currently there is a great deal of P2 activity underway at Federal facilities. Several of these activities are described in the draft Federal Government Pollution Prevention Strategy, which has been issued by OFFE and OPPT pursuant to the Agency's Pollution Prevention Strategy. February, 1991.

This initiative will build upon the themes outlined in the above P2 strategy documents, but will also consider the Agency's two primary guidance documents which address P2 activities in relation to enforcement actions;

- Policy on the Use of Supplemental Enforcement Projects (SEP) in EPA Settlements, James M. Strock, February 12, 1991 (this document is provided as Attachment V to this guidance), and

- Interim Policy on the Inclusion of Pollution Prevention and Recycling Provisions in Enforcement Settlements, James M. Strock, February 25, 1991 (this document is provided as Attachment VI to this guidance).

These documents describe a specific methodology for considering P2 activities as part of enforcement negotiations and settlements. They identify five specific types of SEP's; pollution prevention projects, pollution reduction projects, environmental restoration projects, environmental auditing projects, and enforcement-related environmental public awareness projects. The document "Policy on the Use of Supplemental Enforcement Projects in EPA Settlements" specifically addresses penalty reduction in exchange for P2 (or other types of environmentally beneficial) projects, hence would generally not be applicable to Federal facilities other than GOCO's. By contrast, the document "Interim Policy on Inclusion of Pollution Prevention and Recycling Provisions in Enforcement Settlements" lists factors to be considered when deciding whether P2 activities should

be used to correct the violation itself or done in addition to the return to compliance; these factors would be applicable whether the Region was negotiating with a private contractor or directly with the Federal facility.

This initiative will build upon the applicable strategy and policy documents described above by emphasizing source reduction[1] activities in every enforcement settlement to the maximum extent practicable. For every enforcement settlement, the Region and the State should seek to include any source reduction activities where practicable, taking into consideration the definition of acceptable SEPs and pollution prevention activities, as those terms are used in the above-referenced pollution prevention policy documents. It is important to note, however, that the goal of the initiative is to maximize P2 activities. hence, limitations which are embodied in the policy documents, which may not be fully applicable should not preclude pursuit of reasonable source reduction activities to the maximum extent practicable.

The Regions will be asked to monitor the extent to which source reduction activities have been included in enforcement settlements under this initiative, as well as the benefits achieved through implementation of such settlements. This is essential to determining the value and effectiveness of this initiative. At the end of each year of the initiative, Regions will be asked to report on their source reduction successes by submitting the information discussed below, Section IX, Multi-Media Enforcement Communications. The Regions will also be asked to report this information on substances not utilized or released during the second year of the initiative for all facilities, including those which were included in the first year of the initiative.

As this is a Federal facilities initiative, Regions and States are encouraged to consider multi-facility source reduction activities as part of individual settlements, or in conjunction with the several settlements at multiple facilities. OFFE will work closely with all Regions to identify opportunities for such innovative settlements. For example, an enforcement action at a single fire-fighting training facility (FFTF) could be expanded to include source reduction activities at other facilities which operate FFTF's but were not part of the initiative. Likewise, if several Regions were pursuing enforcement negotiations at several facilities operated by one DOD service, the possibility of a series of source reduction activities throughout all of that service's facilities should be explored.

The Risk Reduction Engineering Laboratory (RREL) of EPA's Office of Research and Development is a major resource available to enforcement personnel for expertise in the identification of pollution prevention opportunities. RREL will assist the Regions by providing potential pollution prevention solutions for identified areas of non-compliance. Under the Waste Reduction Evaluations at Federal Sites (WREAFS) program, RREL has conducted numerous pollution prevention opportunity assessments at Federal facilities. As part of the initiative, OFFE intends to incrementally fund RREL to provide pollution prevention assistance to the Regions. Regions that require assistance with the identification of pollution prevention opportunities should request assistance from OFFE early in the enforcement process if it appears that compliance problems or violations identified during multi-media inspections may be amenable to pollution prevention solutions. For further information or assistance, contact: Jim Bridges, RREL (513/569-7683).

XI. Multi-Media Enforcement Communications

In each phase of the initiative, EPA will seek to ensure that each facility inspected either returns to compliance or is under the terms of an enforceable agreement within a specified period of time. The end of this period of time will usually coincide with the end of a phase. EPA will seek to ensure that threats to human health and the environment have been abated to the maximum extent possible pursuant to the action. These

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[1] As used in this section of this guidance, the term source reduction is intended to be synonymous with pollution prevention.

objectives will be carefully tracked by the Regions through the identification by OFFE at the start of the initiative, of the data to be collected. The data collected should support those items outlined in the objectives and measures of success in this guidance.

The use of publicity creates a deterrent effect that is an integral part of the enforcement process with regard to this initiative. The Federal sector is very responsive to positive and negative press. The glare of the public spotlight is one of the most important tools currently available in environmental enforcement, but most often this occurs during judicial cluster filings with the Department of Justice. This exact approach is not available for Federal facility enforcement cases. The press release approach to be used for this initiative is intended to highlight the Agency's efforts to evaluate compliance throughout the Federal sector and to show sound results from Federal sector enforcement.

Each concluding phase of the initiative will be announced as part of a larger EPA press release which announces a specific EPA/State Federal facility enforcement action. This press release should be broad in nature with special attention given to innovative approaches used to address areas of non-compliance. These approaches may be global settlements, pollution prevention projects to address areas of non-compliance, or voluntary actions by the regulated community. OFFE believes this will create a great amount of concern throughout the Federal sector and may bring voluntary corrective measures to an increased level. The details of this strategy must still be developed and approved through Headquarters communications, and OFFE intends to ensure that Regional and State concerns are addressed in the final strategy.

An initial list of data related to the enforcement cases developed under the initiative, which will be tracked by the Regions, is listed below. The Regions should seek to maximize the benefits derived from the initiative by emphasizing the activities described below as well as those objectives and measures of success developed by the Regions or mentioned in sections IV and V of this document:

- Number of pounds of pollutants eliminated from use, recycled, or recovered.
- Number of pounds of pollutant emissions reduced, including emissions which affect human populations or sensitive ecosystems such as impaired waterbodies.
- Number and cost of pollution prevention projects initiated, both compliance and non-compliance related.
- Number and locations of facilities affected by P2 settlements.
- Timeframes from date of inspection, to issuance of Notice of Non-compliance, to issuance of draft FFCA, to finalization of FFCA.
- Innovative Regional/State activities that further enhance the goals of the initiative.
- Areas of concern which program offices, Regions, States, or the agency could address to ensure successful future activities at Federal facilities.

XII. Major Milestones

The following is a list of major milestones for the Federal facility multi-media compliance initiative. They may be revised to reflect progress and/or necessary changes during the initiative:

02/92 Assistant Administrator Tate's article "EPA's Enforcement Priorities for Fiscal Year 1992" in National Environmental Enforcement Journal, February 1992, identifies implementation of multi-media enforcement at Federal facilities (this document is provided as Attachment VII to this guidance).

04/92 Initial concept paper for the FY 1993/1994 initiative to Regions from OFFE, after EMC workgroup review. Overall initiative is described, including facility selection, enforcement, and media components.

05/92 Assistant Administrator Tate issues Final Addendum on Multi-Media Enforcement to the Policy Framework on State/Federal Enforcement Agreements (this document is provided as Attachment III to this guidance).

06/92 Response to concept paper comments sent to commenters with the first draft of the implementation guidance for the initiative (this document is provided as Attachment VIII to this guidance).

07/92 Deputy Administrator Habicht issues national guidance on State/EPA Enforcement Agreements highlighting the Federal Facilities Multi-Media Enforcement/Compliance Initiative (this document is provided as Attachment IV to this guidance).

10/92 Issue draft implementation guidance for the FY 1993/1994 initiative from Deputy Administrator Habicht to DAAs and DRAs.

11/92 Response from Regions indicating initial list of targeted facilities and extent of expected participation.

11/92 Comments from Regions and HQ offices on the draft implementation guidance.

01/93 Deputy Administrator Habicht issues memorandum to Federal Department and Agency Secretaries and Administrators announcing the Federal Facilities Multi-Media Enforcement/Compliance Initiative.

02/93 OFFE begins distribution of P2 opportunity profiles to the Regions.

02/93 Issuance of the final HQ communications strategy.

02/93 Distribution of annotated outline for inbriefings and outbriefings for inspections under the initiative.

03/93 Distribution of final implementation guidance for the initiative addressing commenters concerns to Regions and HQ offices.

06/93 National press release concluding first phase of enforcement activities for the initiative.

12/93 National press release on completion of second phase of enforcement activities for the initiative.

02/94 Draft report on the results of the first and second phase of enforcement for the initiative.

06/94 National press release on completion of third phase of enforcement activities for the initiative.

12/94 National press release on completion of fourth phase of enforcement activities and completion of overall initiative.

06/95 Final Report on the two-year initiative.

XIII. Conclusions

At the end of the two-year initiative, OFFE will release a report, based upon extensive Regional and State input, describing the national trend in compliance rates at Federal facilities, as well as a summary of the environmental benefits derived from the initiative, as measured in the categories described above. The initiative will also test the effectiveness of multi-media approaches to environmental compliance and implement pollution prevention solutions to identified violations. Questions and comments regarding this initiative should be forwarded to:

Jim Edward, Director
Strategic Planning and Prevention Division
Office of Federal Facilities Enforcement
U.S. EPA (OE-2261)
401 M Street, S.W.
Washington, D.C. 20460
(202) 260-8859 (direct) (202) 260-9437 (fax)

or staff contact: Reggie Cheatham (202) 260-4641/9437 (fax).

FEDERAL FACILITIES HAZARDOUS WASTE COMPLIANCE MANUAL
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Clarification of Interim Status Qualification Requirements for the Hazardous Components of Radioactive Mixed Waste (53 Federal Register, September 23, 1988)

Bruce Weddle, OSW, State Program Advisory #2 - RCRA Authorization to Regulate Mixed Wastes

State Authorization to Regulate Hazardous Components of Radioactive Mixed Wastes (51 Federal Register, July 3, 1986) as attachment

Office of General Counsel, Regulation of Radioactive Mixed Waste Under RCRA

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Federal Facility Hazardous Waste Compliance Office (FFHWCO)

Department of Defense

Department of Energy

Department of Interior

H. R. 2194

P.L. 102-386

One Hundred Second Congress of the United States of America

AT THE SECOND SESSION

Begun and held at the City of Washington on Friday, the third day of January, one thousand nine hundred and ninety-two

An Act

To amend the Solid Waste Disposal Act to clarify provisions concerning the application of certain requirements and sanctions to Federal facilities.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

TITLE I—FEDERAL FACILITY COMPLIANCE ACT

SEC. 101. SHORT TITLE.

This title may be cited as the "Federal Facility Compliance Act of 1992".

SEC. 102. APPLICATION OF CERTAIN PROVISIONS TO FEDERAL FACILITIES.

(a) IN GENERAL.—Section 6001 of the Solid Waste Disposal Act (42 U.S.C. 6961) is amended—

(1) by inserting "(a) IN GENERAL.—" after "6001.";

(2) in the first sentence, by inserting "and management" before "in the same manner";

(3) by inserting after the first sentence the following: "The Federal, State, interstate, and local substantive and procedural requirements referred to in this subsection include, but are not limited to, all administrative orders and all civil and administrative penalties and fines, regardless of whether such penalties or fines are punitive or coercive in nature or are imposed for isolated, intermittent, or continuing violations. The United States hereby expressly waives any immunity otherwise applicable to the United States with respect to any such substantive or procedural requirement (including, but not limited to, any injunctive relief, administrative order or civil or administrative penalty or fine referred to in the preceding sentence, or reasonable service charge). The reasonable service charges referred to in this subsection include, but are not limited to, fees or charges assessed in connection with the processing and issuance of permits, renewal of permits, amendments to permits, review of plans, studies, and other documents, and inspection and monitoring of facilities, as well as any other nondiscriminatory charges that are assessed in connection with a Federal, State, interstate, or local solid waste or hazardous waste regulatory program."; and

(4) by inserting after the second sentence the following: "No agent, employee, or officer of the United States shall be personally liable for any civil penalty under any Federal, State, interstate, or local solid or hazardous waste law with respect to any act or omission within the scope of the official duties of the agent, employee, or officer. An agent, employee, or officer of the United States shall be subject to any criminal sanction

(including, but not limited to, any fine or imprisonment) under any Federal or State solid or hazardous waste law, but no department, agency, or instrumentality of the executive, legislative, or judicial branch of the Federal Government shall be subject to any such sanction.".

(b) ADMINISTRATIVE ENFORCEMENT ACTIONS.—Such section is further amended by adding at the end the following new subsections:

"(b) ADMINISTRATIVE ENFORCEMENT ACTIONS.—(1) The Administrator may commence an administrative enforcement action against any department, agency, or instrumentality of the executive, legislative, or judicial branch of the Federal Government pursuant to the enforcement authorities contained in this Act. The Administrator shall initiate an administrative enforcement action against such a department, agency, or instrumentality in the same manner and under the same circumstances as an action would be initiated against another person. Any voluntary resolution or settlement of such an action shall be set forth in a consent order.

"(2) No administrative order issued to such a department, agency, or instrumentality shall become final until such department, agency, or instrumentality has had the opportunity to confer with the Administrator.

"(c) LIMITATION ON STATE USE OF FUNDS COLLECTED FROM FEDERAL GOVERNMENT.—Unless a State law in effect on the date of the enactment of the Federal Facility Compliance Act of 1992 or a State constitution requires the funds to be used in a different manner, all funds collected by a State from the Federal Government from penalties and fines imposed for violation of any substantive or procedural requirement referred to in subsection (a) shall be used by the State only for projects designed to improve or protect the environment or to defray the costs of environmental protection or enforcement.".

(c) EFFECTIVE DATES.—

(1) IN GENERAL.—Except as otherwise provided in paragraphs (2) and (3), the amendments made by subsection (a) shall take effect upon the date of the enactment of this Act.

(2) DELAYED EFFECTIVE DATE FOR CERTAIN MIXED WASTE.—Until the date that is 3 years after the date of the enactment of this Act, the waiver of sovereign immunity contained in section 6001(a) of the Solid Waste Disposal Act with respect to civil, criminal, and administrative penalties and fines (as added by the amendments made by subsection (a)) shall not apply to departments, agencies, and instrumentalities of the executive branch of the Federal Government for violations of section 3004(j) of the Solid Waste Disposal Act involving storage of mixed waste that is not subject to an existing agreement, permit, or administrative or judicial order, so long as such waste is managed in compliance with all other applicable requirements.

(3) EFFECTIVE DATE FOR CERTAIN MIXED WASTE.—(A) Except as provided in subparagraph (B), after the date that is 3 years after the date of the enactment of this Act, the waiver of sovereign immunity contained in section 6001(a) of the Solid Waste Disposal Act with respect to civil, criminal, and administrative penalties and fines (as added by the amendments made by subsection (a)) shall apply to departments, agencies, and instrumentalities of the executive branch of the Federal Govern-

ment for violations of section 3004(j) of the Solid Waste Disposal Act involving storage of mixed waste.

(B) With respect to the Department of Energy, the waiver of sovereign immunity referred to in subparagraph (A) shall not apply after the date that is 3 years after the date of the enactment of this Act for violations of section 3004(j) of such Act involving storage of mixed waste, so long as the Department of Energy is in compliance with both—

(i) a plan that has been submitted and approved pursuant to section 3021(b) of the Solid Waste Disposal Act and which is in effect; and

(ii) an order requiring compliance with such plan which has been issued pursuant to such section 3021(b) and which is in effect.

(4) APPLICATION OF WAIVER TO AGREEMENTS AND ORDERS.—The waiver of sovereign immunity contained in section 6001(a) of the Solid Waste Disposal Act (as added by the amendments made by subsection (a)) shall take effect on the date of the enactment of this Act with respect to any agreement, permit, or administrative or judicial order existing on such date of enactment (and any subsequent modifications to such an agreement, permit, or order), including, without limitation, any provision of an agreement, permit, or order that addresses compliance with section 3004(j) of such Act with respect to mixed waste.

(5) AGREEMENT OR ORDER.—Except as provided in paragraph (4), nothing in this Act shall be construed to alter, modify, or change in any manner any agreement, permit, or administrative or judicial order, including, without limitation, any provision of an agreement, permit, or order—

(i) that addresses compliance with section 3004(j) of the Solid Waste Disposal Act with respect to mixed waste;

(ii) that is in effect on the date of enactment of this Act; and

(iii) to which a department, agency, or instrumentality of the executive branch of the Federal Government is a party.

SEC. 103. DEFINITION OF PERSON.

Section 1004(15) of the Solid Waste Disposal Act (42 U.S.C. 6903(15)) is amended by adding the following before the period: "and shall include each department, agency, and instrumentality of the United States".

SEC. 104. FACILITY ENVIRONMENTAL ASSESSMENTS.

Section 3007(c) of the Solid Waste Disposal Act (42 U.S.C. 6927(c)) is amended as follows:

(1) The first sentence is amended by striking out "Beginning" and all that follows through "undertake" and inserting in lieu thereof "The Administrator shall undertake".

(2) The first sentence is further amended by striking out "Federal agency" and inserting in lieu thereof "department, agency, or instrumentality of the United States".

(3) The section is further amended by inserting after the first sentence the following new sentence: "Any State with an authorized hazardous waste program also may conduct an inspection of any such facility for purposes of enforcing the facility's compliance with the State hazardous waste program.".

(4) The section is further amended by adding at the end the following: "The department, agency, or instrumentality owning or operating each such facility shall reimburse the Environmental Protection Agency for the costs of the inspection of the facility. With respect to the first inspection of each such facility occurring after the date of the enactment of the Federal Facility Compliance Act of 1992, the Administrator shall conduct a comprehensive ground water monitoring evaluation at the facility, unless such an evaluation was conducted during the 12-month period preceding such date of enactment.".

SEC. 105. MIXED WASTE INVENTORY REPORTS AND PLAN.

(a) MIXED WASTE AMENDMENT.—(1) Subtitle C of the Solid Waste Disposal Act (42 U.S.C. 6921 et seq.) is amended by adding at the end the following new section:

"SEC. 3021. MIXED WASTE INVENTORY REPORTS AND PLAN.

"(a) MIXED WASTE INVENTORY REPORTS.—

"(1) REQUIREMENT.—Not later than 180 days after the date of the enactment of the Federal Facility Compliance Act of 1992, the Secretary of Energy shall submit to the Administrator and to the Governor of each State in which the Department of Energy stores or generates mixed wastes the following reports:

"(A) A report containing a national inventory of all such mixed wastes, regardless of the time they were generated, on a State-by-State basis.

"(B) A report containing a national inventory of mixed waste treatment capacities and technologies.

"(2) INVENTORY OF WASTES.— The report required by paragraph (1)(A) shall include the following:

"(A) A description of each type of mixed waste at each Department of Energy facility in each State, including, at a minimum, the name of the waste stream.

"(B) The amount of each type of mixed waste currently stored at each Department of Energy facility in each State, set forth separately by mixed waste that is subject to the land disposal prohibition requirements of section 3004 and mixed waste that is not subject to such prohibition requirements.

"(C) An estimate of the amount of each type of mixed waste the Department expects to generate in the next 5 years at each Department of Energy facility in each State.

"(D) A description of any waste minimization actions the Department has implemented at each Department of Energy facility in each State for each mixed waste stream.

"(E) The EPA hazardous waste code for each type of mixed waste containing waste that has been characterized at each Department of Energy facility in each State.

"(F) An inventory of each type of waste that has not been characterized by sampling and analysis at each Department of Energy facility in each State.

"(G) The basis for the Department's determination of the applicable hazardous waste code for each type of mixed waste at each Department of Energy facility and a description of whether the determination is based on sampling

and analysis conducted on the waste or on the basis of process knowledge.

"(H) A description of the source of each type of mixed waste at each Department of Energy facility in each State.

"(I) The land disposal prohibition treatment technology or technologies specified for the hazardous waste component of each type of mixed waste at each Department of Energy facility in each State.

"(J) A statement of whether and how the radionuclide content of the waste alters or affects use of the technologies described in subparagraph (I).

"(3) INVENTORY OF TREATMENT CAPACITIES AND TECHNOLOGIES.—The report required by paragraph (1)(B) shall include the following:

"(A) An estimate of the available treatment capacity for each waste described in the report required by paragraph (1)(A) for which treatment technologies exist.

"(B) A description, including the capacity, number and location, of each treatment unit considered in calculating the estimate under subparagraph (A).

"(C) A description, including the capacity, number and location, of any existing treatment unit that was not considered in calculating the estimate under subparagraph (A) but that could, alone or in conjunction with other treatment units, be used to treat any of the wastes described in the report required by paragraph (1)(A) to meet the requirements of regulations promulgated pursuant to section 3004(m).

"(D) For each unit listed in subparagraph (C), a statement of the reasons why the unit was not included in calculating the estimate under subparagraph (A).

"(E) A description, including the capacity, number, location, and estimated date of availability, of each treatment unit currently proposed to increase the treatment capacities estimated under subparagraph (A).

"(F) For each waste described in the report required by paragraph (1)(A) for which the Department has determined no treatment technology exists, information sufficient to support such determination and a description of the technological approaches the Department anticipates will need to be developed to treat the waste.

"(4) COMMENTS AND REVISIONS.—Not later than 90 days after the date of the submission of the reports by the Secretary of Energy under paragraph (1), the Administrator and each State which received the reports shall submit any comments they may have concerning the reports to the Department of Energy. The Secretary of Energy shall consider and publish the comments prior to publication of the final report.

"(5) REQUESTS FOR ADDITIONAL INFORMATION.—Nothing in this subsection limits or restricts the authority of States or the Administrator to request additional information from the Secretary of Energy.

"(b) PLAN FOR DEVELOPMENT OF TREATMENT CAPACITIES AND TECHNOLOGIES.—

"(1) PLAN REQUIREMENT.—(A)(i) For each facility at which the Department of Energy generates or stores mixed wastes, except any facility subject to a permit, agreement, or order

described in clause (ii), the Secretary of Energy shall develop and submit, as provided in paragraph (2), a plan for developing treatment capacities and technologies to treat all of the facility's mixed wastes, regardless of the time they were generated, to the standards promulgated pursuant to section 3004(m).

"(ii) Clause (i) shall not apply with respect to any facility subject to any permit establishing a schedule for treatment of such wastes, or any existing agreement or administrative or judicial order governing the treatment of such wastes, to which the State is a party.

"(B) Each plan shall contain the following:

"(i) For mixed wastes for which treatment technologies exist, a schedule for submitting all applicable permit applications, entering into contracts, initiating construction, conducting systems testing, commencing operations, and processing backlogged and currently generated mixed wastes.

"(ii) For mixed wastes for which no treatment technologies exist, a schedule for identifying and developing such technologies, identifying the funding requirements for the identification and development of such technologies, submitting treatability study exemptions, and submitting research and development permit applications.

"(iii) For all cases where the Department proposes radionuclide separation of mixed wastes, or materials derived from mixed wastes, it shall provide an estimate of the volume of waste generated by each case of radionuclide separation, the volume of waste that would exist or be generated without radionuclide separation, the estimated costs of waste treatment and disposal if radionuclide separation is used compared to the estimated costs if it is not used, and the assumptions underlying such waste volume and cost estimates.

"(C) A plan required under this subsection may provide for centralized, regional, or on-site treatment of mixed wastes, or any combination thereof.

"(2) REVIEW AND APPROVAL OF PLAN.—(A) For each facility that is located in a State (i) with authority under State law to prohibit land disposal of mixed waste until the waste has been treated and (ii) with both authority under State law to regulate the hazardous components of mixed waste and authorization from the Environmental Protection Agency under section 3006 to regulate the hazardous components of mixed waste, the Secretary of Energy shall submit the plan required under paragraph (1) to the appropriate State regulatory officials for their review and approval, modification, or disapproval. In reviewing the plan, the State shall consider the need for regional treatment facilities. The State shall consult with the Administrator and any other State in which a facility affected by the plan is located and consider public comments in making its determination on the plan. The State shall approve, approve with modifications, or disapprove the plan within 6 months after receipt of the plan.

"(B) For each facility located in a State that does not have the authority described in subparagraph (A), the Secretary shall submit the plan required under paragraph (1) to the Administrator of the Environmental Protection Agency for

review and approval, modification, or disapproval. A copy of the plan also shall be provided by the Secretary to the State in which such facility is located. In reviewing the plan, the Administrator shall consider the need for regional treatment facilities. The Administrator shall consult with the State or States in which any facility affected by the plan is located and consider public comments in making a determination on the plan. The Administrator shall approve, approve with modifications, or disapprove the plan within 6 months after receipt of the plan.

"(C) Upon the approval of a plan under this paragraph by the Administrator or a State, the Administrator shall issue an order under section 3008(a), or the State shall issue an order under appropriate State authority, requiring compliance with the approved plan.

"(3) PUBLIC PARTICIPATION.—Upon submission of a plan by the Secretary of Energy to the Administrator or a State, and before approval of the plan by the Administrator or a State, the Administrator or State shall publish a notice of the availability of the submitted plan and make such submitted plan available to the public on request.

"(4) REVISIONS OF PLAN.—If any revisions of an approved plan are proposed by the Secretary of Energy or required by the Administrator or a State, the provisions of paragraphs (2) and (3) shall apply to the revisions in the same manner as they apply to the original plan.

"(5) WAIVER OF PLAN REQUIREMENT.—(A) A State may waive the requirement for the Secretary of Energy to develop and submit a plan under this subsection for a facility located in the State if the State (i) enters into an agreement with the Secretary of Energy that addresses compliance at that facility with section 3004(j) with respect to mixed waste, and (ii) issues an order requiring compliance with such agreement and which is in effect.

"(B) Any violation of an agreement or order referred to in subparagraph (A) is subject to the waiver of sovereign immunity contained in section 6001(a).

"(c) SCHEDULE AND PROGRESS REPORTS.—

"(1) SCHEDULE.—Not later than 6 months after the date of the enactment of the Federal Facility Compliance Act of 1992, the Secretary of Energy shall publish in the Federal Register a schedule for submitting the plans required under subsection (b).

"(2) PROGRESS REPORTS.—(A) Not later than the deadlines specified in subparagraph (B), the Secretary of Energy shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Energy and Commerce of the House of Representatives a progress report containing the following:

"(i) An identification, by facility, of the plans that have been submitted to States or the Administrator of the Environmental Protection Agency pursuant to subsection (b).

"(ii) The status of State and Environmental Protection Agency review and approval of each such plan.

"(iii) The number of orders requiring compliance with such plans that are in effect.

"(iv) For the first 2 reports required under this paragraph, an identification of the plans required under such subsection (b) that the Secretary expects to submit in the 12-month period following submission of the report.

"(B) The Secretary of Energy shall submit a report under subparagraph (A) not later than 12 months after the date of the enactment of the Federal Facility Compliance Act of 1992, 24 months after such date, and 36 months after such date."

(2) The table of contents for subtitle C of the Solid Waste Disposal Act (contained in section 1001) is amended by adding at the end the following new item:

"Sec. 3021. Mixed waste inventory reports and plan."

(b) DEFINITION.—Section 1004 of the Solid Waste Disposal Act (42 U.S.C. 6902) is amended by adding at the end the following new paragraph:

"(41) The term 'mixed waste' means waste that contains both hazardous waste and source, special nuclear, or by-product material subject to the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.).".

(c) GAO REPORT.—

(1) REQUIREMENT.—Not later than 18 months after the date of the enactment of this Act, the Comptroller General shall submit to Congress a report on the Department of Energy's progress in complying with section 3021(b) of the Solid Waste Disposal Act.

(2) MATTERS TO BE INCLUDED.—The report required under paragraph (1) shall contain, at a minimum, the following:

(A) The Department of Energy's progress in submitting to the States or the Administrator of the Environmental Protection Agency a plan for each facility for which a plan is required under section 3021(b) of the Solid Waste Disposal Act and the status of State or Environmental Protection Agency review and approval of each such plan.

(B) The Department of Energy's progress in entering into orders requiring compliance with any such plans that have been approved.

(C) An evaluation of the completeness and adequacy of each such plan as of the date of submission of the report required under paragraph (1).

(D) An identification of any recurring problems among the Department of Energy's submitted plans.

(E) A description of treatment technologies and capacity that have been developed by the Department of Energy since the date of the enactment of this Act and a list of the wastes that are expected to be treated by such technologies and the facilities at which the wastes are generated or stored.

(F) The progress made by the Department of Energy in characterizing its mixed waste streams at each such facility by sampling and analysis.

(G) An identification and analysis of additional actions that the Department of Energy must take to—

(i) complete submission of all plans required under such section 3021(b) for all such facilities;

(ii) obtain the adoption of orders requiring compliance with all such plans; and

(iii) develop mixed waste treatment capacity and technologies.

SEC. 106. PUBLIC VESSELS.

(a) AMENDMENT.—Subtitle C of the Solid Waste Disposal Act (42 U.S.C. 6921 et seq.) is further amended by adding at the end the following new section:

"SEC. 3022. PUBLIC VESSELS.

"(a) WASTE GENERATED ON PUBLIC VESSELS.—Any hazardous waste generated on a public vessel shall not be subject to the storage, manifest, inspection, or recordkeeping requirements of this Act until such waste is transferred to a shore facility, unless—

"(1) the waste is stored on the public vessel for more than 90 days after the public vessel is placed in reserve or is otherwise no longer in service; or

"(2) the waste is transferred to another public vessel within the territorial waters of the United States and is stored on such vessel or another public vessel for more than 90 days after the date of transfer.

"(b) COMPUTATION OF STORAGE PERIOD.—For purposes of subsection (a), the 90-day period begins on the earlier of—

"(1) the date on which the public vessel on which the waste was generated is placed in reserve or is otherwise no longer in service; or

"(2) the date on which the waste is transferred from the public vessel on which the waste was generated to another public vessel within the territorial waters of the United States; and continues, without interruption, as long as the waste is stored on the original public vessel (if in reserve or not in service) or another public vessel.

"(c) DEFINITIONS.—For purposes of this section:

"(1) The term 'public vessel' means a vessel owned or bareboat chartered and operated by the United States, or by a foreign nation, except when the vessel is engaged in commerce.

"(2) The terms 'in reserve' and 'in service' have the meanings applicable to those terms under section 7293 and sections 7304 through 7306 of title 10, United States Code, and regulations prescribed under those sections.

"(d) RELATIONSHIP TO OTHER LAW.—Nothing in this section shall be construed as altering or otherwise affecting the provisions of section 7311 of title 10, United States Code.".

(b) TECHNICAL AMENDMENT.—The table of contents for subtitle C of such Act (contained in section 1001) is further amended by adding at the end the following new item:

"Sec. 3022. Public vessels.".

SEC. 107. MUNITIONS.

Section 3004 of the Solid Waste Disposal Act (42 U.S.C. 6924) is amended by adding at the end the following new subsection:

"(y) MUNITIONS.—(1) Not later than 6 months after the date of the enactment of the Federal Facility Compliance Act of 1992, the Administrator shall propose, after consulting with the Secretary of Defense and appropriate State officials, regulations identifying

when military munitions become hazardous waste for purposes of this subtitle and providing for the safe transportation and storage of such waste. Not later than 24 months after such date, and after notice and opportunity for comment, the Administrator shall promulgate such regulations. Any such regulations shall assure protection of human health and the environment.

"(2) For purposes of this subsection, the term 'military munitions' includes chemical and conventional munitions.".

SEC. 108. FEDERALLY OWNED TREATMENT WORKS.

(a) AMENDMENT.—Subtitle C of the Solid Waste Disposal Act (42 U.S.C. 6921 et seq.) is further amended by adding at the end the following new section:

"SEC. 3022. FEDERALLY OWNED TREATMENT WORKS.

"(a) IN GENERAL.—For purposes of section 1004(27), the phrase 'but does not include solid or dissolved material in domestic sewage' shall apply to any solid or dissolved material introduced by a source into a federally owned treatment works if—

"(1) such solid or dissolved material is subject to a pretreatment standard under section 307 of the Federal Water Pollution Control Act (33 U.S.C. 1317), and the source is in compliance with such standard;

"(2) for a solid or dissolved material for which a pretreatment standard has not been promulgated pursuant to section 307 of the Federal Water Pollution Control Act (33 U.S.C. 1317), the Administrator has promulgated a schedule for establishing such a pretreatment standard which would be applicable to such solid or dissolved material not later than 7 years after the date of enactment of this section, such standard is promulgated on or before the date established in the schedule, and after the effective date of such standard the source is in compliance with such standard;

"(3) such solid or dissolved material is not covered by paragraph (1) or (2) and is not prohibited from land disposal under subsections (d), (e), (f), or (g) of section 3004 because such material has been treated in accordance with section 3004(m); or

"(4) notwithstanding paragraphs (1), (2), or (3), such solid or dissolved material is generated by a household or person which generates less than 100 kilograms of hazardous waste per month unless such solid or dissolved material would otherwise be an acutely hazardous waste and subject to standards, regulations, or other requirements under this Act notwithstanding the quantity generated.

"(b) PROHIBITION.—It is unlawful to introduce into a federally owned treatment works any pollutant that is a hazardous waste.

"(c) ENFORCEMENT.—(1) Actions taken to enforce this section shall not require closure of a treatment works if the hazardous waste is removed or decontaminated and such removal or decontamination is adequate, in the discretion of the Administrator or, in the case of an authorized State, of the State, to protect human health and the environment.

"(2) Nothing in this subsection shall be construed to prevent the Administrator or an authorized State from ordering the closure of a treatment works if the Administrator or State determines such closure is necessary for protection of human health and the environment.

"(3) Nothing in this subsection shall be construed to affect any other enforcement authorities available to the Administrator or a State under this subtitle.

"(d) DEFINITION.—For purposes of this section, the term 'federally owned treatment works' means a facility that is owned and operated by a department, agency, or instrumentality of the Federal Government treating wastewater, a majority of which is domestic sewage, prior to discharge in accordance with a permit issued under section 402 of the Federal Water Pollution Control Act.

"(e) SAVINGS CLAUSE.—Nothing in this section shall be construed as affecting any agreement, permit, or administrative or judicial order, or any condition or requirement contained in such an agreement, permit, or order, that is in existence on the date of the enactment of this section and that requires corrective action or closure at a federally owned treatment works or solid waste management unit or facility related to such a treatment works.".

(b) TECHNICAL AMENDMENT.—The table of contents for subtitle C of such Act (contained in section 1001) is further amended by adding at the end the following new item:

"Sec. 3023. Federally owned treatment works.".

SEC. 108. SMALL TOWN ENVIRONMENTAL PLANNING.

(a) ESTABLISHMENT.—The Administrator of the Environmental Protection Agency (hereafter referred to as the "Administrator") shall establish a program to assist small communities in planning and financing environmental facilities. The program shall be known as the "Small Town Environmental Planning Program".

(b) SMALL TOWN ENVIRONMENTAL PLANNING TASK FORCE.—(1) The Administrator shall establish a Small Town Environmental Planning Task Force which shall be composed of representatives of small towns from different areas of the United States, Federal and State governmental agencies, and public interest groups. The Administrator shall terminate the Task Force not later than 2 years after the establishment of the Task Force.

(2) The Task Force shall—

(A) identify regulations developed pursuant to Federal environmental laws which pose significant compliance problems for small towns;

(B) identify means to improve the working relationship between the Environmental Protection Agency (hereafter referred to as the Agency) and small towns;

(C) review proposed regulations for the protection of the environmental and public health and suggest revisions that could improve the ability of small towns to comply with such regulations;

(D) identify means to promote regionalization of environmental treatment systems and infrastructure serving small towns to improve the economic condition of such systems and infrastructure; and

(E) provide such other assistance to the Administrator as the Administrator deems appropriate.

(c) IDENTIFICATION OF ENVIRONMENTAL REQUIREMENTS.—(1) Not later than 6 months after the date of the enactment of this Act, the Administrator shall publish a list of requirements under Federal environmental and public health statutes (and the regulations developed pursuant to such statutes) applicable to small

towns. Not less than annually, the Administrator shall make such additions and deletions to and from the list as the Administrator deems appropriate.

(2) The Administrator shall, as part of the Small Town Environmental Planning Program under this section, implement a program to notify small communities of the regulations identified under paragraph (1) and of future regulations and requirements through methods that the Administrator determines to be effective to provide information to the greatest number of small communities, including any of the following:

(A) Newspapers and other periodicals.

(B) Other news media.

(C) Trade, municipal, and other associations that the Administrator determines to be appropriate.

(D) Direct mail.

(d) SMALL TOWN OMBUDSMAN.—The Administrator shall establish and staff an Office of the Small Town Ombudsman. The Office shall provide assistance to small towns in connection with the Small Town Environmental Planning Program and other business with the Agency. Each regional office shall identify a small town contact. The Small Town Ombudsman and the regional contacts also may assist larger communities, but only if first priority is given to providing assistance to small towns.

(e) MULTI-MEDIA PERMITS.—(1) The Administrator shall conduct a study of establishing a multi-media permitting program for small towns. Such evaluation shall include an analysis of—

(A) environmental benefits and liabilities of a multi-media permitting program;

(B) the potential of using such a program to coordinate a small town's environmental and public health activities; and

(C) the legal barriers, if any, to the establishment of such a program.

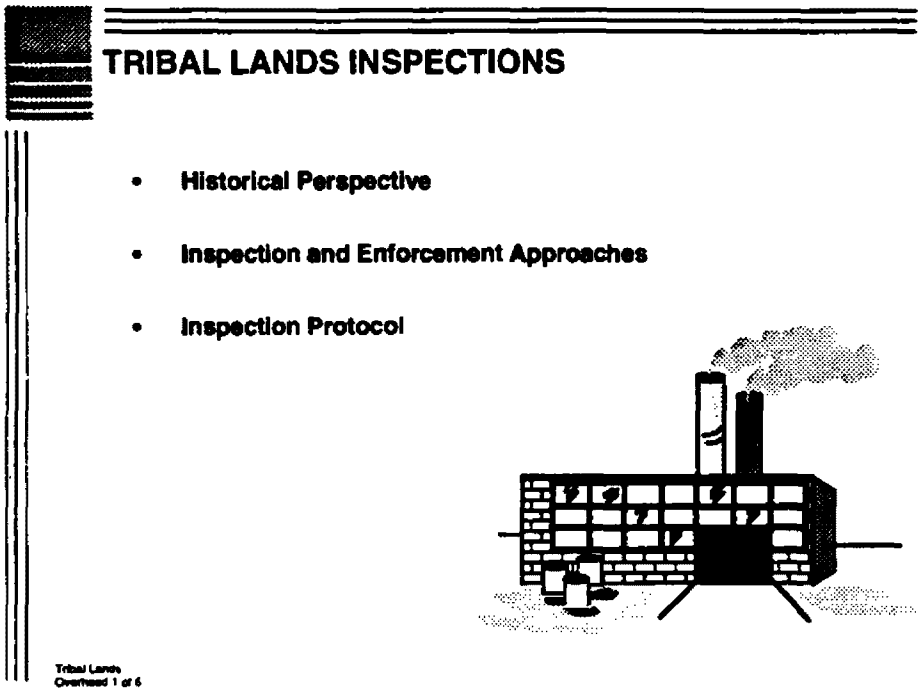
(2) Within 3 years after the date of enactment of this Act, the Administrator shall report to Congress on the results of the evaluation performed in accordance with paragraph (1). Included in this report shall be a description of the activities conducted pursuant to subsections (a) through (d).

(f) DEFINITION.—For purposes of this section, the term "small town" means an incorporated or unincorporated community (as defined by the Administrator) with a population of less than 2,500 individuals.

(g) AUTHORIZATION.—There is authorized to be appropriated the sum of $500,000 to implement this section.

SEC. 110. CHIEF FINANCIAL OFFICER REPORT.

The Chief Financial Officer of each affected agency shall submit to Congress an annual report containing, to the extent practicable, a detailed description of the compliance activities undertaken by the agency for mixed waste streams, and an accounting of the fines and penalties imposed on the agency for violations involving mixed waste.

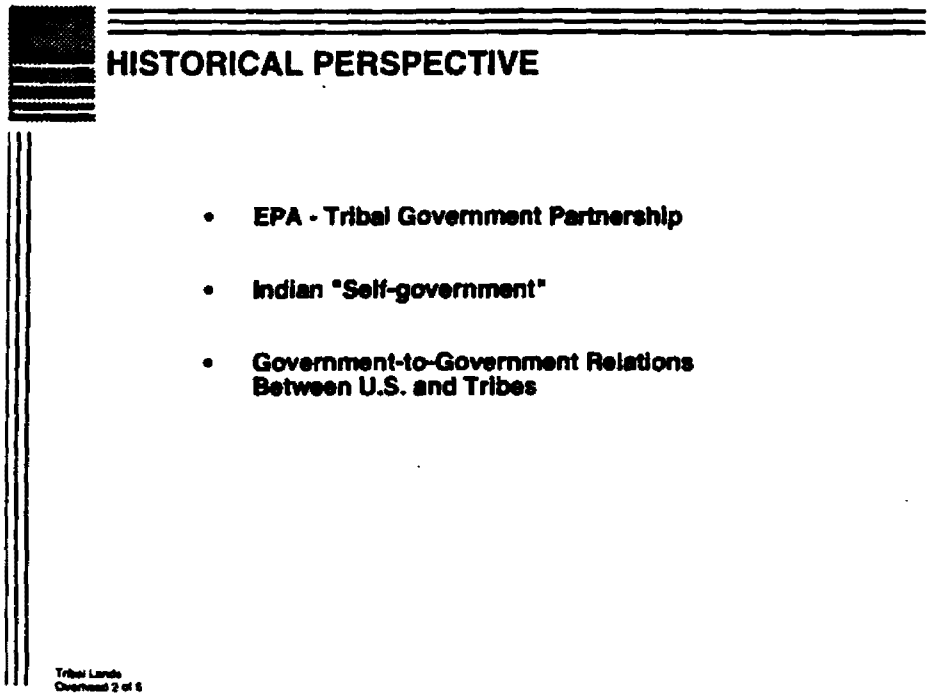


OVERHEAD #1

TITLE: Tribal Lands Inspections

KEY POINTS:

- During this presentation, we will discuss:
  - — Types of agreements entered into with Indian Tribal governments, such as Notices of Noncompliance (NONs)
  - — Enforcement actions that can (and may not) be taken when violations occur on Tribal lands—as you know, because of the status of facilities on Tribal lands, EPA cannot use the standard enforcement tools otherwise available
  - — Protocol for conducting inspections on Tribal lands.



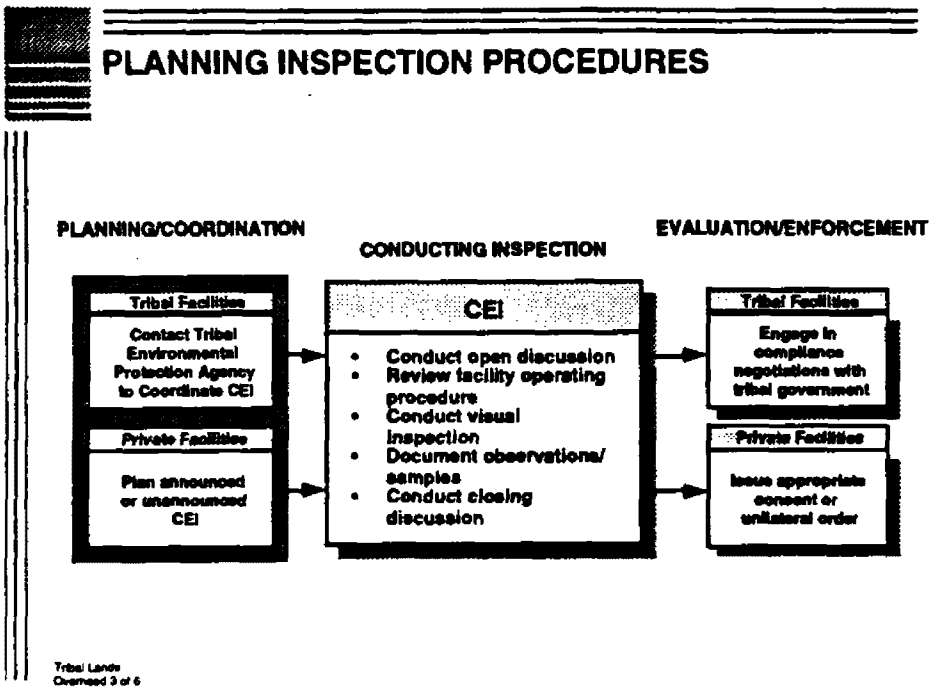
OVERHEAD #2

TITLE: Historical Perspective

KEY POINTS:

- Before we begin these discussions, let's look at the history behind inspections on Tribal lands.

- The partnership that EPA has established and continues to foster with Tribal governments is based on the principles outlined in the EPA Policy for the Administration of Environmental Programs and Indian Policy Implementation Guidance. The Policy and Guidance state that inspections must be based on the principles of Indian "self-government," and relations between the Federal government and Tribal Governments must be conducted on "a government-to-government" level. Accordingly, when inspectors are conducting CEIs, EPA will give special consideration to Tribal protocol and ensure the close involvement of Tribal governments in making decisions and reviewing environmental compliance on reservation lands. Inspectors should stand ready to work directly with Tribal officials on a one-to-one basis, rather than subordinate to state agencies. EPA recognizes that Tribal governments have primary responsibility for making environmental policy and for conducting facility evaluations on Tribal lands. The EPA Policy for the Administration of Environmental Programs and Indian Policy Implementation Guidance is included in your Participant's Manual.

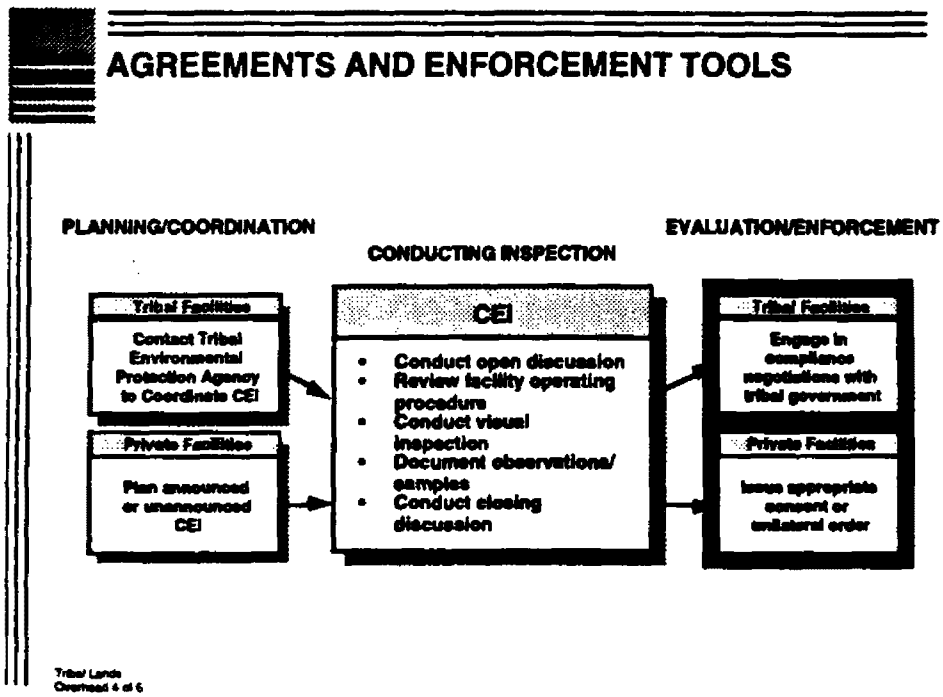


OVERHEAD #3

TITLE: Planning Inspection Procedures

KEY POINTS:

- This diagram is designed to illustrate the basic differences in planning an approach for inspections on Tribal lands and for inspections of private facilities.
- Federal Indian Policy states that inspections should be conducted through "government-to-government" relations by contacting the Tribal environmental protection agency. Most RCRA CEI's are conducted jointly by EPA and the Tribal agency. Actual inspection procedures may vary among EPA Regions. A list of the Regional EPA Indian Coordinators is provided in your Participant's Manual for your convenience.
- Aside from the special care taken in following the appropriate protocol, CEIs at facilities on Tribal lands do not differ significantly from those conducted at private facilities.



OVERHEAD #4

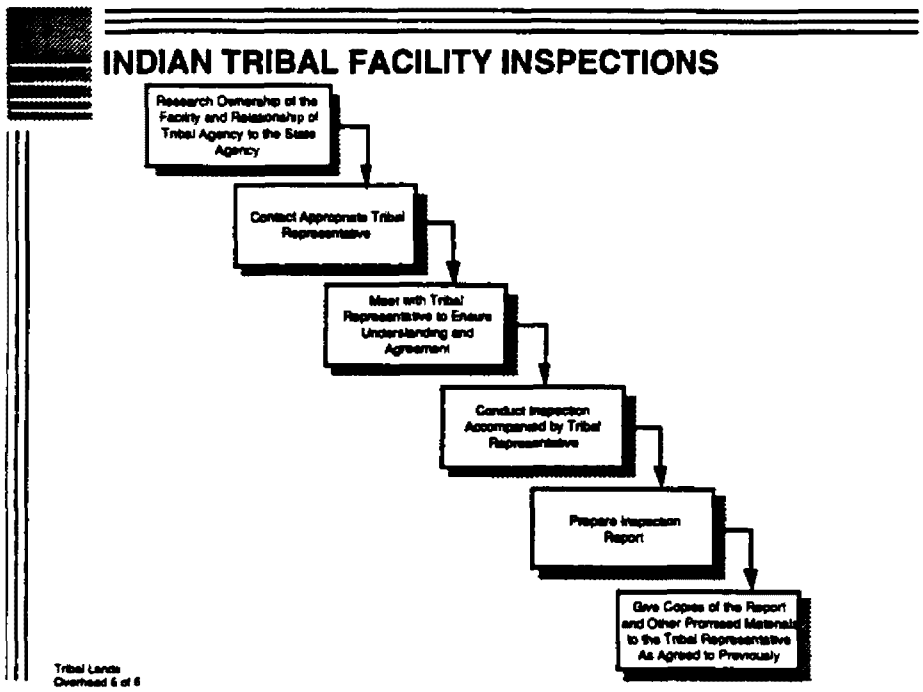
TITLE: Agreements and Enforcement Tools

KEY POINTS:

- Because the Federal government may not sue or fine an Indian Tribal government, the specifics of enforcement at these facilities becomes complex. The following enforcement tools are used to ensure compliance at facilities on Tribal lands:

  — Indian Tribal governments and EPA usually negotiate compliance agreements at facilities owned and operated by the Tribal government. Only after all other dispute resolution negotiations fail should EPA issue administrative orders, such as §3008(h) or §3008(a) compliance orders.

  — Private facilities on Indian Tribal lands are also subject to all RCRA enforcement actions and fines.



OVERHEAD #5

TITLE: Indian Tribal Facility Inspections

KEY POINTS:

- Before conducting an inspection at a Tribal land facility a considerable amount of research and preparation must be done. Tribes are their own government entity and inspectors must work with them to ensure a smooth inspection. By following the appropriate protocol a potentially hostile situation (EPA threatening to inspect, Tribal government threatening to bring charges for trespassing) will be cooperative and pleasant.

- Tribal concerns and responsibilities will vary depending on the exact owner/operator status of a facility. An inspector should determine if the Tribe owns and operates the facility or if it is leasing it some other entity.

  — Tribal owner/operator—a Tribal representative should be involved at all stages of the inspection process

  — Lease to non-Tribal entity—the Tribe must give permission for the inspector to enter the property but will not accompany the inspector.

OVERHEAD #5

TITLE: Indian Tribal Facility Inspections (continued)

KEY POINTS:

- It is important to have an understanding of the relationship between a Tribe and a state. Although Tribes usually work only with the Region on environmental issues, some may have a working relationship with the state. If so, the state may already be involved with the Tribe or have some initial information that may save you time.

- It is critical to contact the appropriate Tribal environmental representative whether it is the Tribal Chairman, the Indian Health Offices, the Tribal Police Officer, the legal offices, the environmental office, or another Tribal body.

- The inspector should meet with the appropriate Tribal representative and go over the inspection procedures and seek information about specific Tribal issues. For example:

  — Is some information especially sensitive?
  — Are there areas that are sacred and should not be photographed?
  — Is there any information that would be considered sensitive that should be made "confidential" in the report?

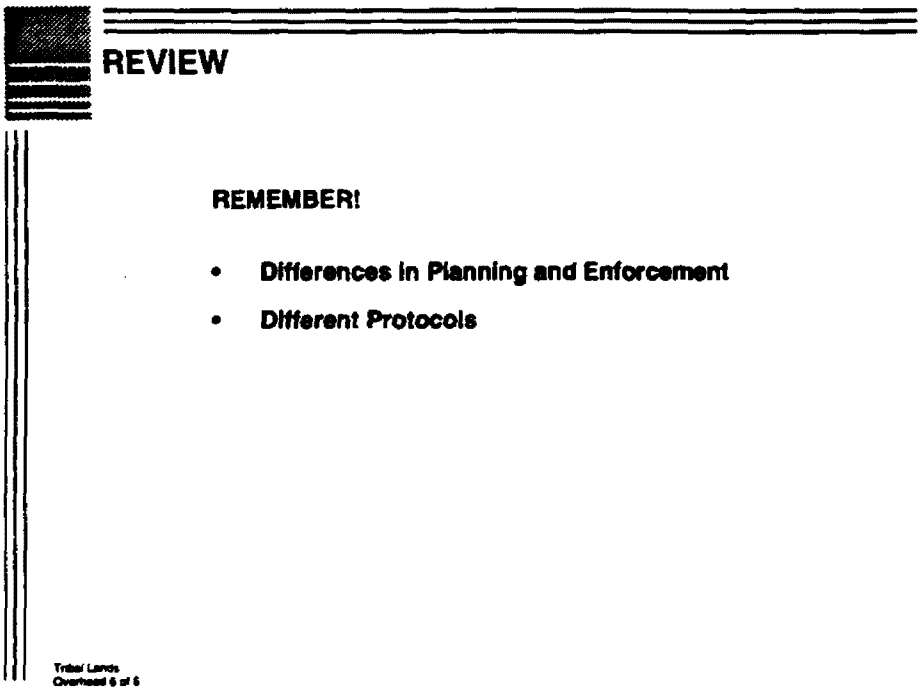
- The inspector should be sure to go over what he or she is planning to do as part of the inspection, including:

  — Where you need to be taken
  — What samples you plan to take (be sure to offer to split samples with the Tribal representative)
  — What photographs you plan to take (offer to give copies of the photos to the representative)
  — What will be included in the inspection report
  — Who can get a copy of the report through the FOIA process (i.e., any state or Federal agency or member of the public).

- When conducting the inspection the Tribal representative will, most likely, want to accompany the inspector. Be sure to follow all previously agreed-to procedures.

- Prepare the Inspection Report, making sure to note any sensitive material as "confidential" so it will not be distributed to the public in response to a FOIA request.

- Be sure to give a copy of the Inspection Report, photographs, test results, etc. to the Tribal representative.



OVERHEAD #6

TITLE: Review

KEY POINTS:

We would like to review several key pieces of information at this point.

- Because EPA may not be able to obtain direct access to Indian Tribal lands, inspectors must plan to coordinate with the appropriate authority to conduct an inspection. Plans must take into consideration whether a facility is Tribal-owned or private.
- When conducting inspections, be aware of special protocols. Specifically, many tribes have cultural protocols that should be followed.

MARCH 20, 1992

EPA REGIONAL INDIAN COORDINATORS

ANNE FENN
INDIAN COORDINATOR
EPA REGION I (PAG 2300)
JFK FEDERAL BUILDING
BOSTON MA 02203
617-565-3927
FTS-835-3927
FAX# FTS-835-3346

ROBERT HARGROVE
INDIAN COORDINATOR
EPA REGION II (2PM-E1)
26 FEDERAL PLAZA
NEW YORK NY 10278
212-264-6722
FTS-264-6722
FAX# FTS-264-6693

ARTHUR LINTON
INDIAN COORDINATOR
EPA REGION IV (9EAB-4)
345 COURTLAND STREET NE
ATLANTA GA 30365
404-881-3776
FTS-257-3776
FAX# FTS-257-5066

CASEY AMBUTAS
INDIAN COORDINATOR
EPA REGION V (5ME-19J)
77 W. JACKSON
CHICAGO IL 60604
312-353-1394
FTS-353-1394
FAX# 353-4135

ERNEST WOODS
INDIAN COORDINATOR
EPA REGION VI (6E-FF
1445 ROSS AVENUE
12TH FLOOR, SUITE 1200
DALLAS, TX 75270
214-655-2260
FTS-255-2260
FAX# 214-655-7446

MICHAEL BRONOSKI
INDIAN COORDINATOR
EPA REGION VII
762 MINNESOTA AVENUE
KANSAS CITY KS 66101
913-551-7291
FTS-276-7291
FAX# 276-7467

CAREN ROTHSTEIN
INDIAN COORDINATOR
EPA REGION VIII (80EA)
999 18TH STREET
DENVER CO 80202
303-294-1114
FTS-330-1114
FAX# FTS-330-7665

ROCCENA LAWATCH
INDIAN COORDINATOR
EPA REGION IX (E-4)
1235 MISSION STREET
SAN FRANCISCO CA 94103
415-744-1602
FTS-484-1602
FAX# 415-744-1460

STEVEN ROY
INDIAN COORDINATOR
EPA REGION X
1200 SIXTH AVENUE
SEATTLE WA 98101
206-553-2118
FTS-399-2118
FAX# FTS-399-1775

MARTIN D. TOPPER, Ph.D.
NATIONAL INDIAN
PROGRAM COORDINATOR
USEPA, 401 M ST., SW
WASHINGTON, DC 20460
202-260-5051
FTS-260-5051

OFA FAX # 260-0129

PART 271 SUBPART A - FINAL AUTHORIZATION DOC: 9541.02(84)

Key Words: State Authorization, Indian Lands

Regulations: 40 CFR 271

Subject: Jurisdiction and Implementation of the Hazardous Waste Program on Indian Lands

Addressee: Regional Division Directors, Regions I-X

Originator: Bruce R. Weddle, Acting Director, State Programs and Resource Recovering Division

Source Doc: #9541.02(84)

Date: 3-5-84

Summary:

States seeking to obtain authorization for the RCRA program on Indian lands must demonstrate their jurisdiction in the Attorney General's statement when applying for final authorization. The State must show clear and unambiguous Congressional delegation of authority over Indian lands.

EPA will continue to administer the RCRA program on Indian lands if a State does not request and obtain authorization over such lands. EPA will seek to involve Tribal governments in the administration of its RCRA programs on Indian lands.

Every Federal Register notice granting or denying RCRA authorization for a State which has Indian lands within its boundaries must state whether EPA or the State will operate the RCRA program on Indian lands.

5 MAR 1984

MEMORANDUM

SUBJECT: Jurisdiction and Implementation of the Hazardous Waste Program on Indian Lands

FROM: Bruce R. Weddle
Acting Director, State Programs and Resource Recovery Division (WH-563)

TO: Regional Division Directors, Regions I-X

Issue

Can States be authorized to operate the hazardous waste program on Indian lands, and, if so, how?

Discussion

Recently, several States have requested information on implementation of the hazardous waste program under the Resource Conservation and Recovery Act (RCRA) on Indian lands. We are currently working with the Office of General Counsel on a comprehensive memorandum on State authorization of Federal (RCRA, UIC, NPDES) environmental programs on Indian lands. In the interim, the guidance that follows responds to some of the issues raised on whether and how States may obtain authorization to operate the RCRA program on Indian lands.

I. Background

Indian tribes are deemed "domestic dependent nations", which means that although they have attributes of a nation, Congress has broad power over Indian affairs. Congress may delegate its power to regulate Indian affairs to State governments; however, it must do so specifically, in clear and express terms.

If a State wishes to obtain authorization to operate the RCRA program on Indian lands, it must demonstrate jurisdiction over activities on Indian lands. Should any State be able to make a satisfactory demonstration of jurisdiction, EPA could

authorize the State to operate the RCRA program on Indian lands in the State.[1]

The Resource Conservation and Recovery Act does not address authorization of the RCRA program on Indian lands. Except for defining Indian tribes as a municipality in §1004, RCRA is silent in this area. Therefore, if a State wishes to assert jurisdiction over Indian lands within its boundaries, it must show some other clear and unambiguous Congressional directive granting such authority. Absent such clear directives, EPA will continue to operate the RCRA program on Indian lands.

The President's policy on Indian affairs was outlined in a statement released on January 24, 1983. The policy emphasizes the importance of self-government by the Indian tribes and, at the same time, a policy of direct government-to-government relationship (i.e., Federal to tribal government). This policy leaves little room for State authorization of the RCRA program on Indian lands unless there is a clear Congressional directive to the contrary.

II. Authorization of States on Indian Lands

Given the tide of Indian law, it will be extremely difficult for a State to show clear and unambiguous Congressional intent that it has primacy over the hazardous waste waste program on Indian lands. The present trend in Indian law supports tribal regulatory authority as opposed to State authority over pollution sources within the borders of the reservation.

Some examples of successful assertions by States to operate programs on Indian lands may be found, however, in the body of Indian law. For example, Oklahoma successfully asserted primacy over the UIC program on Indian lands in the State. It is important to note, however, that there is a Federal statute specifically delegating State jurisdiction over oil and gas production from wells of the Five Civilized Tribes in Oklahoma.

III. What should States/Regions do?

State applications for authorization should include a statement as to whether or not the State is seeking authorization to operate the RCRA program on Indian lands. If it is seeking such authorization, the State Attorney General must include an

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[1]It is EPA's interpretation that we cannot authorize Indian tribal governments to operate the RCRA program in lieu of EPA unless Congress amends RCRA to so allow. Indian tribes are defined as "municipalities" in §1004 of RCRA, and not "States", and are therefore not eligible for authorization or grants under §§3006 or 3011.

analysis of the legal basis for the State's claim of jurisdiction over Indian lands in the Attorney General's statement submitted in the final authorization package. To obtain RCRA jurisdiction over Indian lands, the State must show clear Congressional intent to grant this authority. This intent must be clearly stated in a federal statute, a treaty with an Indian tribe, or unambiguous legislative history. EPA will then evaluate the claim as a matter of Federal Indian law. Because this is a question of Federal law, however, we will not necessarily defer to the State Attorney General's opinion, as we generally do on questions of interpretations of State law.

The silence on this subject in our Federal Register notices has been confusing. Every RCRA authorization notice for a State that has an Indian reservation must state the status of those Indian lands, i.e., whether EPA or the State will operate the RCRA program. If the State has successfully asserted such jurisdiction, the notice must include the basis for such an assertion, i.e., the statute or treaty which gives it clear and unambiguous power to operate the RCRA program on Indian lands.

Decision

States may seek authorization for the RCRA program on Indian lands. In order to obtain such authorization, the State must demonstrate its jurisdiction in the Attorney General's statement when applying for final authorization. The State must show clear and unambiguous Congressional delegation of authority over Indian lands.

If a State does not request and obtain authorization over Indian lands, EPA will continue to administer the RCRA program on those lands. In keeping with the President's Indian Policy, the Agency will seek to involve Tribal governments in the administration of EPA's RCRA programs on Indian lands. This issue will be dealt with in further detail in the forthcoming EPA Indian policy and subsequent guidances.

Every Federal Register notice granting or denying RCRA authorization for a State which has Indian lands within its boundaries must address the status of those lands, i.e., whether EPA or the State will operate the RCRA program on Indian lands.

cc: Regional Counsels, Regions I-X
Meg Silver

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

1984

OFFICE OF
EXTERNAL AFFAIRS

INDIAN POLICY
U.S. ENVIRONMENTAL PROTECTION AGENCY

Attached are two documents which were adopted by the Environmental Protection Agency (EPA) on November 8, 1984, relating to Indian Tribes and Federal programs for protection of reservation environments:

1) EPA Policy for the Administration of Environmental Programs on Indian Reservations.

2) Indian Policy Implementation Guidance.

These documents lay the groundwork for EPA management of the Agency's regulatory programs on reservation lands. The cornerstones of the Policy and Guidance are the principles of Indian "self-government" and "government-to-government" relations between the Federal Government and Tribal Governments. Through implementation of the Policy, the Agency hopes to realize the long-range objective of including Tribal Governments as partners in decision-making and program management on reservation lands, much as we do with State Governments off-reservation.

In the beginning, implementation of the Policy will be slowly paced, as the Agency will need to seek legislative authority in many areas and go through a lengthy budget process before we can carry out the principles of the Policy and directives of the Guidance in a comprehensive manner. In the first year, however, we will begin to seek statutory changes, modify regulations, and work on selected pilot programs. These pilot programs will investigate problems associated with Tribal regulation of water and air quality and the handling and disposal of hazardous materials on reservation lands. The experience will help both EPA and the Tribes develop models for dealing with these problems in the special legal and political context of Indian reservations.

Environmental programming that will involve Tribal Governments in the Federal regulatory process on a significant scale is a new endeavor for EPA and Tribes alike. To be successful, we will need cooperation and assistance from all sectors and would welcome your on-going support.

If you have questions or need further information, please contact Leigh Price, National EPA Indian Coordinator, at (202) 382-5051.

Attachment

11/8/84

EPA POLICY FOR THE ADMINISTRATION OF ENVIRONMENTAL PROGRAMS ON INDIAN RESERVATIONS

INTRODUCTION

The President published a Federal Indian Policy on January 24, 1983, supporting the primary role of Tribal Governments in matters affecting American Indian reservations. That policy stressed two related themes: (1) that the Federal Government will pursue the principle of Indian "self-government" and (2) that it will work directly with Tribal Governments on a "government-to-government" basis.

The Environmental Protection Agency (EPA) has previously issued general statements of policy which recognize the importance of Tribal Governments in regulatory activities that impact reservation environments. It is the purpose of this statement to consolidate and expand on existing EPA Indian Policy statements in a manner consistent with the overall Federal position in support of Tribal "self-government" and "government-to-government" relations between Federal and Tribal Governments. This statement sets forth the principles that will guide the Agency in dealing with Tribal Governments and in responding to the problems of environmental management on American Indian reservations in order to protect human health and the environment. The Policy is intended to provide guidance for EPA program managers in the conduct of the Agency's congressionally mandated responsibilities. As such, it applies to EPA only and does not articulate policy for other Agencies in the conduct of their respective responsibilities.

It is important to emphasize that the implementation of regulatory programs which will realize these principles on Indian Reservations cannot be accomplished immediately. Effective implementation will take careful and conscientious work by EPA, the Tribes and many others. In many cases, it will require changes in applicable statutory authorities and regulations. It will be necessary to proceed in a carefully phased way, to learn from successes and failures, and to gain experience. Nonetheless, by beginning work on the priority problems that exist now and continuing in the direction established under these principles, over time we can significantly enhance environmental quality on reservation lands.

POLICY

In carrying out our responsibilities on Indian reservations, the fundamental objective of the Environmental Protection Agency is to protect human health and the environment. The keynote of this effort will be to give special consideration to Tribal interests in making Agency policy, and to insure the close involvement of Tribal Governments in making decisions and managing environmental programs affecting reservation lands. To meet this objective, the Agency will pursue the following principles:

1. THE AGENCY STANDS READY TO WORK DIRECTLY WITH INDIAN TRIBAL GOVERNMENTS ON A ONE-TO-ONE BASIS (THE "GOVERNMENT-TO-GOVERNMENT" RELATIONSHIP), RATHER THAN AS SUBDIVISIONS OF OTHER GOVERNMENTS.

EPA recognizes Tribal Governments as sovereign entities with primary authority and responsibility for the reservation populace. Accordingly, EPA will work directly with Tribal Governments as the independent authority for reservation affairs, and not as political subdivisions of States or other governmental units.

2. THE AGENCY WILL RECOGNIZE TRIBAL GOVERNMENTS AS THE PRIMARY PARTIES FOR SETTING STANDARDS, MAKING ENVIRONMENTAL POLICY DECISIONS AND MANAGING PROGRAMS FOR RESERVATIONS, CONSISTENT WITH AGENCY STANDARDS AND REGULATIONS.

In keeping with the principle of Indian self-government, the Agency will view Tribal Governments as the appropriate non-Federal parties for making decisions and carrying out program responsibilities affecting Indian reservations, their environments, and the health and welfare of the reservation populace. Just as EPA's deliberations and activities have traditionally involved the interests and/or participation of State Governments, EPA will look directly to Tribal Governments to play this lead role for matters affecting reservation environments.

3. THE AGENCY WILL TAKE AFFIRMATIVE STEPS TO ENCOURAGE AND ASSIST TRIBES IN ASSUMING REGULATORY AND PROGRAM MANAGEMENT RESPONSIBILITIES FOR RESERVATION LANDS.

The Agency will assist interested Tribal Governments in developing programs and in preparing to assume regulatory and program management responsibilities for reservation lands. Within the constraints of EPA's authority and resources, this aid will include providing grants and other assistance to Tribes similar to that we provide State Governments. The Agency will encourage Tribes to assume delegable responsibilities, (i.e. responsibilities which the Agency has traditionally delegated to State Governments for non-reservation lands) under terms similar to those governing delegations to States.

Until Tribal Governments are willing and able to assume full responsibility for delegable programs, the Agency will retain responsibility for managing programs for reservations (unless the State has an express grant of jurisdiction from Congress sufficient to support delegation to the State Government). Where EPA retains such responsibility, the Agency will encourage the Tribe to participate in policy-making and to assume appropriate lesser or partial roles in the management of reservation programs.

4. THE AGENCY WILL TAKE APPROPRIATE STEPS TO REMOVE EXISTING LEGAL AND PROCEDURAL IMPEDIMENTS TO WORKING DIRECTLY AND EFFECTIVELY WITH TRIBAL GOVERNMENTS ON RESERVATION PROGRAMS.

A number of serious constraints and uncertainties in the language of our statutes and regulations have limited our ability to work directly and effectively with Tribal Governments on reservation problems. As impediments in our procedures, regulations or statutes are identified which limit our ability to work effectively with Tribes consistent with this Policy, we will seek to remove those impediments.

5. THE AGENCY, IN KEEPING WITH THE FEDERAL TRUST RESPONSIBILITY, WILL ASSURE THAT TRIBAL CONCERNS AND INTERESTS ARE CONSIDERED WHENEVER EPA'S ACTIONS AND/OR DECISIONS MAY AFFECT RESERVATION ENVIRONMENTS.

EPA recognizes that a trust responsibility derives from the historical relationship between the Federal Government and Indian Tribes as expressed in certain treaties and Federal Indian Law. In keeping with that trust responsibility, the Agency will endeavor to protect the environmental interests of Indian Tribes when carrying out its responsibilities that may affect the reservations.

6. THE AGENCY WILL ENCOURAGE COOPERATION BETWEEN TRIBAL, STATE AND LOCAL GOVERNMENTS TO RESOLVE ENVIRONMENTAL PROBLEMS OF MUTUAL CONCERN.

Sound environmental planning and management require the cooperation and mutual consideration of neighboring governments, whether those governments be neighboring States, Tribes, or local units of government. Accordingly, EPA will encourage early communication and cooperation among Tribes, States and local governments. This is not intended to lend Federal support to any one party to the jeopardy of the interests of the other. Rather, it recognizes that in the field of environmental regulation, problems are often shared and the principle of comity between equals and neighbors often serves the best interests of both.

7. THE AGENCY WILL WORK WITH OTHER FEDERAL AGENCIES WHICH HAVE RELATED RESPONSIBILITIES ON INDIAN RESERVATIONS TO ENLIST THEIR INTEREST AND SUPPORT IN COOPERATIVE EFFORTS TO HELP TRIBES ASSUME ENVIRONMENTAL PROGRAM RESPONSIBILITIES FOR RESERVATIONS.

EPA will seek and promote cooperation between Federal agencies to protect human health and the environment on reservations. We will work with other agencies to clearly identify and delineate the roles, responsibilities and relationships of our respective organizations and to assist Tribes in developing and managing environmental programs for reservation lands.

8. THE AGENCY WILL STRIVE TO ASSURE COMPLIANCE WITH ENVIRONMENTAL STATUTES AND REGULATIONS ON INDIAN RESERVATIONS.

In those cases where facilities owned or managed by Tribal Governments are not in compliance with Federal environmental statutes, EPA will work cooperatively with Tribal leadership to develop means to achieve compliance, providing technical support and consultation as necessary to enable Tribal facilities to comply. Because of the distinct status of Indian Tribes and the complex legal issues involved, direct EPA action through the judicial or administrative process will be considered where the Agency determines, in its judgment, that: (1) a significant threat to human health or the environment exists, (2) such action would reasonably be expected to achieve effective results in a timely manner, and (3) the Federal Government cannot utilize other alternatives to correct the problem in a timely fashion.

In those cases where reservation facilities are clearly owned or managed by private parties and there is no substantial Tribal interest or control involved, the Agency will endeavor to act in cooperation with the affected Tribal Government, but will otherwise respond to noncompliance by private parties on Indian reservations as the Agency would to noncompliance by the private sector elsewhere in the country. Where the Tribe has a substantial proprietary interest in, or control over, the privately owned or managed facility, EPA will respond as described in the first paragraph above.

9. THE AGENCY WILL INCORPORATE THESE INDIAN POLICY GOALS INTO ITS PLANNING AND MANAGEMENT ACTIVITIES, INCLUDING ITS BUDGET, OPERATING GUIDANCE, LEGISLATIVE INITIATIVES, MANAGEMENT ACCOUNTABILITY SYSTEM AND ONGOING POLICY AND REGULATION DEVELOPMENT PROCESSES.

It is a central purpose of this effort to ensure that the principles of this Policy are effectively institutionalized by incorporating them into the Agency's ongoing and long-term planning and management processes. Agency managers will include specific programmatic actions designed to resolve problems on Indian reservations in the Agency's existing fiscal year and long-term planning and management processes.

William D. Ruckelshaus

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON D C 20460

NOV 8 1984

OFFICE OF
THE ADMINISTRATOR

MEMORANDUM

SUBJECT: Indian Policy Implementation Guidance

FROM: Alvin L. Alm
Deputy Administrator

TO: Assistant Administrators
Regional Administrators
General Counsel

INTRODUCTION

The Administrator has signed the attached EPA Indian Policy. This document sets forth the broad principles that will guide the Agency in its relations with American Indian Tribal Governments and in the administration of EPA programs on Indian reservation lands.

This Policy concerns more than one hundred federally-recognized Tribal Governments and the environment of a geographical area that is larger than the combined area of the States of Maryland, New Jersey, Connecticut, Massachusetts, Vermont, New Hampshire and Maine. It is an important sector of the country, and constitutes the remaining lands of America's first stewards of the environment, the American Indian Tribes.

The Policy places a strong emphasis on incorporating Tribal Governments into the operation and management of EPA's delegable programs. This concept is based on the President's Federal Indian Policy published on January 24, 1983 and the analysis, recommendations and Agency input to the EPA Indian Work Group's Discussion Paper, Administration of Environmental Programs on American Indian Reservations (July 1983).

TIMING AND SCOPE

Because of the importance of the reservation environments, we must begin immediately to incorporate the principles of EPA's Indian Policy into the conduct of our everyday business. Our established operating procedures (including long-range budgetary and operational planning activities) have not consistently focused on the proper role of Tribal Governments or the special legal and political problems of program management on Indian lands. As a result, it will require a phased and sustained effort over time to fully implement the principles of the Policy and to take the steps outlined in this Guidance.

Some Regions and Program Offices have already made individual starts along the lines of the Policy and Guidance. I believe that a clear Agency-wide policy will enable all programs to build on these efforts so that, within the limits of our legal and budgetary constraints, the Agency as a whole can make respectable progress in the next year.

As we begin the first year of operations under the Indian Policy, we cannot expect to solve all of the problems we will face in administering programs under the unique legal and political circumstances presented by Indian reservations. We can, however, concentrate on specific priority problems and issues and proceed to address these systematically and carefully in the first year. With this general emphasis, I believe that we can make respectable progress and establish good precedents for working effectively with Tribes. By working within a manageable scope and pace, we can develop a coordinated base which can be expanded, and, as appropriate, accelerated in the second and third years of operations under the Policy.

In addition to routine application of the Policy and this Guidance in the conduct of our everyday business, the first year's implementation effort will emphasize concentrated work on a discrete number of representative problems through cooperative programs or pilot projects. In the Regions, this effort should include the identification and initiation of work on priority Tribal projects. At Headquarters, it should involve the resolution of the legal, policy and procedural problems which hamper our ability to implement the kinds of projects identified by the Regions.

The Indian Work Group (IWG), which is chaired by the Director of the Office of Federal Activities and composed of representatives of key regional and headquarters offices, will facilitate and coordinate these efforts. The IWG will begin immediately to help identify the specific projects which may be ripe for implementation and the problems needing resolution in the first year.

Because we are starting in "mid-stream," the implementation effort will necessarily require some contribution of personnel time and funds. While no one program will be affected in a major fashion, almost all Agency programs are affected to some degree. I do not expect the investment in projects on Indian Lands to cause any serious restriction in the States' funding support or in their ability to function effectively. To preserve the flexibility of each Region and each program, we have not set a target for allocation of FY 85 funds. I am confident, however, that Regions and program offices can, through readjustment of existing resources, demonstrate significant and credible progress in the implementation of EPA's Policy in the next year.

ACTION

Subject to these constraints, Regions and program managers should now initiate actions to implement the principles of the Indian Policy. The eight categories set forth below will direct our initial implementation activities. Further guidance will be provided by the Assistant Administrator for External Affairs as experience indicates a need for such guidance.

1. THE ASSISTANT ADMINISTRATOR FOR EXTERNAL AFFAIRS WILL SERVE AS LEAD AGENCY CLEARINGHOUSE AND COORDINATOR FOR INDIAN POLICY MATTERS.

This responsibility will include coordinating the development of appropriate Agency guidelines pertaining to Indian issues, the implementation of the Indian Policy and this Guidance. In this effort the Assistant Administrator for External Affairs will rely upon the assistance and support of the EPA Indian Work Group.

2. THE INDIAN WORK GROUP (IWG) WILL ASSIST AND SUPPORT THE ASSISTANT ADMINISTRATOR FOR EXTERNAL AFFAIRS IN DEVELOPING AND RECOMMENDING DETAILED GUIDANCE AS NEEDED ON INDIAN POLICY AND IMPLEMENTATION MATTERS. ASSISTANT ADMINISTRATORS, REGIONAL ADMINISTRATORS AND THE GENERAL COUNSEL SHOULD DESIGNATE APPROPRIATE REPRESENTATIVES TO THE INDIAN WORK GROUP AND PROVIDE THEM WITH ADEQUATE TIME AND RESOURCES NEEDED TO CARRY OUT THE IWG'S RESPONSIBILITIES UNDER THE DIRECTION OF THE ASSISTANT ADMINISTRATOR FOR EXTERNAL AFFAIRS.

The Indian Work Group, (IWG) chaired by the Director of the Office of Federal Activities, will be an important entity for consolidating the experience and advice of the key Assistant and Regional Administrators on Indian Policy matters. It will perform the following functions: identify specific legal, policy, and procedural impediments to working directly with Tribes on reservation problems; help develop appropriate guidance for overcoming such impediments; recommend opportunities for implementation of appropriate programs or pilot projects; and perform other services in support of Agency managers in implementing the Indian Policy.

The initial task of the IWG will be to develop recommendations and suggest priorities for specific opportunities for program implementation in the first year of operations under the Indian Policy and this Guidance.

To accomplish this, the General Counsel and each Regional and Assistant Administrator must be actively represented on the IWG by a staff member authorized to speak for his or her office. Further, the designated representative(s) should be afforded the time and resources, including travel, needed to provide significant staff support to the work of the IWG.

3. ASSISTANT AND REGIONAL ADMINISTRATORS SHOULD UNDERTAKE ACTIVE OUTREACH AND LIAISON WITH TRIBES, PROVIDING ADEQUATE INFORMATION TO ALLOW THEM TO WORK WITH US IN AN INFORMED WAY.

In the first thirteen years of the Agency's existence, we have worked hard to establish working relationships with State Governments, providing background information and sufficient interpretation and explanations to enable them to work effectively with us in the development of cooperative State programs under our various statutes. In a similar manner, EPA managers should try to establish direct, face-to-face contact (preferably on the reservation) with Tribal Government officials. This liaison is essential to understanding Tribal needs, perspectives and priorities. It will also foster Tribal understanding of EPA's programs and procedures needed to deal effectively with us.

4. ASSISTANT AND REGIONAL ADMINISTRATORS SHOULD ALLOCATE RESOURCES TO MEET TRIBAL NEEDS, WITHIN THE CONSTRAINTS IMPOSED BY COMPETING PRIORITIES AND BY OUR LEGAL AUTHORITY.

As Tribes move to assume responsibilities similar to those borne by EPA or State Governments, an appropriate block of funds must be set aside to support reservation abatement, control and compliance activities.

Because we want to begin to implement the Indian Policy now, we cannot wait until FY 87 to formally budget for programs on Indian lands. Accordingly, for many programs, funds for initial Indian projects in FY 85 and FY 86 will need to come from resources currently planned for support to EPA-and State-managed programs meeting similar objectives. As I stated earlier, we do not expect to resolve all problems and address all environmental needs on reservations immediately. However, we can make a significant beginning without unduly restricting our ability to fund ongoing programs.

I am asking each Assistant Administrator and Regional Administrator to take measures within his or her discretion and authority to provide sufficient staff time and grant funds to allow the Agency to initiate projects on Indian lands in FY 85 and FY 86 that will constitute a respectable step towards implementation of the Indian Policy.

5. ASSISTANT AND REGIONAL ADMINISTRATORS, WITH LEGAL SUPPORT PROVIDED BY THE GENERAL COUNSEL, SHOULD ASSIST TRIBAL GOVERNMENTS IN PROGRAM DEVELOPMENT AS THEY HAVE DONE FOR THE STATES.

The Agency has provided extensive staff work and assistance to State Governments over the years in the development of environmental programs and program management capabilities. This assistance has become a routine aspect of Federal/State relations, enabling and expediting the States' assumption of delegable programs under the various EPA statutes. This "front end" investment has promoted cooperation and increased State involvement in the regulatory process.

As the Agency begins to deal with Tribal Governments as partners in reservation environmental programming, we will find a similar need for EPA assistance. Many Regional and program personnel have extensive experience in working with States on program design and development; their expertise should be used to assist Tribal Governments where needed.

6. ASSISTANT ADMINISTRATORS, REGIONAL ADMINISTRATORS AND THE GENERAL COUNSEL SHOULD TAKE ACTIVE STEPS TO ALLOW TRIBES TO PROVIDE INFORMED INPUT INTO EPA'S DECISION-MAKING AND PROGRAM MANAGEMENT ACTIVITIES WHICH AFFECT RESERVATION ENVIRONMENTS.

Where EPA manages Federal programs and/or makes decisions relating directly or indirectly to reservation environments, full consideration and weight should be given to the public policies, priorities and concerns of the affected Indian Tribes as expressed through their Tribal Governments. Agency managers should make a special effort to inform Tribes of EPA decisions and activities which can affect their reservations and solicit their input as we have done with State Governments. Where necessary, this should include providing the necessary information, explanation and/or briefings needed to foster the informed participation of Tribal Governments in the Agency's standard-setting and policy-making activities.

7. ASSISTANT AND REGIONAL ADMINISTRATORS SHOULD, TO THE MAXIMUM FEASIBLE EXTENT, INCORPORATE TRIBAL CONCERNS, NEEDS AND PREFERENCES INTO EPA'S POLICY DECISIONS AND PROGRAM MANAGEMENT ACTIVITIES AFFECTING RESERVATIONS.

It has been EPA's practice to seek out and accord special consideration to local interests and concerns, within the limits allowed by our statutory mandate and nationally established criteria and standards. Consistent with the Federal and Agency policy to recognize Tribal Governments as the primary voice for expressing public policy on reservations, EPA managers should, within the limits of their flexibility, seek and utilize Tribal input and preferences in those situations where we have traditionally utilized State or local input.

We recognize that conflicts in policy, priority or preference may arise between States and Tribes as it does between neighboring States. As in the case of conflicts between neighboring States, EPA will encourage early communication and cooperation between Tribal and State Governments to avoid and resolve such issues. This is not intended to lend Federal support to any one party in its dealings with the other. Rather, it recognizes that in the field of environmental regulation, problems are often shared and the principle of comity between equals often serves the interests of both.

Several of the environmental statutes include a conflict resolution mechanism which enables EPA to use its good offices to balance and resolve the conflict. These procedures can be applied to conflicts between Tribal and State Governments that cannot otherwise be resolved. EPA can play a moderating role by following the conflict resolution principles set by the statute, the Federal trust responsibility and the EPA Indian Policy.

8. ASSISTANT ADMINISTRATORS, REGIONAL ADMINISTRATORS AND THE GENERAL COUNSEL SHOULD WORK COOPERATIVELY WITH TRIBAL GOVERNMENTS TO ACHIEVE COMPLIANCE WITH ENVIRONMENTAL STATUTES AND REGULATIONS ON INDIAN RESERVATIONS, CONSISTENT WITH THE PRINCIPLE OF INDIAN SELF-GOVERNMENT.

The EPA Indian Policy recognizes Tribal Governments as the key governments having responsibility for matters affecting the health and welfare of the Tribe. Accordingly, where tribally owned or managed facilities do not meet Federally established standards, the Agency will endeavor to work with the Tribal leadership to enable the Tribe to achieve compliance. Where reservation facilities are clearly owned or managed by private parties and there is no substantial Tribal interest or control involved, the Agency will endeavor to act in cooperation with the affected Tribal Government, but will otherwise respond to noncompliance by private parties on Indian reservations as we do to noncompliance by the private sector off-reservation.

Actions to enable and ensure compliance by Tribal facilities with Federal statutes and regulations include providing consultation and technical support to Tribal leaders and managers concerning the impacts of noncompliance on Tribal health and the reservation environment and steps needed to achieve such compliance. As appropriate, EPA may also develop compliance agreements with Tribal Governments and work cooperatively with other Federal agencies to assist Tribes in meeting Federal standards.

Because of the unique legal and political status of Indian Tribes in the Federal System, direct EPA actions against Tribal facilities through the judicial or administrative process will be considered where the Agency determines, in its judgment, that: (1) a significant threat to human health or the environment exists, (2) such action would reasonably be expected to achieve effective results in a timely manner, and (3) the Federal Government cannot utilize other alternatives to correct the problem in a timely fashion. Regional Administrators proposing to initiate such action should first obtain concurrence from the Assistant Administrator for Enforcement and Compliance Monitoring, who will act in consultation with the Assistant Administrator for External Affairs and the General Counsel. In emergency situations, the Regional Administrator may issue emergency Temporary Restraining Orders, provided that the appropriate procedures set forth in Agency delegations for such actions are followed.

9. ASSISTANT ADMINISTRATORS, REGIONAL ADMINISTRATORS AND THE GENERAL COUNSEL SHOULD BEGIN TO FACTOR INDIAN POLICY GOALS INTO THEIR LONG-RANGE PLANNING AND PROGRAM MANAGEMENT ACTIVITIES, INCLUDING BUDGET, OPERATING GUIDANCE, MANAGEMENT ACCOUNTABILITY SYSTEMS AND PERFORMANCE STANDARDS.

In order to carry out the principles of the EPA Indian Policy and work effectively with Tribal Governments on a long-range basis, it will be necessary to institutionalize the Agency's policy goals in the management systems that regulate Agency behavior. Where we have systematically incorporated State needs, concerns and cooperative roles into our budget, Operating Guidance, management accountability systems and performance standards, we must now begin to factor the Agency's Indian Policy goals into these same procedures and activities.

Agency managers should begin to consider Indian reservations and Tribes when conducting routine planning and management activities or carrying out special policy analysis activities. In addition, the IWG, operating under the direction of the Assistant Administrator for External Affairs and with assistance from the Assistant Administrator for Policy, Planning and Evaluation, will identify and recommend specific steps to be taken to ensure that Indian Policy goals are effectively incorporated and institutionalized in the Agency's procedures and operations.

Attachment

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUL 10 1991

MEMORANDUM

THE ADMINISTRATOR

SUBJECT: EPA/State/Tribal Relations

TO: Assistant Administrators
General Counsel
Inspector General
Regional Administrators
Associate Administrators
Staff Office Directors

Earlier this year I shared with you my views concerning EPA's Indian Policy, its implementation and its future direction. I would now like to further emphasize my commitment to the Policy by endorsing the attached paper that was coordinated by Region VIII on EPA/State/Tribal Relations.

This paper was prepared to formalize the Agency's role in strengthening tribal governments' management of environmental programs on reservations. The paper notes that the differences between the interests of tribal and state governments can be very sensitive and sometimes extend well beyond the specific issues of environmental protection. It reaffirms the general approach of the Agency's Indian Policy and recommends the strengthening of tribal capacity for environmental management. I believe the Agency should continue its present policy, making every effort to support cooperation and coordination between tribal and state governments, while maintaining our commitment to environmental quality.

- I encourage you to promote tribal management of environmental programs and work toward that goal.

Please distribute this document to states and tribes in your region.

William K. Reilly

Attachment

cc. Headquarters Program Office Directors
Regional Office Directors

FEDERAL, TRIBAL AND STATE ROLES IN THE PROTECTION AND REGULATION OF RESERVATION ENVIRONMENTS

A Concept Paper

I. BACKGROUND

William Reilly, in his first year as EPA Administrator, reaffirmed the 1984 EPA Indian Policy and its implicit promise to protect the environment of Indian reservations as effectively as the Agency protects the environment of the rest of the country. The EPA Indian Policy is premised on tribal self-determination, the principle that has been set forth as federal policy by Presidents Nixon, Reagan, and Bush. Self-determination is the principle recognizing the primary role of tribal governments in determining the future course of reservation affairs. Applied to the environmental arena in the EPA Indian Policy, this principle looks to tribal governments to manage programs to protect human health and the environment on Indian reservations.

II. TRIBAL, STATE AND FEDERAL EXPECTATIONS

The Agency is sensitive to the fact that tribal and state governments have serious and legitimate interests in the effective control and regulation of pollution sources on Indian reservations. EPA shares these concerns and, moreover, has a responsibility to Congress under the environmental statutes to assure that effective and enforceable environmental programs are developed to protect human health and the environment throughout the nation, including Indian reservations.

Indian tribes, for whom human welfare is tied closely to the land, see protection of the reservation environment as essential to preservation of the reservations themselves. Environmental degradation is viewed as a form of further destruction of the remaining reservation land base, and pollution prevention is viewed as an act of tribal self-preservation that cannot be entrusted to others. For these reasons, Indian tribes have insisted that tribal governments be recognized as the proper governmental entities to determine the future quality of reservation environments.

State governments, in turn, recognize that the environmental integrity of entire ecosystems cannot be regulated in isolation. Pollution in the air and water, even the transportation of hazardous materials in everyday commerce, is not restricted to political boundaries. Accordingly, state governments claim a vital interest in assuring that reservation pollution sources are effectively regulated and, in many cases, express an interest in managing reservation environmental programs themselves, at least for non-Indian sources located on the reservations. In addition, some state officials have voiced the concerns of various non-Indians who live or conduct business within reservation boundaries, many of whom believe that their environmental or business interests would be better represented by state government than by the tribal government.

Although the Agency hears these particular concerns expressed most often through tribal and state representatives, respectively, the Agency is aware that most of these concerns are shared by both tribes and states. For example, tribal governments are not alone in holding the view that future generations depend on today's leaders to manage the environment wisely. Many state officials argue the same point with the same level of conviction as tribal leaders. Conversely, tribal governments share with states the awareness that individual components of whole ecosystems cannot be regulated without regard to management of the other parts. Tribal governments have also shown themselves to share the states' sensitivity to the concerns and interests of the entire reservation populace, whether those interests are the interests of Indians or non-Indians. In the Agency's view, tribes and states do not differ on the importance of these goals. Where they differ at all, they differ on the means to achieve them.

EPA fully shares with tribes and states their concerns for preservation of the reservation as a healthy and viable environment, for rational and coordinated management of entire ecosystems, and, thirdly, for environmental management based on adequate input both from regulated businesses and from the populace whose health the system is designed to protect. Moreover, the Agency believes that all of these interests and goals can be accommodated within the framework of federal Indian policy goals and federal Indian law.

III. EPA POLICY

The EPA Indian Policy addresses the subject of state and tribal roles within reservation boundaries as follows:

1) First, consistent with the President's policy, the Agency supports the principle of Indian self-government:

"In keeping with the principle of Indian self-government, the Agency will view Tribal Governments as the appropriate non-Federal parties for making decisions and carrying out program responsibilities affecting Indian reservations, their environment, and the health and welfare of the reservation populace. Just as EPA's deliberations and activities have traditionally involved the interests and/or participation of State Governments, EPA will look directly to Tribal Governments to play this lead role for matters affecting reservation environments."

2) Second, the Agency encourages cooperation between state, tribal and local governments to resolve environmental issues of mutual concern:

"Sound environmental planning and management require the cooperation and mutual consideration of neighboring governments, whether those governments be neighboring States, Tribes or local units of government. Accordingly, EPA will encourage early communication and cooperation among Tribes, States and local governments. This is not intended to lend Federal support to any one party to the jeopardy of the interests of the other. Rather, it recognizes that in the field of environmental regulation, problems are often shared and the principle of comity between equals often serves the best interests of both."

IV. PRINCIPLES AND PROCEDURES FOR EPA ACTION

EPA program managers will be guided by the following principles and procedures regarding tribal and state roles in the management of programs to protect reservation environments.

1. The Agency will follow the principles and procedures set forth in the EPA Policy for the Administration of Environmental Programs on Indian Reservations and the accompanying Implementation Guidance, both signed on November 8, 1984.

2. The Agency will, in making decisions on program authorization and other matters where jurisdiction over reservation pollution sources is critical, apply federal law as found in the U.S. Constitution, applicable treaties, statutes and federal Indian law. Consistent with the EPA Indian Policy and the interests of administrative clarity, the Agency will view Indian reservations as single administrative units for regulatory purposes. Hence, as a general rule, the Agency will authorize a tribal or state government to manage reservation programs only where that government can demonstrate adequate jurisdiction over pollution sources throughout the reservation. Where, however, a tribe cannot demonstrate jurisdiction over one or more

reservation sources, the Agency will retain enforcement primacy for those sources. Until EPA formally authorizes a state or tribal program, the Agency retains full responsibility for program management. Where EPA retains such responsibility, it will carry out its duties in accordance with the principles set forth in the EPA Indian Policy.

3. Under both authorized and EPA-administered programs for reservations, the Agency encourages cooperation between tribes and states, acting in the spirit of neighbors with a mutual self-interest in protecting the environmental and the health and welfare of the reservation populace. Such cooperation can take many forms, including notification, consultation, sharing of technical information, expertise and personnel, and joint tribal/state programming. While EPA will in all cases be guided by federal Indian law, EPA Indian Policy and its broad responsibility to assure effective protection of human health and the environment, the Agency believes that this framework allows flexibility for a wide variety of cooperative agreements and activities, provided that such arrangements are freely negotiated and mutually agreeable to both tribe and state. The Agency will not act in such a manner as to force such agreements.

4. The Agency urges states to assist tribes in developing environmental expertise and program capability. The Agency has assisted in funding state environmental programs for two decades, with the result that, today, state governments have a very capable and sophisticated institutional infrastructure to set and enforce environmental standards consistent with local state needs and policies. As the country now moves to develop an infrastructure of tribal institutions to achieve the same goals, state governments can play a helpful and constructive role in helping to develop and support strong and effective tribal institutions. The State of Wisconsin has worked with the Menominee Tribe to develop a joint tribal/state RCRA program that can serve as a model of mutually beneficial cooperation for other states and tribes.

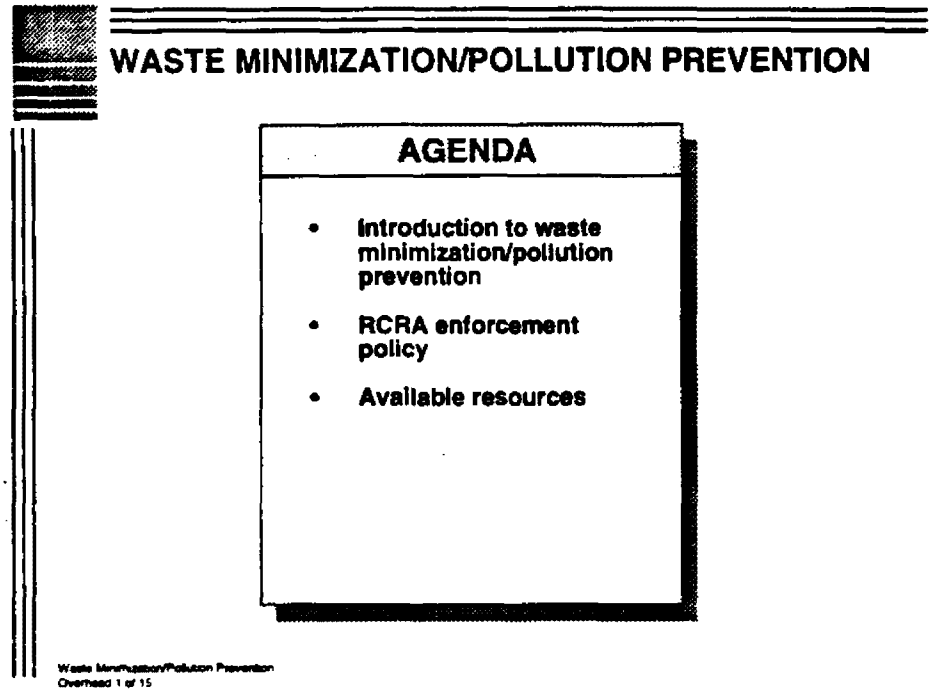
5. The Agency urges tribes to develop an Administrative Procedures Act (APA) or other means for public notice and comment in the tribal rule-making process. Many tribes now working with EPA to develop environmental standards and regulatory programs have already taken the initiative in establishing such techniques for obtaining community input into tribal decision-making. Such tribes have enacted APAs and held public meetings to gather input from both Indian and non-Indian residents of the reservation prior to setting tribal environmental standards for their reservations. The Agency generally requires states and tribes to provide for adequate public participation as a prerequisite for approval of state or tribal environmental programs. The Agency believes that public input into major regulatory decisions is an important part of modern regulatory governance that contributes

significantly to public acceptance and therefore the effectiveness of regulatory programs. The Agency encourages all tribes to follow the example of those tribes that have already enacted an APA.

6. Where tribal and State governments, managing regulatory programs for reservation and state areas, respectively, may encounter transboundary problems arising from inconsistent standards, policies, or enforcement activities, EPA encourages the tribal and state governments to resolve their differences through negotiation at the local level. EPA, in such cases, is prepared to act as a moderator for such discussions, if requested. Where a statute such as the Clean Water Act designates a conflict-resolution role for EPA in helping to resolve tribal/state differences, EPA will act in accordance with the statute. Otherwise, EPA will respond generally to such differences in the same manner that EPA responds to differences between states.

V. CONCLUSION

The Agency believes that where an ecosystem crosses political boundaries, effective regulation calls for coordination and cooperation among all governments having a regulatory role impacting the ecosystem. Many differences among tribes and states, like differences among states, are a natural outgrowth of decentralized regulatory programs; these differences are best resolved locally by tribes and states acting out of mutual concern for the environment and the health of the affected populace. EPA actions and decisions made in carrying out its role and responsibilities will be consistent with federal law and the EPA Indian Policy. Within this framework, the Agency is convinced that the environmental quality of reservation lands can be protected and enhanced to the benefit of all.

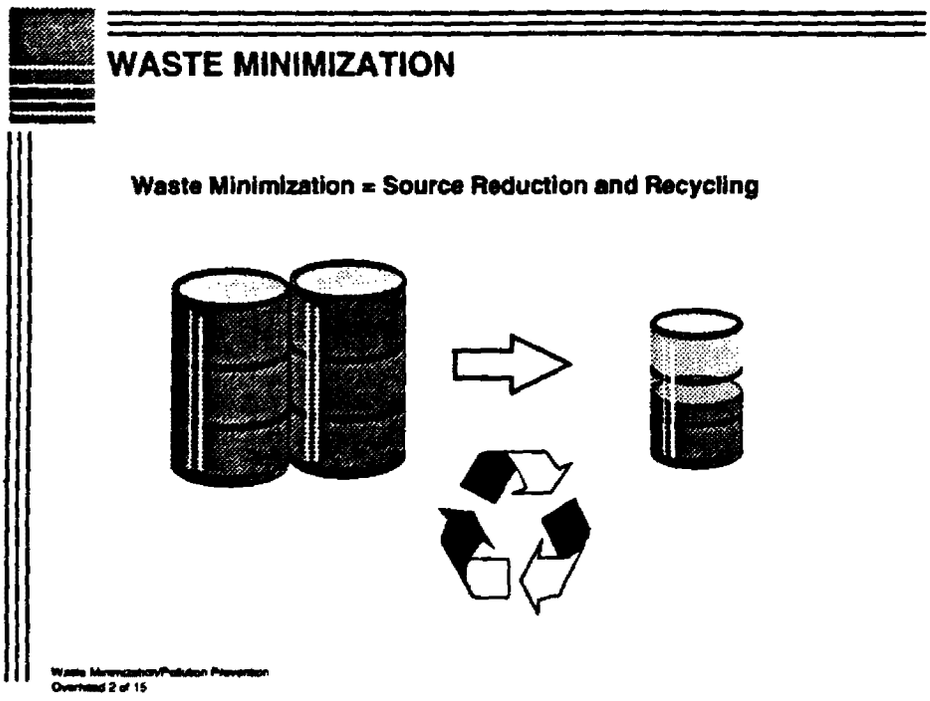


OVERHEAD #1

TITLE: Waste Minimization/Pollution Prevention

KEY POINTS:

- This presentation will cover an introduction to waste minimization and pollution prevention, the RCRA enforcement policy and the inspector's role in complying with this policy, as well as resources available to inspectors and facilities. This presentation also includes an exercise that provides an opportunity to demonstrate the inspector's new role and test the limits of the new enforcement policy.



OVERHEAD #2

TITLE: Waste Minimization

KEY POINTS:

- There has been considerable confusion over the terms waste minimization and pollution prevention. What does waste minimization mean to you?
- Now that we have heard our peers' definitions of waste minimization, I will relate a definition offered in a draft Agency guidance that defines waste minimization as:

  > "the reduction, to the extent feasible, of hazardous waste that is generated prior to treatment, storage, or disposal of the waste. It is defined as any source reduction or recycling activity that results in either: (1) reduction of total volume of hazardous waste; (2) reduction of toxicity of hazardous waste; or (3) both, as long as that reduction is consistent with the general goal of minimizing present and future threats to human health and the environment." (FR Vol. 54, No. 111, page 25056, 6/12/89)

- For purposes of this Institute, we will refer to waste minimization as source reduction and recycling.

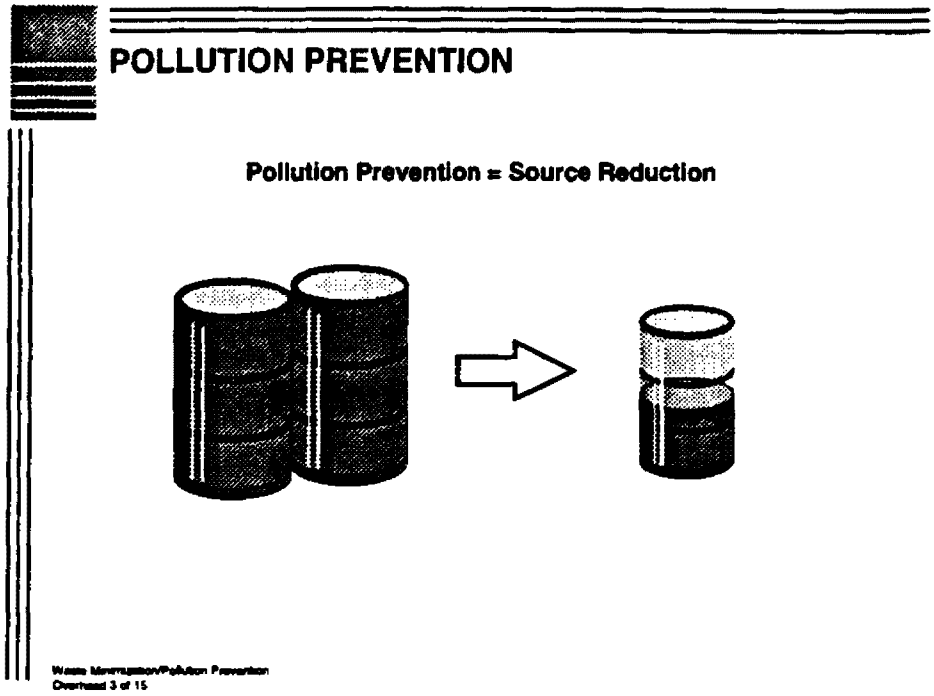
OVERHEAD #2

TITLE: Waste Minimization (continued)

KEY POINTS:

- Wastewater treatment, incineration, and other forms of treatment are often considered to be waste minimization, but they are not.

- It is important to note that transferring waste from one medium to another does not constitute minimizing waste. For example, incinerating hazardous waste may result in a decrease in RCRA regulated waste, but an increase in releases to the air. True minimization reflects reductions in one medium without increases in others.



OVERHEAD #3

TITLE: Pollution Prevention

KEY POINTS:

- What does the term pollution prevention mean to you?
- Although the theory behind waste minimization and source reduction is the same, the language prescribed by HSWA and the Pollution Prevention Act defines the two terms differently.
- Unlike the definition of waste minimization outlined in HSWA, the Pollution Prevention Act of 1990 indicates that pollution prevention includes source reduction but excludes most types of recycling. The Act defines source reduction as any process that:

  > "reduces the amount of any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment prior to recycling, treatment, or disposal..."

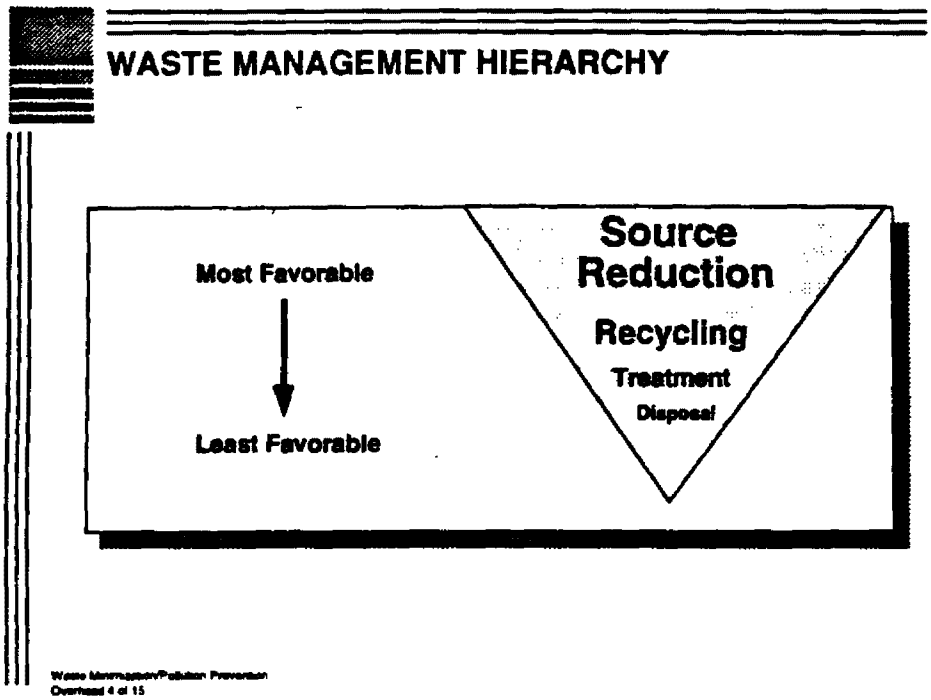
- EPA interpreted the language in the Pollution Prevention Act and defined pollution prevention as source reduction in a May 28, 1992 memo from Henry Habicht II, EPA Deputy Administrator.

OVERHEAD #3

TITLE: Pollution Prevention (continued)

KEY POINTS:

- Both HSWA and the Pollution Prevention Act emphasize the importance of taking a multi-media approach to reducing wastes. Inspectors can help implement reduction across media by looking beyond RCRA waste streams when conducting inspections. Inspectors should look at entire processes at facilities, noting transfers of pollutants from one medium to another.



OVERHEAD #4

TITLE: Waste Management Hierarchy

KEY POINTS:

- How would you define the Waste Management Hierarchy?
- The EPA first published a Waste Management Hierarchy in a 1976 policy statement. The Hierarchy is intended to be a logical approach to managing waste in order to minimize risks to public health and the environment. The Hierarchy has evolved and may differ depending on the source.
- The Hierarchy presented in the viewgraph is based on the Pollution Prevention Act of 1990, which states: "pollution should be prevented or reduced at the source whenever feasible; pollution that cannot be prevented should be recycled in an environmentally safe manner whenever feasible; pollution that cannot be prevented or recycled should be treated in an environmentally safe manner whenever feasible; and disposal or other release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner." (Public Law 101–508 Title 6, 104 STAT 1388, Section 6602(b), November 5, 1990).

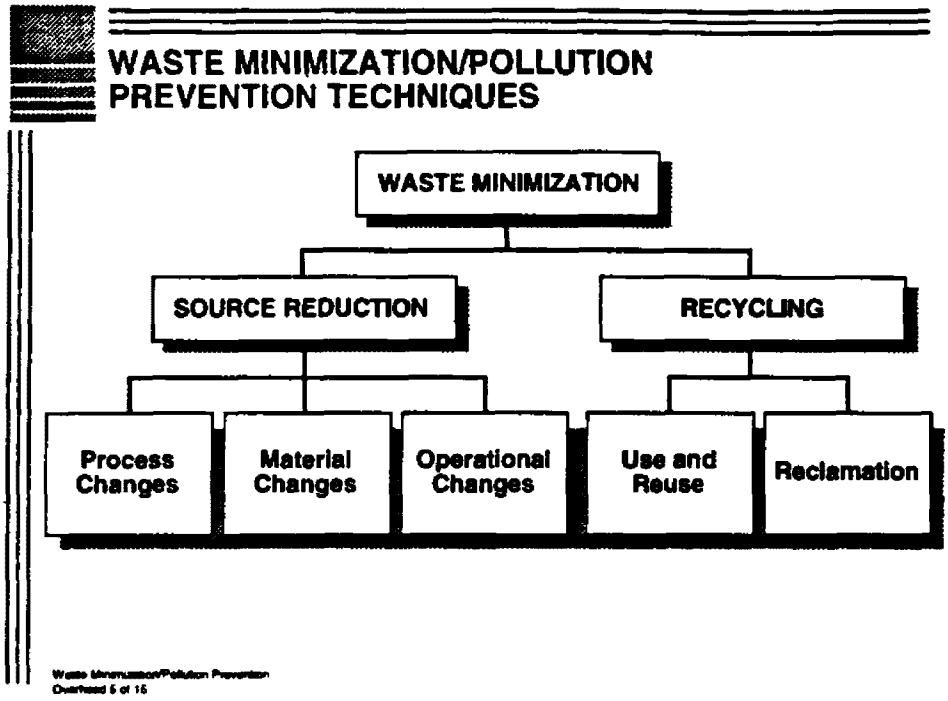
OVERHEAD #4

TITLE: Waste Management Hierarchy (continued)

KEY POINTS:

- The Hierarchy encourages the reduction of wastes at the source and the recycling of materials, rather than treating and/or disposing of them on land or in air and water.

- Waste minimization refers to the top two tiers of the Waste Management Hierarchy: source reduction and recycling. Pollution prevention refers only to the top tier of the Hierarchy.



OVERHEAD #5

TITLE: Waste Minimization/Pollution Prevention Techniques

KEY POINTS:

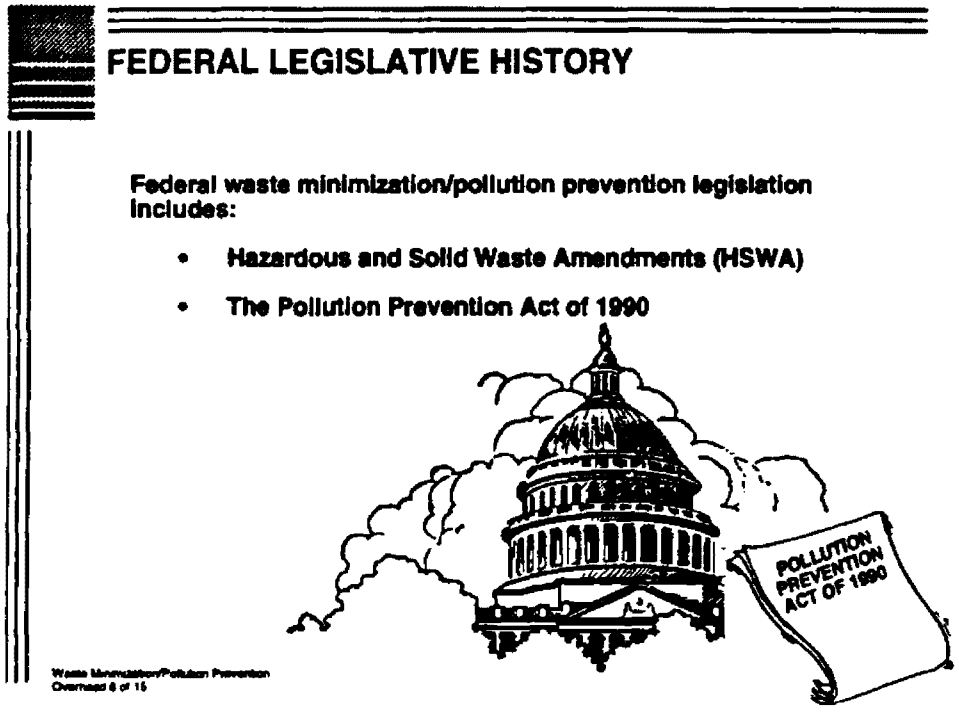
- What do you see as the components of source reduction and recycling?
- Source reduction, the preferred option, can include product changes or source controls.
- Product changes include substitution of a product, conserving a product, or changing a product's composition.
- Source controls include:
  - — Process changes — for example, with respect to temperature, pressure, or equipment;
  - — Material or input changes using non-hazardous materials or materials that result in less waste;
  - — Changes in operating techniques — for example, improved housekeeping and maintenance to reduce leaks and spills, education/outreach programs, or changes in inventory management or materials handling procedures.

OVERHEAD #5

TITLE: Waste Minimization/Pollution Prevention Techniques (continued)

KEY POINTS:

- Recycling can include use and reuse and reclamation.
- RCRA regulations indicate that a material is used or reused if it is:
  - — Employed as an ingredient in an industrial process to make a product, or
  - — Employed in a particular function or application as an effective substitute for a commercial product. (40 CFR 261.1)
- A material is reclaimed if it is processed to recover a usable product, or if it is regenerated. (40 CFR 261.1)



OVERHEAD #6

TITLE: Federal Legislative History

KEY POINTS:

- HSWA emphasized waste minimization as a national policy, stating that "wherever feasible, the generation of hazardous waste is to be reduced or eliminated as expeditiously as possible ...," and it established requirements for generators and TSDFs.

- The Pollution Prevention Act of 1990 made source reduction a national policy and required EPA to perform numerous functions, including training enforcement personnel and inspectors, to promote source reduction. The Act also prescribed additional reporting requirements for the SARA Title III universe on their source reduction and recycling efforts. More specifically, Title III requires reporting on manufacturing plants' releases of 320 toxic chemicals into air, water, or soil. Facilities must estimate and report their total releases each year. EPA compiles these reports on a computerized database called the Toxic Release Inventory or TRI. How can you make use of TRI data?

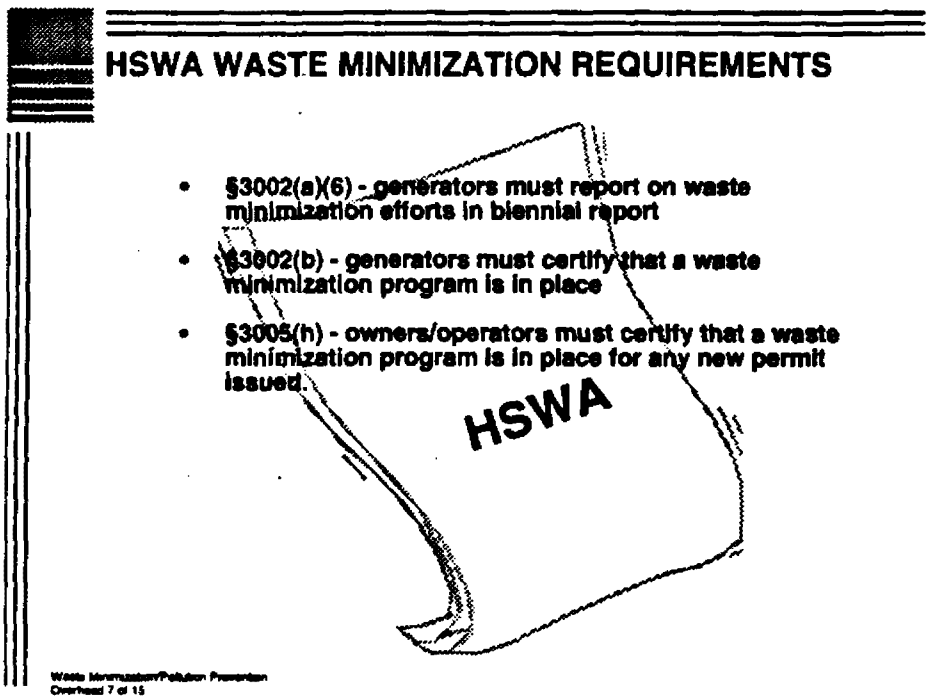
- Land ban has been the biggest HSWA driver of waste minimization, since generators have suffered higher costs as a result of the ban.

OVERHEAD #6

TITLE: Federal Legislative History (continued)

KEY POINTS:

- In addition, EPA has instituted national programs to achieve reductions in pollution. One example of such a program is the 33/50 Program, announced by EPA in 1991. This voluntary pollution prevention initiative sets reduction goals for 17 high priority toxic chemicals. The goal of the program is to reduce the total amount released into the environment and transferred off site by 33 percent at the end of 1992 and by 50 percent at the end of 1995, based on 1988 levels. This would mean a reduction from 1.4 billion pounds of the 17 targeted chemicals released and transferred off site in 1988 to 200 million pounds released or transferred off site by 1995. EPA seeks to accomplish these reductions through innovative pollution prevention programs that go beyond regulatory requirements. Participants in the program include, for example: B.F. Goodrich; AT&T; Dupont; Illinois Toolworks; and 3M.



OVERHEAD #7

TITLE: HSWA Waste Minimization Requirements for Generators and TSDFs

KEY POINTS:

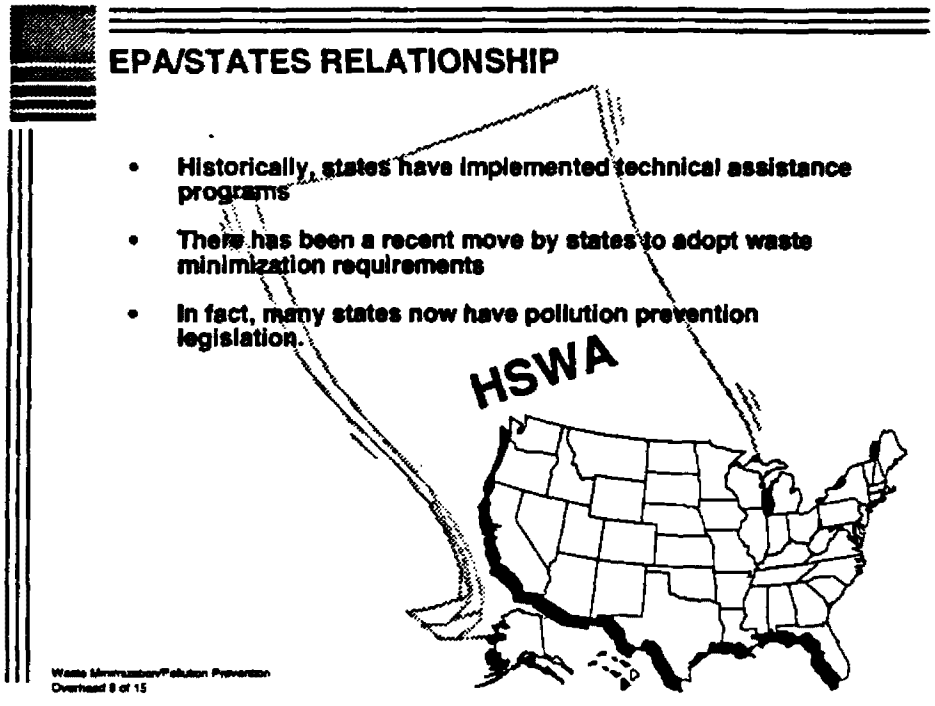
- HSWA sets forth three basic waste minimization requirements for generators and TSDFs. They are:
  - — That hazardous waste generators submit waste minimization information as part of the biennial reports (§3002(a)(6));
  - — That generators certify on the manifest that they have a waste reduction program in place (§3002(b));
  - — That, as a permit requirement, all TSDFs must certify at least annually that they have a waste reduction system in place (§3005(h)).
- Using HSWA authority, EPA has promulgated regulations addressing these issues in 40 CFR under Sections 262, 264, and 265.

OVERHEAD #7

TITLE: HSWA Waste Minimization Requirements for Generators and TSDFs (continued)

KEY POINTS:

- What kind of program can TSDF's undertake?
  - — Substitute one waste for newly-purchased material in treating other waste
  - — Recycling instead of treatment
  - — Require generators to have waste minimization plan in place.



OVERHEAD #8

TITLE: EPA/States Relationship

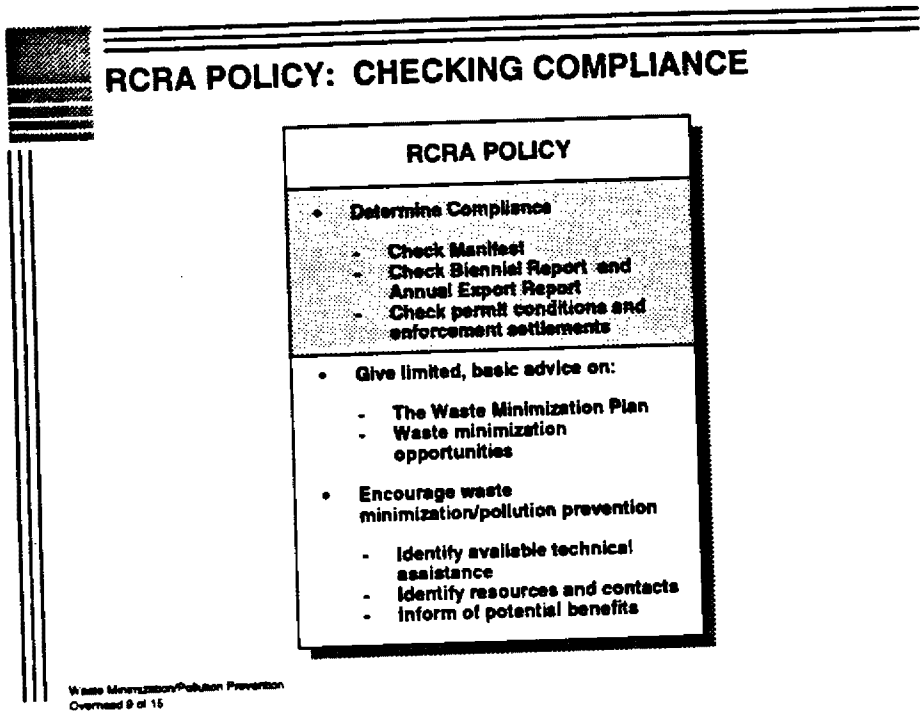
KEY POINTS:

- Historically, almost all states established mostly non-regulatory programs to encourage waste minimization. State programs have included:
  - — Technical assistance
  - — Education and outreach
  - — Economic benefit
  - — Waste exchange
  - — Research and development
  - — Limited regulatory requirements.

- Now states are becoming more prescriptive, although relatively few involve or empower their enforcement program.

- Many RCRA-authorized states have adopted waste minimization requirements. In fact, more than half of all U.S. states have enacted pollution prevention legislation that typically requires RCRA generators or SARA Title III facilities to develop pollution prevention plans. Facilities in these states should have well documented waste minimization/pollution prevention plans that can be reviewed by the inspector.

- What is the status of waste minimization requirements and pollution prevention legislation in the states represented at the Institute?



OVERHEAD #9

TITLE: RCRA Policy: Checking Compliance

KEY POINTS:

- The RCRA policy is set forth in "The Role of RCRA Inspectors in Promoting Waste Minimization" (OSWER Directive 9938.10), which was based on existing Regional and state efforts and recommendations. It directs inspectors to determine compliance. To do this, inspectors should:
  - — Check that each manifest is certified by an authorized person
  - — Check to see that a waste minimization plan is in place and is being implemented
  - — Ensure that waste minimization language is included on the biennial report or annual export report
  - — Confirm that any waste minimization conditions included in a permit or resulting from enforcement action are being met.

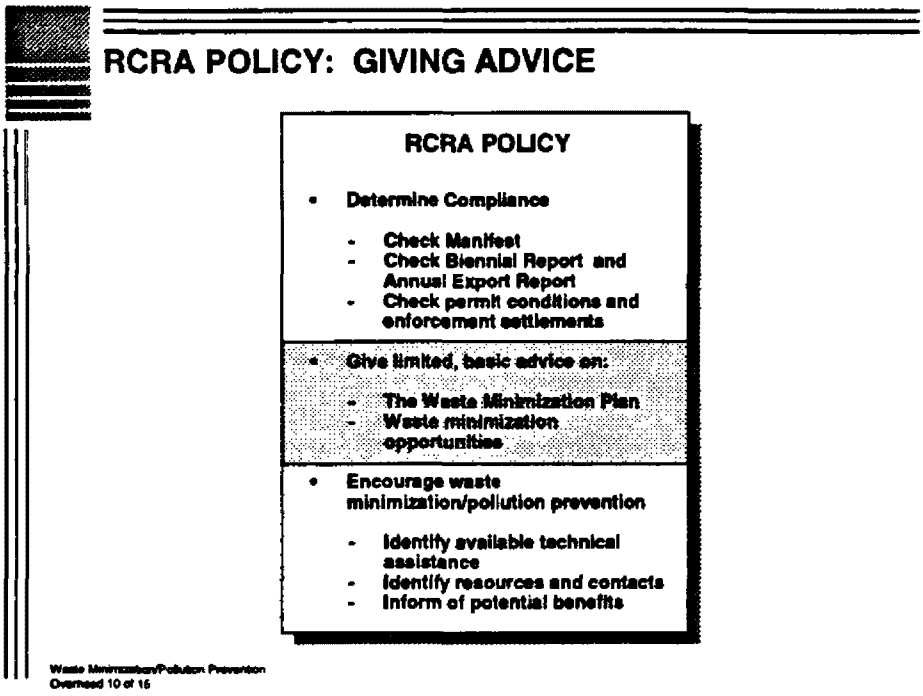
OVERVIEW #9

TITLE: RCRA Policy: Checking Compliance (continued)

KEY POINTS:

Other compliance related initiatives include the following:

- EPA has developed guidance on developing supplemental environmental projects (SEPs) and incorporating pollution prevention into enforcement settlements. Pollution prevention requirements in SEPs or pollution prevention settlement provisions include training, pollution prevention assessments, and technology changes.
  - Inspectors may be asked to review or provide waste minimization information to support enforcement personnel in developing SEPs as part of settlement negotiations.
  - Inspectors will need to check compliance with SEP requirements.
- EPA is incorporating pollution prevention into TSDF permits as well as permits in other programs:
  - Inspectors should check compliance with RCRA permit requirements.
  - Permits in other programs could also impact RCRA waste and waste minimization efforts. Inspectors could benefit by reviewing these other permits.



OVERHEAD #10

TITLE: RCRA Policy: Giving Advice

KEY POINTS:

- Inspectors may give limited, basic waste minimization/pollution prevention advice to facilities. This advice may focus on the facility's waste minimization plan/program and waste minimization opportunities.

- When giving advice:

  — Present it in an informal manner
  — Stress that it is not binding and not related to the facility's regulatory compliance.

- Avoid giving advice that:

  — Is technical
  — Is capital-intensive
  — Endorses a specific product
  — Leads a facility to think that any changes made would bring the facility into compliance.

OVERVIEW #10

TITLE: RCRA Policy: Giving Advice (continued)

KEY POINTS:

- Proper examples of advice-giving related to waste minimization opportunities include:

  — "You may want to try either sweeping or blowing the sawdust and residuals off the wood before treating it so you can lower the trash that gets into the holding tank. That may lower the amount of waste sludge you have to worry about."

  — "If you let the workpiece hang a little longer over the tank, more of the solution will drain back into it and you'll probably have less drag-out."

- Inappropriate advice would be:

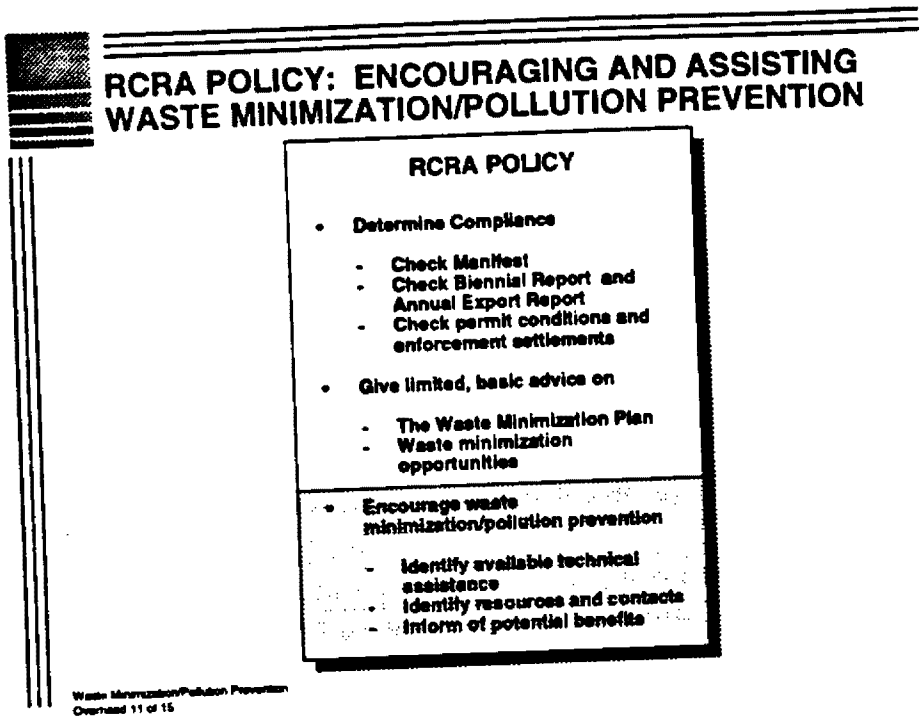
  — "Company X installed a Wammo Mark IV ink recycling unit to reuse their waste inks. You should do the same. It might take care of some of your regulatory problems and will save you a whole lot of money."

- Advice on the waste minimization program/plan can also be provided without compromising your enforcement position by referring to the basic elements in a waste minimization program as outlined in the nonbinding Federal Register Notice (Vol. 54, No. 111, June 12, 1989). The Notice indicated that discussion of the following should be included in a waste minimization plan:

  — Top management support
  — Characterization of waste
  — Periodic waste minimization
  — A cost allocation system
  — Encouragement of technology transfer
  — Program evaluation.

- Refer to "Role of Inspectors in Promoting Waste Minimization" for guidelines for giving advice.

- During the exercise later in this presentation, we will explore the nature of advice that is appropriate under the policy.



OVERHEAD #11

TITLE: RCRA Policy: Encouraging and Assisting Waste Minimization/Pollution Prevention

- Ways of encouraging waste minimization/pollution prevention include:

  — Identifying for the facility waste minimization technical assistance programs. These programs are listed by state in Pollution Prevention Resources and Training Opportunities in 1992. Examples of these technical assistance programs include:

    •• Alaska's Waste Reduction Assistance Program and Small Business Hazardous Material Management Project
    •• Minnesota's Technical Assistance Program.

  — Identifying resources to assist facilities attempting to integrate waste minimization into their operations, including:

    •• Book of pollution prevention training opportunities
    •• Guidance and brochures
    •• List of resources/contacts.

OVERVIEW #11

TITLE: RCRA Policy: Encouraging and Assisting Waste Minimization/Pollution Prevention (continued)

KEY POINTS:

- Some resources are displayed in the Library down the hall. To the extent that they seem relevant, facilities can be referred to these documents. Please take the time to flip through these resources during your breaks.

- You have been given in your Participant's Manual:

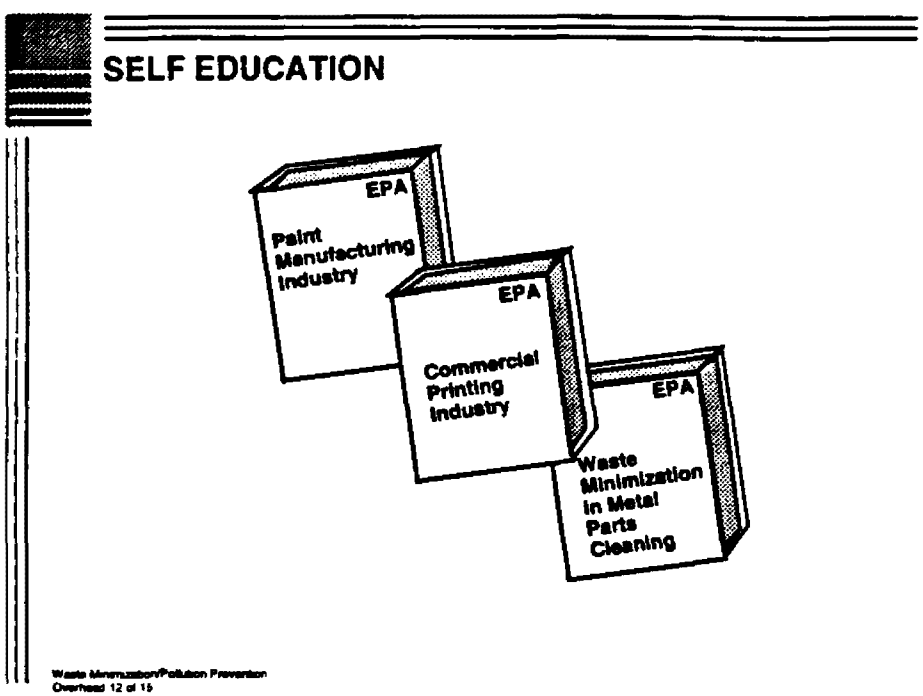
  — A list of state waste minimization/pollution prevention laws
  — A summary of the Pollution Prevention Act of 1990
  — A resource list, which identifies pertinent written materials and points of contact.

- As mentioned earlier, the Pollution Prevention Resources and Training Opportunities 1992 identifies contacts in each state, university-affiliated pollution prevention research centers and training programs, and clearinghouses and associations that can assist facilities. This document can be obtained by calling the Pollution Prevention Information Clearinghouse at (703) 821–4800, 9 a.m. to 5 p.m.

- The Pollution Prevention Information Clearinghouse also contains technical, policy, programmatic, legislative, and financial information concerning source reduction and recycling efforts. It is accessible via telephone hotline, computer, or mail. Call (713) 821–4800 to reach the Technical Support Office and (800) 424–9346 to reach the RCRA/Superfund Hotline. To access this and additional information using your personal computer, call (703) 506–1025 to reach the Pollution Prevention Information Exchange System.

- Inspectors can also inform facilities of potential benefits of implementing waste minimization activities. In certain states, facilities receive awards for their pollution prevention work. Inherent incentives also exist for generators. These include:

  — Improved worker health and safety
  — Reduced liability
  — Improved public image
  — Cost savings from reduced treatment and disposal costs, lower material handling/storage costs, reduced purchases of raw materials, etc.



OVERHEAD #12

TITLE: Self Education

KEY POINTS:

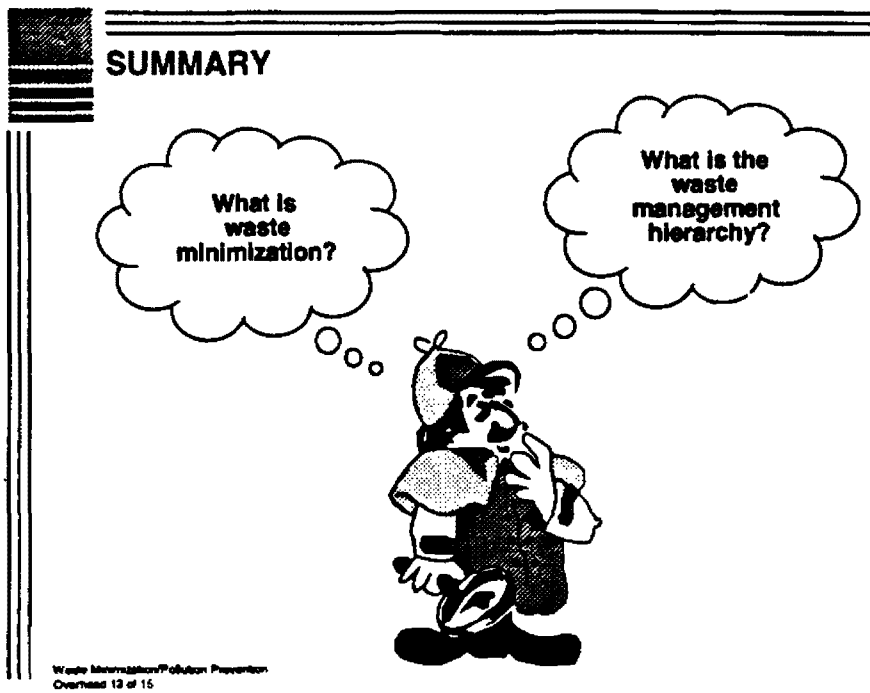
- As we already know, an inspector should have a strong knowledge of the industrial processes conducted at a facility prior to inspecting that type of facility. Having an understanding of the process used at the facility will also place the inspector in a better position to encourage the facility to implement waste minimization activities.
- An inspector may educate himself or herself regarding industrial processes by reading relevant guidance such as The Paint Manufacturing Industry, or The Commercial Painting Industry. These documents and other relevant resources are included on your list of references in your Participant's Manual.
- The inspector may also attend relevant seminars regarding topics such as the metal processing industry. Inspectors can identify such seminars by calling their Regional pollution prevention contact listed in Pollution Prevention Resources and Training Opportunities in 1992, which is also included on your reference list.
- Inspectors will learn about industrial processes and waste minimization opportunities while "on the job." Inspectors can apply "lessons learned" during one inspection to other inspections of similar industrial processes.
- The inspector should note, however, that without a knowledge of the processes at a facility, he or she should not discuss the process or waste minimization opportunities with the facility representatives.

OVERHEAD #12

TITLE: Self Education (continued)

KEY POINTS:

- We will now conduct an exercise that requires us to apply the information we have discussed during this module.

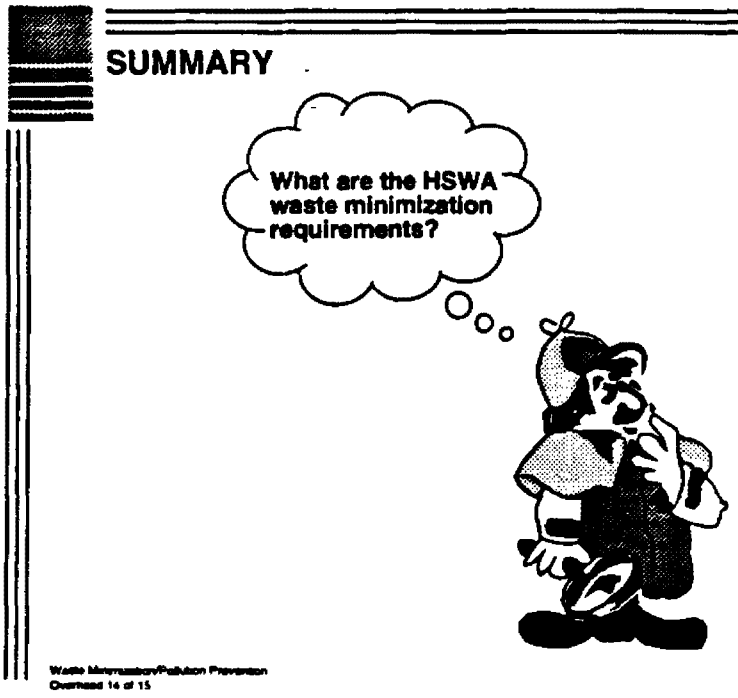


OVERHEAD #13

TITLE: Summary

KEY POINTS:

- Waste minimization is source reduction and recycling, while pollution prevention focuses on source reduction.
- The Waste Management Hierarchy is a means of managing waste to minimize risks to public health and the environment. Source reduction is the most preferable waste management technique. Recycling is the second most preferable. Wastes should be treated only after source reduction and recycling. Disposal is the last alternative.

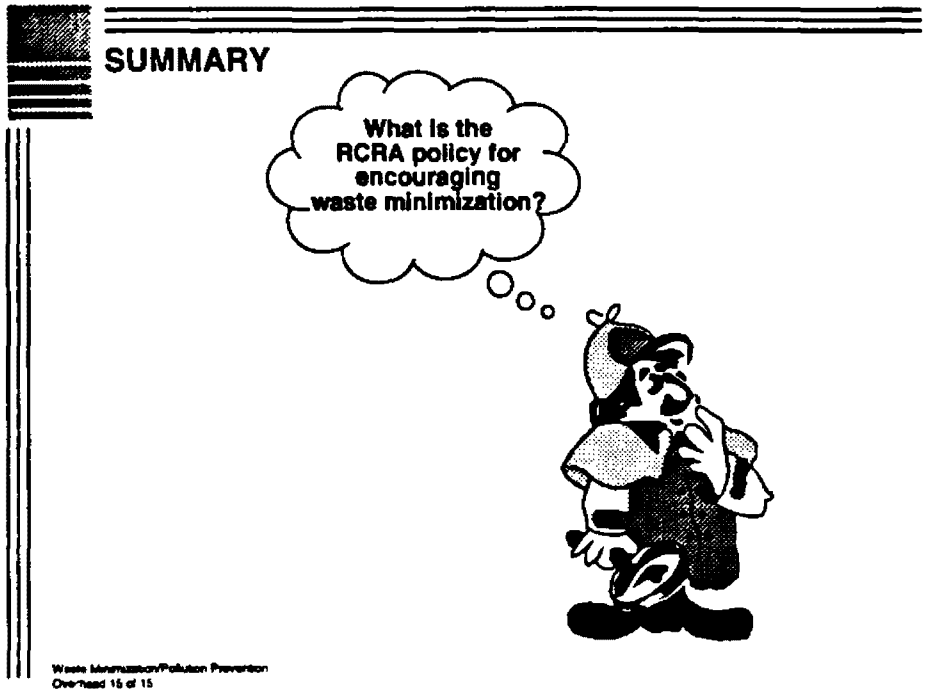


OVERHEAD #14

TITLE: Summary

KEY POINTS:

- The waste minimization portion of HSWA requires generators to:
  - — Certify on their waste manifests that they have a program in place to reduce volume or quantity and toxicity of waste
  - — Report on their waste minimization efforts in a Biennial Report and Annual Export Report.
- HSWA requires TSDFs to certify that a waste minimization plan is in place for any new permit issued.



OVERHEAD #15

TITLE: Summary

KEY POINTS:

- RCRA Policy directs inspectors to:
  - — Determine compliance:
    - •• Check manifests
    - •• Check Biennial Reports and Annual Export Reports
    - •• Check Permit Conditions and Enforcement Settlements.
  - — Give limited, basic advice.
  - — Inform generators of the benefits of waste minimization/pollution prevention and available resources.

FACILITY DESCRIPTION
FABRICATED METAL INDUSTRY
RUSTY'S METAL SHOP

Rusty's Metal Shop, which fabricates metal, is classified under Standard Industrial Classification (SIC) 34. The facility supports many other industries, such as the automotive and appliance industries, by producing metal parts and products. The numerous processes performed at Rusty's Metal Shop can be grouped into three categories: machining, cleaning, and finishing. Rusty's Metal Shop produces:

For Ford Motors

- Camshafts
- Crankshafts
- Gears

For General Electric

- Chassis for radio and television
- Drill bits
- Sockets

Machining operations at Rusty's Metal Shop involve metal cutting processes. During this process metal is sheared from the workpiece/product. Metalworking fluids are applied to the workpiece and machining tool to facilitate cutting by controlling the temperature, washing away metal pieces, lubricating the cutting process, providing a good finish, and inhibiting (corrosion and) surface oxidation. These fluids commonly may include water emulsions of a soluble oil or paste, or oils (mineral, sulphurized, or chlorinated).

Metal workpieces are then cleaned to prepare for finishing. There are primarily three types of metal cleaners utilized by Rusty's Metal Shop: 1) both halogenated and nonhalogenated organic solvents); 2) alkaline cleaners; 3) acid cleaners. Cleaners are normally contained in large open tanks, with the parts to be cleaned mounted on racks or in perforated horizontal barrels. The racks or barrels are then lowered into cleaning tanks for a few minutes, then removed and lowered into other tanks, depending on the process being applied.

Finishing of fabricated metal products at Rusty's Metal Shop involves electroplating and painting. At Rusty's Metal Shop, solvent-based paints are used. Depending on the size, shape, complexity, and quantity of items to be painted, Rusty's Metal Shop applies the paint using one of the following methods: dipping; flow coating; or spraying. At Rusty's Metal Shop, metal parts are cleaned and then are dipped in a series of plating baths followed by a series of rinses. Electroplating is achieved by passing an electric current through a solution containing dissolved metal ions as well as the metal object to be plated. Ferrous and nonferrous metal objects are typically electroplated with various metals (cadmium, chromium, copper, iron, nickel, and zinc) as well as precious metals (gold and silver). Rinsewater is used at Rusty's Metal Shop to wash off the drag-out from a workpiece after it is removed from a bath.

All wastewaters are treated on-site and discharged under a NPDES permit.

LIST OF WASTES
FABRICATED METAL INDUSTRY
RUSTY'S METAL SHOP

The major wastes at Rusty's Metal Shop include:

- Metal working fluids (oils) and other lubricating oils
- Scrap metal
- Spent organic solvents
- Waste water treatment sludge
- Rags contaminated with organic solvents and oils
- Clay absorbent contaminated with organic solvents, paints, and oils
- Sludge from solvent recovery still
- Waste paint
- Wastewater, which is treated on-site to recover metals, neutralized and discharged under NPDES permit
- Empty paint containers
- Waste acid etchant.

WASTE MINIMIZATION PLAN
FABRICATED METAL INDUSTRY
RUSTY'S METAL SHOP

Rusty's Metal Shop has encouraged waste reduction in its machining, cleaning, and painting operations for a number of years to reduce the quantity and toxicity of its wastes, conserve natural resources, and reduce costs. The program elements are described below.

CORPORATE POLICY STATEMENT OF SUPPORT FOR POLLUTION PREVENTION

As evidence of corporate support of the waste minimization program at Rusty's Metal Shop, management dispersed a memo describing the corporate pollution prevention plan and tactics for fulfilling the goals in the plan.

DESCRIPTION OF POLLUTION PREVENTION PLANNING TEAM

Management hired an environmental engineer to coordinate all waste management and minimization efforts for the Facility. This waste minimization coordinator communicates monthly with top management at Rusty's Metal Shop. The coordinator along with top management plban next steps for waste minimization efforts at the Facility.

PLAN FOR COMMUNICATING SUCCESSES AND FAILURES OF POLLUTION PREVENTION PROGRAMS WITHIN YOUR COMPANY

The coordinator will compile an annual report on waste minimization activities at Rusty;'s Metal Shop and will ensure that the report is made available to all employees.

DESCRIPTION OF THE PROCESSES THAT PRODUCE, USE OR RELEASE HAZARDOUS OR TOXIC MATERIALS (INCLUDING AMOUNTS AND TYPES OF RELEASES)

Machining, cleaning, and painting operations at Rusty's Metal Shop produce hazardous wastes and toxic materials. These wastes are noted on an attached list of wastes.

DESCRIPTION OF CURRENT AND PAST WASTE MINIMIZATION ACTIVITIES AT RUSTY'S METAL SHOP

Primary Waste Minimization Activity

In 1991, Rusty's Metal Shop evaluated possible waste minimization activities, including replacement of selected solvents with aqueous cleaners. This study indicated that Rusty's Metal Shop could reduce its waste by making this replacement. The Facility implemented this change on a pilot basis for two months at the close of the fiscal year. The Facility saw a reduction from its average 120 tons of hazardous waste for a two month period to 105 tons for the two month test period. The activity is being evaluated on other parameters, such as process effectiveness, employee safety, and cost. Based on the findings, it may be implemented within the first few months of the new fiscal year.

Characterization of Waste

Rusty's Metal Shop has implemented for a number of years a waste accounting system, which tracks wastes produced at the facility from generation to final destination. The findings from this accounting system are available for review.

Periodic Waste Minimization Assessment

Periodic assessment is incorporated into the waste minimization practices at Rusty's Metal Shop. These practices include tracking waste from generation to final destination to identify source reduction opportunities and calculate the true cost of waste. For example, Rusty's Metal Shop plans to select one waste stream for assessment and identify source reduction opportunities.

Cost Allocation

Waste management costs are calculated for each step in the management process and directed back to the department producing the waste.

Encourage Technology Transfer

Rusty's Metal Shop shares information with other fabricated metal industries through participation in a Roundtable of Region A Waste Reduction programs. The Roundtable serves as a forum in which generators can share information about successful and problematic waste minimization approaches. Guest speakers from state and technical assistance programs, trade associations, and consultants bring information on innovative technologies/approaches to the forum.

Program Evaluation

The Waste Minimization Coordinator leads the annual evaluation of Rusty's Metal Shop's waste minimization program. This evaluation is completed through a thorough tracking of all wastes generated in the facility and through interviews with staff members from each area of Rusty's Metal Shop. The Waste Minimization Coordinator submits an annual report on waste minimization activities to top management at Rusty's Metal Shop.

HAZARDOUS WASTE REPORT/WASTE MINIMIZATION
FABRICATED METAL INDUSTRY
RUSTY'S METAL SHOP

(The following information is an excerpt from Rusty's Metal Shop's Waste Minimization Report, included in the Biennial Report.)

In 1991, Rusty's Metal Shop evaluated possible waste minimization activities, including replacement of selected solvents with aqueous cleaners. This study indicated that Rusty's Metal Shop could reduce its waste by making this replacement. The Facility implemented this change on a pilot basis for two months at the close of the fiscal year. The Facility saw a reduction from its average 120 tons of hazardous waste for a two month period to 105 tons for the two month test period. The activity is being evaluated on other parameters, such as process effectiveness, employee safety, and cost. Based on the findings, it may be implemented within the first few months of the new fiscal year.

STATE WASTE MINIMIZATION/POLLUTION PREVENTION LAWS

STATUS OF LEGISLATION

STATE	ENACTED	PROPOSED	TECHNICAL ASSIST. AVAIL.
AK	X		X
AR			X
AZ	X		X
CA	X		X
CO		X	X
CT	X		X
DE	X		X
FL	X		X
GA	X		X
HI			X
IL	X		X
IN	X		X
IA	X		X
KS			X
KY	X		X
LA	X		X
MA	X		X
MD			X
ME	X		X
MI			X
MN	X		X
MS	X		X
MO		X	X
MT			X
NC	X		X
ND			
NE			X
NJ	X		X
NM			X
NY	X		X
NV			X
OH		X	X
OK			
OR	X		X
PA		X	X
RI	X		X
SC			X
SD			X
TN	X		X
TX	X		X
UT			X
VA			X
VT	X		X
WA	X		X
WI	X		X
WVA			X
WY			X

POLLUTION PREVENTION ACT OF 1990
SUMMARY

TITLE	SUMMARY
6601 Short Title	The Pollution Prevention Act of 1990
6602 Findings and Policy	Congress declares pollution prevention as national policy.
6603 Definitions	Defines terms used in subtitle including an explanation of source reduction (which excludes recycling).
6604 EPA Activities	Mandates EPA to develop and implement a strategy to promote source reduction. Grants EPA the authority to establish an office to carry out the 12 Agency functions specified in the strategy. The office shall be independent of program offices, with authority to review and advise such offices.
6605 Grants to States for State Technical Assistance Programs	Requires the Agency to make matching grants (up to 50%) to support state programs to promote the use of source reduction techniques by businesses.
6606 Source Reduction Clearinghouse	Requires the Agency to establish and make available to the public a source reduction clearinghouse to compile information including a computer data base which contains information on management, technical and operational approaches to source reduction.
6607 Source Reduction and Recycling Data Collection	Requires each owner or operator of a facility required to file an annual toxic chemical release form under Section 313 of SARA to include in this filing a toxic chemical source reduction and recycling report.
6608 Biennial Reports	Requires EPA to submit biennially to Congress a report describing the actions taken to implement source reduction and the results of these actions
6609 Savings Provisions	Prohibits the Act from modifying or interfering with the implementation of Title III of SARA or responsibilities or liability under state or Federal law.
6610 Authorization of Appropriations	Provides $8 million to EPA for each of the fiscal years 1991, 1992, 1993, and $8 million for state grants for each of the fiscal years 1991, 1992, and 1993.

WASTE MINIMIZATION/POLLUTION PREVENTION MODULE
THE ADVANCED RCRA INSPECTOR'S INSTITUTE

REFERENCES FOR INSPECTORS

EPA Guidance Documents

Facility Pollution Prevention Guide, EPA/600/R-62/088, May 1992. Describes how to identify, assess, and implement opportunities for implementing pollution prevention. The guide is written for individuals responsible for implementing waste minimization programs at facilities. The guide also provides a list of references and information resources.

RCRA Inspection Manual, Appendix I: "Keeping Up With Current RCRA Regulatory Concerns," pages I-7-I-9. Summarizes RCRA policy on incorporating pollution prevention into RCRA inspections. Provides list of activities that an inspector should complete when conducting a facility inspection to ensure that facilities are in compliance with HSWA requirements. Also includes a waste minimization checklist and a list of resources to which the inspector can refer.

EPA Policy Documents

"Interim EPA Policy on the Inclusion of Pollution Prevention and Recycling Provisions in Enforcement Settlements," Memorandum from James M. Strock, Assistant Administrator, Office of Enforcement, February 25, 1991.

"The Role of RCRA Inspectors in Waste Minimization," OSWER Directive 9938.10, September 12, 1991. Describes activities RCRA inspectors should perform to ensure facilities are in compliance with HSWA and to encourage pollution prevention.

"Waste Minimization Incentives: Request for Comments," Federal Register, Volume 55, Number 194, pages 40881-40887, October 5, 1990. Responses to the comments are reflected in the RCRA Waste Minimization Action Plan, EPA/530-R-92-020, May 1992.

Legislation

"The Pollution Prevention Act of 1990," Public Law 101-508 Title 6, 104 STAT. 1388, November 5, 1990. Establishes a pollution prevention hierarchy as a national policy. The Act describes the Agency's strategy for implementing pollution prevention activities and also covers areas such as reporting requirements on source reduction and recycling activities.

EPA Resource/Outreach Documents

Pollution Prevention Resources and Training Opportunities in 1992, U.S. EPA, Office of Pollution Prevention, EPA/560/8-92-002, January 1992. This document lists waste minimization/pollution prevention state and Federal programs and contacts, as well as guidance, fact sheets, and videos, university affiliated pollution prevention training and research centers, clearinghouses, and associations.

Waste Minimization: Environmental Quality and Economic Benefits (Second Edition), EPA/530-SW-89-049, 1989. A brief document that encourages generators to implement waste minimization activities by providing them with examples of how waste minimization has been cost effective for generators.

REFERENCES FOR FACILITIES

EPA Guidance Documents

Facility Pollution Prevention Guide, EPA/600/R-62/088, May 1992. Describes how to identify, assess, and implement opportunities for implementing pollution prevention. The guide is written for individuals responsible for implementing waste minimization programs at facilities. The guide also provides a list of references and information resources.

Guides to Pollution Prevention. These provide information on EPA's waste minimization assessment process, as well as detailed information on industrial processes and waste minimization opportunities for the following industries:

The Pesticide Formulating Industry, EPA/625/7-90/004
The Paint Manufacturing Industry, EPA/625/7-90-005
The Fabricated Metal Products Industry, EPA/625/7-90/006
The Printed Circuit Board Manufacturing Industry, EPA/625/7-90/007
The Commercial Printing Industry, EPA/625/7-90/008
Selected Hospital Waste Streams, EPA/625/7-90/009
Research and Educational Institutions, EPA/625/7-90/010
Waste Minimization in Metal Parts Cleaning, EPA/530-SW-89-049.

EPA Policy Documents

"Clarification of Types of Activities That May Be Used to Satisfy Waste Minimization Certification," OSWER Directive 9560.14-85, August 5, 1985. States that Congress' intent with regard to waste minimization requirements in HSWA is to encourage hazardous waste generators to reduce the quantity and toxicity of waste generated. Indicates that generators who recycle onsite or send their wastes offsite to be recycled are also satisfying waste minimization requirements.

"Submission of Waste Minimization Information," OSWER Directive 9454.00-1A, May 23, 1986. Directs Regions to verify that generators are submitting to EPA or authorized states waste minimization information required by Section 3002(a)(6) and 40 CFR 262.41(a)6 &7.

"Waste Minimization: Permit Certification and Joint Permitting," OSWER Directive 9560.1985 (01), September 11, 1985. Provides guidance for incorporating the Section 3005(h) waste minimization certification of HSWA into RCRA permits; clarifies joint permitting under HSWA.

EPA Resource/Outreach Documents

Innovative Hazardous Waste Treatment Technologies: A Developer's Guide to Support Services, EPA 540/2-91/012, June 1992. Provides descriptions and contacts at institutions/organizations that can provide support to innovative technology developers.

Pollution Prevention: A Resource Book for Industry, June 1990. Describes for industry benefits of pollution prevention, and provides success stories and references. Also includes bibliography which contains potential case studies and resources.

Waste Minimization: Environmental Quality and Economic Benefits (Second Edition), EPA/530-SW-89-049, 1989. A brief document that encourages generators to implement waste minimization activities by providing them with examples of how waste minimization has been cost effective for generators.

CONTACTS

Office of Waste Programs Enforcement:
- Technical Assistance Training Branch - FTS-260-9320 or 202-260-9320
- Policy and Regional Operations Branch - FTS-260-8115 or 202-260-8115.

Office of Solid Waste:
- Waste Minimization Branch - FTS-308-8402 or 703-308-8402.

Office of Pollution Prevention and Toxics:
- Pollution Prevention Division - 202-260-3357.

The Pollution Prevention Information Clearinghouse (PPIC) contains technical, policy, programmatic, legislative, and financial information concerning source reduction and recycling in the United States and abroad. It can be reached via telephone hotlines, personal computer (Pollution Prevention Information Exchange System (PIES)), or mail. Reach PPIC using the following numbers or address:

- RCRA/Superfund Hotline - 800-424-9346
- PPIC Technical Support Office - 703-821-4800
- PIES - 703-506-1025
- Mailing Address - c/o SAIC
  7600-A Leesburg Pike
  Falls Church, Virginia 22043.

Waste minimization/pollution prevention state and Federal programs and contacts are listed in Pollution Prevention Resources and Training Opportunities in 1992. This resource book also lists guidance, fact sheets, and videos, university affiliated pollution prevention training and research centers, and clearinghouses, and associations.

WASTE STREAMS GENERATED AND WASTE MINIMIZATION OPPORTUNITIES IN THE FABRICATED METAL INDUSTRY: CLEANING

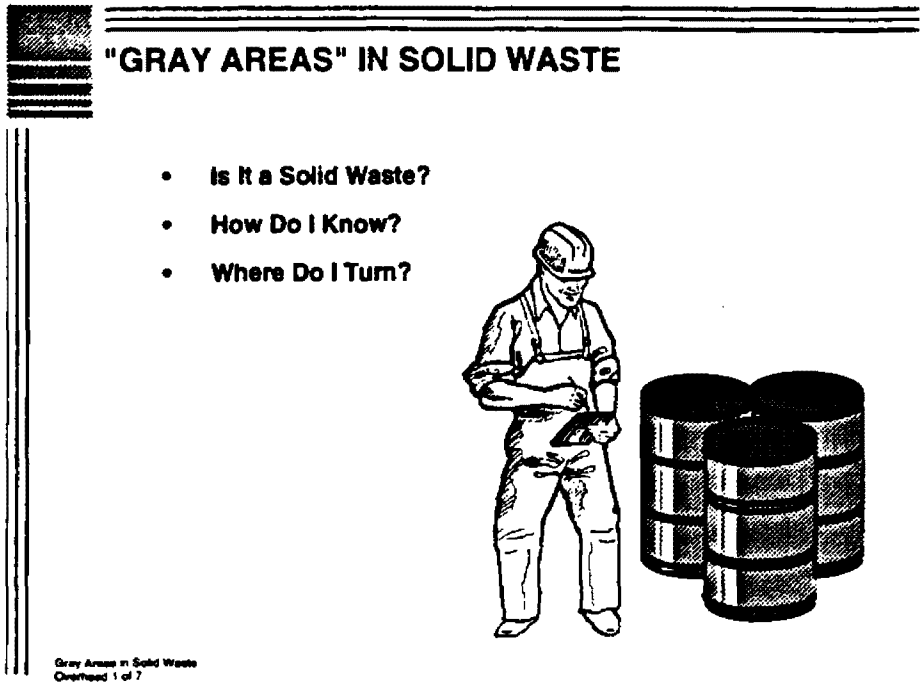
UNIT/PROCESS	CHEMICAL INPUTS	WASTE STREAM	WASTE MINIMIZATION OPPORTUNITIES
Solvent Cleaning	Volatile Organic Compounds	VOC vapors Spent solvents	• Use abrasive cleaning methods • Standardize solvents • Avoid cross-contamination of solvents to minimize degradation • Inspect parts/boards to avoid cleaning and finishing defective parts • Substitute aqueous cleaners for organic solvents • Install lids and freeboard chillers on tanks to minimize vapor losses • Recover organic vapors • Recycle spent solvent with an on-site still • Recycle solvents off-site • Increase freeboard space.
Aqueous Cleaning	Alkaline Solutions Acids Additives (e.g., antioxidants) Water	• Spent solutions • Sludge (containing metals) • Wastewater	• Use mechanical/abrasive cleaning methods • Replace caustics with detergents or citrus-based cleaners • Recover acids in wastewaters through evaporation • Use deionized water • Agitate rinse tanks with air • Recover metals and wastewaters through evaporation, ion exchange, reverse osmosis, electrolysis, electrodialysis • Remove sludge frequently
Abrasive Cleaning	Aluminum oxide Silica Grease Water	• Waste abrasive • Metal • Spent cloth wheels	• Use greaseless or water-based binders • Investigate synthetic abrasives • Use water-based liquid spray systems.

WASTE STREAMS GENERATED AND WASTE MINIMIZATION OPPORTUNITIES IN THE FABRICATED METAL INDUSTRY: MACHINING

UNIT/PROCESS	WASTE STREAM	WASTE MINIMIZATION OPPORTUNITIES
Material Handling		• Preinspect materials to prevent machining, cleaning, and finishing defective workpieces • Implement purchasing and inventory control to ensure materials meet specifications and do not expire prior to use • Test/resuse expired materials
Machining	Metal Working Fluids Scrap Metal	• Use higher quality metalworking fluids and synthetic fluids • Use deionized water to increase performance and extend life • Maintain equipment, gaskets, seals, and wipers to reduce tramp oil contamination • Clean, recover, and reuse fluids through skimming, filtration, coalescing, centrifuging, hydrocloning, and pasteurization • Use oils as fuel • Use air, nitrogen, carbon dioxide, or other gases for cooling

WASTE STREAMS GENERATED AND WASTE MINIMIZATION OPPORTUNITIES IN THE FABRICATED METAL INDUSTRY: FINISHING

UNIT/PROCESS	CHEMICAL INPUTS	WASTE STREAM	WASTE MINIMIZATION OPPORTUNITIES
Plating	• Acids • Chelating agents • Metal compounds • Cyanide compounds	• Spent catalyst solution • Wastewater • Spent plating bath solution • Filter sludges	• Use non-cyanide baths/and stress relievers (e.g., polysiloxames) • Continuously filter baths to extend life • Use low concentrate plating solutions • Substitute nitric or hydrochloric acid for cyanide in plating baths to produce a less hazardous sludge • Increase bath temperature to reduce viscosity and improve drainage • Agitate bath solutions • Extend process bath life through the use of deionized water, improved rack design and maintenance, pure anodes, and reducing drag-out • Monitor and adjust solution activity
Etching	• Acids • Ammonia	• Spent etchant • Wastewater	• Investigate demand for unetched parts • Use non-chrome etchants (e.g., ferris chloride) • Use differential electroless plating • Use non-chelated etchants (e.g. sodium persulfate) • Recycle spent etchants with electrolytic cells
Rinsing		• Wastewater • Treatment sludge (containing heavy metal compounds)	• Increase the number of rinses after each process bath • Employ countercurrent rinsing • Use spray or fog-spray rinsing techniques • Remove bath solutions with air streams or mechanical means • Add surfactants/wetting agents • Agitate rinse tanks with air • Recover metals and wastewaters through evaporation, ion exchange, reverse osmosis, electrolysis, electrodialysis • Slow the speed of withdrawal • Use deionized water • Use rinse water from alkaline cleaning operations to rinse workpieces from an acid cleaning operation
Painting	• Paints • Resins	• Waste Paint • Empty containers • Solvent vapors	• Minimize overspray through equipment modifications or operator training • Substitute solvent-based paints with water-based paints • Recover and reuse paint



OVERHEAD #1

TITLE: "Gray Areas" in Solid Waste

KEY POINTS:

- Determining whether a given material is a solid waste has enormous implications for its management. If you determine that something is not a solid waste and, therefore, can't be a hazardous waste, then its generation, transportation, and final disposal are not governed by RCRA. If, on the other hand, you do determine that the material is a solid waste, then there are very clear-cut regulations that must be complied with. In this presentation, we will focus on three major gray areas that you may frequently encounter in the field. These three areas are: 1) sham recycling, 2) waste derived products, and 3) speculative accumulation. For each of these areas, we will define the terms and describe scenarios that fall within these three gray areas. There are others, such as secondary material classification and point of generation issues, but in the interest of time our discussions will focus primarily on the three mentioned.

- On inspections where it is difficult for you to determine if materials are or are not solid waste, the determinations will have to be based on the facts of the particular case. You may not be able to make a determination on the spot. You will have to go back to the office and use all your resources (e.g., Office of Solid Waste and Emergency Response (OSWER) Directives, Regulatory Development Branch memos, or RCRA Enforcement Division (RED) personnel.)

OVERHEAD #1

TITLE: "Gray Areas" in Solid Waste (continued)

KEY POINTS:

- During this presentation we will examine two different scenarios by engaging in active debate. The debates will illustrate that, in many cases, the facts can support different determinations regarding classification of materials.

- In addition, we will identify human and written resources that you can consult when faced with these or other gray areas.

40 CFR §261.2 TABLE 1

	Use constituting disposal (§261.2(c)(1))	Energy recovery/ fuel (§261.2(c)(2))	Reclamation (§261.2(c)(3))	Speculative accumulation (§261.2(c)(4))
Spent Materials	(*)	(*)	(*)	(*)
Sludges (listed in 40 CFR Part 261.31 or 261.32)	(*)	(*)	(*)	(*)
Sludges exhibiting a characteristic of hazardous waste	(*)	(*)		(*)
By-products (listed in 40 CFR Part 261.31 or 261.32)	(*)	(*)	(*)	(*)
By-products exhibiting a characteristic of hazardous waste	(*)	(*)		(*)
Commercial chemical products	(*)	(*)		
Scrap Metal	(*)	(*)	(*)	(*)

* Is a solid waste.

Gray Areas in Solid Waste
Overhead 2 of 7

OVERHEAD #2

TITLE: 40 CFR §261.2 Table 1

KEY POINTS:

- Table 1 of §261.2 is the starting point for determining if a material is a solid waste. It covers four different recycling schemes and seven different types of secondary materials and identifies when they would be a solid waste. For example, a characteristic sludge that is being used for its energy value would be a solid waste. If the characteristic sludge was being reclaimed, it would not be a solid waste and therefore could not be a hazardous waste.

- There will be scenarios which won't fit into Table 1 easily and that aren't as straightforward. Let's take a closer look at each of the three gray areas that you will likely encounter at some point when conducting inspections. Some of these situations you may have already encountered in the field.

- Another issue that will need to be resolved is whether reclamation occurs prior to use or reuse as an ingredient, prior to use as an effective substitute for a chemical commercial product, or prior to being returned to the original process that generated the material. In all three scenarios, if the secondary material is reclaimed prior to use or reuse, it would not meet the §261.2(e) exceptions from being considered waste management.

OVERHEAD #3

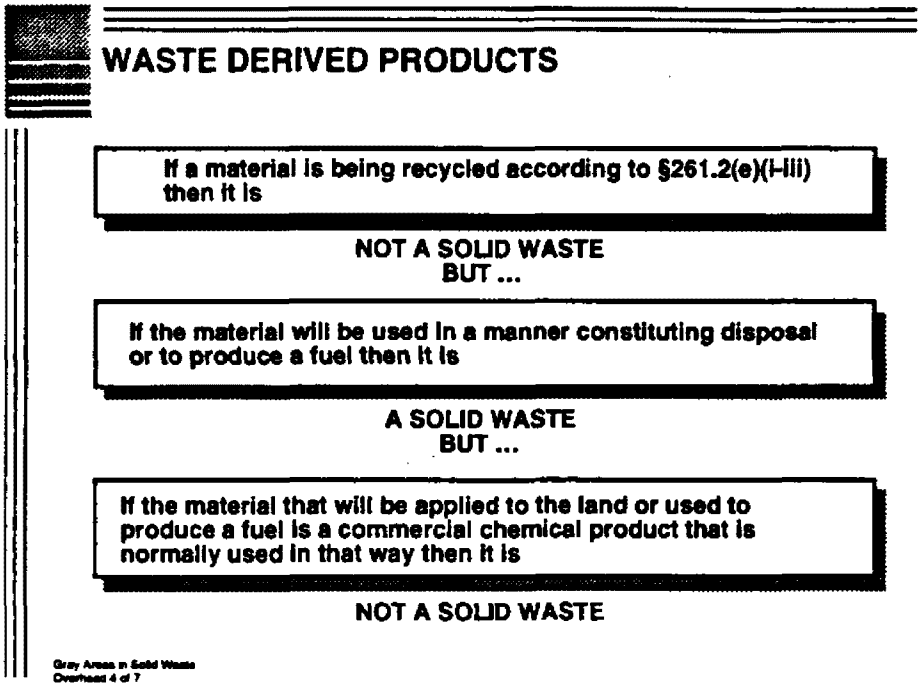
TITLE: Sham Recycling

KEY POINTS:

- You may encounter facilities that "recycle" their materials in ways that avoid waste management, but do not significantly recover material or energy value. In fact, the real intent is to treat or dispose of their hazardous waste, not to recycle it— hence, the term "sham recycling."

- An example is the direct use of a hazardous waste to manufacture a consumer product, such as sending a F-listed solvent, with a low Btu value, to a cement kiln and identifying it as a necessary ingredient in the production of cement. The hazardous constituents are in effect treated while they contribute nothing to the final product. Using spent pickle liquor as a wastewater conditioner is a legitimate use of a secondary material as a commercial product substitute.

- As you know, facilities are required to maintain documentation when claiming that their materials are not solid wastes (40 CFR §261.2(f)). But you may encounter, or have already encountered, situations where the material is partially used to make a product. For example, a F006 sludge may have certain properties that make it useful in cement production, but it also contains very high concentrations of hazardous constituents that contribute nothing to the product. The gray area in this scenario stems from the need to determine if this is a legitimate use of the material and can therefore be considered recycling.



OVERHEAD #4

TITLE: Waste Derived Products

KEY POINTS:

- As we have noted, §261.2(e) describes recycling activities that are not defined as waste management. That is, use or reuse as an ingredient, use or reuse as an effective substitute for a commercial product, and returning the material to the process where it was originally generated, without prior reclamation.

- There are four important exceptions: if the material is being used to produce a product that will be applied to the land, or to produce a fuel, or is being accumulated speculatively, or is inherently wastelike, it is a solid waste. The first two exceptions encompass waste derived products. There is one further important exception: Products that are made by incorporating chemical commercial products are not a solid waste if they are either used in a manner constituting disposal or used for energy recovery (if the chemical commercial product is normally used in that way).

- You are probably most familiar with an off-specification commercial chemical product that is being sent off-site for energy recovery. For example, an off-specification jet fuel, hydrazine (U133), used as fuel for a boiler. Another example is chlordane (U036), a listed commercial chemical product that is also a pesticide. When chlordane is used as a pesticide, it is not a solid waste. Therefore, if chlordane is applied to the ground as a pesticide and it subsequently

OVERHEAD #4

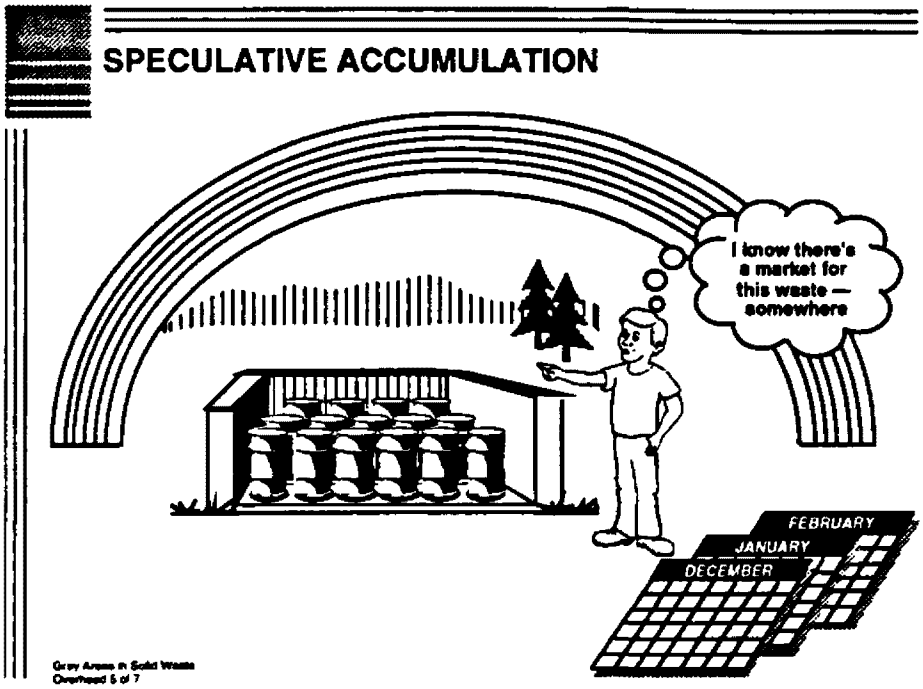
TITLE: Waste Derived Products

KEY POINTS:

is mixed with a solid waste, this mixture would not be a hazardous waste via the mixture rule. Again, this is because the commercial chemical product is being used as it normally would be used.

- It becomes very important to determine if the commercial chemical product was being used as intended or if in fact, it was actually being disposed. Let's look at another scenario. 2,4,5,–T, a pesticide, is mixed with water prior to being used. If this unused mixture spills onto the ground before it is used, the soil would be considered to contain the listed commercial chemical product (i.e., F027). If the contamination resulted from the use of the 2,4,5,–T, then the soil would not be considered to contain the listed hazardous waste. You should note that the soil could still be a hazardous waste if it exhibited a characteristic of a hazardous waste.

- Even though a material is a solid waste if it is applied to land, it will not be regulated if it meets LDR treatment standards and has been physically incorporated into a product. An example is a commercial fertilizer that contains zinc flue dust (K061), provided that it is being produced for the general public's use and provided that it is handled in a manner commensurate with the management of zinc fertilizers (e.g., stored and transported properly).



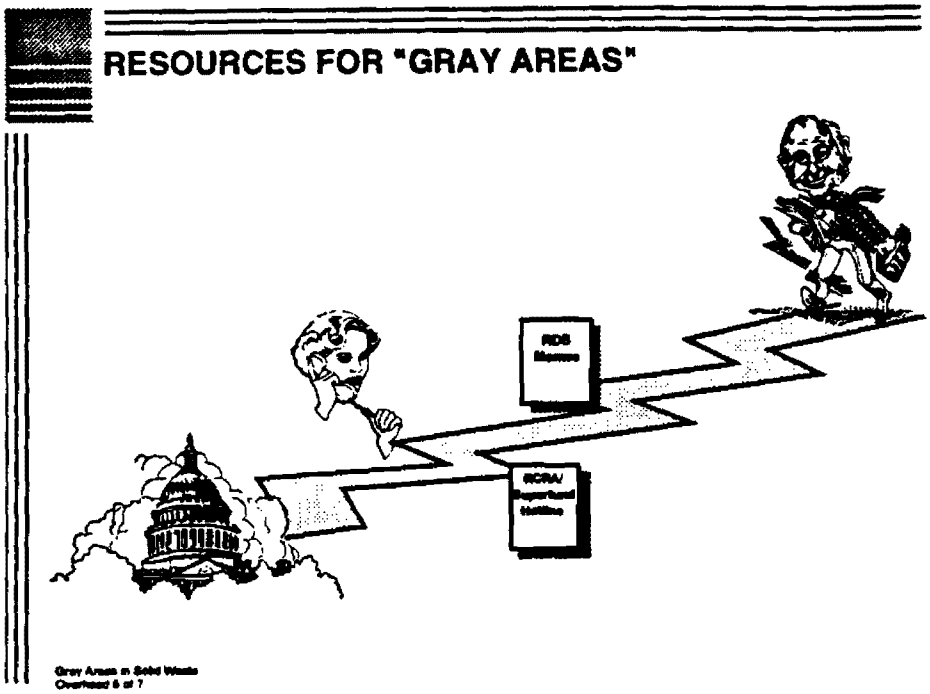
OVERHEAD #5

TITLE: Speculative Accumulation

KEY POINTS:

- Speculative accumulation occurs when materials are accumulated with the intent of recycling, but there is a long time period before the recycling takes place. Unless it can be shown that a certain amount of waste is recycled during a calendar year, the material is a solid waste (and hence can be a hazardous waste). The generator needs to show that the material has recycling potential, and that there is a feasible way to recycle the material. The generator must also show that there is a turnover of 75% of the accumulated material in a calendar year. The gray area in this scenario results from the need to determine if a particular material can be recycled and if there is a means of recycling it. For example, a facility accumulates a sludge that is characteristically hazardous. The intent is to recycle the sludge. If the nearest recycler is 500 miles away, the facility will have to show that it is economically reasonable to send the sludge that far to be recycled.

- We have just looked at the gray areas of sham recycling, waste derived products and speculative accumulation. As stated earlier, there are other gray areas related to determining if a material is a solid waste. Can you suggest other gray areas you are aware of or have experienced?



OVERHEAD #6

TITLE: Resources for Gray Areas

KEY POINTS:

- We've just briefly described some broad categories of gray areas that may arise when determining if a material is a solid waste. As you can probably imagine, there are as many scenarios as there are facilities and far too many for there to be a definitive answer for every situation. The regulations are not designed to address each and every situation or factor. That is why your determination of whether a material is or is not a solid waste and how you get to that decision is very important. For example, when determining whether an activity is legitimate recycling vs. sham recycling, you will need to look at the constituents in the secondary material that are being recycled and compare them to the constituents found in the virgin ingredients. These factors and others will be unique.

- To assist you in collecting information and expert opinions please refer to your Participant's Manual. This is a compilation of both human resources and written resources that can help you. Let's briefly walk through the handout.

OVERHEAD #6

TITLE: Resources for "Gray Areas" (continued)

KEY POINTS:

- The Resources for Gray Areas is divided into 2 sections—one for human resources and one for written resources. This list of human resources is further broken down into a section on Headquarter resources and a section on Regional resources. You will notice that offices are listed, rather than specific individuals. Individuals change positions but, for the most part, office functions remain constant. Listed in the written resources section are pertinent OSWER directives, regulatory development branch memos, RCRA Hotline monthly report questions, Federal Registers, and other guidance documents.

OVERHEAD #7

TITLE: Solid Waste—Yes or No?

KEY POINTS:

- The cases you debated were based on real cases. We modified some of the facts to make the debates more even-handed. Here are the actual determinations of the two cases:

  Case 1 - Inorganic Recycling

  In February 1989, EPA sent Inorganic Recycling (IR) a Section 3007 information request and made a field visit to the site. In April 1989, EPA informed IR that the company's operation revealed characteristic properties of a hazardous waste treatment operation. The Agency required IR to conduct a test burn and analyze the results to determine whether IR was legitimately recycling hazardous wastes into a commercially usable endproduct. In October 1989, the U.S. EPA and the Ohio EPA approved IR's Work Plan, which defined the test procedure for the test burn. The testing was structured into two phases. The U.S. EPA and the Ohio EPA concurred that data generated during the Phase I and II tests would lead to a technical basis for either accepting or rejecting IR's claims for legitimate recycling. In April 1990, the U.S. EPA determined that IR's operation represents a valid means of reprocessing waste materials for the purposes of endproduct production, provided that IR adheres to certain conditions. One of the conditions requires IR to perform certain tests and keep detailed records demonstrating the extent of their recycling activities.

OVERHEAD #7

TITLE: Solid Waste—Yes or No? (continued)

KEY POINTS:

Constituents to be sampled and tested for include benzene, vinyl chloride, mercury, beryllium, total organic carbon, total cyanide, hexavalent chromium, and total metal content. EPA's approach in setting these criteria was to divide the hazardous constituents present in the F006 waste stream into two groups, those that contribute to recycling, and those that do not. These tests and associated records will allow IR to prove continued compliance with 40 CFR §§261.2(e) and (f).

Case 2—American Brass Incorporated

ABI had been placing slag on the pile since at least 1984 with minimal removal. Needless to say, ABI did not meet the 75% removal requirement under speculative accumulation for quite a few years. Therefore, the pile was considered a solid waste because of speculative accumulation, and a hazardous waste because of the TC levels of lead. ABI further failed to properly manage the baghouse dust. In March 1988, EPA filed a complaint against ABI. In June 1989, EPA, Alabama Department of Environmental Management (ADEM), and ABI entered into a Consent Decree. ABI was required to close the slag pile by December 31, 1989 pursuant to the terms of a closure plan attached to the Consent Decree. In addition, ABI was prohibited from placing newly generated slag on the land and baghouse dust was to be properly managed. It was not until 1991 when ADEM and EPA conducted a joint inspection of the facility noting that the requirements of the closure plan had not been completed, that ABI began serious removal of slag from the slag pile. At the end of 1991, ABI had removed more than 75% of the slag pile that existed in the beginning of the calendar year. Since they removed at least 75% of the slag pile at that time, the pile ceased to be a solid waste and, therefore, a hazardous waste at the beginning of 1991. ABI had totally lifted the slag pile by February 29, 1992 as per the modification to Consent Decree.

- As revealed by the debates, general guidance cannot adequately clarify gray areas. As you have all experienced, you have to make judgment calls in many, if not most, situations. These decisions should be based on the facts of a particular case, and should not be done quickly. Take time to fully examine all the facts.

- Additionally, there are human and written resources that are available to help you in resolving these issues. A comprehensive list of resources is available in your Participant's Manual. Use these resources.

RESOURCES FOR "GRAY AREAS" IN SOLID WASTE

WRITTEN RESOURCES

FEDERAL REGISTERS

Date	Citation	Subject
April 11, 1985	50 *FR* 14216	Technical Corrections to Solid Waste Definitions

Technical corrections to the January 4, 1985 rule defining solid waste. Indicates that an unlisted commercial chemical product (e.g., unused oil) would be regulated as a listed Chemical Commercial Product.

January 4, 1985	50 *FR* 614	Definition of Solid Waste

Modifications to definition of solid waste finalized and recycling regulations promulgated. Discusses the entire basis for the definition of solid waste. Further discusses the types of secondary materials and how the method of recycling will determine if the material is a solid waste.

April 4, 1983	48 *FR* 14472	Proposed rule on Definition of Solid Waste

Proposed regulations for determining which materials are hazardous wastes when recycled.

OSWER DIRECTIVES

Date	From/To	Subject
April 29, 1989	Lowrance/Regions I-X	Legitimate vs. sham recycling
	OSWER Directive 9441.1989(19)	

OTHER DOCUMENTS

RCRA Implementation Study Update: The Definition of Solid Waste: July 1992, EPA/530-R-92-021

HOTLINE MONTHLY REPORT QUESTIONS

Date	Subject
May 1992	Secondary Material Used as Effective Substitutes for Commercial Products
February 1992	Speculative Accumulation Calculation
August 1991	Off-Specification Circuit Printing Board
May 1990	Spent Material; Mercury Spilled from a Thermometer
March 1990	By-Product vs. Scrap Metal
October 1987	Off-Spec Fuel Burned for Energy Recovery

HUMAN RESOURCES

REGIONS

Region 1

Office	Phone Number
Waste Management Division	(617) 573-5700
Regional Counsel	(617) 565-3451

Region 2

Office	Phone Number
Hazardous and Solid Waste Programs Branch	(212) 264-9469
Hazardous Waste Compliance Branch	(212) 264 8356
Regional Counsel - Air, Waste, and Toxics Branch	(212) 264-5340

Region 3

Office	Phone Number
RCRA Programs Branch	(215) 597-0980
RCRA Enforcement and UST Branch	(215) 597-2809
Regional Counsel	(215) 597-9822

Region 4

Office	Phone Number
RCRA and Federal Facilities Branch	(404) 347-3016
Waste Programs Branch	(404) 347-5059
Regional Counsel - Hazardous Waste Law Branch	(404) 347-2641

Region 5

Office	Phone Number
RCRA Office	(312) 886-7437
RCRA Enforcement Branch	(312) 886-4434
RCRA Program Management Branch	(312) 353-8512
Regional Counsel- Solid Waste and Emergency Response Branch	(312) 886-0556

Region 6

Office	Phone Number
RCRA Enforcement Branch	(214) 655-6745
RCRA Programs Branch	(214) 655-6655
Regional Counsel	(214) 665-2110

HUMAN RESOURCES (continued)

Region 7

Office	Phone Number
RCRA Branch	(913) 551-7051
Regional Counsel - Hazardous Waste/RCRA Branch	(913) 551-7010

Region 8

Office	Phone Number
RCRA Implementation Branch	(303) 293-1663
RCRA Management Branch	(303) 293-1513
Regional Counsel	(303) 293-7550

Region 9

Office	Phone Number
Waste Compliance Branch	(415) 744-2120
Regional Counsel	(415) 744-1364

Region 10

Office	Phone Number
Waste Management Branch	(206) 553-2782
Hazardous Waste Policy Branch	(206) 553-2871
Regional Counsel - Hazardous Waste Branch	(206) 553-6695

RCRA/SUPERFUND/OUST HOTLINE

(800) 424-9346

Debate Preparation and Conduct Rules

1. Select a lead debater and a note taker. (The lead debater may choose to be the note taker, too. This decision is up to each team).

2. The Red and Orange teams each need to select one member to summarize their respective enforcement cases at the time of the debates. If you are one of these teams, select one member to present a brief summary (not to exceed 1 minute) of your assigned enforcement case. This person can also be the lead debater and/or the note taker. The purpose of this summary is to introduce the specific gray area scenario of the given debate to the rest of the participants.

3. Read the details of the case and the background materials. Discuss the case and develop your team strategy for the debate.

4. Review with the lead debater the points to raise during the debate. The lead debater will have 2 1/2 minutes to present your team's position and identify supporting materials/references.

5. Adhere to the time frames listed below and on the flipchart at the front of the room. Time is limited, and each team will need to adhere to the following time constraints:

   — Review of case and background materials, and discussion of team approach and points you plan to make during the debate *(30–35 minutes)*

   — Brief summary of the case and conduct of the debate *(3 1/2 minutes per team)*

6. Send the lead debater from your team to the front of the room when the instructor calls on your team to compete in a debate with the opposing team. If you are the Red or Orange team, also send the member responsible for introducing the case in question to the rest of the participants.

DETAILED INSTRUCTIONS PACKET FOR NATIONAL BRASS CASE STUDY

NATIONAL BRASS INCORPORATED

National Brass Incorporated (NBI) is an unpermitted, secondary brass smelter with a facility located in Christmas Tree, Alabama. NBI smelts scrap metal from dealers and industrial sources to reclaim brass and produce brass ingots. The smelting process produces three additional materials: ambient air baghouse dust, zinc oxide baghouse dust, and brass furnace slag ("slag"). The baghouse dust from flue gases, mainly consisting of zinc oxide, is bagged and sold for reclamation. The baghouse dust from charging gases is fed back into the furnace. A portion of the slag is reprocessed in a ball mill producing a ball mill residue which may be sold as a fertilizer. The slag exhibits a hazardous characteristic because of its lead content. The slag does contain recoverable amounts of metals and may also be further processed to produce another saleable product.

On December 17, 1992, you visit the facility. NBI claims that their slag would be classified as a by-product exhibiting a characteristic and when sent for reclamation would not be a solid waste per 40 CFR §261.2(c) Table 1. NBI's records show that they began accumulating the slag on the ground at its facility in June 1990. A closer review of the facilities records show that 500 lbs. of slag were accumulated from June–December 1990. From January to May 1991, an additional 1000 lbs. were accumulated and on May 17, 1991, 1450 lbs were sent off-site for recycling. On December 31, 1991, they had 400 lbs on-site. During your visit NBI has 500 lbs of slag on-site. The facility that they usually send the slag to for recycling had a fire in September and has not yet gone back into production.

Is the slag a solid waste?

BACKGROUND MATERIALS

subsequently used as feedstock. This situation is a subset of the one just described, so that these materials are wastes until reclaimed. Their later use as feedstock does not alter this result. The Agency acknowledges, however, that its discussion of the recycling of spent sulfuric acid in the proposal preamble (footnote 30) created some confusion. The Agency still does not think this process involves reclamation. To eliminate any uncertainty, however, we are amending § 261.4(a) of the regulations to state that spent sulfuric acid that is recycled to produce virgin sulfuric acid is not considered to be a solid waste. (See Section L below.)

2. *The Status of Reclaimed Products.* The Agency proposed a clarifying amendment to § 261.3(c)(2) (the "derived from" rule) to indicate that commercial products reclaimed from hazardous wastes are products, not wastes, and so are not subject to the RCRA Subtitle C regulations. See 48 FR 14488. Thus, regenerated solvents are not wastes. Similarly, reclaimed metals that are suitable for direct use, or that only have to be refined to be usable are products, not wastes. This amendment states a fairly evident principle, and was not challenged by any commenter.

We caution, though, as we did in the proposal, that this principle does not apply to reclaimed materials that are not ordinarily considered to be commercial products, such as waste-waters or stabilized wastes. The provision also does not apply when the output of the reclamation process is burned for energy recovery or placed on the land. These activities are controlled by the provisions of the definition dealing with using hazardous wastes as ingredients in fuels or land-applied products. For instance, if a spent solvent is treated and blended with oil to sell as a fuel, that waste-derived fuel is still subject to RCRA jurisdiction.

The principle also does not apply to wastes that have been processed minimally, or to materials that have been partially reclaimed but must be reclaimed further before recovery is completed. (See 48 FR at 14490/n. 37.) For this last situation—where materials are partially reclaimed but must be reclaimed further until recovery is completed—we are providing a variance procedure for situations in which the initially reclaimed material is commodity-like in spite of the need for additional processing before it is finally reclaimed. This variance is explained fully in Section J.2 of Part 2 of the preamble below.

F. Section 261.2(c)(4): Wastes That Are Accumulated Speculatively

1. *Grouping of Speculative Accumulation and Overaccumulation Provisions.* EPA proposed that any secondary material (i.e., spent materials, sludges, or by-products) being accumulated speculatively were solid wastes. We said these materials are "accumulated speculatively" when they are being stored with a legitimate expectation of eventual recycling but have never been recycled, or cannot feasibly be recycled. See 48 FR 14488.

The Agency further proposed that secondary materials that accumulate at a site for over a year without 75 percent being recycled are solid wastes. 48 FR 14490. The sense of this provision was that all secondary materials that overaccumulate before being recycled are solid wastes, even if they are going to be recycled in ways that ordinarily do not constitute waste management.

We have combined these concepts in a single provision in the final definition. We have drafted the provision so that secondary materials are considered to be solid wastes if they are accumulating before being recycled. However, the materials will not be considered solid wastes (under this provision of the definition) if the person accumulating can show, on request, that: a) the materials have known recycling potential and can feasibly be recycled, and b) during a one-year calendar period that the amount of material recycled, or transferred to a different site for recycling, is at least 75 percent of the amount accumulated at the beginning of the year.[50]

We think that drafting the provision in this way most accurately reflects Congressional intent that accumulated hazardous secondary materials are ordinarily to be regarded as solid and hazardous wastes. Congress believed that hazardous wastes are rarely, if ever, recycled or amenable for recycling. H.R. Rep. No. 94-1491, at 4. It mandated a "regulatory framework" to ensure that "hazardous wastes (are not) disposed of in ponds or lagoons or on the ground in a manner that results in substantial and sometimes irreversible pollution of the environment." (*Id.*) This mandated "regulatory approach" would "eliminat(e) the last remaining loophole in environmental law . . ." (*Id.*)

Although accumulating hazardous secondary materials are ordinarily regarded as solid and hazardous wastes, this is not invariably the case. As noted earlier in the preamble (see Section II.B. of Part 1 and Section H of Part 2), these materials would not be wastes if they can be recycled in certain designated ways, and if they are not accumulated speculatively before being recycled. These situations represent exceptions to the general statutory prohibition against unregulated waste management.

The final rule thus states the general principle that hazardous secondary materials accumulating before recycling are wastes unless the person accumulating is able to show on request that he is indeed recycling sufficient volumes of the materials on an annual basis. The provision is not substantively different from the proposed rule on overaccumulation; the drafting indicates explicitly, however, that this is an exception to the general statutory principle. Thus, the burden of showing that sufficient amounts are being recycled is on the person accumulating the material. (See Section J. of this part of the preamble.)

2. *§ 261.2(c)(4)(A): Wastes That Are Accumulating With Expectation of Recycling But Which Have Not Been Recycled.* We are adopting in the final rule the proposed provision that all materials stored with a legitimate expectation of eventually being recycled but for which there is no known recycling market or disposition, or no feasible means of recycling, are wastes. These wastes are subject immediately to all applicable RCRA Subtitle C standards. Ordinarily, these are storage standards for the applicable type of storage facility. (See 48 FR 14488/2.) Materials that are known to be recyclable, such as solvents, scrap metal, used oil, or most smelting dross, slags, and sludges ordinarily would not be subject to this provision. A person accumulating hazardous secondary materials would have the burden of proving that there is a feasible means of recycling the material. (See Section J. below.) This ordinarily will require identification of actual recyclers and recycling technology, location of the recycler, and relative costs associated with recycling. For example, if the

[50] One commenter questioned whether reclaimed industrial cooling water was considered to be reclaimed. Ordinarily, we consider cooling water (contact or non-contact) to be reused directly when it is reclaimed. Cooling water is not ordinarily processed or treated to remove impurities before reclamation, but is reused every time the process (often through a cooling tower) to lose enough heat to be reusable. The Agency does not consider cooling water reused in this way to be reclaimed.

[51] Of course, the materials could still be discarded hazardous wastes regardless of how they are recycled. For example, they would be wastes if they are to be recycled by being burned to recover energy.

nearest recycler is 800 miles away, the person accumulating the hazardous secondary material would have to show that it is economically reasonable to send his material that far to be recycled. The most convincing demonstration clearly would be that the hazardous secondary material actually has been recycled.

Most comments supported the proposal. Two commenters, however, suggested that material for which generators could demonstrate that ongoing developmental work will lead to recycling at a future date should not be considered to be accumulated speculatively. We disagree. We think that materials that are not known to be recyclable (or not feasibly recyclable in the hands of a particular generator) are wastes immediately. The example in the preamble to the proposed rule of a waste accumulating over eight years while the generator endeavored to find a means to recycle it indicates that conducting research into recycling possibilities is much different than being able to recycle a waste. In addition, the Agency is not equipped to evaluate whether an unproven developmental plan will ultimately prove feasible.

3. *Section 261.1(c)(4)(B): Wastes Accumulating Before Recycling That Are Not Recycled In Sufficient Amounts.* a. *The Proposed Provision.* EPA proposed that secondary materials not already defined as wastes that accumulated at a site for over a year without 75 percent being recycled, or transferred to a different site for recycling, are solid wastes. (The materials must, of course, have a know potential for recycling, or they will be considered to be wastes immediately.) EPA also proposed that certain wastes which were exempt when recycled would no longer be exempt if insufficient amounts were recycled in a year.

We coupled this provision with an exception allowing persons who failed to recycle 75 percent in a given year to petition the Regional Administrator (or authorized state having this provision) to demonstrate that they could recycle sufficient amounts in the subsequent year. If the petition was granted the accumulated material was not a waste, or remained exempt from regulation. Once the material accumulated for over a year without sufficient turnover, however, it became a waste or lost its exemption from regulation unless the Regional Administrator (or authorized State) were to decide otherwise.

b. *The Final Regulation.* We are promulgating this provision essentially as proposed. We continue to believe that the length of time secondary materials are accumulated before being recycled is an important indicator of whether or not they are wastes (or, in the case of precious metal wastes, whether they should be subject to regulation). This is borne out by the large number of recycling damage cases where secondary materials that were overaccumulated over time caused extensive harm. Commenters likewise stated that raw materials usually are processed through production processes in a continual manner and therefore that the length of time a secondary material accumulates before recycling is relevant in determining whether the material is a waste. The Agency also believes, and many commenters agreed, that the one-year period and 75 percent turnover figure were within the reasonable range of values the Agency could select. We are promulgating this provision essentially as proposed.

As just discussed, the major change in the provision involves the structuring of the regulation to indicate that secondary materials stored before recycling are wastes unless the person accumulating the waste is able to show that they are being recycled at an annual rate of 75 percent or more. By requiring persons accumulating the materials to be able to show that they are recycling sufficient amounts, we mean that they have the burden of proof on this issue. We are not requiring specific reports to be submitted to the Agency, nor that particular records be maintained. (See Section d. below discussing the type of records that would satisfy the burden of proof.)

As at proposal, this provision applies to all spent materials, sludges, and by-products not already defined as solid and hazardous wastes and that are accumulated before any type of recycling. The provision thus applies to secondary materials not otherwise considered to be wastes when recycled—namely, to materials that are to be used as ingredients or as commerical product substitutes, to materials that are recycled in a closed-loop production process, to unlisted sludges and by-products that are to be reclaimed, and to black liquor and spent sulfuric acid being reclaimed. Thus, if one of these materials are overaccumulated, they would be considered to be hazardous wastes and would become subject to regulation under applicable provisions of § 261.6, normally § 261.6 (b) and (c) [see Section II.L of Part 2 of the preamble].

The provision also continues to apply to one set of wastes which are ordinarily exempt from most regulation when recycled, precious metal wastes being reclaimed. Thus, if these wastes are overaccumulated, they no longer are conditionally exempt from regulation (see § 266.70(d)).

The provision does *not* apply to secondary materials that arise wastes when they are recycled. ... example scrap metal, secondary materials burned as fuels, or spent lead-acid batteries being reclaimed. The regulations in § 261.6 and Part 266 must be consulted to determine if these wastes are regulated. Rate of turnover thus is not a factor in determining the extent of regulation for these wastes.

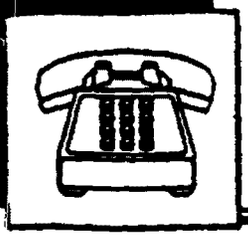
In response to comment, we are adding that the provision also does not apply to materials generated in a manufacturing process unit or associated non-waste-treatment manufacturing unit covered by § 261.4(c). Including materials that are generated in these units in the calculation would be inconsistent with the reasons EPA initially exempted wastes accumulated in these types of units. See 45 FR 72025 (October 30, 1980).[9]

EPA proposed that the 75% turnover rate be calculated based on volume. In response to comment, we are writing the final rule so that rate of turnover can be calculated based on either weight or volume. Either measure appears to be a reasonable way to calculate turnover.

We are making one other change to the proposed rule by requiring 75% of the accumulated materials be recycled during the *calendar* year, starting on January 1, 1985. The proposal would have allowed the person accumulating to choose among the calendar, fiscal, and inventory years as the period during which 75% turnover must be achieved. On reflection, we think that a single time period is needed to facilitate enforcement and to achieve uniformity. EPA believes that if enforcement officials are confronted with a differing starting date at each facility, this provision would become too difficult to implement.

c. *The Requirement That Materials of The Same Class Being Recycled The Same Way Be Counted Together.* In the proposal, we left open the question of whether the overaccumulation provision applies on a material-by-material basis or on a basis that takes into account both the material being recycled and the

[9] Although the final rule retains in § 261.4(c)—a provision that exempts wastes from regulation—EPA is not stating that the materials in these units are wastes. EPA is stating that the secondary materials otherwise defined as solid wastes that are accumulating in the product storage tanks or other vessels described in § 261.4(c) are subject to the turnover provision contained in the speculative accumulation rule.



HOTLINE QUESTIONS AND ANSWERS

RCRA

1. Speculative Accumulation Calculation

In March 1991, a facility generated 200 kg of sludge that exhibited the toxicity characteristic (TC) for lead (D008). The operator of the facility placed these materials in storage to await reclamation of lead. At that time, the facility was not accumulating any other recyclable materials. Since the sludge will be reclaimed, it is not considered a solid waste while stored prior to reclamation (40 CFR §261.2(c)(3)). On December 31, 1991, the facility still had not recycled any of this material. Is the sludge accumulated speculatively under §261.1(c)(8), since 75 percent was not recycled in the year, and therefore subject to management as a solid and hazardous waste?

No, the sludge would not be accumulated speculatively. Although it is accumulated before being recycled, it is not accumulated speculatively if the person accumulating it can show that (1) the material is potentially recyclable and has a feasible means of being recycled, and (2) during the calendar year (commencing on January 1) the amount of material that is recycled or sent for recycling equals at least 75 percent of the amount of that material accumulated at the beginning of the period (§261.1(c)(8)). A facility owner/operator must show that he or she has recycled 75 percent of the material in storage on January 1 of that year. "Under this provision, the amount of material turned over in a year is critical, not the total amount accumulated at the end of the year" (48 FR 14490; April 4, 1983). For the above facility, the amount of material in storage on January 1, 1991, was zero, so on December 31, 1991, the operator does not have to show that any amount was recycled during the calendar year. On January 1, 1992, however, 200 kg of D008 sludge are in storage. Thus, the facility must be able to show that 75 percent of this material, or 150 kg, has been recycled or sent for recycling by December 31, 1992. If the operator cannot demonstrate this 75 percent recycling rate, the sludge remaining in storage is said to be accumulated speculatively and becomes subject to regulation as a solid waste. Because it exhibits a characteristic, the generator must begin to handle the material as a hazardous waste. The Agency notes that "this approach could allow essentially a free year to accumulate where a generator starts a year with little or no waste" (48 FR 14490; April 4, 1983). The period of one calendar year starting on January 1 was selected, however, to facilitate enforcement and achieve uniformity (50 FR 635; January 4, 1985).

In making the above calculation, the 75 percent requirement applies to all materials of the same class being recycled in the same way. If this facility also generated a by-product that exhibited the TC for chromium (D007) and reclaimed it, the owner/operator would make a separate speculative accumulation calculation for this by-product (50 FR 635-6; January 4, 1985).

The RCRA regulations provide that certain materials, which would otherwise be considered hazardous waste, will not be regulated as solid waste (and therefore hazardous waste) when they are reclaimed (§261.2(c)(3)). The requirement that materials accumulated speculatively be regulated as solid waste was intended to prevent abuse of this exemption. It is only applicable to certain situations, including the reclamation of characteristic sludges and by-products, materials used or reused as ingredients, commercial product substitutes, black liquor, sulfuric acid, and precious metals reclamation. The rule is not applicable to spent materials being reclaimed, listed sludges being reclaimed, or listed by-products being reclaimed, because these materials are already considered solid wastes when awaiting recycling (50 FR 635; January 4, 1985). It also does not apply to commercial chemical products that are stored prior to reclamation, because, by definition, these materials are not regulated as solid wastes until they are abandoned or intended for discard (48 FR 14489; April 4, 1983).

2. Medical Waste Tracking Act Demonstration Program

What is the status of the Medical Waste Tracking Act demonstration program, laid out in 40 CFR Part 259?

In response to the Medical Waste Tracking Act of 1988 (which amended RCRA by adding Subtitle J), EPA established a two-year demonstration program to track medical waste. The program began June 22, 1989, and ended June 22, 1991. Five States participated in the program: Connecticut, New Jersey, New York, Puerto Rico, and Rhode Island. The program has expired and only some of the Federal recordkeeping regulations are currently in effect.

Section 11008 of RCRA required EPA to submit to Congress two interim reports and a final report on medical waste management and the demonstration program. The first and second interim reports were submitted in May 1990 and December 1990. The first interim report summarized information that was then available from the tracking program and outlined an agenda for additional research on each of the 12 specific areas concerning medical waste that were identified in the Act. The second interim report provided a research update and forecast on each of these subject areas. The third and final report will summarize all the information gathered, evaluate the success of the demonstration program, and outline options for managing medical waste. The final report is currently under Agency review and completion is expected late in 1992. After EPA submits the final report, Congress will review the results of the two-year program and determine the most appropriate course of action for medical waste management.

EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW

3. Threshold Determination Under Section 313

A facility covered under §313 of the Emergency Planning and Community Right-to-Know Act manufactures and repairs airplanes. Prior to beginning any repair work, any fuel remaining in the airplane's fuel tanks is emptied by service personnel at the facility. After the repairs are completed, the airplane is refueled with fuel removed from the airplane's fuel tanks and/or new fuel. Should the owner/operator of the manufacturing and repair facility consider the toxic chemicals present in the fuel when making §313 threshold and release calculations?

DETAILED INSTRUCTIONS PACKET FOR KELLY RECYCLING CASE STUDY

KELLY RECYCLING

Kelly Recycling, Inc. (KR) is an unpermitted recycling facility located in Slapout, Montana. KR recycles F006 wastes from commercial glass production and ceramic industries by burning the waste in a mobile vitrification unit to produce an aggregate. KR markets the aggregate as an endproduct with the following potential uses: 1) an ingredient in ceramic tiles; and 2) an ingredient in abrasives. At one time, KR also cited roadbased material as a potential use but, due to the inconsistent results in meeting LDR treatment standards, KR no longer markets their endproduct for use as roadbased material.

In December 1992, you make a field visit to Kelly Recycling. Facility personnel claim that they are recycling F006 waste, not treating it, because they meet the criteria found in 40 *CFR* §261.2(e)(ii). KR claims that the metals present in the F006 waste (primarily lead and cadmium) are necessary for the formation of bonds in the production of the aggregate. (Typically, the raw material used in aggregate production contains iron as the metal responsible for the bonding.) The KR operation does not make use of a process diagram describing exact amounts of raw materials needed and there are no specifications for the final aggregate product (this is due in part to the variability of the F006 waste that KR uses, and the fact that industrial specifications for aggregates are very basic, such as specific gravity, strength, weight, etc.). They are using the F006 waste as an effective substitute for a commercial product. They have contacted a broker for the marketing of their aggregate product.

Is the aggregate a solid waste?

BACKGROUND MATERIALS

9441.1989

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON D C 20460

APR 26 1989

MEMORANDUM

SUBJECT: F006 Recycling

FROM: Sylvia K. Lowrance, Director
Office of Solid Waste (OS-300)

TO: Hazardous Waste Management Division Directors
Regions I-X

It has come to the attention of EPA Headquarters that many of the Regions and authorized States are being requested to make determinations on the regulatory status of various recycling schemes for F006 electroplating sludges. In particular, companies have claimed that F006 waste is being recycled by being used as: (1) an ingredient in the manufacture of aggregate, (2) an ingredient in the manufacture of cement, and (3) feedstock for a metals recovery smelter. The same company may make such requests of more than one Region and/or State. Given the complexities of the regulations governing recycling vs. treatment and the definition of solid waste, and the possible ramifications of determinations made in one Region affecting another Region's determination, it is extremely important that such determinations are consistent and, where possible, coordinated.

Two issues are presented. The first issue is whether these activities are legitimate recycling, or rather just some form of treatment called "recycling" in an attempt to evade regulation. Second, assuming the activity is not sham recycling, the issue is whether the activity is a type of recycling that is subject to regulation under sections 261.2 and 261.6 or is it excluded from our authority.

With respect to the issue of whether the activity is sham recycling, this question involves assessing the intent of the owner or operator by evaluating circumstantial evidence, always

a difficult task. Basically, the determination rests on whether the secondary material is "commodity-like." The main environmental considerations are (1) whether the secondary material truly has value as a raw material/product (i.e., is it likely to be abandoned or mismanaged prior to reclamation rather than being reclaimed?) and (2) whether the recycling process (including ancillary storage) is likely to release hazardous constituents (or otherwise pose risks to human health and the environment) that are different from or greater than the processing of an analogous raw material/product. The attachment to this memorandum sets out relevant factors in more detail.

If the activity is not a sham, then the question is whether it is regulated. If F006 waste is used as an ingredient to produce aggregate, then such aggregate would remain a solid waste if used in a manner constituting disposal (e.g., road-base material) under sections 261.2(c)(1) and 261.2(e)(2)(i) or if it is accumulated speculatively under section 261.2(e)(2)(iii). Likewise, the F006 "ingredient" is subject to regulation from the point of generation to the point of recycling. The aggregate product is, however, entitled to the exemption under 40 CFR 266.20(b), as amended by the August 17, 1988, Land Disposal Restrictions for First Third Scheduled Wastes final rule (see 53 FR 31197 for further discussion). However, if the aggregate is not used on the land, then the materials used to produce it would not be solid wastes at all, and therefore neither those materials nor the aggregate would be regulated (see section 261.2(e)(1)(i)).

Likewise, cement manufacturing using F006 waste as an ingredient would yield a product that remains a solid waste if it is used in a manner constituting disposal, also subject to section 266.20(b). There is an additional question of whether the cement kiln dust remains subject to the Bevill exclusion. In order for the cement kiln dust to remain excluded from regulation, the owner or operator must demonstrate that the use of F006 waste has not significantly affected the character of the cement kiln dust (e.g., demonstrate that the use of F006 waste has not significantly increased the levels of Appendix VIII constituents in the cement kiln dust leachate). **[NOTE: This issue will be addressed more fully in the upcoming supplemental proposal of the Boiler and Industrial Furnace rule, which is pending Federal Register publication.]**

For F006 waste used as a feedstock in a metals recovery smelter, the Agency views this as a recovery process rather than use as an ingredient in an industrial process and, therefore, considers this to be a form of treatment that is not currently regulated (see sections 261.2(c) and 261.6(c)(1)). Furthermore, because this is a recovery process rather than a production process, the F006 waste remains a hazardous waste (and must be

managed as such prior to introduction to the process), and the slag from this process would normally be considered a "derived from" F006 waste. However, for primary smelters, the slag may be considered subject to the Bevill exclusion provided that the owner or operator can demonstrate that the use of F006 waste has not significantly affected the hazardous constituent content of the slag (i.e., make a demonstration similar to the one discussed above for the cement kiln dust). [NOTE: In the supplemental proposal of the Boiler and Industrial Furnace rule noted above, the Agency will be proposing a definition of "indigenous waste" based on a comparison of the constituents found in the waste to the constituents found in an analogous raw material. Should the F006 waste meet the definition of an "indigenous waste," the waste would cease to be a waste when introduced to the process and the slag would not be derived from a hazardous waste.]

Also, you should be aware that OSW is currently reevaluating the regulations concerning recycling activities, in conjunction with finalizing the January 8, 1988 proposal to amend the Definition of Solid Waste. While any major changes may depend on RCRA reauthorization, we are considering regulatory amendments or changes in regulatory interpretations that will encourage on-site recycling, while ensuring the protection of human health and the environment.

Headquarters is able to serve as a clearinghouse to help coordinate determinations on whether a specific case is "recycling" or "treatment" and will provide additional guidance and information, as requested. Ultimately, however, these determinations are made by the Regions and authorized States. Attached to this memorandum is a list of criteria that should be considered in evaluating the recycling scheme. Should you receive a request for such a determination, or should you have questions regarding the criteria used to evaluate a specific case, please contact Mitch Kidwell, of my staff, at FTS 475-8551.

Attachment

CRITERIA FOR EVALUATING WHETHER A WASTE IS BEING RECYCLED

The difference between recycling and treatment is sometimes difficult to distinguish. In some cases, one is trying to interpret intent from circumstantial evidence showing mixed motivation, always a difficult proposition. The potential for abuse is such that great care must be used when making a determination that a particular recycling activity is to go unregulated (i.e., it is one of those activities which is beyond the scope of our jurisdiction). In certain cases, there may be few clear-cut answers to the question of whether a specific activity is this type of excluded recycling (and, by extension, that a secondary material is not a waste, but rather a raw material or effective substitute); however, the following list of criteria may be useful in focusing the consideration of a specific activity. Here too, there may be no clear-cut answers but, taken as a whole, the answers to these questions should help draw the distinction between recycling and sham recycling or treatment.

(1) **Is the secondary material similar to an analogous raw material or product?**

- o **Does it contain Appendix VIII constituents not found in the analogous raw material/product (or at higher levels)?**
- o **Does it exhibit hazardous characteristics that the analogous raw material/product would not?**
- o **Does it contain levels of recoverable material similar to the analogous raw material/product?**
- o **Is much more of the secondary material used as compared with the analogous raw material/product it replaces? Is only a nominal amount of it used?**
- o **Is the seondary material as effective as the raw material or product it replaces?**

(2) **What degree of processing is required to produce a finished product?**

- o **Can the secondary material be fed directly into the process (i.e., direct use) or is reclamation (or pretreatment) required?**
- o **How much value does final reclamation add?**

(3) What is the value of the secondary material?

- Is it listed in industry news letters, trade journals, etc.?
- Does the secondary material have economic value comparable to the raw material that normally enters the process?

(4) Is there a guaranteed market for the end product?

- Is there a contract in place to purchase the "product" ostensibly produced from the hazardous secondary materials?
- If the type of recycling is reclamation, is the product used by the reclaimer? The generator? Is there a batch tolling agreement? (Note that since reclaimers are normally TSDFs, assuming they store before reclaiming, reclamation facilities present fewer possibilities of systemic abuse).
- Is the reclaimed product a recognized commodity? Are there industry-recognized quality specifications for the product?

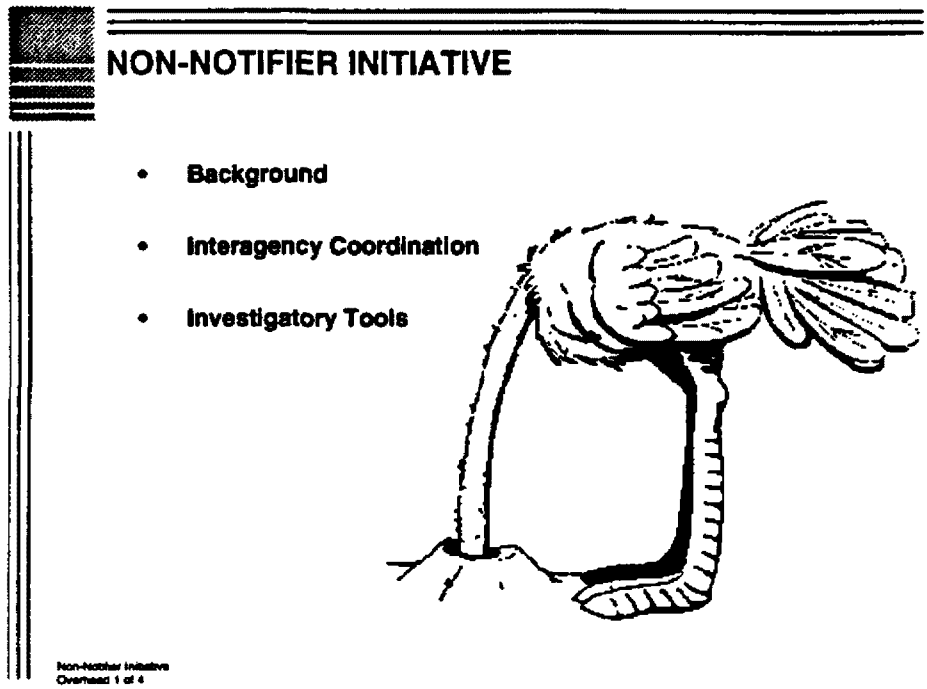
(5) Is the secondary material handled in a manner consistent with the raw material/product it replaces?

- Is the secondary material stored on the land?
- Is the secondary material stored in a similar manner as the analogous raw material (i.e., to prevent loss)?
- Are adequate records regarding the recycling transactions kept?
- Do the companies involved have a history of mismanagement of hazardous wastes?

(6) Other relevant factors.

- What are the economics of the recycling process? Does most of the revenue come from charging generators for managing their wastes or from the sale of the product?
- Are the toxic constituents actually necessary (or of sufficient use) to the product or are they just "along for the ride."

These criteria are drawn from 53 FR at 522 (January 8, 1988); 52 FR at 17013 (May 6, 1987); and 50 FR at 638 (January 4, 1985).

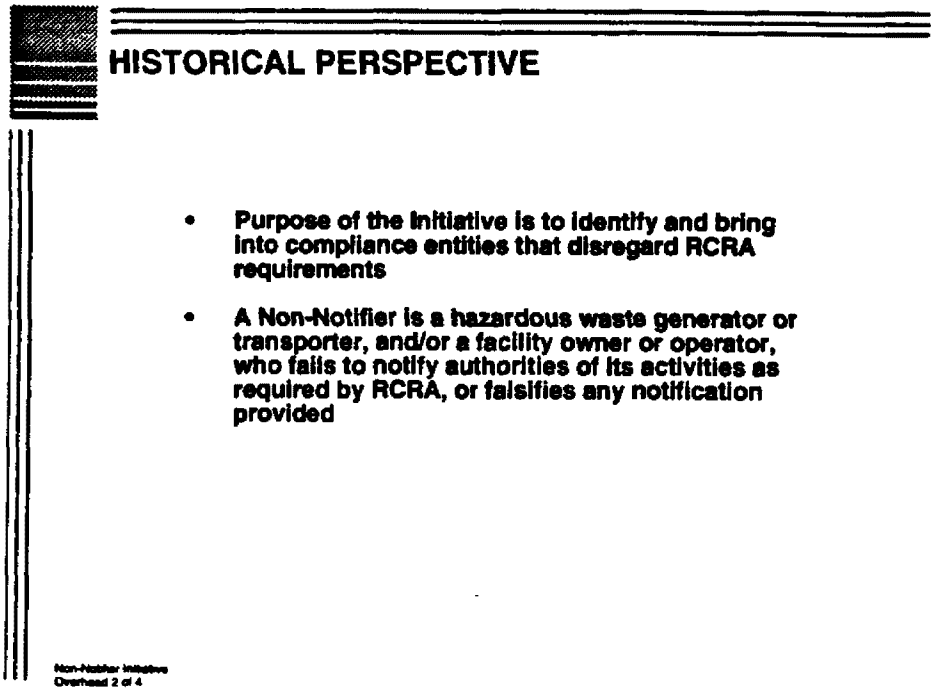


OVERHEAD #1

TITLE: Non-Notifier Initiative

KEY POINTS:

- During this presentation, we will discuss:
  - — Non-Notifier Initiative—its history, objectives, and importance
  - — Roles that Headquarters, Regions, and states play or can play to make the Initiative successful
  - — Methods used to identify violators of the notification requirements.



OVERHEAD #2

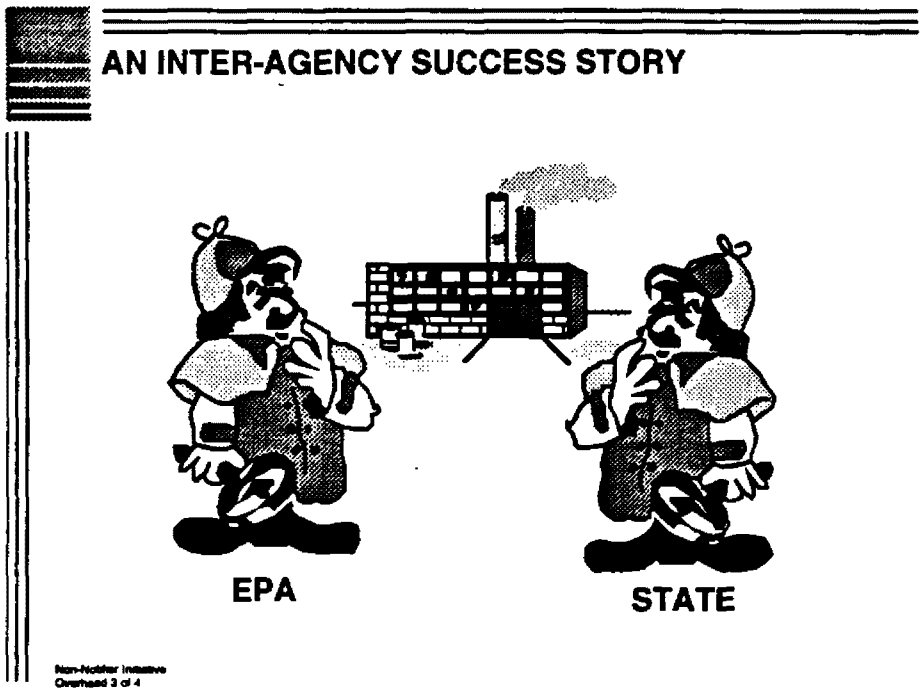
TITLE: Historical Perspective

KEY POINTS:

- Before we begin this discussion, let's look at the history behind the Non-Notifier Initiative and the events that led up to its implementation.

  — The Non-Notifier Initiative was launched in winter 1991-1992 to identify and bring into compliance generators and transporters of hazardous waste and owners and operators of facilities who disregard RCRA requirements, especially the Toxicity Characteristic and the Boiler and Industrial Furnace rules. Because in September 1990 the TC rule expanded the number of chemicals that qualify as characteristic hazardous waste for large generators, EPA predicted that several violators of this rule existed. Entities that fall within the scope of the Non-Notifier Initiative include those that hide their mismanagement of hazardous waste by failing to notify authorities as required under RCRA, or falsifying any notifications they do provide.

  — The universe of non-notifiers includes facilities that have failed to file Section 3010 notices and Part A permit applications or necessary permit modifications. It also includes those who fail to notify regarding individual units, even though a facility may have interim status or a Part B permit for other units. For the purpose of the Initiative, if an owner or operator notifies EPA or the state only after being contacted by a regulating agency, it will still be considered a non-notifier.



OVERHEAD #3

TITLE: An Inter-Agency Success Story

KEY POINTS:

- In February 1992, as part of the Initiative, the EPA and nine states, including Maryland, Alabama, Florida, Georgia, South Carolina, North Carolina, Ohio, Colorado, and Washington, initiated more than 45 civil enforcement actions, assessing over $20 million in penalties, against non-notifiers. In addition, EPA announced several criminal enforcement actions it had taken to halt criminal hazardous waste activities.

- Of the actions filed in early 1992, 23 were taken by the states under RCRA. The first initiative under RCRA to include state-lead cases highlights the cooperative strategy between EPA and the states to crack down on illegal operators.

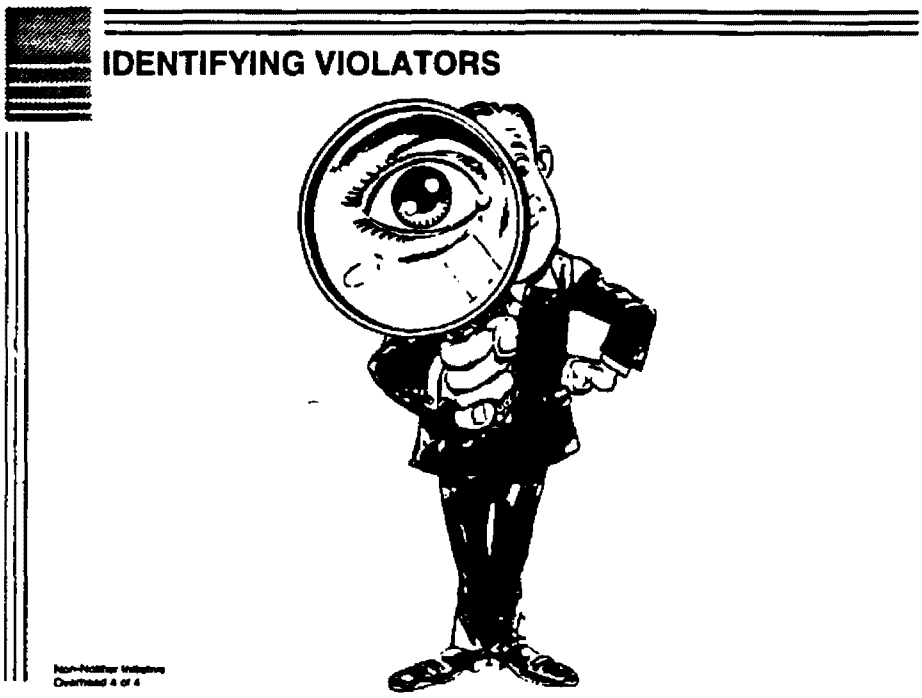
  — Example of a civil case: Inspections by the State of North Carolina of a dry cleaning facility located in Charlotte revealed the facility had open drums of ignitable hazardous wastes, some of which had been dumped onto the ground. Other waste was contaminated with tetrachloroethylene. In addition, groundwater supplies within one-half mile of the facility were found to contain traces of tetrachloroethylene and related organic contaminants.

OVERHEAD #3

TITLE: An Inter-Agency Success Story (continued)

KEY POINTS:

— Example of a criminal case: In January 1992, one company and three of its officers pled guilty in Washington to the illegal storage, transportation, and disposal of hundreds of drums of paint waste. The three individuals agreed to serve one year in prison, and the company agreed to pay $500,000 in restitution for the cost of cleanup and proper disposal of the paint wastes. Three additional individuals were also charged in a separate indictment.



OVERHEAD #4

TITLE: Identifying Violators

KEY POINTS:

- The states and EPA use a wide variety of investigatory techniques to locate facilities that fail to notify authorities of hazardous waste facilities, including:
  - — Cross-referencing various databases, including Dunn & Bradstreet reports and EPA databases from hazardous waste and other media, to identify specific facilities likely to generate, treat, store, or dispose of hazardous wastes
  - — Researching data from other criminal and/or civil cases
  - — Following up on tips and complaints received from the general public
  - — Pinpointing facilities that EPA and state workers observed during routine activities
  - — Using the yellow pages of local telephone directories to locate businesses under specific headings (i.e., machine shops, printers).

OVERHEAD #4

TITLE: Identifying Violators

KEY POINTS:

- In your Participant's Manual, you will find background materials relating to the Initiative.

Environmental Protection Agency | Public Affairs (A-107)

EPA Environmental News

FOR RELEASE: TUESDAY, FEBRUARY 4, 1992

EPA TARGETS HAZARDOUS WASTE "ILLEGAL OPERATORS" IN LATEST ENFORCEMENT INITIATIVE

Wendy Butler (202) 260-4376

The U.S. Environmental Protection Agency and nine states today announced a major nationwide campaign against those who have been evading the nation's hazardous waste management system and handling such waste in a potentially dangerous manner. EPA and the states together have issued more than 45 civil enforcement actions, assessing over $20 million in penalties, against generators and transporters of hazardous waste and owners and operators of facilities who have disregarded the requirements of the Resource Conservation and Recovery Act, the law that governs the disposal of hazardous wastes. In addition, EPA announced that it has taken several criminal enforcement actions to halt criminal hazardous waste activities.

The states participating in the initiative are: Maryland, Alabama, Florida, Georgia, South Carolina, North Carolina, Ohio, Colorado, and Washington.

"The Bush Administration is committed to vigorously enforcing the nation's hazardous waste regulations," EPA's Assistant Administrator for Solid Waste and Emergency Response, Don R. Clay, said, "and we will continue to use the full weight of our authority against those who seek to operate outside of our hazardous waste laws."

Some of these companies have been mismanaging hazardous waste and, in effect, hiding that activity by failing to notify authorities as they are required to under RCRA or falsifying such notifications. For example, on Jan. 29, 1992, Kenneth R. Nugent, an environmental consultant for the Evergreen Construction Co., was indicted for allegedly submitting a backdated permit application in an effort to mislead EPA that Evergreen was legally handling hazardous wastes under EPA's Toxicity Characteristic (TC) Rule. Citing the Nugent indictment, EPA's Assistant Administrator

for Enforcement, Herbert H. Tate, Jr., stated, "Because we consider reporting to be the cornerstone of our regulatory system, EPA will not tolerate those who submit false reports or fail to report in violation of our nation's environmental laws. We are committed to protect the U.S. taxpayer against the costs polluters impose on the environment."

Some of the facilities included in this initiative have created the potential for substantial harm to human health and the environment. The mismanagement of hazardous waste represented in many of these cases has resulted in releases to the environment. Many of today's cases involve the disposal of hazardous waste on the ground, down sewer drains, in garbage dumpsters destined for disposal at municipal landfills, and in leaking tanks or containers.

"These violations could lead to serious environmental problems; they are not mere paperwork violations," said EPA's Don R. Clay. "We intend to make sure that legitimate businesses have a level playing field by eliminating the competitive advantage illegal operators might have in not complying with environmental laws."

The initiative announced today is part of an intense, long-term effort to identify illegal operating facilities and to bring them into compliance. EPA and the states have increased the focus of their inspections on finding facilities that have not notified the appropriate government agency of hazardous waste management activities. In addition to the actions announced today, EPA is in the process of investigating other illegally operating facilities which may be subject to future enforcement initiatives.

"By taking coordinated enforcement actions against non-notifiers, EPA and the states are sending a clear message of their commitment to assure compliance with hazardous waste management requirements," said Tate. "Facilities that have failed to notify EPA or the state of regulated hazardous waste management activities, and thus are operating illegally, are on notice that they too could become the subject of an enforcement action."

Half of today's federal administrative actions are brought against illegal handlers of waste that became hazardous under RCRA's TC regulation. Effective in September 1990 for large quantity generators as well as treatment, storage, and disposal facilities, the TC Rule expanded the number of chemicals that qualify as characteristic hazardous wastes.

Of the actions filed, 23 are actions taken by the states under RCRA. The first initiative under RCRA to include state-lead cases highlights the cooperative strategy between EPA and the states to crack down on illegal operators.

(more)

"Maryland has received high marks from EPA Region III for our enforcement efforts on hazardous waste," said Maryland Secretary of the Environment Robert Perciasepe. Maryland is one of several states that participated in the development of this initiative. "It is important that Maryland and other states continue to aggressively enforce hazardous waste laws to assure that these materials are handled properly," he continued.

Among the state cases announced as part of today's initiative, is a case brought by N.C. against Ram Leather Care (Ram), a dry cleaning facility located in Charlotte, North Carolina. Inspections revealed that the Ram facility had open drums of ignitable hazardous wastes, some of which had been dumped onto the ground, and that other waste was contaminated with tetrachloroethylene, a RCRA hazardous waste. In addition, groundwater supplies within one-half mile of the facility were found to contain traces of tetrachloroethylene and related organic contaminants.

As part of the federal administrative actions announced today, EPA is bringing an enforcement action against Alfab Inc., a West Virginia truck manufacturer, for dumping paint and solvent waste on the grounds of its facility for the past 10 years. EPA also has notified the owner and an operator of the Hawaiian Western Steel Facility on the island of Oahu that they have violated RCRA by illegally storing and disposing of hazardous waste and other actions. EPA has informed the owner and an operator of the Hawaiian Western Steel facility that the Agency may bring a civil enforcement action against them if they do not promptly enter into an agreement providing for the relief sought by EPA, including the clean up of contamination posing a threat to human health or the environment.

There are several criminal developments involving illegal operators included in the initiative, in addition to the Nugent indictment.

On Jan. 21, 1992, three individuals and one company pled guilty in Washington to the illegal storage, transportation and disposal of hundreds of drums of paint waste. - Panama Machinery and Equipment Co. Inc., doing business as The Everett Steel Companies, and three company officers, Manney Berman, Leonard Berman and Leon Berman, each pled guilty to participating in a conspiracy to illegally dispose of the paint waste. The three individuals agreed to serve one year in prison, and the company agreed to pay $500,000 in restitution for the cost of cleanup and proper disposal of the paint wastes. Three additional individuals were also charged in a separate indictment.

On Jan. 16, 1992, a federal grand jury in Dallas, Texas, indicted Robert M. Brittingham, former Chairman of the Board and part owner of Dal-tile Corp. and John J. LoMonaco, former Board member and president of Dal-Tile, for felony violations of RCRA and conspiracy to violate RCRA. The charges arose from the alleged dumping of lead-contaminated hazardous waste into a sand and gravel pit in Dallas County, which was not a permitted treatment, storage or disposal facility.

Also, on Jan. 17, 1992, Ronald William Meyers, President and Chief Executive Officer of Sutherlin Industries Inc., pled guilty to charges of illegal storage of ignitable waste at an unpermitted facility in Sutherlin, Ore.

The states and EPA regions used a wide variety of investigatory techniques to locate facilities that failed to notify authorities of hazardous waste activities. A number of databases, including Dunn and Bradstreet reports and various EPA databases were cross-referenced in an effort to identify specific facilities likely to generate, treat, store or dispose of hazardous wastes. Other investigatory tools included following up on tips received from the general public or pinpointing facilities that EPA and state workers observed during routine activities.

# # #

THE SUN

Maryland

WEDNESDAY, FEBRUARY 5, 1992

City firm jolted with big fine for waste storage

50 other U.S. companies cited on hazardous-material counts

By Timothy B. Wheeler
Sun Staff Correspondent

WASHINGTON — A $1.2 million fine has been levied against a Baltimore electroplating company, one of 51 firms named yesterday by federal and state environmental officials as part of a month-long crackdown on hazardous waste violations across the nation.

The Environmental Protection Agency said 22 companies and two government facilities in 16 states had been charged in the past month with illegal storage and disposal of hazardous wastes and related violations. The agency filed criminal charges against five companies.

Cited yesterday for allegedly storing hazardous wastes without a permit and other violations and fined $1.2 million were Atlantic Alliance Corp. at 4004 E. Monument St. and its president, Philip Horelick.

Two other Maryland firms were also fined.

The EPA said it was penalizing Mr. Horelick because of what agency officials alleged was an attempt to evade responsibility for past violations.

Atlantic Alliance Corp., formerly Allied Metal Finishing Corp., was fined $50,000 by the EPA two years ago. But the company went bankrupt without paying or cleaning up, said Lawrence Falkin, chief of hazardous waste enforcement for the EPA's Region 3 office in Philadelphia.

The company's principals, including Mr. Horelick, then formed Atlantic Alliance, bought the assets of Allied Metal Finishing and took over the electroplating operation, the EPA said. An inspection last July found violations involving storage of liquid wastes and sludges containing lead, cadmium and other toxic metals.

Attempts to reach Mr. Horelick at the company and at home were not successful yesterday.

Those cited have 30 days to appeal the proposed penalties, EPA officials said.

Ten states, including Maryland, took action against 24 firms on similar charges in what officials described as a coordinated enforcement campaign.

Many of those cited were accused of mismanaging hazardous wastes and of essentially seeking to evade detection by failing to notify authorities or falsifying reports required under the federal Resource Conservation and Recovery Act.

"These are not just paperwork violations," said Don R.

See EPA, 2B, Col. 1

Firm fined $1.2 millio

EPA, from 1B

Clay, assistant EPA administrator for solid waste and emergency response. "These are people who have not just been breaking the law but harming the environment at the same time."

Some of the companies cited were dumping toxic wastes on the ground, down sewer drains and in trash bins, or they were storing hazar chemicals in leaking drums tanks, officials said.

Potomac Electric Power Co. of the companies targeted, tended that its transgressions paperwork violations that did no danger the environment.

The utility, which serves Washington area, was hit wit $453,000 penalty for illegally s ping and storing hazardous wa at four of its facilities, including Chalk Point and Morgantown po plants in Maryland. Pepco relase statement saying that it had "alw carefully and safely disposed o wastes" at licensed disposal s The violations alleged were ma "documentation discrepancies," utility said.

Mr. Falkin acknowledged t Pepco's wastes, primarily clean solvents, apparently were dispo of property. But he said that with the keeping of proper records waste shipments and storage, thorities could not be sure.

The Maryland Department of Environment also proposed a $3.0 fine against Publishers Printing Jessup on Monday for illegal stor and disposal of hazardous waste flammable solvent used to clean firm's printing presses.

Ray Dayton, Publishers Printin vice president, said he had not ceived the state's citation.

Maryland Environment Secreta Robert Perciasepe said that rules reporting on storage and handling hazardous wastes are intended prevent toxic dumps that may r quire costly cleanup at governme expense.

The Washington Times
WEDNESDAY, FEBRUARY 5, 1992

EPA says Pepco evaded waste laws

By Karen Riley
THE WASHINGTON TIMES

Potomac Electric Power Corp. learned yesterday that it is facing a possible $453,000 federal fine for evading the nation's hazardous waste disposal laws at its controversial Benning Road power plant in Northeast Washington.

The utility was one of 43 companies identified as "illegal operators" in a nationwide probe conducted by the Environmental Protection Agency (EPA) and nine states, including Maryland.

All told, the investigation has netted five criminal guilty pleas, six criminal indictments, 45 civil actions and $20 million in penalties. Cases have included dumping hazardous waste on the ground, down sewer drains, in trash bins and in leaky tanks or containers.

"Truly, these are not just paperwork violations. They are breaking a law and harming the environment at the same time," Don Clay, EPA assistant administrator for solid waste and emergency response, told reporters at a news conference called to announce the results of the crackdown.

EPA asked for a $453,000 fine in the administrative complaint filed against the utility yesterday, considered a steep fine by agency officials. The EPA also wants Pepco to shut down the accumulation facility at the plant.

Pepco officials staunchly denied the utility was breaking any laws.

"Well, for some companies it may not be a paperwork violation, but for us it is," spokeswoman Nancy Moses said yesterday.

The utility stores a variety of hazardous waste solvents, such as rags soaked in paint thinner and leftover brake fluid solvent, until enough is accumulated to be shipped to an outside licensed waste disposal facility, she said.

All new waste is logged into a record book, placed in sealed metal drums and stored in a small "accumulation" building at the Benning Road plant.

Waste is rarely stored for more than 10 days, Mrs. Moses said.

The EPA has accused Pepco of operating the storage facility without notifying the agency of this activity, and without

see EPA, page C9

EPA

From page C1

providing proper disposal instruction notices to outside facilities that receive Pepco's waste — charges Pepco said appear to relate primarily to documentation discrepancies.

"Pepco has always carefully and safely disposed of all wastes including degreasing fluids, many of which are found in garages and kitchens," said John Derrick, Pepco's chief operating officer.

"We take this matter seriously, and we believe we will be able to explain satisfactorily our position to EPA," he said.

Ironically, EPA used to take foreign visitors to the Pepco storage site in the late 1980s to show them an example of a model facility, Mrs. Moses said.

Pepco contends that EPA's rules relating to the transfer and disposal of certain substances are detailed and complex and subject to interpretation.

Indeed, in 1989 the company changed its documentation procedures after an EPA inspection noticed a difference in interpretation.

Citing one example of the interpretation problems, Pepco pointed out that rags sprayed with a solvent and used on a machine are considered safe, but if solvent is sprayed directly on a machine and then wiped with rag, the rag is considered contaminated.

EPA said it moved against the Benning Road plant after receiving consumer complaints about the facility.

"We have long questioned some of the activities going on in that facility," said Kevin Chavous, a D.C. lawyer who has represented the nearby River Terrace community in disputes with the utility.

"In the past, there had been questions whether EPA and the District government had given attention to the monitoring that needs to be done. If Pepco is in violation, I'm glad to see EPA recognize that and fine them accordingly," Mr. Chavous said.

EPA said yesterday's probe, conducted over the last few months, is part of a broader effort to get tough with companies that evade the nation's hazardous waste disposal rules.

THURSDAY, FEBRUARY 9, 1989 The Washington Post

METRO

Pepco Facing EPA Fine in Hazardous Waste Case

By D'Vera Cohn
Washington Post Staff Writer

The Environmental Protection Agency proposed yesterday to fine Pepco $453,000 for allegedly storing hazardous waste from four power plants at its Benning Road facility in the District without the required permits to guarantee safety.

EPA said the complaints stemmed from 25 shipments of hazardous waste—mainly cleaning solvents, but also including small amounts of PCBs—from June 1988 to October 1989. Officials said they are still investigating possible violations after that. They said the proposed fine would be EPA's first against the Potomac Electric Power Co. for such hazardous waste violations.

Pepco said it would challenge the fine, which officials said was based on a difference in interpreting complex federal hazardous waste regulations.

"Pepco has always carefully and safely disposed of all wastes including degreasing fluids, many of which are found in garages and kitchens," John Derrick, the utility's chief operating officer, said in a statement. "We take this matter seriously, and we believe we will be able to explain satisfactorily our position to EPA."

Depending on the chemicals involved, cleaning solvents can cause problems ranging from skin irritation to cancer. PCBs, or polychlorinated biphenyls, once were used in electrical transformers, but now use has been banned because of health concerns.

The allegedly illegal storage turned up during a routine 1989 inspection by the District's Department of Consumer and Regulatory Affairs, EPA officials said.

"We are aware that there are a significant number of facilities out there operating illegally without permits," said Larry Falkin, the chief hazardous waste enforcement officer for the EPA's regional office. "If we find them before they come to us, we're going to deal with them harshly."

The shipments came from the utility's Buzzard Point facility in the District, Potomac River plant in Alexandria, Morgantown facility in Newburg, Md., and Chalk Point in southern Prince George's County, EPA said.

Federal law allows hazardous waste to be stored for no more than 10 days unless a facility has a storage permit, which subjects it to stricter inspection standards, Falkin said. But EPA said one shipment was stored at Benning Road for 268 days, another for 267 days and others for a month or more.

Falkin said it was unclear whether any problems resulted, but said lengthy storage carries the risk of leakage, fire or other environmental dangers. He said the shipments also did not have required documents outlining how the waste was to be disposed of. The Benning Road waste eventually was shipped to a legal disposal or storage facility, he said.

Nancy Moses, a Pepco spokeswoman, said utility officials believe the law allows storage for up to 90 days at Benning Road, and only "one or two" shipments may have been stored too long.

INSIDE

THE DISTRICT

Pepco Faces Fine

■ The Environmental Protection Agency wants to fine Pepco $453,000 because, the agency says, the company stored hazardous waste at its Benning Road facility without the required safety permits. Page C3

assessment of a pesticide chemical based on health and environmental data and limit uses of the chemical eligible for re-registration.

Barvie told the Chemical Producers and Distributors Association that the agency was "rejecting at a rate that makes the production schedule impossible as structured."

Only 13 REDs have been issued under the program. Another 396 are outstanding, according to Barvie. He said he expects EPA to complete another 10 to 15 REDs in 1992. But 1992 will be the "critical year" for making a transition to a meaningful production schedule, he stated.

As EPA guidelines for the studies change, the data base becomes a moving target, impacting the ability of registrants to submit the requested information in a timely fashion, he said.□

Hazmat Transportation

EPA CARGO TANK STANDARDS VAGUE, UNHELPFUL TO INDUSTRY, NTSB FINDS

Vague federal manufacturing standards for hazardous material cargo tanks and a lack of enforcement of the standards is resulting in non-compliance by their manufacturers, the National Transportation Safety Board said Feb. 4.

In an investigation conducted on seven manufacturers of cargo tank motor vehicles, the safety board found deficiencies in the cargo tank design of each manufacturer.

Two of the manufacturers, Acro and New Progress, make cargo tanks intended for hazardous materials service and the tanks produced by each company do not meet the federal standards required under the Department of Transportation's hazardous materials transportation rules, the safety board concluded.

Specifically, the rollover devices that protect fittings on the DOT specification 300 and 400 series cargo tanks are not adequate on the cargo tanks manufactured by Acro and New Progress, the safety board concluded.

Standards for rollover protection devices on cargo tanks are specified in 49 CFR 178. The rollover devices must protect openings, valves, fittings, and pressure relief devices located in the upper two-thirds of a cargo tank so that no material is released from a cargo tank during an accident.

The special investigation NTSB performed was based on seven accidents involving cargo tanks. One incident in Albuquerque, N.M., involved a cargo tank in which the fittings on the tank were not protected adequately from the rollover protection device. Hydrochloric acid leaked from the cargo tank, prompting an evacuation, James Kolstad, NTSB-chairman, said after the formal hearing in which the safety board adopted the staff's report, recommendations and conclusions.

The board concluded that guidance on fittings to shakers from DOT's Research and Special Programs Administration is insufficient, as is information about the forces the rollover protection devices can withstand during an accident.

In addition, the Federal Highway Administration lacks the technical expertise on cargo tank manufacturing to train its inspectors. Therefore, enforcement of the standards is lax, the safety board members said.

Even though the accidents involved only DOT specification 306 and 312 cargo tanks, the safety board concluded that 307, 406, 407, and 412 cargo tanks also may not be fit structurally because of possibly inadequate standards. The rollover protection device standards are identical for all of those cargo tanks, according to an NTSB staff member briefing the board on the report.

The board recommended that RSPA assist the Federal Highway Administration to improve the rollover protection devices by analyzing the forces they can withstand during an accident.

RSPA also should promulgate performance standards on rollover devices. The current standards are specifications. The agency also should provide guidance on the existing standards, NTSB directed.

In addition, all cargo tanks should be phased out from hazardous materials service if they do not meet standards or cannot be modified.

"We're saying the RSPA regulations are very difficult to understand and to provide any guidance to industry on exactly what is desired," Kolstad told BNA after the meeting.

"The standards are vague. There are no guidelines to industry on how they can use [the rules] to determine how they should apply the standards," he said.□

Enforcement

EPA, STATES ISSUE CLUSTER OF ACTIONS AGAINST ILLEGAL OPERATORS UNDER RCRA

A "cluster" of 81 federal and state enforcement actions have been filed as part of a crack down on facilities that illegally handle hazardous waste, the Environmental Protection Agency said Feb. 4.

EPA and ten states announced filing 46 civil actions and 5 criminal actions assessing over $26 million in penalties against generators and transporters of hazardous waste, as well as facility owners and operators that have disregarded notification requirements under the Resource Conservation and Recovery Act.

The agency said it has launched a long-term effort with states to find facilities operating illegally. According to Herbert Tate, EPA assistant administrator for enforcement, "Facilities that have failed to notify EPA or the state of regulated hazardous waste management activities, and thus are operating illegally, are on notice that they too could become the subject of an enforcement action."

'Snapshot'

The enforcement actions were filed during a time period from early December 1991, to Feb. 4, 1992, according to Don Clay, EPA assistant administrator for solid waste and emergency response. The cluster is intended as a "snapshot" of the agency's joint federal/state enforcement initiative.

In addition to the civil actions, EPA said, the cluster filing includes a number of criminal violations. The cases involve disposal of hazardous waste on the ground, down sewer drains, in garbage dumpsters

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destined for disposal at municipal landfills, and in leaking tanks or containers.

For example, Tate said, an action filed against the United States Sugar Co. in Palm Beach, Fla., involved criminal violations which resulted in fines of $2.75 million for RCRA violations for illegal hazardous waste dumping. "This is the current record for a penalty in the criminal area that has been assessed against any one particular company," Tate said.

U.S. Sugar allegedly disposed of land-contaminated hazardous waste at its Palm Beach County plant site and at public landfills that were not permitted for hazardous waste.

In another criminal action against Pamona Machine Co., in Everett, Wash., three of the companies officers—the company president, the vice president and general manager, and the vice president—all pled guilty to criminal offenses. Each officer agreed to serve one year in prison, and the company has agreed to pay penalties of $506,000 in restitution for the costs of cleanup and for the improper disposal of paint wastes.

An action filed on Jan. 29, 1992, EPA said, an environmental consultant for the Evergreen Construction Co., in Bellingham, Mass., was indicted for "allegedly submitting a backdated permit application in an effort to mislead EPA that Evergreen was legally handling hazardous waste under the agency's toxicity characteristic rule." The rule, which was effective in September 1990 for large-quantity waste generators, expanded the number of chemicals that qualify as characteristic hazardous wastes.

According to EPA, half of the federal administrative actions under the cluster filing were brought against illegal handlers of waste that became hazardous under the TC rule.

Tate told reporters that out of the 15,000 inspections EPA conducts each year, 95 percent or more are of companies that have notified EPA that they have attempted to comply with the law. But, he said, between 1 percent and 5 percent of the inspections are of "non-notifiers."

Tate said the cluster filing "is just the beginning to try to step up that effort against those who have tried to evade our system."

Most of the enforcement actions were filed based on complaints and reports received from citizens. In addition, he said, EPA regions have stepped up technological approaches to identifying non-notifiers.

Region IV, for example, "has developed a sophisticated array of overlapping profiles for identifying various industries" that are possible hazardous waste handlers.

In addition, he said, the agency uses more conventional resources, such as Chamber of Commerce registries and telephone books, to identify source companies.

The states included in the initiative are Maryland, Alabama, Florida, Georgia, South Carolina, North Carolina, Ohio, Colorado, and Washington.

Text of EPA's fact sheet and summary on its enforcement initiative appear in Section E.□

Hazardous Waste

OHIO HAZARDOUS WASTE INCINERATOR RECEIVES PERMIT CHANGE TO RESUME CONSTRUCTION

CINCINNATI—(By a BNA Special Correspondent)—The U.S. Environmental Protection Agency announced Tuesday it has approved a permit modification that will allow work to resume on a key pollution-control component of the Waste Technologies Industries hazardous waste incinerator in East Liverpool, Ohio.

In a related move, Waste Technologies signed a consent agreement Jan. 30 to pay a $129,800 fine for beginning construction on the spray dryer prior to the EPA's final decision, EPA assistant regional counsel Nancy-Ellen Zeimen said Tuesday. The EPA ordered work on the spray dryer halted Jan. 9 and proposed a $134,000 fine against the company. Negotiations between the U.S. EPA and company have continued since then, Zeimen said.

Construction of the spray dryer will resume immediately, Waste Technologies spokeswoman Julia Bircher said Tuesday. And the interruption will not delay the $148 million plant's opening, scheduled for mid-summer 1992.

"The EPA has thoroughly reviewed every comment on the spray dryer and concludes that it meets every legal and technical requirement," EPA Region V Administrator Valdas V. Adamkus said in a statement. "We realize this facility is the subject of much controversy, however, the spray dryer will avoid the risks caused by transporting and discharging several thousand gallons of contaminated water per day."

The plant is opposed by the City of Pittsburgh, state of West Virginia and groups of residents from East Liverpool and nearby Chester, W. Va. The West Virginia Air Pollution Control Commission and Division of Natural Resources set up equipment last summer to establish background levels of certain pollutants and monitor emissions from the facility.

"It doesn't surprise me that they granted the permit," said Terri Swearingen, spokeswoman for the Tri-State Environmental Council, a citizen group opposing the plant. "They've given them everything we've asked for."

Swearingen said the group produced expert testimony in public hearings that the spray dryer would increase airborne emissions of volatile organic compounds and mercury.

Waste Technologies could have built the plant as originally permitted without a spray dryer, but felt it would improve waste treatment and pollution control, Blake Marshall, president of the project's managing partner, Von Roll America, said.

The company began installation of the spray dryer in December based on permit approval by the Ohio EPA, Marshall said. The company submitted a Class 2 modification request to the U.S. EPA in October 1990 under Federal Resource Conservation and Recovery Act rules, he said. Waste Technologies was automatically allowed to start construction under 40 CFR 270.42, paragraph b(6) when the EPA failed to respond to the application within 90 days, he said. The EPA did not respond until August 1991, when it told Waste Technologies that the permit modification was being processed using Class 3 modification procedures.

"Because of the misconceptions surrounding this plant and the subsequent controversy, the EPAs have examined this request with a fine-tooth comb," Marshall said. "We have supplied the necessary technical information and both EPAs are satisfied that the spray dryer will perform in a manner that benefits the environment."□

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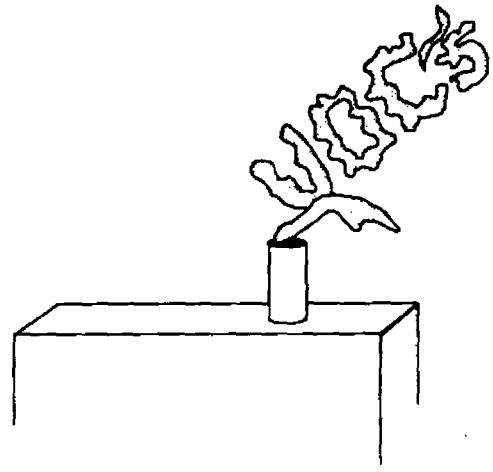
AIR EMISSIONS



Air Emissions
Overhead 1 of 19

OVERHEAD #1

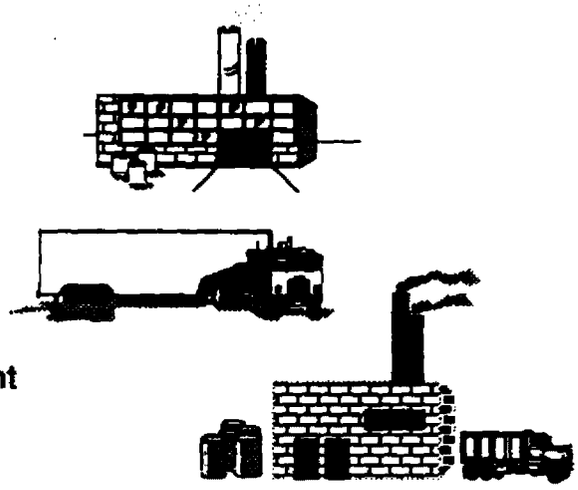
TITLE: Air Emissions

KEY POINTS:

- EPA has established standards limiting organic air emissions from specific sources at all TSDFs that require permits under Subtitle C.
- During this module we will be discussing:
  - The equipment and processes covered by the air emissions requirements
  - What the regulatory requirements are.

WHEN DO ORGANIC AIR EMISSIONS HAPPEN?

- Storage
- Transfer
- Treatment



Air Emissions
Overhead 2 of 19

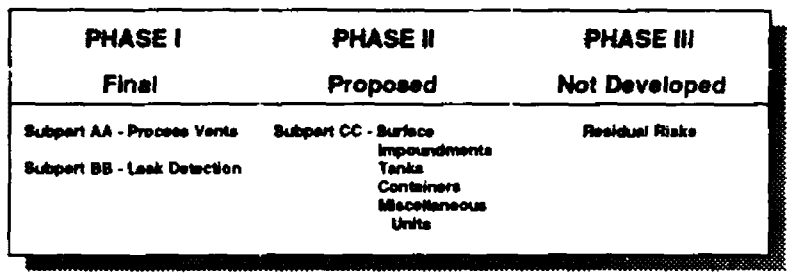
OVERHEAD #2

TITLE: When Do Organic Air Emissions Happen?

KEY POINTS:

- Organic air emissions can occur any time a volatile is released to outside air, such as during storage, transfer, or treatment.
- The principal concern about air emissions from hazardous waste comes from volatile organic compounds (VOCs), some of which are toxic or carcinogenic.
- During the first phases of regulation, organics are regulated as a class, rather than setting individual standards for each toxic constituent.

PHASED REGULATORY APPROACH



Air Emissions
Overhead 3 of 19

OVERHEAD #3

TITLE: Phase I, II & III

KEY POINTS:

- Section 3004(a) of HSWA requires EPA to promulgate standards for the monitoring and control of air emissions from TSDFs.
- The resulting regulations are aimed at controlling air emissions at new and existing hazardous waste TSDFs and they are divided into three phases.
- The first phase, sometimes referred to as "the Accelerated Rule," was published June 21, 1990 and became effective on December 21, 1990 for interim status facilities. It consists of Subpart AA, covering air emissions from process vents, and Subpart BB, covering air emissions from equipment leaks. (§§264.1030 - 264.1065 or §§265.1030 - 265.1064)
- Phase II, sometimes referred to as the Comprehensive Rule, was proposed on June 22, 1991. Phase II will set standards for organic emissions from surface impoundments, tanks, containers, and miscellaneous units in a new Subpart CC.
- The third phase, the Individual Constituents Rule, will use new data from TSDFs to perform site-specific modeling of facilities predicted to have high residual risk after Phases I and II. This will be constituent specific.
- Compliance with Subparts AA and/or BB does not exempt a facility from applicable Clean Air Act (CAA) standards or any state requirements.

WHICH FACILITIES ARE AFFECTED?

Air Emissions
Overhead 4 of 19

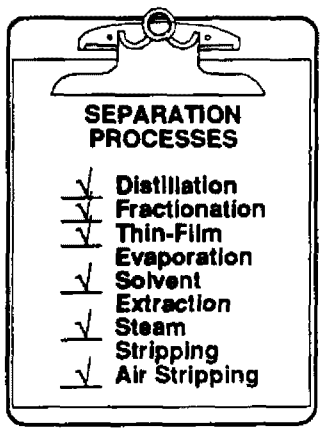
OVERHEAD #4

TITLE: Which Facilities are Affected?

KEY POINTS:

- It is important to recognize that some facilities are affected by Subpart AA while others are affected by Subpart BB.
- Recycling units at interim status facilities, even if exempt, must comply with AA. (§265.1030 (b)(2))
- Permitted facilities must be in compliance when their permit is reissued. (§264.1030 (c))
- New facilities must have the required devices and monitoring programs in place when they begin operations.
- With respect to Subpart BB, <u>all</u> interim status facilties subject to the permitting requirements of 40 CFR part 270 must comply. (§265.1030(b)(1))
- As is the case with Subpart AA, all permitted facilties must be in compliance when their permit is reissued (§264.1030(c)), and all new facilities must have the required devices and monitoring programs in place when they begin operations.

SUBPART AA - PROCESS VENTS



Air Emissions
Overhead 5 of 19

OVERHEAD #5

TITLE: Subpart AA - Process Vents

KEY POINTS:

- Subpart AA covers the process vents associated with six specific separation processes common at TSDFs for recycling of hazardous waste. These are distillation, fractionation, thin-film evaporation, solvent extraction, and steam or air stripping. (§264/ or §265.1030(b))

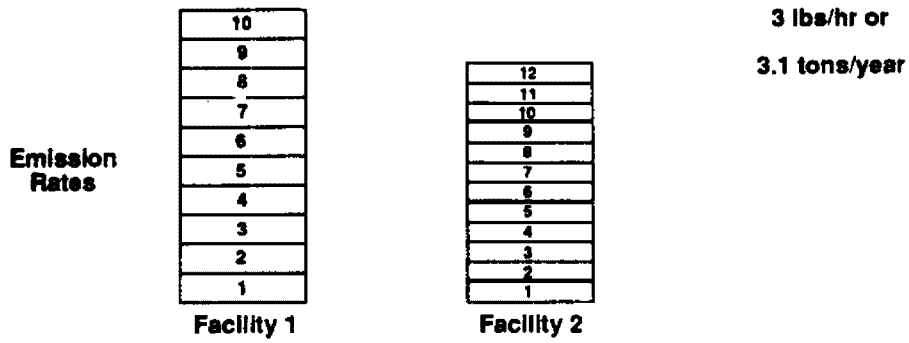
- About 350 units nationwide are subject to Subpart AA. More than half of these are batch distillation units (as determined from the 1987 TSDF Survey).

- Process vents associated with any of the six separation processes are subject to Subpart AA requirements if they handle wastes with 10 parts per million by weight (ppmw) or greater of total organic compounds. The concentration is a time-weighted annual average for each unit. (55 FR 25459)

- Vents on tanks "associated with" an affected unit are also covered if emissions from the process unit are vented through the tank. Thus, the requirements cannot be avoided by rerouting emissions to a subsequent tank to be vented.

- A schematic of a thin-film evaporation system has been included with these learning materials to illustrate the application of Subpart AA to process vents.

EMISSIONS STANDARDS



Air Emissions
Overhead 6 of 19

OVERHEAD #6

TITLE: Emissions Standards

KEY POINTS:

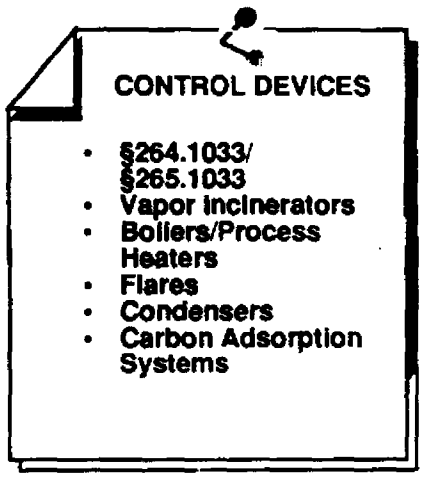
- Once the process vents subject to the requirements are identified, the discharges from each must be added to provide a facility summation of emissions. (§§264/5.1032(a)) The emission determinations can be based on either engineering calculations or testing (§§265.1032 (c) or 264.1032 (c)) with performance tests meeting the requirements of §§265.1034 (c) or 264.1034 (c).

- For the entire facility, emissions are not to exceed 3 lbs/hour and 3.1 tons/year. (§§264/5.1032(a)(l)) The standards apply to the entire facility, regardless of the number of vents at that facility. Therefore, as illustrated here, Facility 1, with 10 vents with high emissions, could exceed the standard, while Facility 2, with 12 vents but lower emissions, is within the standards.

- If the standard is exceeded, the facility must install control devices to get the summation value below both standards or reduce the summation value by 95 percent. (§§264/5.1032 (a)(2))

- If vents are below 3 lb/hr and 3.1 tons/yr. without control devices added on (other than internal devices, which are not regulated), the facility is only subject to a recordkeeping requirement, specifically, §§264/5.1035 (f).

CONTROL DEVICES



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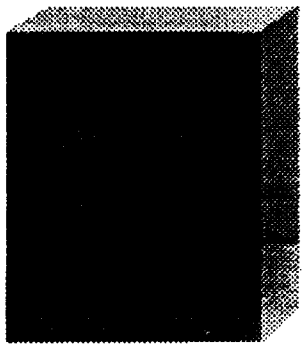
OVERHEAD #7

TITLE: Control Devices

KEY POINTS:

- There are no specific requirements dictating which types of control devices should be used to reduce emissions. TSDFs may choose one of the devices provided for in §§264/5.1033 or may select an alternative device.
- Facilities using control devices listed in §§264/5.1033 must follow the operating requirements for those controls found at §§264/5.1033(b) through (i). (§§264/5.1032(b) and 264/5.1033 (a))
- Facilities using other control devices should have a description, including operating parameters, in the operating record in accordance with §§264.5/1033(j).
- It is important to understand the regulatory difference between a control device and a device that is part of the process. Devices that are intended to recover or capture solvents or other organic compounds for use, reuse, or sale are considered to be a component of the process and are not control devices.
- Closed-vent systems have a no-detectable emission limit of 500 ppm which must be tested annually.

REPORTING REQUIREMENTS



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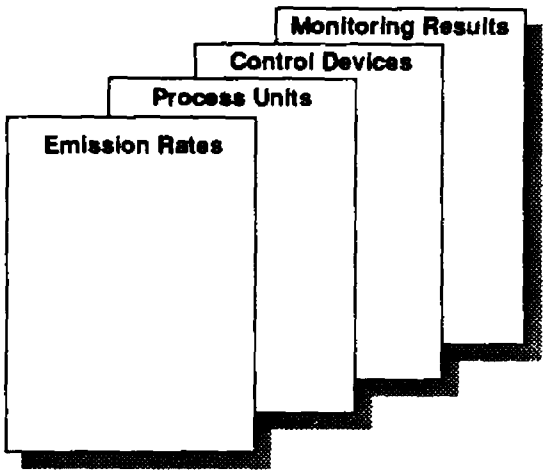
OVERHEAD #8

TITLE: What Reports Have to be Filed?

KEY POINTS:

- Facilities with RCRA permits incorporating Subpart AA must report semiannually all exceedances longer than 24 hours. (§264.1036)
- Interim status facilities are not required to report control device exceedances.

RECORDKEEPING REQUIREMENTS



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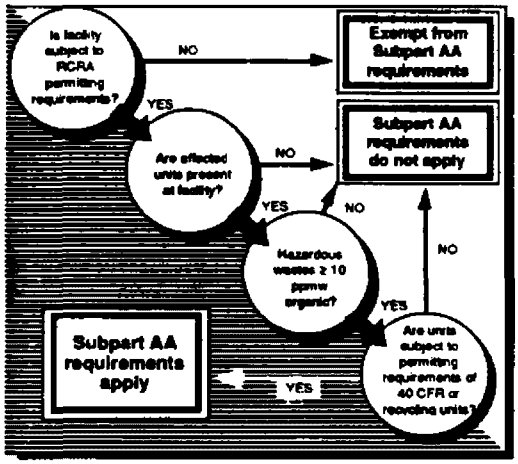
OVERHEAD #9

TITLE: Documentation

KEY POINTS:

- TSDFs must document process vent emissions and emission reductions achieved by control devices. (§§264/5.1035)
- TSDFs must keep records of:
  - — The emission rate for each vent and for the entire facility (§§264/5.1035(b)(2))
  - — The throughput and operating hours of each affected process unit.
- Documentation must show whether control devices achieve the emission rate limits by design and during operation. (§§264/5.1035(b)(2) and (c))
- Control devices must be monitored for specific parameters and the results recorded in the facility operating record. (§§264/5.1035(b)(4))
- A careful review of the facility's operating record is an important component of an air emissions inspection.

SUBPART AA APPLICABILITY



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OVERHEAD #10

TITLE: Subpart AA Applicability

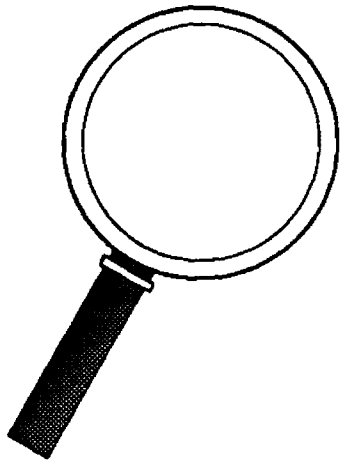
KEY POINTS:

To recap the Subpart AA requirements:

- Subpart AA applies to process vents associated with six separation processes: distillation, fractionation, thin-film evaporation, solvent extraction, and steam or air stripping.
- Only vents associated with units that handle wastes with 10 ppmw or greater of organics are subject to the regulations. Areas with only seals or gaskets are not vents. (§§264/5.1030(b))
- The entire facility must not exceed the regulatory standard of 3 lbs/hour and 3.1 tons/year of organic emissions. (§§264/5.1032(a)(1))
- If the facility exceeds the standard, it must install control devices to bring emissions below the hourly and annual standards or reduce overall emissions by 95 percent. (§§264/5.1032(a)(2))
- Facilities with affected vents that never exceed the emission rate limit are not required to install controls or monitor process vent emissions to comply with the air emissions requirements. However, they must verify that the procedure used is allowed under §264.1034(d)(2) or §265.1034(d)(2) and that this data is recorded in a log that is kept in the operating record. (§264.1035(l) or §265.1035(l))

SUBPART BB — LEAK DETECTION

- **Valves**
- **Pumps**
- **Compressors**
- **Pressure relief devices**
- **Sampling connection systems**
- **Open-ended valves or lines**
- **Flange**
- **Subpart AA control devices**



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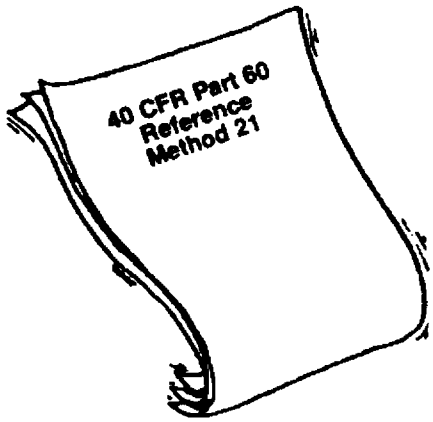
OVERHEAD #11

TITLE: Subpart BB — Leak Detection

KEY POINTS:

- Subpart BB is a program for detection and repair of equipment leaks that are likely to result in organic air emissions.
- The equipment leak standards apply to the types of devices listed on the overhead when they contain or contact wastes that are composed of at least 10% by weight of organics (or 100,000 ppmw). (§§264/5.1050(b))
- EPA estimates that approximately 1,300 TSDFs handle waste streams with 10% or greater organics.
- The heart of Subpart BB is the Leak Detection and Repair (LDAR) program which focuses on monitoring and timely repair of identified leaks.
- Equipment subject to Subpart BB requirements is not necessarily associated with Subpart AA units. The two subparts are independent and are not directly related.
- Note that the waste concentration cutoff for Subpart BB is not an annual average as for Subpart AA. Instead, if the hazardous waste concentration is ever expected to exceed the 10% by weight measure, the equipment involved is potentially subject to Subpart BB.

LEAK DETECTION AND REPAIR



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OVERHEAD #12

TITLE: Leak Detection and Repair

KEY POINTS:

- As with Subpart AA, the first step in Subpart BB is identification of the equipment subject to the regulations.

- All equipment such as valves, pumps, etc. that contain or contact hazardous wastes that are at least 10 percent by weight organics (≥ 100,000 ppmw) are affected. Note that the waste concentration cutoff for Subpart BB is not an annual average as for Subpart AA. Instead, if the hazardous waste concentration is even expected to exceed 10 percent by weight, the equipment is potentially subject to Subpart BB. (§264.1031 and §264/5.1050(b))

- All equipment must be monitored using Reference Method 21, a copy of which is in your Participant's Manual. This monitoring is instantaneous, as opposed to that under Subpart AA, which involves emissions over an hour or year. (§§264/5.1063(b))

- A device may be exempt from monthly monitoring requirements under certain conditions, such as being identified as unsafe-to-monitor, difficult-to-monitor, or No Detectable Emissions (NDE) (this will be the most common designation that is exempt from monthly monitoring). (§§264/5.1052(e), §§264/5.1053(i) and §§264/5.1057(f), (g), and (h))

OVERHEAD #12

TITLE: Leak Detection and Repair (continued)

KEY POINTS:

- Unsafe-to-monitor means that personnel would be exposed to immediate danger as a consequence of monitoring.
- A difficult-to-monitor determination is warranted if personnel would have to be elevated more than 2 meters above a support surface to perform monitoring or the device is in an existing hazardous waste management unit.

LEAK DETECTION

- **10,000 ppm for most equipment**
- **500 ppm for No Detectable Emissions**

Air Emissions
Overhead 13 of 19

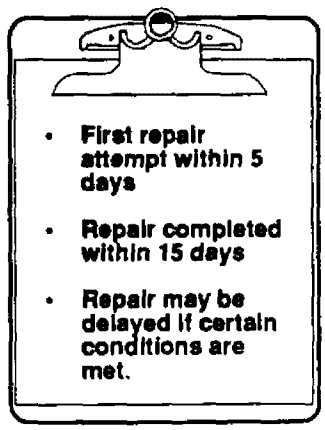
OVERHEAD #13

TITLE: Leak Detection

KEY POINTS:

- The monitoring requirements are dependent upon the type of equipment, the designation of the equipment, and the fluid type.
- For most equipment, the level of air emissions signifying a leak is 10,000 ppm. (§§264/5.1052(b), 264/5.1057(b), 264/5.1058(b), 264/5.1061(c)(2))
- For equipment designated as having no detectible emissions (NDE), a leak is defined as an emission that exceeds 500 ppm above background levels. An example of an NDE device is a leakless valve, such as a sealed-bellows valve. (§§264/5.1052(e), 264/5.1054(b))
- Once a leak is detected, the equipment must be tagged and repair attempts must be recorded in the facility's operating record. (§§264/5.1052(c) and (d)(6), 264/5.1053(g), 264/5.1054(b), 264/5.1057(d), 264/5.1058(c), and 264/5.1064(c) and (d))
- Enforcement of Subpart BB focuses on adequate monitoring for leaks and timely repair. The leak itself is not a violation, but failure to repair it in the specified time is.

REPAIRS



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OVERHEAD #14

TITLE: Repairs

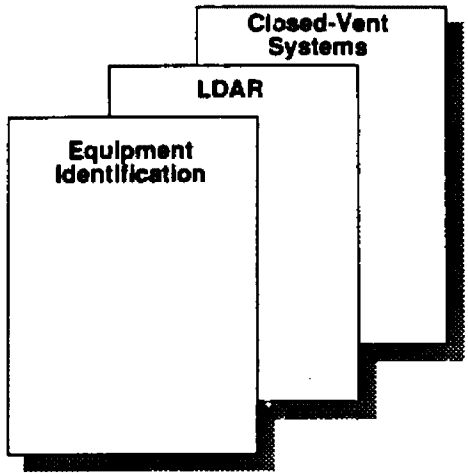
KEY POINTS:

- In most cases, leak repair must be initiated within 5 days of detection and completed within 15 days. (§§264/5.1052(c) and (d)(6), 264/5.1053(g), 264/5.1054(b), 264/5.1057(d), 264/5.1058(c), and 264/5.1064(c) and (d)) The regulations give examples of appropriate "first attempt" at repair for most equipment, such as tightening the packing gland on a compressor.

- Facilities may claim a "delay of repair" if it can be justified properly in the operating record. This is allowed if the repair is technically infeasible without a hazardous waste management unit shutdown. (§264.1059)

- Waste streams must be analyzed each time the waste changes and when the facility wants to prove that a waste no longer has organic concentrations high enough to require performance of the leak detection and repair program. As with Subpart AA, organic concentrations may be determined by testing (as specified in §§264/5.1063(d)), or applying knowledge.

RECORDKEEPING REQUIREMENTS



Air Emissions
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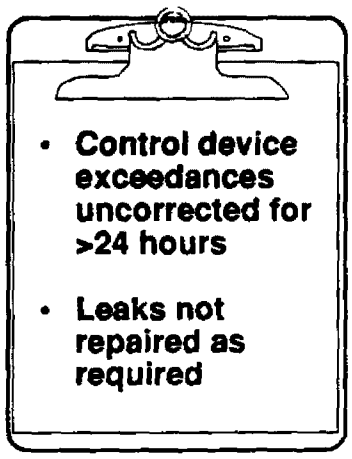
OVERHEAD #15

TITLE: Recordkeeping Requirements

KEY POINTS:

- The following information must be documented in the facility's operating record:
  - — Equipment subject to the requirements, organics concentration of waste stream, state of waste (gas/vapor or liquid), and method of compliance with standards (§§264/5.1064(g), (h), (i), and (j))
  - — Leaks identified, dates and methods of repair, reasons for any delays, and documentation of successful repair and (§§264/5.1064(d))
  - — Design, monitoring, operating, and inspection information for closed-vent systems and control devices. (§§264/5.1064(e) and (f))
- Remember that Subpart BB applies to all TSDFs. Even if no equipment contains or contacts waste with organic concentrations over allowable levels, records demonstrating that fact must be maintained. (§§264/5.1064(k)(3))

REPORTING REQUIREMENTS



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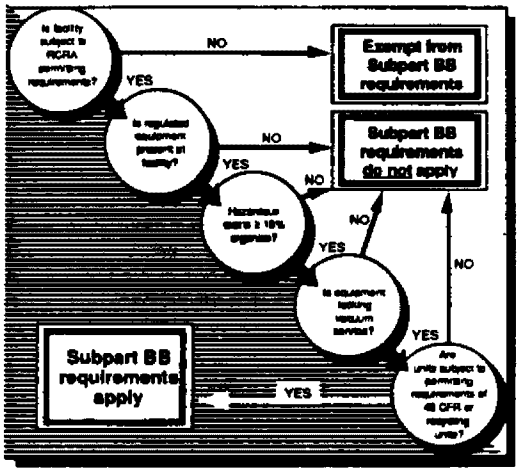
OVERHEAD #16

TITLE: Reporting Requirements

KEY POINTS:

- Permitted facilities must submit a semiannual report of exceedances of equipment emission limits that go uncorrected for over 24 hours. The duration and cause o. the exceedance and corrective measures taken must also be reported. (§264.1065)
- A semiannual report is not required if all leaks are repaired as required and equipment does not operate outside of design specifications for more than 24 hours.
- Interim status facilities are not required to submit a semiannual report.

SUBPART BB REQUIREMENTS APPLY



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OVERHEAD #17

TITLE: Subpart BB Requirements Apply

KEY POINTS:

- Subpart BB applies to all TSDFs that are subject to the permitting requirements of 40 CFR Part 270. (§§264/5.1050(a))
- Regulated equipment types include valves, pumps, compressors, pressure relief devices, sampling connection systems, and open-ended valves and lines, flanges, and any control devices used on Subpart AA units. (§264.1031)
- The equipment is subject to the requirements if it contains or contacts wastes with an organic concentration over 10 percent by weight and the waste is managed in units subject to permitting under 40 CFR Part 270. (§§264/5.1050(b))
- Regulated equipment must be monitored regularly by the facility owner/operator to detect any leaks and repairs that must be completed within specified timeframes. (§§264/5.1052-§§264/5.1063)
- Interim status facilities were required to be in compliance with Subpart BB requirements by December 21, 1991. Permitted facilities are required to incorporate the appropriate requirements into their permits when they are renewed and must be in compliance when the revised permit becomes effective.

SYNOPSIS

AA	BB
Process vents	Equipment leaks
10 ppmw organics	10% organic by weight
Facility-wide emission standards	Leak detection and repair

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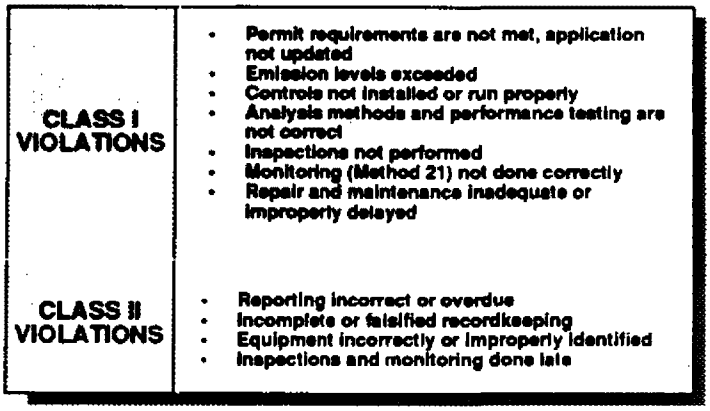
OVERHEAD #18

TITLE: Synopsis

KEY POINTS:

- Subparts AA and BB both address the control of organic air emissions from TSDFs.
- Subpart AA regulates process vents associated with separation units handling wastes that are 10 ppmw or greater organics and requires that facility-wide emissions from affected process vents be kept below specified levels.
- Subpart BB covers leaks from a variety of equipment types that contain or contact wastes that are 10 percent organics by weight or greater and requires regular monitoring to detect leaks and timely repairs. Equipment does not have to be connected to a Subpart AA unit to be subject to Subpart BB.

CATEGORIES OF VIOLATIONS



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OVERHEAD #19

TITLE: Categories of Violations

KEY POINTS:

- We have assumed a great deal of knowledge on your part regarding enforcement considerations and how to conduct inspections.
- We want to briefly discuss air emissions violations. There is a wide range of actual violations, and it is important for you to know how to classify them.
- If the TSDF has a violation that results in a release or potential release of hazardous waste into the environment, then a Class I violation has occurred.
- A Class II violation, on the other hand, identifies non-compliance without an actual or potential release.
- If any of you have questions regarding enforcement strategy or the conduct of inspections, now is a good time to discuss them.
- Now that you are all "experts" on air emissions, we are going to break into color-coded teams to work on a case study.

OVERHEAD #19

TITLE: Categories of Violations

KEY POINTS:

- The case study will help you take the knowledge that you have just acquired and understand how to practically apply it. You have the next 30 minutes to work on the case study. Spend only the first few minutes reviewing the case study and use the majority of time discussing the answers to the questions.

INSTRUCTIONS: Please spend a few minutes reading this case study. Devote the majority of your time to working within your group to discuss and answer the questions on page four of this packet. We will reconvene in 30 minutes to discuss the exercise.

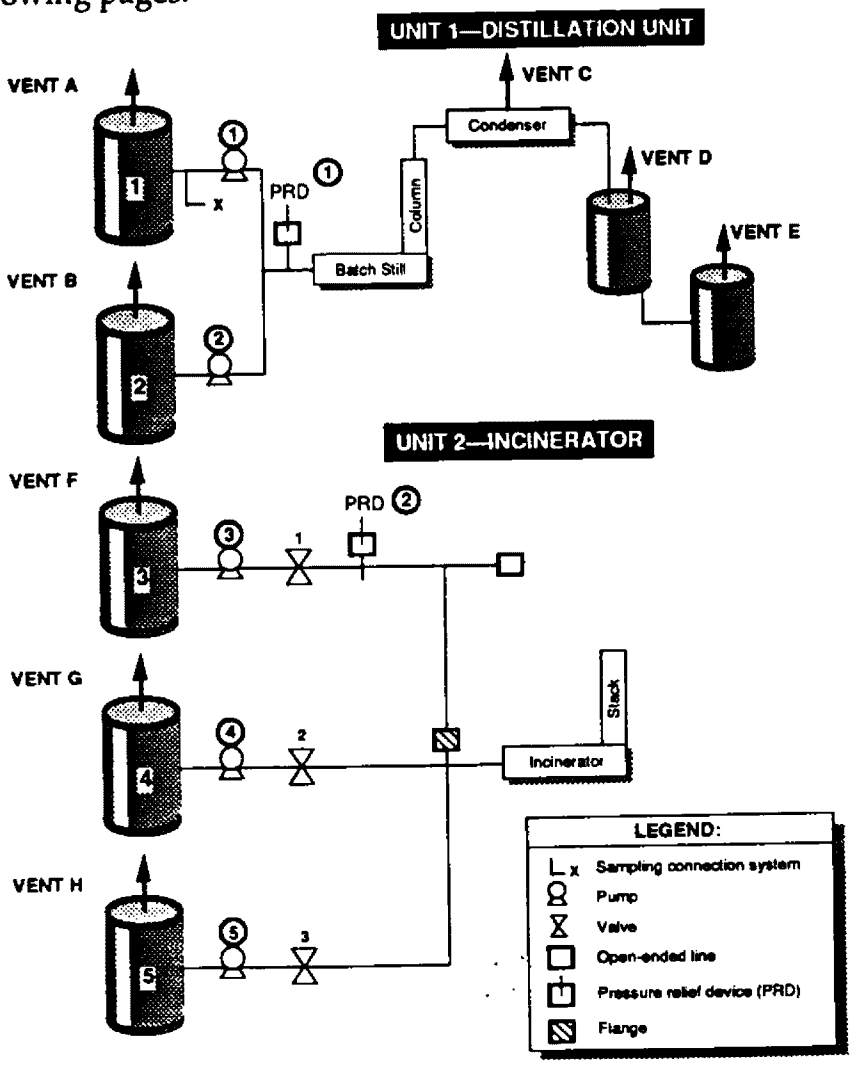
AIR EMISSIONS CASE STUDY

WASTE AWAY, INC.

Waste Away, Inc. is a permitted TSD facility. Applicable portions of Subparts AA and BB were included when their permit was re-issued on April 17, 1991. Their original permit was issued November 1990. They have two units in operation, an incinerator and a distillation unit. The wastes are generated off site and transported to Waste Away Inc. by rail car and tank truck.

The date of your inspection is January 14, 1993.

A diagram of the facility is illustrated below and permit information is given on the following pages.



PERMIT INFORMATION

Issued: April 17, 1991

Unit Operations:

1. distillation
2. incineration

Storage Tanks:

1. TOC = 120,000 ppm, light liquid, 200 million gallons/yr
2. TOC = 8 ppm, light liquid, 56 million gallons/yr
3. TOC = 450 ppm, heavy liquid, 35 million gallons/yr
4. TOC = 150,000 ppm, light liquid, 98 million gallons/yr
5. TOC = 160,000 ppm, light liquid, 45 million gallons/yr

Vents at Facility: 8

Pressure Relief Devices: 2

Pumps: 5

Sampling Connection System: 1

Valves: 3

Open-ended Line: 1

OPERATING RECORD

Pumps:

1. no detectable emissions
2. no detectable emissions
3. mechanical dual seal
4. general
5. general

Valves:

1. general
2. general
3. leakless

PRD: both are closed vent/control device

TOC Analysis:

initially conducted April 1, 1991
last one was April 1, 1992
method used: 9060

OPERATING RECORD (cont.)

Fluid type analysis conducted at the same time as TOC based on vapor pressure knowledge

Statement that control device reduces emission by 95%

Monitoring:

flow indicator records daily
temperature at two locations, recorded daily, inspected weekly
all correct general device information is included
design avg. exhaust temperature is 150°; recorded on device at 175°

weekly visual inspection of pumps and valves

monthly monitoring of all pumps and valves
Valve 2 was found leaking on December 12 and repaired by January 1

QUESTIONS*

1. On what date is Waste Away, Inc. required to comply with Subparts AA and BB?

2. Which units fall under the Subpart AA process vent rule?

3. Which specific vents are subject to Subpart AA requirements?

4. If the operating record only listed TOC values (or documentation) for units above 10 ppm, would they be in compliance?

5. How often do waste stream analyses have to be performed? Is Waste Away in compliance? What if the distillation unit processes batch waste streams?

6. List the equipment subject to Subpart BB. Is PRD #1 covered? If not, when would it be covered?

7. The facility adds a third operating unit that is subject to the process vent rule. The following are the hourly and yearly emissions rates for the two units subject to Subpart AA:

	Hourly	Yearly
Unit 1	1.6 lbs/hr	1.7 tons/yr
Unit 2	2.5 lbs/hr	2.6 tons/yr
	4.1 lbs/hr	4.3 tons/yr

   If the facility installs only one control device on one of these two units, is it possible for the facility to be in compliance?

8. During your walk through of the facility, you observe the following:

   - no tags on any equipment
   - dripping from Pump #4
   - flow indicator measurements for the distillation unit control device recorded daily
   - temperature indicator measurements for the distillation unit control device recorded hourly
   - exhaust temperature from the distillation unit control device is 175° and has been for 48 hours
   - Valve #2 was found to be leaking on December 12, 1992 and was repaired on January 1, 1993.

   What violations have you found?

* For questions 1–6, assume the condenser is associated with the distillation unit. For question 8, assume the condenser has been added as a control device.

ANSWERS

1. April 17, 1991 (264.1030(c))

2. Unit Number 1 (264.1030(b) & 264.1032(a))

3. Just the vents from the distillation condenser (264.1031)

4. No, they must show results for all waste stream lines (265.1063(d))

5. Annually, when waste stream changes, and at times specified by the Regional Administrator; yes; test TOC for each batch (264.1064(k)(3))

6. Pumps: 1, 4, and 5
   Valves: 2 and 3
   PRD may be subject – will be dependent upon how they are drawing from tanks
   Sample connection system (264.1050(b))

7. Yes, if the facility installs a condenser with a 95 percent removal efficiency on Unit 1, the facility will be below the emissions rates listed in the process vent rule. Unit 1 emissions will be .08 lbs/hr (.085 tons/yr) and the overall facility emissions rates will be 2.58 lbs/hr (2.685 tons/yr).

8. No tag on valve #2 (264.1052(b)(2) and 264.1064(c))
   Flow indicator records daily, should be hourly (264.1033(f)(l))
   Exhaust temperature is too high above design average temperature (264.1033(f)(2)(vi)(B) and 264.1035(c)(4)(vii)(A))

Inspection Checklists for Process Vents and Equipment Leaks

The following inspection checklists pertain to process vents and equipment that should be used during inspections. The first two pages of each checklist require general information concerning the facility, its processes and equipment that can be completed from information available in the file material for the facility in the EPA offices, supplemented by information available in the file material at the facility. A summary sheet is given for listing all the control devices or pieces of equipment that you want to look at during your inspection. Finally, a worksheet is given for each type of control device and for equipment.

Process Vent Checklist

The Subpart AA process vent checklist requires information for process vent control equipment located at the facility being inspected. One form should be completed for each separate control device present at the facility. In most cases only one or two control devices will be present, and so the other pages are not needed.

Equipment Leak Checklist

The table at the end of the Subpart BB checklist requires information for pieces of equipment covered by the Phase I Air Rule located at the facility being inspected. Each piece of equipment that you wish to check can be given one column on the checklist. Information for this table is obtained from the facility records or operating log and from the individual pieces of equipment.

Checklist
Process Vents Applications
Part 264/265 Subpart AA

Applicability 264/5.1030

1. Does the facility have units permitted under Part 270 or is it permitted under Part 270 ?

   1a. What is the effective date* for this facility ?

   1b. For interim status facilities, have these requirements been incorporated into Part B application submittal?

2. Are there any of the following separation processes at the facility ?

   distillation, fractionation, thin-film evaporation, solvent extraction, air stripping, or steam stripping

Standards 264/5.1032

Waste Streams

3. Are there waste streams associated with any separation processes that contain 10 ppmw or greater organics concentration? 264/5.1032(a)

   3a. If they claim waste streams below 10 ppmw, did they use proper means to determine concentration ? 264/5.1034(d)(1 or 2)

   3b. Was date of initial determination before their effective date ? 264/5.1034(e)

   3c. Where other analysis performed annually or upon change to waste streams ? 264/5.1034(e)(2 or 3)

Facility Emissions Rates

4. Is the hourly process vent organic emission rate ≥ 3 lb/hr ?

   Is the yearly process vent organic emission rate ≥ 3.1 tons/yr ?

   4a. If performance tests were made, were they according to 264/5.1034(c)* ?

   4b. If engineering calculations were used, were they according to 264/5.1035 (b)(ii) ?

   4c. Has owner/operator signed statement that test conditions portray worst case actual operating conditions?

   4d. Were the facility emissions rates determined by the effective date ?

Facility Emission Rates After Control Devices or Change in Operations

   5a. Are the process vent organic emission rate for the facility ≤ 3 lb/hr and ≤ 3.1 tons/year or are they reduced by 95% ?

   5b. If performance tests were used, were they in accordance with 264/5.1034(c) and was test plan in accordance with 264/5.1035(b)(3) ?

   5c. If engineering calculations were used, were they in accordance with 264/5.1035(b)(4) ?

5d. For facilities without the control devices installed, do they have an installation plan [264.5/1033(a)(2) and 264/5.1035(b)(1) ?

5e. Will the control devices be installed by 18 months after the effective date ?

Reporting (264.1036)

6. For facilities with final permits incorporating this rule, have they sent in semi-annual reports of exceedances lasting longer than 24 hours?

(Use individual control device worksheets to continue inspection)

Summary Sheet for Control Devices (CD)

Vent #	Control Device	CD #	On Unit #	For Vents#
	Condenser			
	Adsorber (Regen)			
	Adsorber (Nonreg)			
	Process Heater			
	Boiler			
	Catalytic Vapor Incinerator			
	Thermal Vapor Incinerator			
	Air Assisted Flare			
	Steam Assisted Flare			
	Nonassisted Flare			

Checklist
Condenser
Part 264/265 AA

Operating Parameters:

List the operating parameters and the limits set for each in the permit or for interim status facilities, the limits the facility gave based on their engineering calculations 264/5.1035(b)(4)(iii)(E) or performance tests 264/5.1035(b)(2)(ii).

Operating Parameter	Limit	Have they met these limits

Are all design documentation, monitoring, operating, and inspection information in the facility operating record ? 264/5.1035 (c)

Yes or No

Monitoring: A and either B or C

A. flow indicator 264/5.1033 (f)(1) _____
- records hourly _____
- installation point correct _____
- daily inspection 264/5.1033 (f)(3) _____

AND

B. [organic compound] in condenser exhaust vent stream
- continuously record 264/5.1033(f)(2)(vi)(A) _____
- daily inspection 264/5.1033(f)(3) _____

OR

C. temperature monitoring device 264/5.1033(f)(2)(vi)(B)
- continuously record _____
- two locations:
  - exhaust vent stream from condenser _____
  - coolent fluid exiting the condenser _____
- accuracy:
  - +/- 1% of Temp being monitored or _____
  - .5 degrees C (whichever is greater _____
- inspect daily 264/5.1033(f)(3) _____

Repair:
- immediately upon daily inspection 264/5.1033(f)(3) _____

Exceedances: 264/5.1035 (c)(4)(vi or vii)
- if monitoring [organic] in exhaust:
  - when [organic] > 20% above design outlet [organic] _____
- if monitoring T:
  - either T exhaust > 6 deg above design avg exhaust T _____
  - or T coolent out > 6 deg above design avg coolent T _____
- cause of exceedance given _____
- measures taken to correct cause provided _____

Closed-vent systems associated with the control device 264/5.1033(j)

standard:	No Detectable Emissions and no visual emissions	_____
monitor:*	At facility effective date	_____
	Annually	_____
	RA requested times	_____
repair:	start by 5 days /complete by 15	_____

Checklist
Thermal Vapor Incinerator
Part 264/265 AA

Operating Parameters:

List the operating parameters and the limits set for each in the permit or for interim status facilities, the limits the facility gave based on their engineering calculations. 264/5.1035(b)(4)(iii)(B) or performance tests 264/5.1035(b)(2)(ii).

Operating Parameter	Limit	Have they met these limits

Are all design documentation, monitoring, operating, and inspection information in the facility operating record ? 264/5.1035 (c)

Yes or No

Monitoring: A and B

- A. flow indicator 264/5.1033 (f)(1) _____
  - records hourly _____
  - installation point correct _____
  - daily inspection 264/5.1033 (f)(3) _____
- B. temperature monitoring device 264/5.1033(f)(2)(i)
  - continuously record _____
  - one location:
    - in combustion chamber downstream of combustion zone _____
  - accuracy:
    - +/- 1% of Temp being monitored or .5 degrees C (whichever is greater) _____
  - inspect daily 264/5.1033(f)(3) _____

Repair:

- immediately upon daily inspection 264/5.1033(f)(3) _____

Exceedances: 264/5.1035 (c)(4)(i or ii)

- if monitoring RT min:
  - when T< 760 deg. C _____
- if standard 95 % eff:
  - when T comb. zone > 28 deg. C below given design avg. comb. zone T _____
- cause of exceedance given _____
- measures taken to correct cause provided _____

Closed-vent systems associated with the control device 264/5.1033(j)

- standard: No Detectable Emissions and no visual emissions _____
- monitor:* At facility effective date _____
  - Annually _____
  - RA requested times _____
- repair: start by 5 days /complete by 15 _____

Checklist
Catalytic Vapor Incinerator
Part 264/265 AA

Operating Parameters:

List the operating parameters and the limits set for each in the permit or for interim status facilities, the limits the facility gave based on their engineering calculations 264/5.1035(b)(4)(iii)(C) or performance tests 264/5.1035(b)(2)(ii).

Operating Parameter	Limit	Have they met these limits

Are all design documentation, monitoring, operating, and inspection information in the facility operating record ? 264/5.1035 (c)

Yes or No

Monitoring: A and B

A. flow indicator 264/5.1033 (f)(1)
- records hourly
- installation point correct
- daily inspection 264/5.1033 (f)(3)

B. temperature monitoring device 264/5.1033(f)(2)(i)(B)
- continuously record
- two locations:
  - exhaust vent stream from condenser
  - coolent fluid exiting the condenser
- accuracy:
  - +/- 1% of Temp being monitored or
  - .5 degrees C (whichever is greater
- inspect daily 264/5.1033(f)(3)

Repair:

immediately upon daily inspection 264/5.1033(f)(3)

Exceedances: 264/5.1035 (c)(4)(iii)(A or B)
- T inlet > 28 deg C below design avg. T inlet
- T diff. across bed < 80% design avg. T difference
- cause of exceedance given
- measures taken to correct cause provided

Closed-vent systems associated with the control device 264/5.1033(j)
- standard: No Detectable Emissions and no visual emissions
- monitor:* At facility effective date
  - Annually
  - RA requested times
- repair: start by 5 days /complete by 15

Checklist
Boiler/Process Heater
Part 264/265 AA

Operating Parameters:

List the operating parameters and the limits set for each in the permit or for interim status facilities, the limits the facility gave based on their engineering calculations 264/5.1035(b)(4)(iii)(C) or performance tests 264/5.1035(b)(2)(ii)

Operating Parameter	Limit	Have they met these limits

Are all design documentation, monitoring, operating, and inspection information in the facility operating record ? 264/5.1035 (c)

Yes or No

Monitoring: A and either B or C

A. flow indicator 264/5.1033(f)(1)
- records hourly ____
- installation point correct ____
- daily inspection 264/5.1033(f)(3) ____

B. If design heat input capacity < 44 MW
- temperature monitoring device 264/5.1033(f)(iv) ____
- continuously record ____
- one location: ____
  - in furnace downstream of combustion zone ____
- accuracy: ____
  - +/- 1% of Temp being monitored or ____
  - .5 degrees C (whichever is greater) ____
- inspect daily 264/5.1033(f)(3) ____

C. If design heat input capacity => 44 MW
- continuously record 264/5.1033(f)(v) ____
- parameter that indicates good combustion practices ____
- inspect daily 264/5.1033(f)(3) ____

Repair:
- immediately upon daily inspection 264/5.1033(f)(3) ____

Exceedances: 264/5.1035(c)(4)(iv)
- T flame zone > 28 deg C below design avg. flame zone T ____
- position changes where vent stream is introduced ____
- cause of exceedance given ____
- measures taken to correct cause provided ____

Closed-vent systems associated with the control device 264/5.1033(j)

standard:	No Detectable Emissions and no visual emissions	____
monitor:*	At facility effective date	____
	Annually	____
	RA requested times	____
repair	start by 5 days/complete by 15	____

Checklist
Flares
Part 264/265 AA

Operating Parameters:

List the operating parameters and the limits set for each in the permit or for interim status facilities, the limits the facility gave based on their engineering calculations 264/5.1035(b)(4)(iii)(D) and 264/5.1033(d) or performance tests 264/5.1035(b)(2)(ii).

Operating Parameter	Limit	Have they met these limits

Are all design documentation, monitoring, operating, and inspection information in the facility operating record ? 264/5.1035 (c)

Yes or No

Standard:
- no visible emissions > 5 minutes/any consecutive hrs ____
- flame present at all times ____
- if steam-assisted:
  - Ve < 60 ft/s and Ht > 300 BTU or ____
  - 60 ft/s <Ve< 400 ft/sec and Ht > 1000 BTU ____
  - Ve < Vmax < 400 and Ht > 300 BTU ____
- if air-assisted:
  - Ve < Vmax and Ht => 300 BTU or ____
  - Ve < 60 ft/sec and Ht => 300 BTU ____
- if non-assisted:
  - Ve < 60 ft/sec and Ht => 200 BTU or ____
  - 60 < Ve < 400 ft/sec and Ht > 1000 BTU ____
  - Ve < Vmax < 400 and Ht > 200 BTU ____

Monitoring: A and B
- A. flow indicator 264/5.1033(f)(1)
  - records hourly ____
  - installation point ____
  - daily inspection 264/5.1033(f)(3) ____
- B. heat sensing device for continuous ignition of pilot flame
  - continuously record ____
  - inspect daily 264/5.1033(f)(3) ____

Repair:
- immediately upon daily inspection 264/5.1033(f)(3) ____

Exceedances: 264/5.1035(c)(4)(v)
- period when pilot flame is not ignited ____
- cause of exceedance given ____
- measures taken to correct cause provided ____

Closed-vent systems associated with the control device 264/5.1033(j)
- standard: No Detectable Emissions and no visual emissions ____
- monitor: At facility effective date ____
  - Annually ____
  - RA requested times ____

repair: start by 5 days/complete by 15

Checklist
Carbon Adsorbers - Regenerative
Part 264/265 AA

Operating Parameters:

List the operating parameters and the limits set for each in the permit or for interim status facilities, the limits the facility gave based on their engineering calculations.
264/5.1035(b)(4)(iii)(D) and 264/5.1033(d) or performance tests 264/5.1035(b)(2)(ii).

Operating Parameter	Limit	Have they met these limits

Are all design documentation, monitoring, operating, and inspection information in the facility operating record ? 264/5.1035 (c)

Yes or No

Monitoring: A, B or C, and D
- A. flow indicator 264/5.1033(f)(1)
  - records hourly
  - installation point
  - daily inspection 264/55.1033(f)(3)
- B. [organic compound] in carbon bed exhaust vent stream
  - continuously record 264/5.1033(f)(2)(vii)
  - daily inspection
- C. device to measure a parameter that indicates regeneration
  - on a regular, predetermined time cycle
  - continuously record
  - inspect daily
- D. replace carbon at regular, predetermined time interval
  - that is < carbon service life 264/5.1033(g)

Repair:
- immediately upon daily inspection 264/5.1033(f)(3)

Exceedances: 264/5.1035(c)(4)(viii and ix)
- if [organic compound]:
  - [org] exhaust > 20% above design exhaust vent
  - stream [org]
- if parameter for regen. on regular cycle
  - flow continuous past predetermined reg. time
- cause of exceedance given
- measures taken to correct cause provided
  - what about .1035(c)(6) or (7)Yes or No

Has 264/5.1035(c)(6) or (7) been met?

Closed-vent systems associated with the control device 264/5.1033(j)
- standard: No Detectable Emissions and no visual emissions
- monitor: At facility effective date
  - Annually
  - RA requested times
- repair: 5/15

Checklist
Carbon Adsorbers - Non-Regenerative
Part 264/265 AA

Operating Parameters:

List the operating parameters and the limits set for each in the permit or for interim status facilities, the limits the facility gave based on their engineering calculations.
264/5.1035(b)(4)(iii)(D) and 264/5.1033(d) or performance tests 264/5.1035(b)(2)(ii).

Operating Parameter	Limit	Have they met these limits

Are all design documentation, monitoring, operating, and inspection information in the facility operating record ? 264/5.1035 (c)

Yes or No

Monitoring: A and either B or C

A. flow indicator 264/5.1033(f)(1)
- records hourly ____
- installation point ____
- daily inspection 264/5.1033(f)(3) ____

B. [organic compound] in exhaust vent stream
- monitor on regular basis ____
- inspect daily or at time < 20% time carbon life (which is longer) ____
- replace carbon when this indicates need ____

C. replace carbon at regular predetermined time interval less than design carbon replacement interval ____

Repair:

immediately upon daily inspection 264/5.1033(f)(3) ____

Exceedances: 264/5.1035(c)(4)(viii) and (ix)

if monitoring [organic] in exhaust:
- date and time when monitored for breakthru ____
- and [ ] reading ____
- date when carbon is replaced with fresh carbon ____

cause of exceedance given ____
measures taken to correct cause provided ____

Closed-vent system

standard:	No Detectable Emissions and no visual emissions	____
monitor:	At facility effective date	____
	Annually	____
	RA requested times	____
repair:	5/15	____

Checklist
Equipment Leak Applications
Part 264/265 Subpart BB

Applicability 264/5.1050

1. Is the facility permitted under Part 270 or does it have units permitted under Part 270 ?

   1a. Facility status: interim status or permitted?

   1b. What is the effective date* for this facility ?

2. Are any of these units exempt* ?

Waste Streams 264/5.1063 (d)

3. Are there waste streams that contain at least 10% organics by weight?

   3a. Method of determination? knowledge, ASTM Methods D2267-88, E169-87, E168-88, E260-85 or Method 9060 or 8240

   3b. If knowledge, is it documented?

   3c. Date of initial determination

   3d. Dates of other analysis? change, batch

4. For each waste stream that does qualify, determine fluid type.
gas/vapor service, light-liquid service, heavy liquid service

   4a. Method for determining light liquid service.

   vapor pressures of constituents from standard texts

   ASTM D-2879-86

Facility Operating Record 264/5.1064 (g)

5. Does the facility have a list of the equipment and identification numbers that is affected by this rule ?

6. Is there a list of the id numbers of NDE pumps, valves, and compressors with signature of owner/operator ?

7. Is there a list of all affected equipment by designation ?

7. Is there a list of PRD in gas/vapor service?

8. Dates of test for NDE

   Background level

   Maximum instrument reading

9. Is there a list of ID numbers for equipment in vacuum service?

10. List of ID numbers of "unsafe-to-monitor" and "difficult-to-monitor" valves, with explanation for each and plan for monitoring or schedule.

Checklist
Equipment Leak Applications
Part 264/265 Subpart BB
(Cont'd)

11. Is there a list of valves using the skip period alternative monitoring schedule, with schedule for monitoring and % leak determined ?

12. For dual mechanical seal pumps or compressors with barrier fluid systems with sensors, is the criteria and explanation of the criteria for determining sensor failure given ?

13. Is there an analysis of design capacity, influent/effluent for each unit subject to these requirements, and an up-to-date analysis either by testing or knowledge to determine if the equipment is covered or not ?

Identification of Equipment Covered by Rule

Equipment	Equipment Id #	Waste Stream #	Fluid
Pumps			
general			
dual mechanical			
NDE (sealless)			
closed vent/control devices			
Compressors			
general			
NDE Sealless			
CV/Control Device			
Pressure Relief Devices			
general			
CV/Control Devices			
Sampling Connecting Systems			
general			
insitu			
Valves			
general			
leakless (NDE)			
unsafe to monitor			
difficult to monitor			
alter allowable %			
alter. skip period LDRP			
Open-ended valves or lines			
Flanges and other connectors			

Requirements for Subpart BB Pieces of Equipment

Valves Gas/Vapor or Liquid Service

general
1. monitored monthly by Method 21
2. 10,000 ppm means a leak
3. two successive months without a leak, monitor first month or each quarter, after leak return to monthly monitoring
4. repair 5/15 or delay or repair

NDE
1. designated NDE in operating record
2. has no external actuating mechanism in contact with HW
3. meets NDE by Method 21 (500 ppm + bkgd)
4. initially tested by Dec. 21, 1990 and annually (or as RA specifies)

"Unsafe to Monitor"
1. designated as such in operating log
2. appears that monitoring personnel would be exposed to immediate danger
3. owner has a written plan to monitor during safe times

"Difficult to Monitor"
1. designated as such in operating record
2. valve location requires personnel to climb over 2 meters above support
3. unit was in operating before June 21, 1990
4. owner has written plan to monitor at least once a year

Percentage % Allowed to leak (2%)
1. owner has notified RA that they will use this method
2. a performance test of all valves in unit during the same week by Dec. 21, 1990 by Method 21
3. repair 5/15 or delay of repair
4. % leaking calculated by:
   # valves subject to rule leaking
   # valves subject to rule within the unit

Skip Period
1. owner notified RA to use this portion
2. can skip one quarterly leak detection after 2 consecutive quarterly monitoring with 2% or less leaking
3. after 5 consecutive monitoring periods at 2% or less, can skip 3
4. return to monthly monitoring if exceed 2%

Heavy Liquid Service

general
1. Monitored by Method 21 within 5 days of indication of leak by sight, smell, or alarm
2. 10,000 ppm means a leak
3. repair 5/15 or delay of repair

Pumps Light Liquid Service

general
1. monitor monthly by Method 21
2. inspect visually weekly for leaks
3. leak is 10,000 ppm or above or a visual indication
4. repair 5/15 days

Requirements for Subpart BB Pieces of Equipment (Cont'd)

mechanical seal system

1. has one of the following:
   a) barrier fluid pressure above stuffing box pressure
   b) has barrier fluid degassing reservoir to CV-CD
   c) purges barrier fluid into HW stream with NDE to air
2. barrier fluid must not be HW with organics > 10%
3. barrier system must have sensor for failure of sys or seal system
4. visual inspection weekly
5. daily check on sensor or audible alarm checked monthly
6. criterion must be set for failure for sensor
7. failure of sensor means a leak
8. repair 5/15 days

no detectable emissions

1. have no externally actuated shaft penetrating the pump housing
2. operate with NDE by Method 21 (500 ppm + bkg)
3. tested initially, annually and any other time by RA

equipped with closed vent system to control device

1. meets control device requirements of the process vent rule

Heavy Liquid Service

1. monitor within 5 days of potential leak determination by visual, audible, or olfactory method
2. leak is 10,000 ppm by Method 21
3. repair 5/15

Sampling Connecting System

1. does it have closed vent or closed purge system
2. do these systems (pick one)
   a) return purged HW to process line with NDE
   b) collect and recycle purged HW with NDE
   c) capture and transport all purged HW to control device (see control device for requirements)
3. has design, documentation, monitoring, operating and inspections been recorded and kept up to date in operating record

Open-ended valves or lines

general

1. is it equipped with cap, blind flange, plug or second valve which is on at all times except during the use of the line or valve
2. if second valve is used, must be closed after open-ended valve is closed
3. if double block and bleed system is used, the bleed valve or line may remain open during operations that require venting the line between the block valves, but must be closed at all other times.

Flanges and Other Connectors

general

1. have they monitored within 5 days of evidence of potential leak by visual, sound or smell.
2. 10,000 ppm means a leak
3. repair 5/15 or delay of repair

Requirements for Subpart BB Pieces of Equipment (Cont'd)

Pressure Relief Devices

gas/vapor service

1. operating with NDE as measured by Method 21
2. after release, return to NDE within 5 days
3. monitor within 5 days of release by Method 21

or

2. is it equipped with closed-vent, control device (Hooded)
3. design, monitoring of control device in facility operating record

light liquid or heavy liquid service

1. monitored by Method 21 within 5 days of visual, smell, audible indications of potential leak
2. over 10,000 ppm means a leak
3. repair 5/15

Closed-vent systems

1. meet NDE emissions requirements of 500ppm + bkgd using Method 21
2. monitor initially by Dec 21, 1990 (or when control devices installed) and annually or other by RA
3. detectable emissions by method 21 or visual
4. repair 5/15

Compressors

general

1. has a seal system with barrier fluid system
2. a) barrier fluid pressure greater than compressor stuffing box pressure or
   b) barrier fluid system with closed-vent to control device (see CVCD) or
   c) has a barrier fluid purge system for NDE
3. barrier fluid is not HW with 10% by weight or greater organics
4. equipped with sensor to detect failure of seal system and/or barrier fluid system
5. a) sensor checked daily or
   b) sensor with audible alarm checked monthly or
   c) sensor with audible checked daily if at unmanned site
6. operator has set criterion for sensor failure
7. sensor indicates failure means leak
8. repair 5/15

Closed-vent and control device (Hooded)

1. see 264/265 Subpart AA requirements

NDE

1. is it meeting NDE by Method 21
2. was it certified NDE initially

Date of Inspection: _____

Facility: _____

Inspector: _____

EQUIPMENT LEAK CHECKLIST

RECORDKEEPING REQUIREMENTS 264.5/(b)(1) and (g)			
Unit Number Listed			
Equipment Identification Number Listed			
Location at Facility			
Type of Equipment			
% by Weight of TOC at Equipment			
Fluid State at Equipment			
Equipment Designation			
If Closed-Vent/ Control Device Used 264/5.1064 (b)(2-4)			
Implementation Plan			
If testing, Performance Test Plan			
Design Documentation or Perf. Test Results			
If Control Device;Monitoring,Operating,			
Inspection Data 264/5.1064 (c)			
LEAK DETECTION AND REPAIR RECORDKEEPING			
264/5.1064 (c and d)			
Monitoring Equipment Number			
Monitoring Operators Identification			
Date of Visual, Audible, Olfactory Indication of Leak			
Date of Leak Detection			
Date of Repair Attempt			
Repair Methods at each Attempt			
Leak "Above 10,000" or Above 500 Above Background			
"Repair Delayed" if After 15 days			
If Valve, Documentation for Repair Delay			
Signature of Person approving Delay			
Expected Date of Repair			
Date of Successful Repair			
PHYSICAL INSPECTION			
Visual, Audible, or Olfactory Indication of Leak			
Monitoring Equipment Number			
Correct Calibration Method			
Correct Monitoring Techniques Used*			
Method 21 Results			
Tag on Leaking Equipment			
If Equipment Already had Tag on it			
Date Leak Detected			
Date of Expected Repair or Repair			
Equipment Marked as Being in this Program			

AIR EMISSIONS POTENTIAL VIOLATIONS

264.13 265.13	General requirements	Failure to identify and use proper waste analyses methods.
264.15 265.15	General requirements	Failure to develop an inspection schedule meeting the terms and frequencies outlined in 264.1033(f)(3), 264.1052(a)(2), (d)(4) and (d)(5), 264.1053(e) and 264.1058(a) and 265.1033(f)(3), 265.1052(a)(2), (d)(8) and (d)(5), 265.1052(e) and 265.1058(a).
264.73 265.73	None - general requirements	Failure to maintain records and results of waste analyses; monitoring, testing and analytical data; and take appropriate corrective actions required by 264 and 265.1034; 264 and 265.1063; 264 and 265.1033; 264 and 265.1034; 264 and 265.1035; 264 and 265.1057; 264 and 256.1058; 264 and 265.1060; 264 and 265.1063; and 264 and 265.1064.
264.1030	Vents - general requirements	Failure to incorporate the requirements of 264.1032 - 264.1036 when facility permit is reissued.
264.1032(a) 265.1032(a)	Process Vents	Failure to reduce total organic emissions to less than 1.4 kg/h (3 lb/h) and 2.8 Mg/yr (3.1 tons/yr) or use of a control device to reduce total organic emissions from affected vents by 95% weight.
264.1032(b) 265.1032(b)	Process Vents control equipment	Failure to install control equipment to meet requirements in 264/265.1032(a)
264.1032(c) 265.1032(c)	Process Vents	Failure to prepare and place in operating record an implementation schedule for installation of closed-vent system and control device.
264.1033(a) 265.1033(a)	Closed-vent systems and control devices	Failure to prepare and place in operating record an implementation schedule for installation of closed-vent system and control device.
264.1033(b) 265.1033(b)	Control devices	Failure to design and operate control devices to recover organic vapors with an efficiency of at least 95% weight unless provisions of 264/264.1032 (a)(1) are met.
264.1033(c) 265.1033(c)	Enclosed Combustion Device	(a) Reduction of VOCs by less than 95%, or (b) Total organic compound concentration greater than 20 ppmv on a dry basis corrected to 3% oxygen; or (c) Residence time less than 0.5 seconds; or (d) Combustion temperature lower than 750 C; or (e) Meet facility emission rate limits.

264.1033(d)(1) 265.1033(d)(1)	Flares	No visible flare emissions shall occur.
264.1033(d)(2) 265.1033(d)(2)	Flares	Flame not present at all times.
264.1033(d)(3) 265.1033(d)(3)	Flares	Flares used if the net heating value of the gas is less than 11.2 MJ/SMC (300 Btu/scf), if the flare is steam- or air-assisted or if the net heating value of the gas is less than 7.45 MJ/SCM (200 Btu/scf) if non-assisted.
264.1033(d)(4) 265.1033(d)(4)	Flares	Steam- and non-assisted flares nor designed for an operated with an exist velocity greater than 18.3 m/s (60 ft/s) except as noted in (d)(4)(ii) and (d)(4)(iii).
264.1033(d)(5) 265.1033(d)(5)	Flares	Air-assisted flares not designed and operated with an exist velocity greater than Vmax as determines in (e)(5).
264.1033(d)(6) 265.1033(d)(6)	Flares	Failure to use flares which are steam-, air - or non-assisted.
264.1033(e) 265.1033(e)	Flares	Failure to use approved methods to determine compliance of flares with provisions of regulations.
264.1033(f) 265.1033(f)	Control devices	Failure to monitor and inspect monitoring readings daily for all control devices to comply with regulations to ensure proper operation and maintenance and failure to implement all requirements in 264/265.1033(f).
264.1033(g) 265.1033(g)	Control devices	For carbon adsorption systems with direct on-site regenerating carbon beds, failure to replace existing carbon with fresh carbon at a regular, predetermined time interval that is no longer than the carbon service life established as a requirement of 264/265.1035(b)(4)(iii)(F).
264.1033(h) 265.1033(h)	Control devices	For carbon adsorption systems that do not regenerate the carbon bed directly on-site, failure to replace a carbon canister on a regular basis using one of the procedures outlined in 264/265.1033(h).
264.1033(i) 265.1033(i)	Control devices	Failure to provide sufficient documentation for devices other than those identified in 264/265.1033 to comply with the provisions of 264/265.1033.
264.1033(k)(1) 265.1033(k)(1)	Closed-vent systems	Total organic emissions greater 500 ppm (method 21).
264.1033(k)(2) 265.1033(k)(2)	Closed-vent systems	Failure to monitor to determine compliance with 264/265.1033(k)(1) on the schedule set for in this paragraph.
264.1033(k)(3)&(4) 265.1033(k)(3)&(4)	Closed-vent systems	Failure to comply with the repair and control requirements for no detectable emissions from closed-vent systems.

264.1033(k) 265.1033(k)	Closed-vent systems	Failure to operate closed-vent systems at all times when emissions may be vented to them.
264.1034 265.1034	Closed-vent systems - Test methods and procedures	Failure to use approved test methods, procedures and performance tests outlined in this section.
264.1035 265.1035	Recordkeeping	Failure to comply with the recordkeeping requirements outlined in this section.
264.1036 265.1036	Reporting	Failure to comply with the reporting requirements outlined in the section.
264.1050 265.1050	General requirements	Failure to incorporate the requirements of 264/265.1052 - 264/265.1065 when facility permits is re-issued. Failure to property mark or identify each piece of equipment subject to these requirements.
264.1052(a) 265.1052(a)	Pumps in light liquid service	Failure to monitor monthly to detect leaks by the methods specified in 264/265.1063(b) and to visually inspect each calendar week for dripping liquids from the pump seals.
264.1052(b) 265.1052(b)	Pumps in light liquid service	None
264.1052(c) 265.1052(c)	Pumps in light liquid service	Failure to repair or attempt to repair within 15 days or specified time frames.
264.1052(d) 265.1052(d)	Pumps in light liquid service	Failure to meet provisions to exempt dual mechanical seal systems from monitoring requirements.
264.1052(e) 265.1052(e)	Pumps in light liquid service	Failure to meet provisions to exempt from monitoring requirements any pump that is designated for no detectable emissions as indicated by an instrument reading of less that 500 ppm above background.
264.1052(f) 265.1052(f)	Pumps in light liquid service	Failure to equip pumps with a closed-vent system if exemption from monitoring requirements is sought.
264.1053(a) 265.1053(a)	Compressors	Failure to equip compressors with seal system.
264.1053(b) 265.1053(b)	Compressors	Failure to equip compressors with seal system meeting requirements set forth in this paragraph (c).
264.1053(d) 265.1053(d)	Compressors	Failure to install the seal system with a sensor that will detect failure of seal system and barrier fluid system.
264.1053(e) 265.1053(e)	Compressors	Failure to inspect sensors daily or to equip sensors with audible alarm that is checked monthly.
264.1053(g) 265.1053(g)	Compressors	Failure to attempt to repair or to repair leaks once detected within time frame.

264.1053(h) 265.1053(h)	Compressors	Failure to install a closed-vent and control device system if exemption from these requirements are sought.
264.1053(i) 265.1053(i)	Compressors	Failure to operate any compressors designated for no detectable emissions to ensure no reading 500 ppm above background is measured.
264.1054(a) 265.1054(a)	Pressure Relief Devices in gas	Instrument reading of 500 ppm or greater is measured.
264.1054(b) 265.1054(b)	Pressure Relief Devices	Failure to attempt or to repair leaks within specified time frames.
264.1054(c) 265.1054(b)	Pressure Relief Devices	Failure to install a closed-vent system for pressure relief devices for which exempts are sought.
264.1055(a) 265.1055(a)	Sampling Connecting Systems	Failure to install, and/or operate closed-purge system or closed-vent system.
264.1056(a) 265.1056(a)	Open-ended Valves or Line	Failure to install, operate, and maintain cap, blind flange, plug or second valve.
264.1057(a) 265.1057(a)	Valves in gas/Vapor or in light liquid service	Failure to monitor monthly to detect leaks.
264.1057(b) 265.1057(b)	Valves in gas/Vapor or in light liquid service	Instrument reading of 10,000 ppm or greater, if the owner/operator uses this as a performance standard for valves.
264.1057(d)&(e) 265.1057(d)&(e)	Valves in gas/Vapor or in light liquid service	Failure to attempt to repair or to repair leaks within specified time frames and by the practices outlined in the paragraph.
264.1057(f) 265.1057(f)	Valves in gas/Vapor or in light liquid service	Failure to comply with requirements for designation of a valve with no detectable emissions.
264.1057(g)&(h) 265.1057(g)&(h)	Valves in gas/Vapor or in light liquid service	For unsafe- or difficult-to-monitor valves, failure to comply with specified requirements
264.1058(a) 265.1058(a)	Pumps and Valves in Heavy Liquid Service; Pressure Relief Devices	Failure to monitor these pieces of equipment within five days if evidence of a leak is found.
264.1058(b) 265.1058(b)	Pumps and Valves in Heavy Liquid Service; Pressure Relief Devices	None
264.1058(c) 265.1058(c)	Pumps and valves in Heavy Liquid Service; Pressure Devices; and Flanges and Connectors	Failure to attempt to repair or to repair leaks detected on these pieces of equipment within the specified time frames. First attempt within 5 days, repair to be completed no later than 15 days.
264.1059 265.1059	Delay of repair	Failure to meet specifications permitting delays in repair of equipment leaks if repairs are not carried out within 5 or 15 days of the detection of the leak.

264.1060 265.1060	Closed-vent systems and control devices	Failure to comply with provisions of 264/265.1033 for closed-vent systems and control devices.
264.1061 265.1061 and 264.1062 265.1062	Alternative standards	Failure to comply with the alternative standards and performance test requirements of this paragraph if an owner/operator requests permission to use the alternative compliance standards for valves in gas/vapor service or in light liquid service. The alternative standards are the allowance of 2 percent of the valves to leak and the allowance of leak detection and repair skip periods. More than 2 percent of th valves leaking is a violation and requires monthly monthly monitoring.
264.1063 265.1063	Equipment leaks - tests methods and procedures	Failure to use approved test methods and procedures and performance tests outlined in this section.
264.1064 265.1064	Recordkeeping	Failure to comply with the recordkeeping requirements outlined in this section.
264.1065 265.1065	Reporting	Failure to company with the reporting requirements outlined in this section.
270.24	Part B Application	Failure to include the specified information for process vents in the Part B application for the facility.
270.25	Part B Application	Failure to include the specified information for equipment in the Part B application for the facility.

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Office of Air Quality Planning and Standards Research Triangle Park NC 27711
EPA-450/3-80-032b June 1982
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Benzene Fugitive Emissions—

Background Information for Promulgated Standards

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Comment: Two commenters remarked about the costs associated with dual seal systems. One commenter reported that one of the refineries contacted in the area estimated a minimum cost of $200,000 for installation of secondary seals with an estimated $35,000 annual maintenance and monitoring cost (IV-D-10). One commenter evaluated the use of dual mechanical seals with a barrier fluid and controlled degassing vents. The commenter concluded that safe installation of this type of system is very expensive and would only control minor amounts of benzene (IV-D-29).

Response: Since proposal, a monthly leak detection and repair program has been selected for control of benzene fugitive emissions from new and existing pumps (see Section 2.3). For new and existing compressors, EPA has selected equipment control. EPA has estimated costs of installing safe systems and has concluded that they are reasonable.

2.4.1.3 Sampling Systems. Four commenters submitted the following comments on the sampling system requirements:

Comment: One commenter recommended that the last five words of paragraph (2), Sec. 62.112(c) of the proposed standard, "without benzene emissions to atmosphere," should be changed to, "with minimal emissions to atmosphere." The commenter noted that designing sampling systems with zero benzene emissions would require using a benzene-free purge. The commenter recommended that only specially designed sampling valves should be required (IV-D-20). One commenter recommended that other sampling systems besides a purge system be allowed, for example, venting to a control device with 95 percent recapture (IV-D-21). Another commenter stated that sampling systems are not state-of-the-art for worker protection. The commenter also recommended that a definition of in-situ sampling systems be added to the standard (IV-D-24).

Response: In the BID for the proposed standard, it was estimated that closed-loop sampling systems are almost 100 percent effective in eliminating sampling purge emissions. As noted in the preamble of the proposed standard (46 FR 1180, January 5, 1981), however, no available data indicate that application of any control technique would be able to comply with a "no detectable emissions" standard (500 ppmv or less VOC concentration above background). Some benzene

could be emitted during sample transfer to a closed collection device.

The intent of the standard is to eliminate sample line purging to atmosphere, ground, or sewer drain. A "zero" (no detectable) emissions limit is not practicable as noted by the establishment of an equipment standard instead of an emissions limit because sampling systems can have detectable emissions. Reference Method 21 would not be practicable for determining emissions from these systems.

EPA recognizes that closed-loop sampling systems have limitations with respect to low-pressure processes or tankage and, in some instances, safety requirements. The regulation, therefore, does not specify a "closed-loop sampling system," but it does require a "closed-purge system." This will allow any system that collects all benzene purged during sampling and recycles or destroys the collected benzene. Closed-loop sampling systems are used in the BID for the proposed standard to evaluate the cost of controlling fugitive emissions from sampling systems (closed-loop sampling systems are generally the most costly system to implement a closed purged system).

The intent for sampling systems has been clarified in the final standard with the changes presented in response to other comments. By elaborating on the requirements for "closed-purge systems" and "in-situ" sampling systems, the proper equipment design criteria for sampling systems have been better described:

"Closed-purge system" means the equipment comprising a closed-loop sampling system or any system that collects benzene purged in the sampling process and either recycles or disposes of benzene.

"In-situ sampling systems" are non-extractive or in-line sampling systems that involve measurement or sampling of process stream conditions without extraction of the sample from the process stream, resulting in no purged emissions of benzene.

In addition to closed-purge sampling, EPA has considered since proposal allowing a closed-vent vacuum system connected to a control device. Closed-vent vacuum systems connected to a control device collect the sample purge and then transport the sample purge to a control device. If these systems are not open to atmosphere, then their reduction in emissions of benzene would be equivalent to

collecting the purge in a collection system that is not open to atmosphere. Based on these considerations, EPA has decided to allow closed-vent vacuum systems connected to control devices.

Comment: One commenter stated that there were the following problems in controlling emissions of benzene in accordance with the proposed regulations:

(1) Attempts to perform closed-loop sampling of nitration batches at one plant were unsuccessful.

(2) One plant anticipated problems with closed-loop sampling of raw material deliveries and reactor content measurements (IV-D-29).

Response: As stated in the previous response, EPA specifies in the proposed and promulgated regulations "closed-purge systems" as the control equipment for sampling systems, not "closed-loop sampling systems." Requiring "closed-purge systems" allows any system that collects all benzene purged during sampling and recycles or destroys the collected benzene. An example system is that of the Fetterolf-"Ram-seal" presented in Docket A-79-27-II-D-56.

2.4.1.4 Continuous Benzene Emissions Control. Comment: One commenter expressed concern for the requirement that all control systems be operated 100 percent of the time when benzene emissions may occur. The commenter was concerned that the provision does not allow for expected or unexpected maintenance or repair of the control system. The commenter recommended that a bypass of emissions be allowed where the control systems must be taken out of service for maintenance or an emergency only where the next emissions that will be bypassed would not exceed the excess emissions that would result from a shutdown and start-up of the process unit (IV-D-21).

Response: The standard requires that control devices be operated when emissions of benzene are vented to them. This means that closed-vent systems transporting the benzene emissions to control devices can not be vented uncontrolled to atmosphere. For larger emissions, current industry practices do not allow uncontrolled venting of emissions from closed-vent systems. Thus, alternative control devices will be available to control these emissions. For smaller emissions, such as those from dual mechanical seal systems, the

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EPA-450/3-80-032a
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of an open-ended valve, they are effective in preventing leaks through the seat of the valve from reaching atmosphere. Open-ended valves, about 20 percent of the total valves handling benzene,[20] are used mostly in intermittent service for sampling, venting, or draining. If a cap or plug is used downstream of a valve when it is not in use, benzene emissions can be reduced. No test data are available to support a control efficiency for these devices. However, the control efficiency will depend on such factors as frequency of valve use, valve seat leakage, and material that may be trapped in the pocket between the valve and cap or plug and lost on removal of the cap or plug. For the purposes of emission calculations, 100 percent control efficiency of these emissions has been assumed. The installation of a cap, plug, or second valve does not prevent the leakage that may occur through the valve stem seal. The attachment of a second valve downstream of the open-ended valve provides a double block and bleed arrangement. In this system, it is important that the upstream valve be closed first. Otherwise, product will remain in the line between the valves, and expansion of this product will cause leakage through the valve stem seals.

4.3.5 Closed-Loop Sampling

A frequent operation in most refining and organic chemical production operations is to withdraw a sample of material from the process for analysis. To ensure that the sample is representative, purging of the sample lines and/or sample container is often required. If this purging is done to atmosphere or to open drains, or if there are incidental handling losses, benzene emissions can result. A closed-loop sampling system is designed so that the purged VOC is returned to the system or sent to a closed disposal system and so that the handling losses are minimized. Figure 4-7 gives two examples of closed-loop sampling systems where the purged VOC is flushed from a point of higher pressure to one of lower pressure in the system and where sample-line dead space is minimized. Other sampling systems are available that utilize partially evacuated sampling containers and require no line pressure drop.[21]

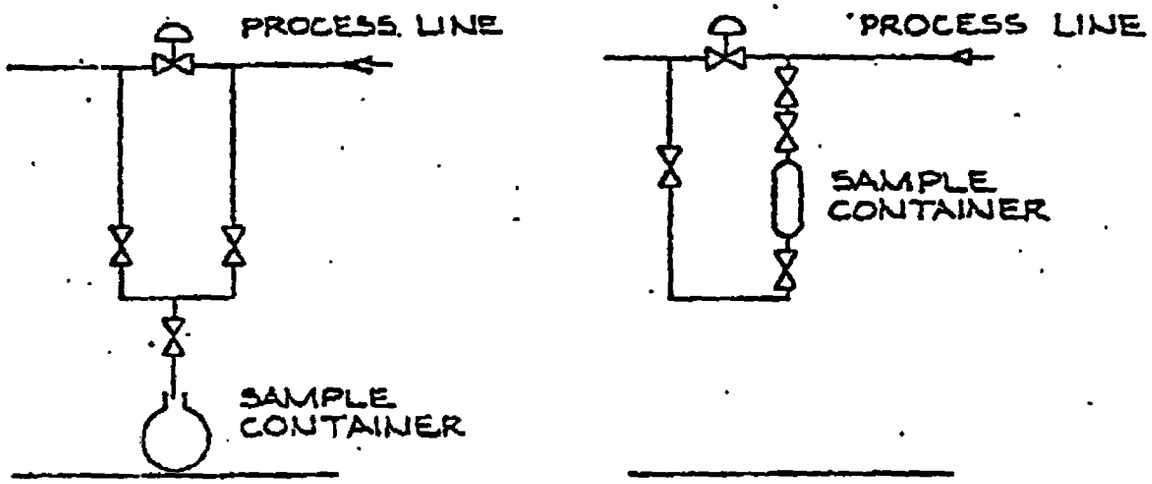


Figure 4-7. Diagram of Two Closed-Loop Sampling Systems[4]

Response:

As noted in the preamble to the proposed regulations (46 FR 1143-1145), performance standards based on emission limits were not possible for pumps and compressors because of technological and economic limitations. Moreover, it was not possible to set concentration limit performance standards based on concentration limits. Even pumps and compressors using the equipment required by the standards have the potential to leak and any leak would be a violation of such a performance standard. Additionally, there are too few pumps and compressors to set a meaningful percent leaking performance standard.

EPA has provided a work practice standard for pumps and has established the equipment standards as alternative control techniques for pumps. In addition, the equipment standards as proposed allow for several options. Dual mechanical seals of any configuration with pressurized or non-pressurized barrier fluid systems or an enclosed and vented seal area were all offered for pumps. Compressors can be controlled by using any type seal with a barrier fluid or enclosed and vented seal areas.

EPA believes that the standards for pumps and compressors are reasonable and allow all owners or operators of affected facilities to comply. The standards incorporate provisions for complying by using sealless equipment, dual seals with barrier fluid systems, or vented seal areas without requesting permission or an equivalency determination. EPA has also provided equivalency procedures for these standards that permit an owner or operator of a process unit to comply with other requirements if the other requirements are shown to provide emissions reductions equivalent to the required equipment standards. The technical problem cited by the commenter in Docket Item No. IV-D-6 is addressed in Sections 4.8 and 4.12.

3.5.5 Performance Standard for Sampling Systems

Comment:

One commenter (IV-D-6) recommended that a performance standard be established for sampling systems. He felt there were better methods of sampling which could not be used under the proposed regulations which could be used without discussion if a performance standard were established.

Comment:

One commenter (IV-D-26) pointed out that the words "stuffing box pressure" should be followed by the word "or" in the proposed Section 60.482(a)(3)(i).

Response:

The three provisions in the proposed §60.482(a)(3) for pumps and in the proposed §60.482(b)(3) for compressors are in series, using the conjunction "or" between the second and third items to indicate that only one of the three items (i, ii, or iii) would apply. Since this construction results in some confusion, the addition of "or" has been made between the first and second items to clarify the intent of exclusive alternatives. With the redesignation of section numbers for the regulation, these exclusive alternatives are found in §60.482-2(d) for pumps and in §60.482-3(b) for compressors.

Comment:

Another commenter (IV-D-17) pointed out one inconsistency in the compressor standards which should be clarified. Sections 60.482(b)(1) and (3) only require a seal system with certain characteristics to be used for all compressors. However, Section 60.482(b)(4) reverts to referring to dual mechanical seal systems.

Response:

The most commonly applied seals for compressors in SOCMI are labyrinth seals. Although the basic labyrinth seal and its more effective variations (staggered labyrinth, honeycomb labyrinth, rotating labyrinth) are considered mechanical seals, they are not dual seal systems, as described for pump applications. Therefore, this portion of §60.482(b)(4) [redesignated §60.482-3(d)] is being revised to read "seal system," not "dual mechanical seal system."

4.9 SAMPLING SYSTEMS

The comments received regarding requirements for sampling systems dealt primarily with four concerns: (1) emissions from closed-loop sampling systems, (2) the cost effectiveness of closed-loop sampling systems,

I hope this answers your question and eliminates any confusion. If you have any further questions, please feel free to contact me.

Sincerely,

Richard S. Colyer
Standards Development Branch

bcc: Emily Chow, OMPE/OSW (OS-520)
Fred Dimmick, ESD/OAQPS (MD-13)
Frank McAlister, PSPD/OSW (OS-341)

Prepared by: OAQPS:ESD:SDB:RColyer:MD-13:629-5262:9/13/90

CASE DEVELOPMENT AND SUPPORT

- **Quality Inspections**
- **Documentation of Evidence**
- **RCRA Civil Penalty Policy.**

Case Development and Support
Overhead 1 of 32

OVERHEAD #1

TITLE: Case Development and Support

KEY POINTS:

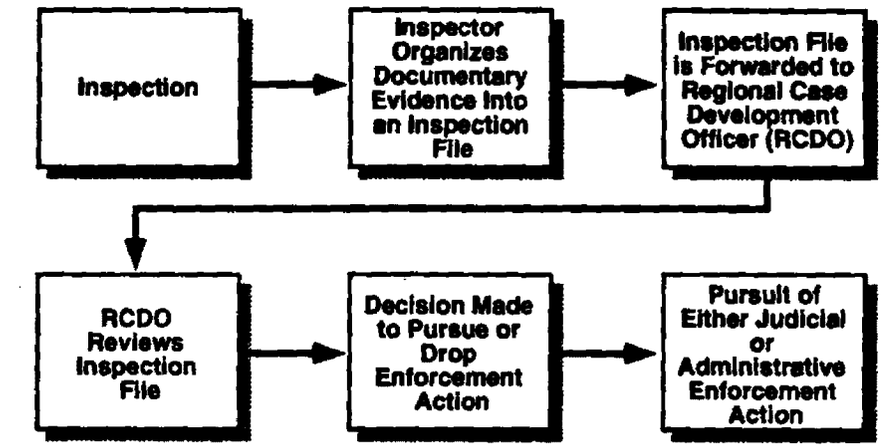
- The RCRA Enforcement Inspection Program serves two critical functions: determining compliance with the RCRA regulations, and supporting enforcement actions. Because of this, it is imperative that inspections be performed in a manner that is both technically and legally correct; flaws in either the technical or legal conduct of an inspection may hamper, prevent, or invalidate the use of inspection results for these critical functions.

- During this presentation, we will discuss the importance of conducting and documenting quality inspections and how inspections impact case development.

- We will discuss the importance of breaking down each relevant statute and regulation into its component elements, as a means of identifying whether a facility is in violation of it and, if so, the necessary elements for proving a violation. We will briefly engage in an interactive exercise documenting evidence necessary to prove a federal regulatory violation.

- In addition, we will briefly discuss the RCRA Civil Penalty Policy and explain how a penalty is calculated.

CASE DEVELOPMENT PROCESS



Case Development and Support
Overhead 2 of 32

OVERHEAD #2

TITLE: Case Development Process

KEY POINTS:

- This is a basic flowchart of the case development process.
- While some of the process is undoubtedly familiar to you, some parts of the process may not be, so let's take a few minutes to look at the process and see where you, as inspectors, fit in.
- Obviously, the process starts with you and the inspection file you put together. After the inspection, however, if you take a closer look at the process, you'll see how it all hinges on your actual visit to the facility, the evidence you observed, and the manner in which you document it.
- After you forward the file to the Case Development Officer, he or she is going to review the file with four things in mind:
  - — Have the samples and documents been properly identified?
  - — How significant is the violation identified?
  - — What is the past history of the facility?
  - — Is the documentation of the evidence adequate?

OVERHEAD #2

TITLE: Case Development Process (continued)

KEY POINTS:

- While all four factors are important to the development of a case, if the documentation of evidence is inadequate, the pursuit of an enforcement action, whether it is judicial or administrative, will be impossible.
- Whether or not evidence is adequate is based not just on whether or not the evidence exists, but on the validity and quality of the evidence, and the level and detail of documentation.
- We will talk more later about gathering and substantiating evidence that is adequate to prove the substance of a violation by proving each element of the violation.
- As was evident from our earlier discussion, depending on the particular approach of a Region or state, attorneys' involvement in the enforcement process can begin at various points. They may introduce litigation concerns into the deliberations over whether or not to pursue an enforcement action.

INFORMATION-GATHERING AUTHORITIES

- **Information Requests**
- **Administrative Warrants**
- **Subpoenas**

Case Development and Support
Overhead 3 of 32

OVERHEAD #3

TITLE: Information-Gathering Authorities

KEY POINTS:

- As inspectors, you are obviously familiar with inspections as a type of information-gathering authority, but there are three others that I would like to discuss.

- The first is the information request. An information request, whether it is made using the telephone or by letter, is authorized by §3007(a) of RCRA. Section 3007(a) allows you, as an inspector or a case development officer, to contact a hazardous waste handler with regards to existing or required information concerning their hazardous waste.

- Another information-gathering authority is the administrative warrant, which some of you may have used in the past. An administrative warrant can be used to gain entry into a facility when facility officials have denied entry to an inspector or have withdrawn their consent to an inspection that is taking place. In certain circumstances, such as when previous contact or correspondence with the facility to be inspected provides reason to believe that entry will not be allowed, a pre-inspection warrant can be granted. A warrant is really just a judicial authorization for an appropriate official to enter a specifically-described location and perform clearly-defined functions. In your case, it would allow you into a facility to conduct an inspection.

OVERHEAD #3

TITLE: Information-Gathering Authorities (continued)

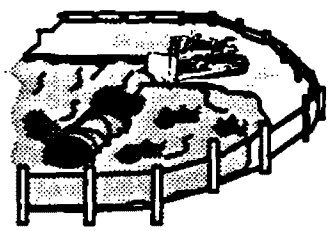
KEY POINTS:

- If you are ever in a situation where you feel a warrant is needed, you first will need to contact the Regional Counsel's office. After discussion, a joint decision will then be made whether or not to seek a warrant. Regional Counsel will then notify Headquarters and will also contact the U.S. Attorney for the district in which the property is located. Once the application for the warrant is prepared and signed by the appropriate magistrate, the warrant can be served. The inspection may then take place strictly in accordance with the warrant. Once the inspection is over, the inspector must sign the return of service form indicating to whom the warrant was served and the date of service. The warrant must then be given to the U.S. Attorney, who will return the warrant to the issuing magistrate.

- The last information-gathering authority we'll talk about today is the subpoena. A subpoena is a legal tool that requires the attendance of witnesses or the production of documentary evidence in court or at a hearing. RCRA subpoenas are only allowed in the context of a hearing held pursuant to a §3008 order, and because of that, are not used in conjunction with actual inspections, though they may be used later in the enforcement process.

GOING BEYOND CHECKLISTS

- **Take Holistic Approach to Facility**
- **Keep Eyes and Ears Open During Visual Inspection**
- **Make Use of All Relevant Resources**



Case Development and Support
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OVERHEAD #4

TITLE: Going Beyond Checklists

KEY POINTS:

- Certainly, inspectors should make use of checklists when preparing for and conducting inspections. They provide a useful mechanism for organizing an inspection, and they ensure that all basic information will be obtained. However, checklists can be limiting, as we have already discussed earlier in the Institute. Reliance on them can lead to a near-sightedness that makes visual inspections less effective than they could be -- the inspector is more worried about checking boxes than in really seeing what is happening at the facility.

- By all means, use checklists when inspecting facilities. But also attempt to do the following:

  — Take a holistic view of a facility. Make sure that you understand, to the extent possible, the different processes and operations relating to waste generation, transportation, and storage, and management's approach to compliance.

  — While referring to a checklist to make sure that you obtain information that you know is important, be sure to pay attention to the goings-on at the facility. Be alert to any visual or verbal triggers that may, for example, lead you to identify violations or areas in which pollution prevention techniques could be beneficial.

OVERHEAD #4

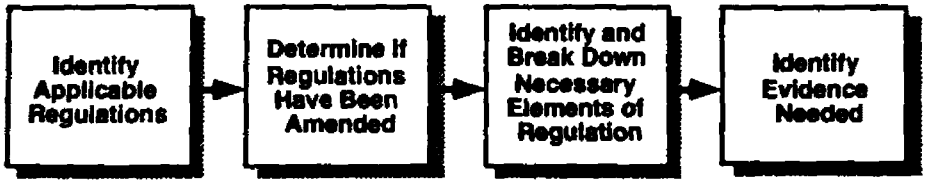
TITLE: Going Beyond Checklists (continued)

KEY POINTS:

— Ensure that, prior to making a site visit, you have reviewed all relevant materials that your office or other offices may have accumulated about a company or one of its facilities. Also, familiarize yourself with the industrial processes you are likely to find at a facility—you can do this by, among other things, referring to guidance available, such as in *The Commercial Painting Industry* (referred to earlier during the Waste Minimization presentation).

— The importance of "going beyond checklists" cannot be overemphasized.

REGULATORY ANALYSIS



Case Development and Support
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OVERHEAD #5

TITLE: Regulatory Analysis

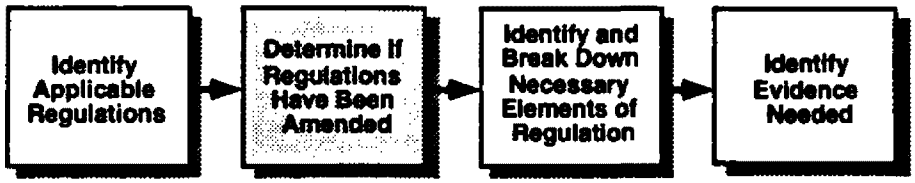
KEY POINTS:

- Though the material we are about to cover may seem a bit basic, the reason it has been included in the Institute is that certain attorneys and other enforcement personnel have noted that a number of enforcement cases in the past were lost due, at least in part, to the lack of available evidence, or weak evidence, documenting the relevant elements of a violation. If you do not properly break down a regulation, ultimately, there may not be a case.

- The purpose of reviewing applicable regulations is to refresh the inspector's knowledge of standards that apply to a facility and what constitutes a violation of those standards.

- Inspectors can determine which regulations apply to a facility in two ways: 1) by focusing on the purpose of the inspection (i.e., is this inspection required by a compliance order issued to that specific facility?); and 2) by referencing the agency's facility file to see what regulations have previously been focused on with regard to that particular facility.

REGULATORY ANALYSIS



Case Development and Support
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OVERHEAD #6

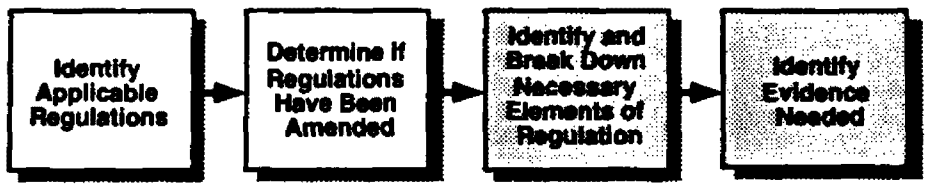
TITLE: Regulatory Analysis

KEY POINTS:

- As inspectors, you need to be aware of regulatory changes that have occurred following previous inspections and how those amendments may impact on the compliance status of a facility. Facility activities that may have complied with standards previously in effect may not comply with current standards.

- You may want to check with sources outside your office to determine if the regulation in question has been amended. Sources that are recommended are the RCRA/Superfund/UST Hotline, your Regional RCRA contact, or the RCRA Inspection Manual, which is currently under revision.

REGULATORY ANALYSIS



Case Development and Support
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OVERHEAD #7

TITLE: Regulatory Analysis

KEY POINTS:

- The purpose of breaking a regulation down into discrete sections or elements is not only to make the inspection process easier to manage overall, but also to allow for easier identification of the specific types of evidence that are needed to prove each element of a violation.
- Similarly, in utilizing the RCPP, you need to break down the policy and make sure you address each aspect of it with respect to a given facility.
- Of course, in breaking down a regulation, you may discover that a facility is in violation of only a portion of a regulation; enforcement actions can be taken for such partial violations.
- In light of everything we discussed, we are now going to look at two examples of Federal regulatory language in the Participant's Manual, and discuss what will constitute a violation and what types of evidence will prove a violation.

HISTORY OF THE RCRA CIVIL PENALTY POLICY

- **RCRA Civil Penalty Policy (RCPP) Developed in 1984, but Implemented Inconsistently.**
- **1989 Inspector General Report and RCRA Implementation Study Documented Inadequacies in RCPP Implementation.**
- **RCPP Revised in 1990**

Case Development and Support
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OVERHEAD #8

TITLE: History of the RCRA Civil Penalty Policy

KEY POINTS:

- The original RCPP was developed to provide guidelines by which penalties should be assessed. However, in the RCRA Implementation Study (RIS), EPA determined that the RCPP was implemented inconsistently, resulting in wide variations in the penalties assessed. The RIS recommended, among other things, that penalties be made higher.
- In 1989, the Inspector General issued a report finding, among other things, the following inadequacies in the existing policy:
  - Insufficient gravity-based penalties
  - No penalties for multi-day violations
  - Failure to consider/recover economic benefits of noncompliance
  - Failure to apply case-specific factors
  - Improper (or non-existent) documentation of penalty calculations.

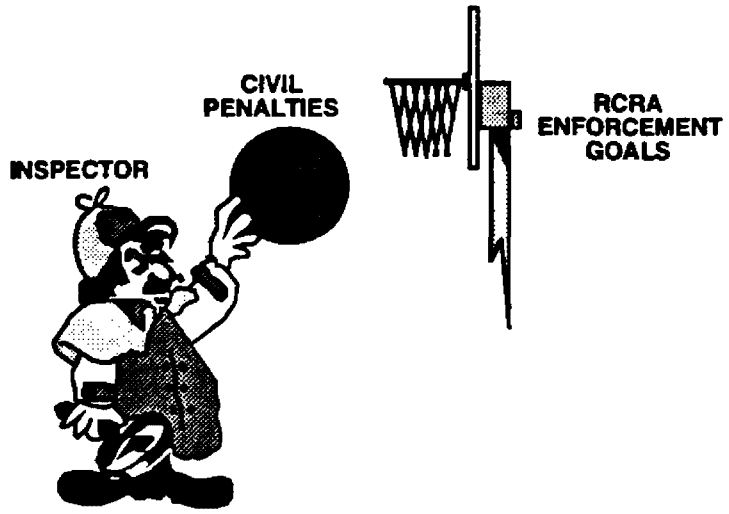
OVERHEAD #8

TITLE: History of the RCRA Civil Penalty Policy (continued)

KEY POINTS:

- The revised RCPP was intended to strengthen the elements of the 1984 RCPP by:
  - Providing a new system to calculate multi-day penalties
  - Requiring use of the BEN computer model to calculate economic benefit
  - Adding an "adjustment factor" for environmentally beneficial projects and litigation risk
  - Re-emphasizing mandatory penalty documentation
  - Improving the consistency of RCPP application.

IMPORTANCE OF RCPP TO RCRA ENFORCEMENT



OVERHEAD #9

TITLE: Importance of RCPP to RCRA Enforcement

KEY PC INTS: (RCPP pp. 5–6)

- Civil penalties provide EPA with one of the means to achieve overall RCRA enforcement.
- Civil penalties contribute to achieving RCRA enforcement by:
  - — Deterring violations
  - — Recovering violator's economic benefit from noncompliance
  - — Expeditiously resolving environmental problems.

STATE USE OF THE RCRA CIVIL PENALTY POLICY

- **RCRA Implementation Study**
- **State Authorization**

Case Development and Support
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OVERHEAD #10

TITLE: State Use of the RCRA Civil Penalty Policy

KEY POINTS:

- The RCRA Implementation Study of 1991 recommends that states adopt the RCPP, or a penalty policy comparable to the RCPP, in order to develop a strong enforcement program.
- Although EPA will not withdraw authorization from, or refuse to authorize, a state program solely because it does not have a penalty policy equivalent to the RCPP, effective deterrence is one characteristic of an adequate state enforcement program that is necessary to obtain and maintain EPA authorization.
- We hope that all of you here from the states will have had some exposure to the RCPP or a comparable policy.

THE INSPECTOR'S ROLE IN PENALTY CALCULATION

- **Perform Initial Site Visit**
- **Identify Violations**
- **Document Violation Information**
- **Completely and Accurately Fill Out Worksheets Used to Calculate the Penalty**

Case De velopment and Support
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OVERHEAD #11

TITLE: An Inspector's Role in Penalty Calculation

KEY POINTS:

- The inspector is the initial contact between EPA and the violator. Usually, he or she will also be the first identifier of potential or actual violations. The critical nature of the inspector's role cannot be overemphasized.

- The penalty is calculated based largely upon the inspector's observations (depending on the nature of the violation). Accuracy and completeness in all the inspector's paperwork is essential for a fair and legally supportable penalty calculation.

PENALTY CALCULATIONS

There Are Three Penalty Calculations:

- **Initial Calculation Based on Complaint**
- **Recalculation Based on New Information**
- **Final Calculation Reflecting Penalty Agreed to at the Settlement.**

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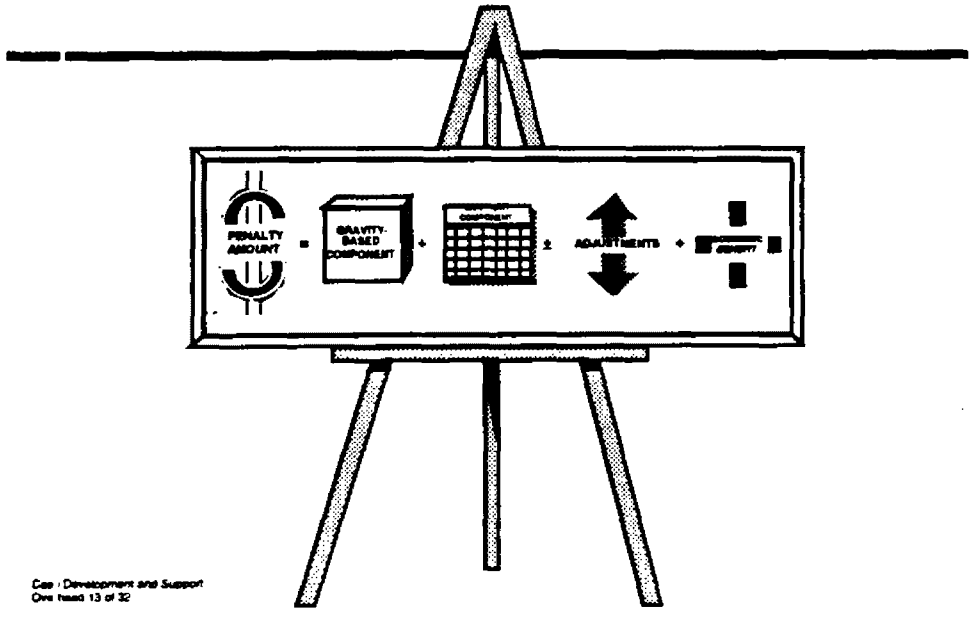
OVERHEAD #12

TITLE: Penalty Calculations

KEY POINTS:

- The inspector has an impact on all three calculations through the inspection report. In addition, in some Regions, the inspector does the initial calculation.
- The initial calculation is made up of the Gravity-Based, Multi-Day, Economic Benefit, and Good Faith or History of Non-Compliance Factors. The other adjustment factors (Willfulness/Negligence, Ability to Pay, Environmental Projects, Litigation Risk) are usually used at the time of settlement, because the information is not available at the time of initial calculation.

COMPONENTS OF THE CIVIL PENALTY



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OVERHEAD #13

TITLE: Components of the Civil Penalty

KEY POINTS: (RCPP p. 1)

- The Penalty Calculation System established through EPA's RCRA Civil Penalty Policy consists of:
  - — Determining a gravity-based penalty for a particular violation, using a penalty assessment matrix
  - — Adding a multi-day component to the penalty as appropriate, to account for a violation's duration
  - — Adjusting the sum of the gravity-based and multi-day components, up or down, for case-specific circumstances, and
  - — Adding to this amount the economic benefit determined to have been gained through non-compliance.
- Expressed as an equation, the calculation looks like (what you see on the overhead). Every penalty calculation should address these components.
- In reality, Regions usually calculate the economic benefit of noncompliance prior to making adjustments. This process will be described later in the session.
- Keep in mind that you must make sure to address each aspect of the RCPP with respect to any given facility.

CALCULATING THE GRAVITY-BASED COMPONENT

- **Gravity-Based Component Considers:**
  - **Potential for Harm**
  - **Extent of Deviation from Requirement.**

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OVERHEAD #14

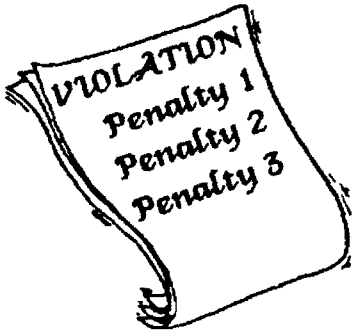
TITLE: Calculating the Gravity-Based Component

KEY POINTS: (RCPP pp. 12-19)

- The first step is to calculate the gravity-based component, which is based on assessment of the potential for harm and a measure of the extent of deviation from the RCRA requirements.
- The gravity-based penalty amount is for Day 1 of a violation. There are separate procedures, which will be discussed later, for dealing with violations that extend beyond one day.

DETERMINING PENALTIES FOR MULTIPLE VIOLATIONS

- **Separate Penalties Should Be Sought for Each Violation of a RCRA Requirement That Results from an Independent Action or Failure to Act.**



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OVERHEAD #15

TITLE: Determining Penalties for Multiple Violations

KEY POINTS: (RCPP pp. 19–21)

- Penalties for multiple violations are distinct from multi-day penalties, which have to do with the longevity of violations.
- The RCPP is clear that penalties should be sought for each violation of a RCRA requirement that results from an independent action or failure to act, including violations that occur:
  - — On different occasions (e.g., improperly manifested waste for two different shipments)
  - — In different locations (e.g., violations in two separate container storage areas for the same facility)
  - — Of different sections of RCRA (e.g., improperly manifested and improperly stored waste)
  - — Of the same section of RCRA (e.g., multiple manifest violations).

  Each multiple penalty is calculated separately and the amounts totalled.

OVERHEAD #15

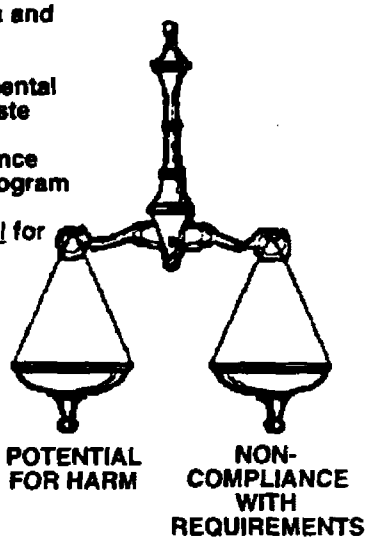
TITLE: Determining Penalties for Multiple Violations (continued)

KEY POINTS: (RCPP pp. 19–21)

- A given charge is substantially distinguishable from another when it requires a separate element of proof. For example, failure to record weekly inspections in October would lead to a separate charge for each week not recorded, because each entry (or blank) is a separate element of proof.

DETERMINING POTENTIAL FOR HARM

- Potential Harm to Human Health and Environment Is Based on:
  - — Risk of Human or Environmental Exposure to Hazardous Waste
  - — Adverse Effect Noncompliance May Have on Regulatory Program
- Emphasis Is Placed on Potential for Harm, Not Actual Harm.



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OVERHEAD #16

TITLE: Determining Potential for Harm

KEY POINTS: (RCPP pp. 13–14)

- Potential for harm has two components: risk of exposure to hazardous waste, and adverse effect on the RCRA regulatory scheme.
- Potential for harm is weighted heavier than the extent of deviation by a violator from RCRA requirements.
- The policy takes into account that some violations, while not likely to give rise directly or immediately to significant risks of contamination, nonetheless strike at the continued integrity of the RCRA program. Examples of these violations include:
  - — Failure to notify as a generator or transporter of hazardous waste, and/or owner/operator of a hazardous waste facility pursuant to RCRA Section 3010
  - — Failure to comply with financial assurance requirements
  - — 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.

OVERHEAD #16

TITLE: Determining Potential for Harm (continued)

KEY POINTS: (RCPP pp. 13–14)

- Factors to consider in determining potential for harm include: evidence of releases, evidence of waste mismanagement, adequacy of provisions for detecting and preventing harm, quantity and toxicity of wastes, likelihood of environmental transport, and existence, size, and proximity of receptor population.

- Potential for harm is considered major, moderate, or minor.

  — Major potential is when the violation poses a substantial risk of exposure of humans or other environmental receptors to hazardous waste or constituents; or when the actions have or may have a substantial effect on statutory or regulatory purposes or procedures for implementing the RCRA program;

  — Moderate potential poses a significant risk; and

  — Minor potential poses a relatively low risk.

- Potential for harm is determined by the person assessing the penalty. This could be the inspector or it could be a member of the Case Development Team, using the information the inspector provided in the inspection report.

CATEGORIZING EXTENT OF DEVIATION

MAJOR	Substantial Noncompliance
MODERATE	Significant Noncompliance
MINOR	Minimal Noncompliance

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OVERHEAD #17

TITLE: Categorizing Extent of Deviation

KEY POINTS: (RCPP p. 19)

- Enforcement personnel should categorize the extent of a deviation as minor, moderate, or major. These categories will have significance in using the penalty assessment matrix. To assist in identifying into which category non-compliance falls, use the following guidelines:

  — Major noncompliance would occur when most applicable requirements are NOT met (e.g., failure to have a closure plan).

  — Moderate noncompliance would occur when some RCRA requirements, but not all, are not met (e.g., failure to modify a closure plan, which was developed, for increased decontamination activities after a spill).

  — Minor noncompliance would mean that most requirements have been followed (e.g., closure plan was developed but omits one step involving decontaminating machines).

GRAVITY-BASED PENALTY ASSESSMENT MATRIX

Extent of Deviation

Potential for Harm	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

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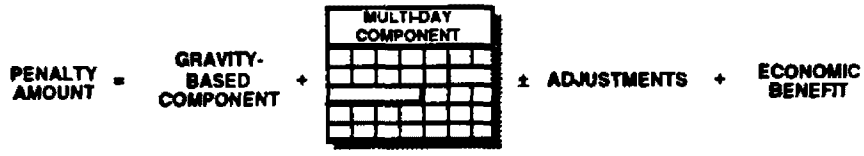
OVERHEAD #18

TITLE: Gravity-Based Penalty Assessment Matrix

KEY POINTS: (RCPP pp. 18–19)

- The penalty assessment matrix makes calculating the gravity-based component fairly straightforward after the previously-discussed assessments have been made.
- The exact penalty is determined by enforcement personnel based on the gravity of the violation.
- The inspector assists in this process by gathering data and communicating the observed violations on the worksheets submitted after the inspection.
- The selection of the exact penalty amount from the range within each cell is left to the discretion of the Case Development Team, which is composed of different people from state to state and Region to Region, usually attorneys and technical program staff.

CALCULATING MULTI-DAY PENALTIES



Multi-Day Component Reflects Duration of a Violation.

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OVERHEAD #19

TITLE: Calculating Multi-Day Penalties

KEY POINTS: (RCPP pp. 19–25)

- The second step in the process is to calculate the multi-day component for continuing violations. This is based on the duration of the violation, rather than the number of violations.

DETERMINING PENALTIES FOR MULTI-DAY VIOLATIONS

MULTI-DAY MATRIX
Extent of Deviation

Potential for Harm	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	$800 to 100	$300 to 100	$100

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OVERHEAD #20

TITLE: Determining Penalties for Multi-Day Violations

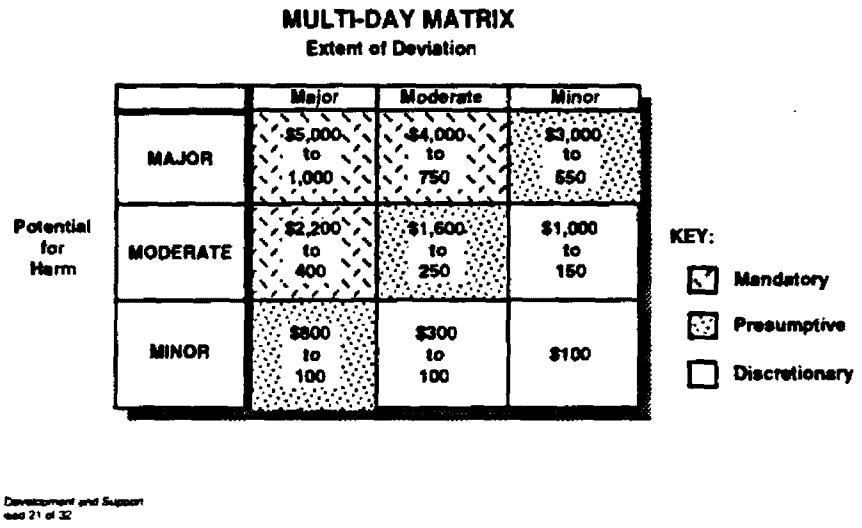
KEY POINTS: (RCPP pp. 22–25)

- RCRA authorizes daily assessment of penalties on a continuing violation. The equation is expressed as:

  Penalty Amount x Duration of Violation = Multi-Day Component

- Assessment of multi-day penalties begins on Day 2 of a continuing violation.
- The multi-day matrix makes calculating penalties for multi-day violations fairly straightforward.
- Matrix cell is from 5% of low end to 20% of high end of corresponding gravity-based cell, with minimum penalty of $100.
- You need factual evidence to support multi-day penalties, but reasonable assumptions are permitted. For example, you may, in some cases, assume the violation began on the effective date of the violated requirement. For example, for a facility not in compliance with BIF requirements, the inspector may assume that the violation began on the date the BIF rule went into effect.

DETERMINING WHETHER MULTI-DAY PENALTIES ARE MANDATORY, PRESUMPTIVE, OR DISCRETIONARY



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OVERHEAD #21

TITLE: Determining Whether Multi-Day Penalties Are Mandatory, Presumptive, or Discretionary

KEY POINTS: (RCPP pp. 23–25)

- New to the revised RCPP is the methodology for determining whether multi-day penalties are mandatory, presumptive, or discretionary. To do this, determine gravity-based designation. Then multiply penalty amount by the number of days the violation continues (beginning on Day 2). Multi-day penalties for day 181+ are always discretionary. Multi-day penalties for up to $25,000/day per violation may be proposed in appropriate cases.

- The mandatory designation in "highly unusual cases" may be waived with prior Headquarters consultation and documentation in the file. For example, a violation of a medical waste tracking act that, although it was in effect at the time of the violation, is no longer in effect at the time of the penalty calculation, would be considered an unusual case.

- The "presumption" in the 2nd tier of cases may be overcome with documentation in the case file.

- In "discretionary" cases, document the decision in the case file. Documentation might include an explanation that a penalty without a multi-day component is sufficient to deter the violator and other potential violators.

OVERHEAD #21

TITLE: Determining Whether Multi-Day Penalties Are Mandatory, Presumptive, or Discretionary (continued)

KEY POINTS: (RCPP pp. 23–25)

- To make a determination, look at the RCPP goals, the seriousness of violation in regard to other violations in the same cell, promptness of remediation, cooperation of facility, size/sophistication of violator, and length of violation.

MULTIPLE/MULTI-DAY VIOLATIONS—SPECIAL CASES

- **Multiple Violations Resulting from a Single Violation**
- **Treatment of Certain Multiple Violations as Multi-Day Violations**

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OVERHEAD #22

TITLE: Multiple/Multi-Day Violations—Special Cases

KEY POINTS: [RCPP pp. 22–23, 89 (Footnote)]

- The RCPP provides some discretion for enforcement personnel to forego separate penalties in special cases to produce more equitable penalty calculations. A special case could include a situation where multiple violations resulting from a single transgression produce distinguishable violations and result in a penalty amount which is disproportionately high. For example, failure to make a hazardous waste determination will violate storage, manifest, and inspection requirements. However, one penalty could be assessed, not four.

- Multiple violations that are similar and resemble multi-day violations may be treated as multi-day violations. For example, failure to sign the manifest for five waste shipments could be assigned one penalty at the gravity-based rate, and four penalties at the lower multi-day rate. (For more information on these types of violations, see RCPP p. 89, footnote 13.)

CALCULATING ECONOMIC BENEFIT OF NONCOMPLIANCE

- **Delayed Costs and Avoided Costs**
- **Cumulative.**

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OVERHEAD #23

TITLE: Calculating Economic Benefit of Noncompliance

KEY POINTS: (RCPP pp. 25–30)

- Although shown as the final step on the chart, Regions generally calculate the economic benefit prior to making any adjustments.
- Economic benefit consists of delayed costs and avoided costs of compliance.
- Recovering any significant economic benefit that a violator enjoys from noncompliance is mandatory under the RCPP unless:
  - — The economic benefit is an insignificant amount (<$2,500)
  - — There are compelling public concerns mitigating against taking a case to trial, should that become necessary
  - — It is unlikely that EPA will be able to recover the economic benefit in litigation (litigation risk)
  - — The company has documented an inability to pay the penalty.
- Economic benefit is cumulative, meaning that if there are several violations that are individually less than $2,500, but cumulatively equal $2,500 or more, economic benefit must be assessed for all the violations.

OVERHEAD #23

TITLE: Calculating Economic Benefit of Noncompliance (continued)

KEY POINTS: (RCPP pp. 25–30)

- Types of activities generally producing economic benefit significant enough to recover benefits include: groundwater monitoring, financial assurance requirements, closure/post-closure, surface impoundment retrofitting, improper land disposal of restricted wastes, clean up of discharges, Part B submittals, minimum technology requirements.

- Use the BEN computer model to calculate economic benefits from noncompliance. Decisions regarding economic benefit should be documented in the case file.

- The information used in the BEN model is provided by inspectors on their submitted worksheets.

CALCULATING THE ADJUSTMENT FACTORS

Adjustments Reflect the Individual Circumstances of the Violator

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OVERHEAD #24

TITLE: Calculating the Adjustment Factors

KEY POINTS: (RCPP pp. 30–40)

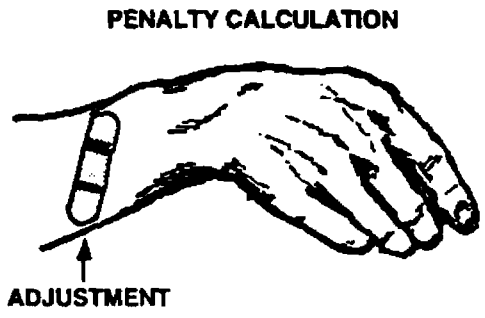
- The final step for Regions is to calculate any adjustments to the penalty appropriate to circumstances of the violation or violator. The RCPP recognizes six adjustment factors. These include:

  — Good Faith/Lack of Good Faith
  — Willfulness/Negligence
  — History of Noncompliance
  — Ability to Pay
  — Environmental Projects
  — Other Unique Factors (Litigation Risks).

- Prior to applying the adjustment factors, enforcement personnel should recalculate the penalty amount where new information has become available since the original calculation was done. The new information may affect the gravity-based and/or economic benefit components.

- Good-faith and History of Non-Compliance are the only two factors taken into account at the time of the initial penalty calculation. The other adjustment factors are taken into account at the settlement stage and are reflected in the final penalty.

APPLYING THE ADJUSTMENT FACTORS



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OVERHEAD #25

TITLE: Applying the Adjustment Factors

KEY POINTS: (RCPP pp. 32–33)

- Enforcement personnel should apply appropriate adjustment factors to the total of gravity-based and multi-day penalty amounts; adjustment factors do not apply to economic benefit from noncompliance.
- Adjustment factors may increase, decrease, or have no effect on the penalty amount. They may be applied to the sum of the gravity-based and multi-day components of penalty or they may be applied cumulatively.
- Each adjustment factor is limited to 25% of the total being adjusted in ordinary circumstances, 26%–40% in unusual circumstances. For example, a plant that had fully intended to comply, and had only one violation due to an employee not acting in capacity, might be considered to have unusual circumstances and, therefore, have its penalty adjusted downward.
- Litigation risk and inability to pay may cause the penalty amount to vary up to 100%.

GOOD FAITH EFFORTS TO COMPLY/ LACK OF GOOD FAITH

- Good-Faith Efforts of Violation to Comply May Adjust Penalty Downward
- Lack of Good-Faith May Adjust Penalty Upward
- No Downward Adjustments Should Be Made For:
  - — Merely Coming Into Compliance After Detection
  - — Claim of Lack of Knowledge of the Law.

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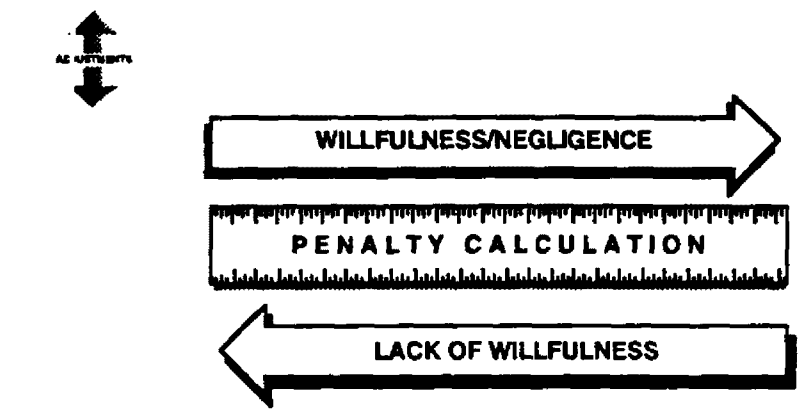
OVERHEAD #26

TITLE: Good Faith Efforts to Comply/Lack of Good Faith

KEY POINTS: (RCPP pp. 33–34)

- Now let's focus on the individual adjustment factors.
- Good-faith efforts should be taken into account at the initial penalty assessment stage. In the complaint penalty, consideration of good faith is required under §3008a.
- Evidence of good faith efforts to comply may adjust the penalty downward. A violator may demonstrate good faith by:
  - — Reporting noncompliance before EPA discovers a violation
  - — Remedying noncompliance prior to EPA detection
  - — Good-faith reliance on written statements by EPA or a State agency.
- Lack of good faith may result in adjustment of the penalty upward (e.g., failing to achieve compliance after detection).
- Lack of knowledge of pertaining laws can not be used as a reason to adjust penalties downwards.

DEGREE OF WILLFULNESS AND/OR NEGLIGENCE



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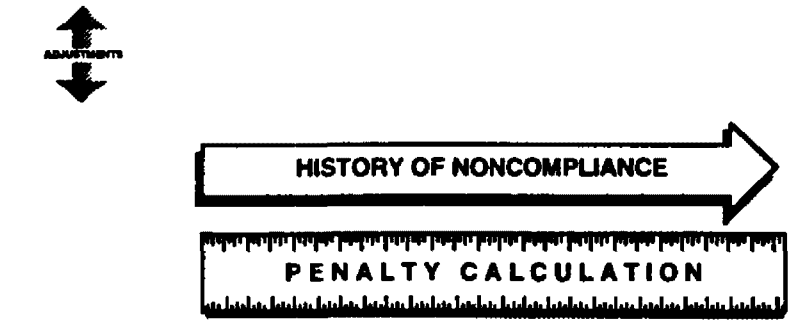
OVERHEAD #27

TITLE: Degree of Willfulness and/or Negligence

KEY POINTS: (RCPP pp. 34–35)

- Evidence of willfulness may adjust a penalty upward. There are several factors to consider as evidence of willfulness:
  - — Violator's control over the events constituting the violation/remedying violator
  - — The foreseeability of the events constituting the violation
  - — Whether the violator knew or should have known of the hazards involved
  - — Whether the violator knew or should have known of the legal requirement violated (upward adjustment only).
- Alternatively, lack of willfulness may adjust the penalty downward. For instance, if a violation occurred due to a minimal amount of carelessness, it would be appropriate to lower the penalty amount.

HISTORY OF NONCOMPLIANCE



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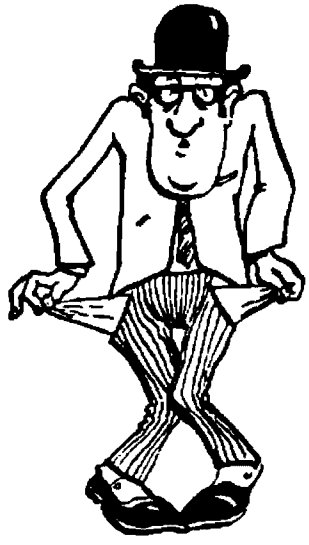
OVERHEAD #28

TITLE: History of Noncompliance

KEY POINTS: (RCPP pp. 35–36)

- Evidence of a history of noncompliance may result in adjustment of a penalty upward. Look for factors such as:
  - — Similarity of a previous violation to the one in question and how recently it occurred
  - — The number of previous violations and pattern of disregard for the environment.
- For violations by corporate divisions, subsidiaries, or new ownership, look for who had control and/or oversight responsibility. Assume that if the same corporation was involved in prior violations, there is a history of noncompliance.
- The history of non-compliance is generally taken into account in the complaint penalty.

ABILITY TO PAY



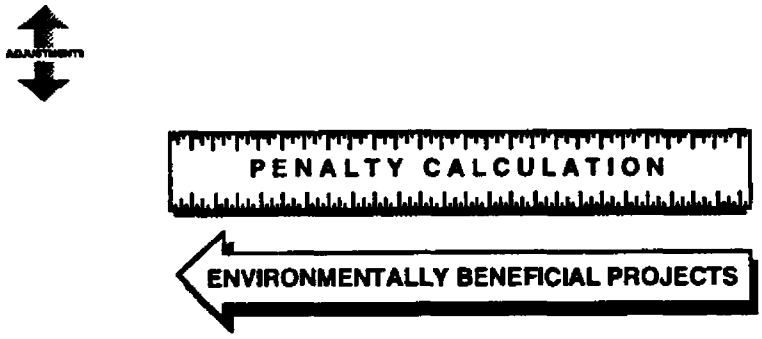
OVERHEAD #29

TITLE: Ability to Pay

KEY POINTS:

- The violator's ability to pay is taken into account at the settlement stage.
- Evidence of inability to pay may adjust a penalty downward, but the burden is on the violator to prove that inability (e.g., by providing copies of tax returns).
- Enforcement personnel must have adequate documentation of inability to pay before adjusting the penalty downward.
- Payment alternatives should be considered in the following order:
  - Installment payment plan with interest
  - Delayed payment schedule with interest
  - Penalty reduction as a last recourse.
- The ABEL computer model is used to analyze inability to pay claims. Each Region should have a BEN/ABEL expert who has the model if inspectors need access to do their own adjusting.

ENVIRONMENTAL PROJECTS



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OVERHEAD #30

TITLE: Environmental Projects

KEY POINTS: (RCPP pp. 37–39)

- Environmentally-beneficial projects are taken into account at the settlement stage.
- Environmentally beneficial projects engaged in by a violator may lead to adjustment of the penalty downward:
- Projects must:
  - — Go beyond mere compliance
  - — Be related to the cause of the violation or the resulting environmental harm.
  - — Conform to EPA criteria that are laid out in the 2/12/91 Policy on the Use of Supplemental Environmental Projects in Enforcement Settlements. There are five categories of projects that will be considered as potential Supplemental Environmental Projects:
    - •• Pollution prevention projects
    - •• Pollution reduction projects
    - •• Projects remediating adverse public health or environmental consequences
    - •• Environmental auditing projects; and
    - •• Enforcement-related environmental public awareness projects.

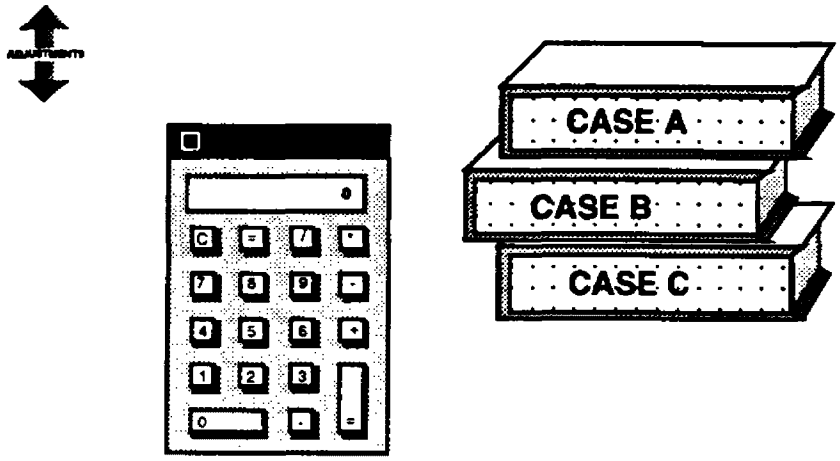
OVERHEAD #30

TITLE: Environmental Projects (continued)

KEY POINTS: (RCPP pp. 37–39)

- For specific examples, you should review the superseding cross-media guidance on environmental projects which supersedes the section in the RCPP on SEPs.
- Economic benefit and substantial gravity-based penalties should still be collected.

OTHER UNIQUE FACTORS



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OVERHEAD #31

TITLE: Other Unique Factors

KEY POINTS: (RCPP pp. 39–40)

- Other factors are taken into account at the settlement stage.
- Adjustment must be made on a case-by-case basis to reflect individual circumstances.
- This determination is usually made by an attorney; however, the inspection report has a great impact on the strength of the case. If the inspector, for example, does not sufficiently record evidence of a continung violation, no multi-day penalty can be assessed without being subject to litigation risk.
- Litigation risks represent the final adjustment factor for a penalty. Consider:
  - Government resources needed to litigate
  - Strengths of government's legal arguments
  - Strengths of violator's defense(s)
  - Strength of the evidence
  - Precedential value of case.

OVERHEAD #31

TITLE: Other Unique Factors (continued)

KEY POINTS: (RCPP pp. 39–40)

- Enforcement personnel must document the legal analysis underlying the litigation risk adjustment.
- Penalty usually should still recoup economic benefit and act as an economic disincentive to violate, regardless of individual circumstances.

SUMMARY

- **Information Gathered by Inspectors Is Used to Determine:**
  - **— Gravity-Based Component**
  - **— Multi-Day Component**
  - **— Economic Benefit**
  - **— Any Adjustment Factors.**
- **Penalties Are Assessed Using Information Provided by Inspectors.**

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OVERHEAD #32

TITLE: Summary

KEY POINTS:

- Although penalties may be assessed by the Case Development Team, the inspector plays a critical role in making the RCPP effective. The information gathered and reported by inspectors is crucial to the proper application of the RCPP and strength of the penalty calculation.
- The actual penalties are calculated by the Case Development Team, using the information provided by the inspectors, or the inspector alone may calculate the initial complaint penalty.
- The RCPP requires that penalty data be based on documentation, so the inspection reports the inspectors file are of vital importance.

monitors, locked entrance, or controlled roadway access to the facility).

[*Comment:* The requirements of paragraph (b) of this section are satisfied if the facility or plant within which the active portion is located itself has a surveillance system, or a barrier and a means to control entry, which complies with the requirements of paragraph (b)(1) or (2) of this section.]

(c) Unless the owner or operator has made a successful demonstration under paragraphs (a)(1) and (2) of this section, a sign with the legend, "Danger—Unauthorized Personnel Keep Out", must be posted at each entrance to the active portion of a facility, and at other locations, in sufficient numbers to be seen from any approach to this active portion. The legend must be written in English and in any other language predominant in the area surrounding the facility (e.g., facilities in counties bordering the Canadian province of Quebec must post signs in French; facilities in counties bordering Mexico must post signs in Spanish), and must be legible from a distance of at least 25 feet. Existing signs with a legend other than "Danger—Unauthorized Personnel Keep Out" may be used if the legend on the sign indicates that only authorized personnel are allowed to enter the active portion, and that entry onto the active portion can be dangerous.

[*Comment:* See § 264.117(b) for discussion of security requirements at disposal facilities during the post-closure care period.]

(Approved by the Office of Management and Budget under control number 2050-0012)

[48 FR 33221, May 19, 1980, as amended at 46 FR 2848, Jan. 12, 1981; 48 FR 14294, Apr. 1, 1983; 50 FR 4514, Jan. 31, 1985]

§ 264.15 General inspection requirements.

(a) The owner or operator must inspect his facility for malfunctions and deterioration, operator errors, and discharges which may be causing—or may lead to—(1) release of hazardous waste constituents to the environment or (2) a threat to human health. The owner or operator must conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment.

(b)(1) The owner or operator must develop and follow a written schedule for inspecting monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment (such as dikes and sump pumps) that are important to preventing, detecting, or responding to environmental or human health hazards.

(2) He must keep this schedule at the facility.

(3) The schedule must identify the types of problems (e.g., malfunctions or deterioration) which are to be looked for during the inspection (e.g., inoperative sump pump, leaking fitting, eroding dike, etc.).

(4) The frequency of inspection may vary for the items on the schedule. However, it should be based on the rate of deterioration of the equipment and the probability of an environmental or human health incident if the deterioration, malfunction, or any operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use. At a minimum, the inspection schedule must include the items and frequencies called for in §§ 264.174, 264.193, 264.195, 264.226, 264.254, 264.278, 264.303, 264.347, 264.602, 264.1033, 264.1052, 264.1053, and 264.1058, where applicable.

[*Comment:* Part 270 of this chapter requires the inspection schedule to be submitted with part B of the permit application. EPA will evaluate the schedule along with the rest of the application to ensure that it adequately protects human health and the environment. As part of this review, EPA may modify or amend the schedule as may be necessary.]

(c) The owner or operator must remedy any deterioration or malfunction of equipment or structures which the inspection reveals on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action must be taken immediately.

(d) The owner or operator must record inspections in an inspection log or summary. He must keep these records for at least three years from

the date of inspection. At a minimum, these records must include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.

(Approved by the Office of Management and Budget under control number 2050-0012)

[45 FR 33221, May 19, 1980, as amended at 48 FR 14294, Apr. 1, 1983; 50 FR 4514, Jan. 31, 1985; 57 FR 3486, Jan. 29, 1992]

EFFECTIVE DATE NOTE: At 57 FR 3486, Jan. 29, 1992, § 264.15 was amended by revising paragraph (b)(4), effective July 29, 1992. For the convenience of the reader, the superseded text is set forth below:

§ 264.15 General inspection requirements.

* * * * *

(b) * * *

(4) The frequency of inspection may vary for the items on the schedule. However, it should be based on the rate of possible deterioration of the equipment and the probability of an environmental or human health incident if the deterioration or malfunction of any operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use. At a minimum, the inspection schedule must include the terms and frequencies called for in §§ 264.174, 264.194, 264.226, 264.253, 264.254, 264.303, 264.347, 264.602, 264.1033, 264.1052, 264.1053, and 264.1058, where applicable.

* * * * *

§ 264.16 Personnel training.

(a)(1) Facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of this part. The owner or operator must ensure that this program includes all the elements described in the document required under paragraph (d)(3) of this section.

[*Comment:* Part 270 of this chapter requires that owners and operators submit with part B of the RCRA permit application, an outline of the training program used (or to be used) at the facility and a brief description of how the training program is designed to meet actual job tasks.]

(2) This program must be directed by a person trained in hazardous waste management procedures, and must include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.

(3) At a minimum, the training program must be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including, where applicable:

(i) Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment;

(ii) Key parameters for automatic waste feed cut-off systems;

(iii) Communications or alarm systems;

(iv) Response to fires or explosions;

(v) Response to ground-water contamination incidents; and

(vi) Shutdown of operations.

(b) Facility personnel must successfully complete the program required in paragraph (a) of this section within six months after the effective date of these regulations or six months after the date of their employment or assignment to a facility, or to a new position at a facility, whichever is later. Employees hired after the effective date of these regulations must not work in unsupervised positions until they have completed the training requirements of paragraph (a) of this section.

(c) Facility personnel must take part in an annual review of the initial training required in paragraph (a) of this section.

(d) The owner or operator must maintain the following documents and records at the facility:

(1) The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job;

(2) A written job description for each position listed under paragraph (d)(1) of this section. This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company lo-

which could result from fires, explosions, or releases at the facility.

(b) Where State or local authorities decline to enter into such arrangements, the owner or operator must document the refusal in the operating record.

Subpart D—Contingency Plan and Emergency Procedures

§ 265.50 Applicability.

The regulations in this subpart apply to owners and operators of all hazardous waste facilities, except as § 265.1 provides otherwise.

§ 265.51 Purpose and implementation of contingency plan.

(a) Each owner or operator must have a contingency plan for his facility. The contingency plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water.

(b) The provisions of the plan must be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

(Approved by the Office of Management and Budget under control number 2050-0002)

[45 FR 33232, May 19, 1980, as amended at 50 FR 4514, Jan. 31, 1985]

§ 265.52 Content of contingency plan.

(a) The contingency plan must describe the actions facility personnel must take to comply with §§ 265.51 and 265.56 in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility.

(b) If the owner or operator has already prepared a Spill Prevention, Control, and Countermeasures (SPCC) Plan in accordance with part 112 of this chapter, or part 1510 of chapter V, or some other emergency or contingency plan, he need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this part.

(c) The plan must describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services, pursuant to § 265.37.

(d) The plan must list names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator (see § 265.55), and this list must be kept up to date. Where more than one person is listed, one must be named as primary emergency coordinator and others must be listed in the order in which they will assume responsibility as alternates.

(e) The plan must include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment), where this equipment is required. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities.

(f) The plan must include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires).

(Approved by the Office of Management and Budget under control number 2050-0002)

[45 FR 33232, May 19, 1980, as amended at 46 FR 27480, May 20, 1981; 50 FR 4514, Jan. 31, 1985]

§ 265.53 Copies of contingency plan.

A copy of the contingency plan and all revisions to the plan must be:

(a) Maintained at the facility; and

(b) Submitted to all local police departments, fire departments, hospitals, and State and local emergency response teams that may be called upon to provide emergency services.

Revised RCRA Civil Penalty Policy Highlights

OBJECTIVE: Provide guidelines to assess penalties and improve overall consistency of RCPP application.

Components of the penalty calculation

Gravity-Based

Includes:

- Assessment of Potential for Harm, which is made up of two things:
  - Risk of exposure
  - Adverse effect on the RCRA regulatory scheme.

  [Emphasis is placed on the potential for harm, not actual harm.]
- Extent of deviation from the RCRA requirements is classified as either:
  - Major
  - Moderate
  - Minor

The Gravity-Based penalty amount is for Day 1 of a violation. Separate penalties should be sought for each violation of RCRA.

Multi-Day

Multi-Day Component = Penalty Amount x Duration of Violation

- Based on the duration of the violation, rather than the number of violations
- Assessment of multi-day penalties begins on Day 2 of a continuing violation.

Economic Benefit

Economic Benefit = Delayed costs + Avoided costs of compliance

- Cumulative
- Recovering significant economic benefit is mandatory in most cases.
- The BEN computer model is used to calculate economic benefits.

Adjustments

- Good-Faith
- History of Noncompliance
- Willfulness *
- Ability to Pay *
- Environmental projects *
- Other Unique Factors (Litigation Risks) *

Gravity-Based, Multi-Day, and Economic Benefit penalties are calculated at the time of the initial penalty calculation, as are the Good-Faith and History of Non-Compliance adjustments. The other four adjustments, indicated by asterisks, are calculated at the settlement stage, because relevant information is usually not available until then.

CALCULATING RCRA PENALTIES, IN A NUTSHELL ...

Pursuant to the 1990 RCRA Civil Penalty Policy (RCPP), the penalty for a violation is calculated in four steps. They are:

1) -a- determine the appropriate gravity-based penalty (GBP) based on the "probability of harm" (actual harm; potential harm; harm to regulatory program) posed by the violation, and its "extent of deviation from regulatory requirements";

   -b- determine penalty point in appropriate matrix cell;

   -c- assess multiple GBPs for separate violations of the same rule (where appropriate);

2) calculate a multiday component to address the violation's duration (if appropriate);

3) adjust the overall gravity-based penalty based on individual factors; and

4) calculate and recapture the "economic benefits of noncompliance" obtained by the violator.

November 25, 1992

SUMMARY SHEET: RCRA ADMINISTRATIVE PENALTIES (1989-1992)

The following OSWER figures on RCRA administrative penalties over the past four fiscal years illustrate the positive impact of the 1990 RCRA Civil Penalty Policy (RCPP) is having on RCRA enforcement.

3008(a) Admin. Complaints	FY '89	FY'90	FY'91	FY'92
Total Proposed Penalties	$13.1 M	$13.8 M	$57.0 M	$67 M
Average Proposed Penalties	**$75 T**	**$101 T**	**$386 T**	**$477T**
Highest Proposed Penalty	$6.3 M	$950 T	$5.5 M	$15.6M
Total Number of Cases	175	137	148	145

3008(a) Consent/Final Orders				
Total Penalties Assessed	$2.5 M	$2.9 M	$7.5 M	$7.7M
Average Penalties Assessed	**$17 T**	**$25 T**	**$35.7 T***	**$77 T**
Highest Penalty Assessed	$138 T	$550 T	$3.4 M	[illegible]
Total Number of Cases	143	110	107	[illegible]

* = excludes largest penalty assessed

October 1, 1992

RCRA ADMINISTRATIVE PENALTY ENFORCEMENT:

ILLUSTRATIVE CHIEF JUDICIAL OFFICER AND ADMIN. LAW JUDGE DECISIONS *

* with selected civil decisions

- prepared by: Jon Silberman, OE-RCRA -

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-- NOTICE: RCRA decisions are "starred." --

Note: This outline summarizes some of the three hundred-plus RCRA administrative decisions accessible through the Enforcement Document Retrieval System (EDRS). The decisions exemplify how the Agency's Presiding Officers apply the factors in the 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 the full 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."

*** 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)."

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: 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.

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."

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.

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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 alone.

Note: 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, a result 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, 199[illegible] 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 wastes 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 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 warn[illegible]

** 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.

Note: In a followup case, United States v. Maiorano, No. C 449[illegible] (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.

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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.

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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.

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MULTIDAY PENALTIES:

Note: Multiday penalties were rarely proposed under the 1984 penalty policy. Consequently, as of the date this outline was prepared, there were no identified RCRA administrative decisions addressing multiday penalty issues under the 1990 RCPP. The following case summaries include three key RCRA civil cases where multiday penalties were 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 CE RCRA Division to discuss the possibility of an appeal.

*** 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.

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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."

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.

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.

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 of "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-09-88-0004 (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] 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 $145,312. 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

*** 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.

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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 spondent 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 assumed to have the ability to pay a penalty where EPA allege t can pay and t 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.

*** 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.

ROBERT K. DORNAN
38TH DISTRICT, CALIFORNIA

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October 16, 1992

Mr. Gregory Lind (RC-3-2)
United States EPA, Region IX
Office of Regional Counsel
75 Hawthorne Street
San Francisco, California 94105

Dear Mr. Lind:

On October 1, 1992, I received an environmental news release from the United States Environmental Protection Agency announcing that it had issued enforcement orders against several California companies for withholding information concerning their hazardous waste generation and handling practices. To my utter disbelief, the complaints proposed penalties totalling $77,900 for the violations.

I immediately contacted Air Industries Corporation, a manufacturer in my district of Garden Grove, CA and learned that the company was negligent in completing a Determination of Violation, Compliance Order form correctly. As I understand it, this form was designed to report the amount of hazardous waste being generated at each of the companies' respective facilities as required under Section 3008 (a)(1) of the RCRA Act. Air Industries, which employs a workforce of 500 and is considered by state officials to be a model manufacturing site in terms of treatment and storage of hazardous waste materials, was fined an astounding $11,400 for a clerical error. The apparent problem was the incorrect marking of a box on the compliance form. What is clear is that Air Industries did not seek to purposely deceive anyone. It was simply an error for which an $11,400 is excessive.

In my opinion, this is completely unacceptable. Today's small businesses are having a hard enough time trying to stay afloat let alone find the means to pay excessive fines levied by bureaucrats in Washington and Sacramento for honest mistakes.

As Air Industries attempts to negotiate a settlement with the U.S. Environmental Protection Agency over this discrepancy, I urge you and your colleagues to appreciate the company's fine record with regards to management of hazardous waste and to take into

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account the impact such a large fine would have on a small business. Thank you in advance.

Best regards.

Bob Dornan

Robert K. Dornan
U.S. Congressman

cc: William Reilly
Administrator, United States EPA

Robert Geoghan
Vice President, Air Industries Corporation

INSPECTION PARADIGMS REVISITED

BE PROACTIVE, NOT REACTIVE!

OVERHEAD #1

TITLE: Inspection Paradigms Revisited

KEY POINTS:

- Over the past few days, you have experienced a variety of circumstances related to conducting facility inspections. Over the next hour, we will:
  - Review the importance of taking a proactive approach when conducting a facility inspection
  - Discuss how the information gained during the Institute has helped expand our inspection paradigms
  - Discuss ways we can apply knowledge gained during the Institute to day-to-day job performance
  - Identify technologies that can be used to enhance performance of inspections.
- We will also be revisiting the exercise you completed during the Exploring Inspection Paradigms module to see how our paradigms may have changed and been influenced by the course.

EXPLORE NEW INSPECTION PARADIGMS

Inspection Paradigms Revisited
Overhead 2 of 5

OVERHEAD #2

TITLE: Explore New Inspection Paradigms

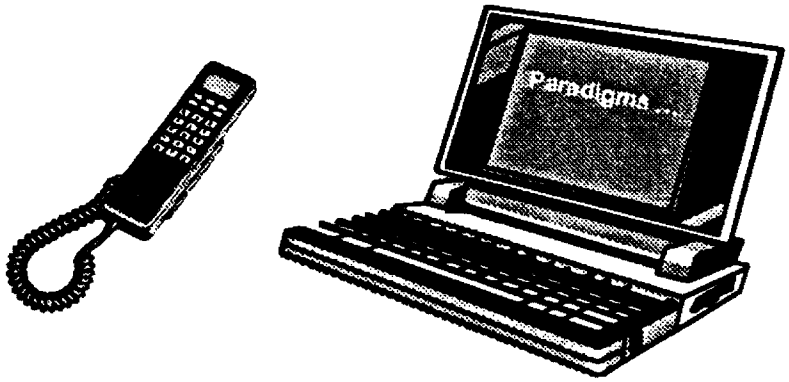
KEY POINTS:

- It is important to look at how we are currently conducting inspections, and engaging in pre-inspection and post-inspection activities in order to better understand why our present paradigms are the way they are, and to explore new paradigms. The exercise we have just conducted has helped us do that today. By exploring new possibilities, we may be able to perform our jobs better and really make a difference to the RCRA program and the environment.

- Constantly ask yourself questions that could help you expand your present paradigms and look to new and different ones. A new approach may not necessarily be better, but we need to be willing to look at it with open eyes in order to decide on its possible effectiveness.

- Your Participant's Manual contains a chart that illustrates five steps in the EPA RCRA inspection process. You may want to use this chart as a guide that you can expand upon or revise as you continue to explore your inspection paradigms.

IDENTIFY USEFUL TECHNOLOGIES



Inspection Paradigms Revisited
Overhead 3 of 5

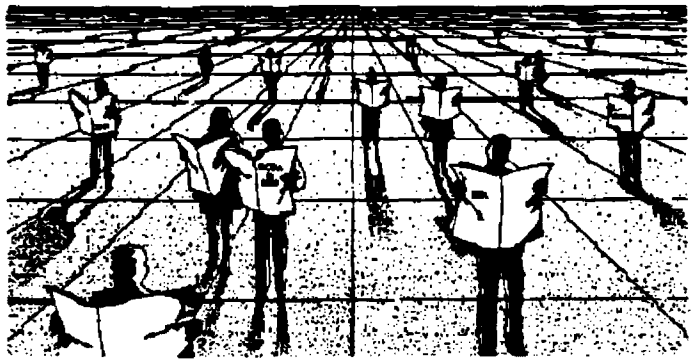
OVERHEAD #3

TITLE: Identify Useful Technologies

KEY POINTS:

- Now that we have discussed what we, as inspectors, can do to understand and explore our individual inspection paradigms, let's ask ourselves what types of technologies could be used to help make our jobs easier. The idea is to generate suggestions that might help guide our paradigms for the RCRA program and the conduction of inspections.

LOOK TO THE FUTURE



Inspection Paradigms Reviewed
Overhead 4 of 5

OVERHEAD #4

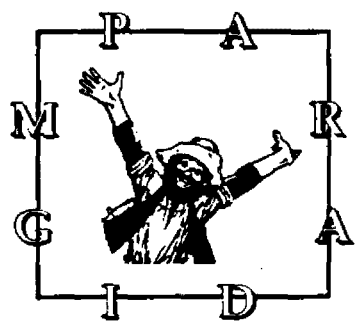
TITLE: Look to the Future

KEY POINTS:

- As we near the close of the Institute, it is time to ask ourselves what we can do with the information that we have learned. We have talked about developing inspection approaches, looking at these approaches to see how we might improve them, and identifying resources and technologies that could help us. Continue to think about where the RCRA program is going, how we might make a difference and, with only a few years until the turn of the century, how we as inspectors should proceed into the future in our efforts to meet the goals of the RCRA program. Much can change by working from the bottom up. Don't expect management to come up with new ideas. The process starts with you!

- By being aware of and preparing for the future, we are less likely to get stuck in the paradigms of the past.

REACH TO THE FRINGES OF YOUR PARADIGMS



Inspection Paradigms Revisited
One Hand 5 of 5

OVERHEAD #5

TITLE: Reach to the Fringes of Your Paradigms

KEY POINTS:

- We encourage you to reach to the fringes of your paradigms, moving into the future with new and innovative ideas for conducting inspections and improving the RCRA program.

INSPECTION PARADIGMS REVISITED

"NEW PERSONAL INSPECTION APPROACH"

NEW PARADIGM PRE-INSPECTION APPROACH:

NEW PARADIGM INSPECTION APPROACH:

NEW PARADIGM POST-INSPECTION APPROACH:

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