UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF LEGAL AND ENFORCEMENT COUNSEL

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NEIC POLICIES AND PROCEDURES

May 1978
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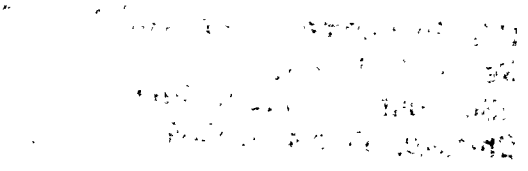
NATIONAL ENFORCEMENT INVESTIGATIONS CENTER
Denver, Colorado



UPDATE

FOR

NEIC POLICIES AND PROCEDURES

The NEIC Policies and Procedures Manual was issued in May 1978 and revised in October 1979, 1980, and 1981. This 1983 revision replaces those pages indicated on the transmittal record.

TRANSMITTAL RECORD

NEIC Policies and Procedures Manual		
No.	Additions and/or changes	Date
1.	Replace entire Manual contents with revised contents	October 1979
2.	Replace pages II-19 and II-20 Insert the transmittal page	October 1980
3.	Replace: Title Page and Contents Page with new pages Pages I-1 and I-11 with new pages I-1 and I-11 Pages II-1 and II-34 with new pages II-1 and II-46	December 1981
4.	Replace: Title, Update, and Transmittal page and pages I-2, I-7, I-10, II-3, II-4, and II-22 with the corresponding new pages	February 1983

OTHER NEIC MANUALS:

Safety Manual

NEIC Pesticide Product Laboratory Procedures Manual

NEIC Pesticide Sampling Manual

NEIC Procedures Manual for the Evidence Audit by Contractor Evidence Audit Teams

NEIC Manual for Groundwater/Subsurface Investigations at Hazardous Waste Sites

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FOREWORD

As part of the Environmental Protection Agency, the National Enforcement Investigations Center provides the Office of Legal and Enforcement Counsel with technical information and evidence in support of EPA legal actions. This function makes the standard operating procedures described in this manual important to every employee.

This manual discusses NEIC project phases, then presents policies and procedures which employees are responsible for knowing and following. These procedures assure that work performed by NEIC will be admissible during any subsequent enforcement action. Substantially equivalent procedures or activities that are not covered in this manual must be coordinated through supervisory personnel and the Enforcement Specialist Office and, when appropriate, will be incorporated in future revisions of this manual. Witness Guidelines are appended to this manual to assist employees called to testify as government witnesses. By adhering to the Center's policies and procedures, employees protect both their professional integrity and that of the NEIC.

I. NEIC PROJECT PHASES

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INTRODUCTION

The projects undertaken by NEIC span a wide variety of activities ranging from one employee performing technical, supportive, or administrative tasks to numerous employees from diverse disciplines working as a team to accomplish a series of complex tasks. Most of the Center's projects consist of these phases:

Project Request
Background Review
Project Plan
Project Activities
Report
Followup

This section of the manual discusses the items in each phase which are common to most projects and outlines NEIC policies pertinent to each phase.

PROJECT REQUEST

All NEIC projects are preceded by requests to the Director for work to be performed. Many requests received by NEIC for technical assistance involve projects which require extensive field work on pollution problems in more than one medium. Others include, for example, a technical and/or legal review of an abatement proposal or analytical support for a Regional enforcement case.

The content of the project request is essential to the success of the project. To assure that NEIC is as responsive as possible, it will consider informal requests from sources within the Agency. However, the official requester must follow up with a specific written request detailing the objectives, relating those objectives to an enforcement action, and identifying the requester's contact. A written, in addition to a verbal, request assures NEIC of administrative accountability and clarity of project definition, as well as allowing management to adequately coordinate and schedule the Center's workload.

Official requests for technical assistance will be received only from the following:

Administrator Deputy Administrator Associate Administrator for Legal and Enforcement Counsel Enforcement Counsel General Counsel Assistant Administrators Inspector General Headquarters Office Directors Headquarters Division Directors Department of Justice, Headquarters	with the knowledge and concurrence of the Enforcement Counsel
Regional Administrators Deputy Regional Administrators Regional Counsel Regional Division Directors U.S. Attorney's Offices State and Local Program Directors	with the knowledge and concurrence of the Regional Counsel

Receipt of an official request will be acknowledged in an NEIC memorandum to the Enforcement Counsel or the appropriate Regional Counsel and copies are sent to individuals identified by the requester. The acceptance will include a tentative schedule for completing the work and is usually sent before any work begins. It designates specific NEIC employees as contacts for technical work and legal coordination and seeks access to all files related to the work. In some cases (for example, requests for technical support or review of an abatement proposal), the acknowledgment memorandum can provide a sufficient outline of work activity.

To accomplish the objectives of a request efficiently and effectively, a Project Coordinator is usually named. The selection of this individual is generally determined by the type of investigation or assistance requested, such as: a multi-media evaluation with or without sampling; case preparation; performance audit; pesticide use investigation; or control technology assessment. In some instances, a technical assistance request may involve only one individual--for example, a detailed control technology assessment; or may involve only analytical support--such as pesticide analyses for Regional investigations; or may require support from several Branches within NEIC.

The scope of the request determines which NEIC organizational elements will be required to support the proposed study. Operations, Laboratory Services, or the Technical Evaluation Staff may assign individuals to the project. The Project Coordinator is designated and is then responsible for assuring that all aspects of the project are carried out. This individual will have demonstrated through past performance as Project Coordinator, or as an assistant, the ability to perform the extensive administrative and technical responsibilities of the Project Coordinator (as described in Section II).

BACKGROUND REVIEW

Review of the available background information applicable to a specific project is a logical and essential first step in providing technical assistance. Scope and duration of the background review are related to the project objectives and vary with the complexity of the project request. Background information is available at the Center through the in-house and affiliated libraries and the NEIC computerized data retrieval systems. However, many projects require visits to EPA headquarters, Regional offices, and/or State and local agencies to review and obtain copies of pertinent files. Where necessary, a reconnaissance visit to the project site provides background verification or updating. Examples of information obtained during a background review include: the applicable laws and regulations, the status of current and pending litigation related to the project, Regional office legal strategy and how the NEIC study relates to the strategy, specific descriptions of process and pollution control systems that may affect the environment, copies of relevant source permits and compliance schedules, past self-monitoring data, prior government or facility studies, available alternative technology, and availability of approved analytical methods.

The primary purpose of a review is to familiarize NEIC personnel with the background of the work request so that a comprehensive project plan can be developed. Moreover, information obtained during the review will often be used during project performance and report preparation. Therefore, it is important to conduct as thorough a review as possible early in the project development. The background review may continue throughout the project as needed information is obtained.

PROJECT PLAN

A general project outline is included with NEIC acceptance of an official request. After sufficient background information has been obtained and evaluated, a comprehensive project plan is usually prepared based on the specific objectives and tasks in the project request. For projects that are small in scope, the acceptance memorandum may serve as the project plan. Projects such as complex pollution control evaluations, permit compliance evaluations, air pollution source surveys, ambient air and/or receiving water quality surveys, pesticide use investigations, and solid/hazardous waste disposal evaluations normally require a detailed project plan.

The Project Coordinator prepares the project plan detailing the project's scope, logistics, and schedules. Items usually addressed in the project plan are:

1. Objectives
2. Background information, including a summary of process(es), applicable regulations or permit conditions, etc.
3. Survey methods, including sampling locations, schedules and procedures, analytical requirements, quality control program, etc.
4. Process data to be collected
5. Personnel and equipment requirements
6. Safety program and equipment
7. Custody procedures
8. Report schedules
9. Followup plans (when necessary)

The Project Coordinator works closely with the appropriate NEIC staff to determine items such as equipment and logistical requirements, analytical

capabilities, and personnel availability. The Project Coordinator also communicates with the requester or designated representative to ensure that the plan being developed addresses the tasks requested and focuses on the objectives.

The plan approximates an agreement between the requesting party and those individuals performing the work. Manpower, equipment needs, and logistics can be forecast and scheduled. Additional equipment, contract services, or personnel can be secured expeditiously with the advance determination of needs.

The project plan should be provided by NEIC to the requester and the survey team at least 2 weeks before any specific field, laboratory, or consultant activity is undertaken. If no comments on the plan are received from the requester during this period, it is assumed that the plan is acceptable. Changes made to the project plan will be coordinated with the requester and the Deputy Director or Assistant Director. If necessary, a meeting will be held between the appropriate NEIC personnel and the requester to discuss any differences and modifications. Once all concerned parties agree to the project plan, it serves as a reference document for the project.

However, during the conduct of the project, some modifications to the plan may be deemed necessary by NEIC personnel when unforeseen circumstances arise.* After the commencement of project activities, requests for significant changes will be directed to the NEIC Director. Requested changes will be discussed with the appropriate management and supervisory staff and with the Project Coordinator. The significant agreed-upon changes will be documented.

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* *The plan will contain a statement that it is subject to change.*

DOCUMENT TRANSMITTAL

NEIC investigative activities are associated with potential enforcement actions. Premature or inadvertent disclosure of the information gathered during an investigation could adversely affect the action or injure a potential party. All data, technical findings, draft and final reports, and related litigation documents for enforcement actions will be transmitted by the Chief of the Enforcement Specialist Office to the Enforcement Counsel, the appropriate Regional Counsel, or their designated representative.

PROJECT ACTIVITIES

Technical duties such as legal and technical information searches, inspections, evaluations, sampling surveys, observations, data gathering, and analytical testing are performed by the applicable established procedures. When new methods or modifications to existing procedures are required, they must be documented as expeditiously as possible. Because of the close scrutiny that may be given to NEIC-gathered data during litigation, all samples are identified, maintained under chain-of-custody procedures, and accounted for by a document control program. NEIC procedures are routinely audited to ensure the quality and admissibility of generated data. (Evidence Audit and Quality Assurance are described in Section II.)

REPORT

The final report details the results of the project efforts, and it can be the requester's basis for enforcement actions. (Report writing and the control of reports is described in Section II.) Because the report may be introduced as evidence in legal proceedings, it must be accurate and legally admissible.

The overall responsibility for preparing the final report is that of the Project Coordinator, who, along with the management of NEIC, bears the burden for the accuracy and admissibility of the report and its conclusions. Achieving this goal requires that project participants assure the accuracy of their individual contributions to the report.

The form of the final report will vary with the type and complexity of the project. Some projects can be presented adequately in a memorandum, while other more complex projects will require extensive data and information presentation and discussion.

A color code has been adopted for bound reports prepared at NEIC. A black cover is reserved for a report specifically targeted for enforcement case preparation. The black cover NEIC enforcement reports are also assigned EPA publication numbers containing a standard prefix followed by a designation of the year that it was submitted for publication and the chronological submission number; for example: EPA-330/2-81-014. A red cover indicates a professional paper, special project with general application, or technical information not directly related to enforcement action. The green cover is used for unique types of publications, particularly NEIC manuals. Other miscellaneous reports have tan covers. All white-cover reports are draft copies of the above categories and each page is marked DRAFT. Specific details for document control procedures related to draft copies of reports are covered in Section II.

The NEIC library maintains a set of the Center's bound reports for reference use. Most reports are also available either as microfiche or paper copy from the library supply. Other short-form reports are available in the various Division files, as well as the Evidentiary File (described in Section II). Each employee is encouraged to become familiar with the various forms of NEIC reports.

Public disclosure of NEIC records will be made to the fullest extent possible when it will not reveal matters that are privileged or confidential. External distribution of reports supporting pending enforcement actions must be authorized through the Chief of the Enforcement Specialist Office. Extra copies of pending case reports will be maintained in a secure area of the library. Report distribution restrictions normally terminate upon resolution of the case; however, a log is maintained of the enforcement reports distributed by NEIC.

Distribution is also restricted for reports that contain confidential information. When a request for confidential treatment covers information submitted for use in a report, the cover, title page, and every page containing that information is marked CONFIDENTIAL. The report author prepares a log of the confidential information used in each portion of the report. All reports containing confidential information will be kept in secure areas until restrictions are removed. These reports are not available in the library and must be logged out by the Document Control Officer, who also receives a copy of every memorandum subsequently transmitting that report. Questions concerning restricted report availability will be directed to the Enforcement Specialist Office. A summary of the strict procedures for handling Toxic Substances Control Act Confidential Business Information begins on page II-34.

Copies of NEIC bound reports may receive public distribution through the National Technical Information Service (NTIS). This includes reports with red, green, or tan covers and those black-covered reports for which enforcement actions have been resolved. Their availability to the public is announced through the NTIS publication "Government Reports Announcements" and a fee is set by NTIS for their reproduction and distribution in either paper or microfiche form.

FOLLOWUP

Completion and transmittal of the project report do not necessarily signify the end of NEIC's involvement with a project. Continuing involvement may include technical consultation on monitoring programs and remedial measures. NEIC personnel will continue to follow up project involvement in subsequent legal proceedings. In such cases, NEIC personnel may be involved in enforcement case preparation and serve as, or be deposed as, witnesses. (Appendix A gives witness guidelines for preparing testimony as an expert witness.) Other reports may affect EPA policies or serve as forerunners for additional enforcement studies.

II. NEIC OPERATING POLICIES AND PROCEDURES

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EMPLOYEE CONDUCT

EPA employees are required to perform their duties in a professional and responsible manner and to refrain from any use of official position for private gain. NEIC employees are also required to collect and report the facts of an investigation completely, accurately, and objectively. They must also conduct themselves at all times in accordance with the regulations prescribed in the EPA handbook, RESPONSIBILITIES AND CONDUCT FOR EPA EMPLOYEES. The following paragraphs review some topics in the handbook especially applicable to NEIC work.

Employees shall avoid conflicts of interest through outside employment or other private interests. A conflict of interest may exist whenever an EPA employee has a personal or private interest in a matter which is related to his official duties and responsibilities. It is important to avoid even the appearance of a conflict of interest because the appearance of a conflict damages the integrity of the Agency and its employees in the eyes of the public. All employees must, therefore, avoid situations which are, or give the appearance of, conflicts of interest when dealing with others in or outside the government.

Good public relations and common sense dictate that employees dress appropriately and with proper safety equipment for the activity in which engaged. When in the laboratory, field, or facility, employees should consult their supervisor and the NEIC SAFETY MANUAL relative to proper attire and safety requirements. Enhanced safety procedures may be specified for individual programs such as laser safety for lidar operators or handling procedures for samples of hazardous substances.

It is important that cooperation be obtained and good working relations established when working with the public. This can best be accomplished by using diplomacy, tact, and persuasion. Employees should not speak of any person, other regulatory agency, or facility in a derogatory manner and should use discretion when asked to give a professional opinion on specific products or projects. All information acquired during an employee's duties is for official use only.

An employee is forbidden to solicit or accept any gift, gratuity, entertainment, favor, loan, or any other thing of monetary value from any person, corporation, or group which has a contractual or financial relationship with EPA, which has interests that may be substantially affected by such employee's official actions, or which conducts operations regulated by EPA. Responsibility for individual actions rests with the employee where circumstances make it inappropriate to decline a nominally valued gratuity, such as lunch in a company cafeteria where no payment mechanism is provided.

ENTERING A FACILITY

Authority

Various Federal environmental statutes grant EPA enforcement personnel authority to enter and inspect facilities. The authority granted in each statute is similar to that stated below, from Section 308 of the Clean Water Act:

> "(a)(B) the Administrator or his authorized representative, upon presentation of his credentials -
>
> (i) shall have a right of entry to, upon, or through any premises in which an effluent source is located or in which any records required to be maintained . . . are located, and
>
> (ii) may at reasonable times have access to and copy any records, inspect any monitoring equipment or method required . . ., and sample any effluents which the owner or operator of such source is required to sample . . . ."

TABLE OF AUTHORITY

	Air	Water	Superfund	Pesticides	Solid Waste	Drinking Water	Toxics
Inspection Authority	CAA 114 40 CFR 80.4, 86*	CWA 308, 402 40 CFR 122.7	CERCLA 104	FIFRA 8,9 40 CFR 169.3	RCRA 3007 40 CFR 122.7	SDWA 1445 40 CFR 122.7, 142.34	TSCA 11
Recordkeeping Authority	CAA 114, 208 311 40 CFR 51, 60, 79**	CWA 308, 402 40 CFR 122.7, 122.11,122.60	CERCLA 103	FIFRA 4,8 40 CFR 169, 171.11	RCRA 3002, 3003, 3004 40 CFR 122.7, 122.11	SDWA 1445 40 CFR 122.7, 122.11, 141.31-33	TSCA 8 40 CFR 704, 710,761
Confidential Information (40 CFR 2.201-2.215, 122.9)	CAA 208, 307 40 CFR 2.301, 53,57,80	40 CFR 2.302	CERCLA 104	FIFRA 7,10 40 CFR 2.307	40 CFR 2.305	40 CFR 2.304	TSCA 14 40 CFR 2.306
Emergency Authority	CAA 303	CWA 504	CERCLA 104, 106	40 CFR 164, 166	RCRA 7003 40 CFR 122.7	SDWA 1431 40 CFR 122.40	TSCA 7
Employee Protection	CAA 322	CWA 507	CERCLA 110		RCRA 7001	SDWA 1450	TSCA 23

* 86.077-7, 86.078-7, 86.441-78, 86.606, 86.1006.89.

** 51.320-.328, 57.105, 57.305, 57.404, 58, 60.7, 61.10, 61.24, 61.69-71, 79.5, 85.407, 85.1806, 85.1906, 86.077-7, 86.084-39 & 40, 86.144-78 thru 82, 86.542-78, 86.609, 86.1009-84.

For the specific requirements on conducting inspections and collecting data pursuant to other particular Acts, see: Section 114 of the Clean Air Act; Sections 8 and 9 of the Federal Insecticide, Fungicide, and Rodenticide Act; Section 3007 of the Resource Conservation and Recovery Act; Sections 8 and 11 of the Toxic Substances Control Act; Section 1445 of the Safe Drinking Water Act; and Section 104 of the Comprehensive Environmental Response, Compensation and Liability Act.

Unreasonable Search and Seizure

EPA authority under the various Acts is subject to the provisions of the Fourth Amendment of the Constitution which prohibits unreasonable searches and seizures. Consent to document an onsite investigation with photographs should be obtained before any photographs are taken by the inspector. While a consensual entry may not be necessary for entering a public area or for acting under emergency conditions, no forcible entry is permitted without due process of law when entry has been denied.

Consent means the intentional foregoing of right to privacy which is not the result of either fear, ignorance, or trickery. When obtaining consent, do not suggest that civil or criminal consequences will result from entry denial. If the element of surprise is critical to the inspection, the site is unoccupied, or prior behavior indicates that entry will be denied, the Enforcement Specialist Office should be notified before the inspection is attempted.

Consent to enter may be revoked by a facility prior to the completion of an inspection. If that should occur, all work performed during the consensual entry should remain in the possession of the inspection team. When a withdrawal of consent occurs, the inspection team shall leave the area and follow the procedures for denial of entry as detailed below.

To comply with statutory authority and avoid any "unreasonable search" and procedural problems, a facility should be entered in the following manner:

1. The plant premises should be entered through the main gate or through the entrance designated by the facility in its response to an inspection notification letter.

2. The employees should introduce themselves in a dignified, courteous manner to a responsible plant official and briefly describe the purpose of the visit. Identification credentials should always be shown. A responsible plant official may be the owner, operator, officer, or agent-in-charge for the facility, including the plant environmental engineer.

3. If there is only a guard present at the entrance, the employee should present his credentials and suggest that the guard call his superior or the responsible official when the name is known.

4. If the Company provides a blank sign-in sheet, log, or visitors register, it is acceptable to sign it. NEIC employees shall not sign a release of liability (waiver) when entering a facility under the authority of Federal law.

5. If entry is refused, the employee should not contest the issue with the facility representative, but immediately do the following:

   a. Obtain name and title of the individual denying entry and record the date and time;

   b. Cite the appropriate EPA-administered legislation, ask if he/she heard and understood the reason for your presence, and record the answer and any reasons given for denial of entry;

   c. Leave the premises.

After leaving the facility, the employee should, at the earliest possible moment, inform the NEIC supervisory personnel and Enforcement Specialist Office of the events which took place.

CRIMINAL INVESTIGATIONS

NEIC will play a major role in investigating criminal conduct in the environmental area. More severe penalties may be imposed on individuals convicted of violating the criminal provisions of environmental or other statutes. This severity functions to deter harmful activities and to punish offenders. Correspondingly, there are greater Constitutional safeguards to protect individuals from a criminal prosecution. NEIC investigations and EPA enforcement activities are required to meet these higher standards from the moment an investigation begins to focus on a suspect until the defendent receives the verdict. The special emphasis on these NEIC investigations results from the potential defendants' desire to conceal their criminal activities and, when detected, their frequent challenges to the investigative procedures that were used to apprehend them.

These challenges are encouraged by the "Exclusionary Rule". This rule prohibits the use of evidence during the prosecution of a defendant whose constitutional rights were violated by the procedures used to collect that evidence. The "Fruit of the Poisonous Tree Doctrine" further excludes from that prosecution any information subsequently derived from that improperly collected evidence. Following the procedures in this manual assures protection for the potential defendant's constitutional rights and leaves a paper trail of the investigation supporting admission of the resulting evidence into a prosecution.

Another procedural challenge frequently occurs when a suspect provides a statement to a law enforcement officer. The NEIC investigator must assure that all statements are made voluntarily and questioning may be terminated at any time the suspect wants to leave.

The Chief, Enforcement Specialist Office, should be consulted when aspects of criminal activity become apparent during a routine investigation or when a criminal investigation is planned. At this point, a trained criminal investigator is assigned to the case. All parts of the criminal investigation must then be completely separated from any concurrent or planned civil investigations. For example, a criminal investigator is prohibited from using routine inspection authority to search for and seize evidence of criminal activities. The investigator must obtain a search

warrant prior to conducting a search for this hidden or concealed evidence. The warrant is based upon sworn testimony that is current, accurate, and reliable. It must describe the area to be searched and the expected search results. Exceptions to this requirement include searches made pursuant to a valid consent and seizure of evidence that is about to be removed or destroyed.

REQUESTING INFORMATION

The environmental statutes authorize EPA reporting and recordkeeping requirements and also protect trade secrets and confidential information. As a general policy, EPA is extremely reluctant to accept this type of information unless it is necessary for carrying out Agency functions under these Acts.

In compliance with EPA regulations, a request* for Company information, pursuant to statutory authority, will contain a statement allowing the facility to designate all or part of the information requested by the Agency as confidential by marking it according to Title 40 of the Code of Federal Regulations (CFR), Part 2, Subpart B, Sections 2.201-2.309 [41 Federal Register (FR) 36902, Sept. 1, 1976, as amended in 43 FR 39997, Sept. 8, 1978]. In addition to citing the appropriate regulation(s), the request should state that:

1. The business may, if it desires, assert a business confidentiality claim covering part or all of the information in the manner described by 40 CFR 2.203(b), and that information covered by such a claim will be disclosed by EPA only to the extent, and by means of the procedures, set forth in those regulations; and that

2. If no such claim accompanies the information when it is received by EPA, it may be made available to the public by EPA without further notice to the business.

When conducting a plant evaluation, inspection, or reconnaissance, NEIC personnel should not accept confidential information unless it is essential in performing NEIC responsibilities. When inspectors expect to obtain or

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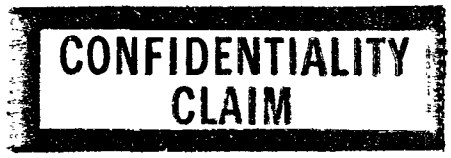
* *Written requests are generally sent through the Regional Counsel.*

observe confidential information, they should maintain a separate logbook. When confidential information is entered into an inspector's logbook, the entire book and the portions containing the confidential information are marked. The Evidence Audit Unit will provide the inspectors with adhesive



labels to mark information submittals or observations for which a business wishes to assert a claim of confidentiality. In those limited situations, the Company should be requested to provide NEIC with a written statement identifying the material which is entitled to confidential treatment. In addition, reasons must be given to substantiate the claim, including any supportive technical data or legal authority. By statute, effluent and emission data are not confidential. Any confidential information received in the mail or hand-delivered shall be marked Confidential and handled appropriately as outlined in the document control program (see page II-31).

DISCLOSURE OF OFFICIAL INFORMATION

It is EPA policy to make information about EPA and its work available, freely and equally, to all individuals, groups, and organizations. This policy, however, does not extend to confidential information or investigatory information and evidence relating to the suspected violation of Federal environmental laws. The transmittal by the Chief of the Enforcement Specialist Office identifies the sensitive nature of documents supporting pending enforcement actions to prevent their inadvertent or premature disclosure.

Any NEIC employee who receives a request, written or oral, for inspection or disclosure of NEIC investigatory records or confidential information, even those made under judicial discovery procedures or the Freedom of Information Act, shall immediately advise the Chief, Enforcement Specialist Office, and obtain approval prior to the release of information. Other information disseminated outside the Agency will be directed through the appropriate Regional office or Headquarters.

PROJECT COORDINATOR RESPONSIBILITIES AND AUTHORITY

The Project Coordinator is the primary contact for a specific, assigned project. All communications with the Regional, State, local, and Company officials, the public, and the news media (press, radio, TV, etc.) need to be coordinated through this individual. All requests for comments or conclusions must be referred to the appropriate case attorney.

PROJECT PLAN

The Project Coordinator is responsible for preparing the project plan. This will involve obtaining the necessary background information from the requester (Region, Headquarters, etc.), all affected NEIC branches, the legal staff, the safety officer, the administrative staff, and the Evidence Audit Unit (EAU). A draft plan (marked DRAFT REPORT FOR AGENCY REVIEW ONLY, DO NOT DUPLICATE) will be provided for internal review to Branch Chiefs and other affected parties. The Coordinator is responsible for disseminating the draft project plan for review and accounting for all draft copies. After comments have been incorporated into the final project plan, all drafts will be disposed of and a revised copy will be sent to the Region or other EPA organization requesting the work. As a general rule, the final plan should be sent to the requester and given to project participants at least 2 weeks before any field work begins.

A briefing on the plan will be held prior to beginning any field work. At that time, those aspects of the study such as test methods, chain-of-custody procedures, legal aspects, safety requirements, document control, and related activities will be discussed with all project participants and EAU. Each participant is expected to read the project plan and be aware of the required procedures. (Section I discusses changes to the project plan once it has been transmitted to the requester.)

ADMINISTRATIVE MATTERS

Petty Cash and Procurement Requests

Prior to the survey, the respective NEIC Branches are expected to submit purchase requisitions for survey needs in a timely fashion to avoid emergency requests. The Project Coordinator is responsible for determining petty cash needs for the study and designating those individuals who will receive petty cash. Proper receipts are necessary to receive credit for petty cash expenditures. When appropriate, the Project Coordinator will arrange to use purchase orders in the field. For example, ice is often required in large quantities during a survey; thus, a purchase requisition is often appropriate.

Timekeeping

The Project Coordinator is expected to certify as correct the Time Reports used by field personnel to report regular time, overtime, and compensatory hours. It is expected that Project Coordinators and Branch Chiefs be familiar with the Fair Labor Standards Act and the EPA Pay Administration Manual as it pertains to overtime, holiday and hazardous-duty pay, and compensatory hours. As appropriate, the Coordinator will be provided a packet containing the necessary pay manuals, policy statements, and forms. Instructions for the completion and submission of time records will be provided by the respective Branch Chiefs.

FIELD ACTIVITIES

The Project Coordinator shall have the overall responsibility for determining that all field activities are performed expeditiously and that the project objectives are met. Branch Chiefs are expected to assign personnel capable of performing the Branch responsibility associated with a particular study; these personnel are expected to understand and follow the procedures relative to their assignments.

The necessity for change from the project plan not affecting the objectives or overall scope of the study--such as addition or deletion of sampling points, modifications to schedules or frequencies, or changes in analytical load--will be coordinated through and approved by the Project Coordinator. This includes any support work being conducted in Denver.

Transportation needs in the field will be determined during the planning stage. GSA vehicles will be used whenever available. The Project Coordinator will be responsible for assuring that vehicles and mobile laboratories transported from Denver generally travel in convoy, and it is imperative that the Project Coordinator be notified immediately of any delays that occur enroute. It is also expected that the rolling stock (mobile laboratories, lidar, vehicles, boats, monitoring equipment) be kept in a state of readiness. If equipment is returned from the field needing repair, maintenance, or overhaul, it shall be accomplished expeditiously by the appropriate Branch.

During the field study, the Project Coordinator or designee is responsible for seeing that all chain-of-custody and quality control procedures for sampling, flow monitoring, analyses, recordkeeping, etc. are followed. The field personnel are, however, expected to understand and follow the custody procedures relative to their assignments. Following completion of the field activities and before returning to NEIC, the Project Coordinator or designee shall account for all field documentation--such as field logbooks, sample tags, Chain-of-Custody Records--and verify that it is complete.

The Project Coordinator is responsible and has the authority for assuring that all field work is conducted safely and that required safety equipment is use . All participants are required to read and adhere to the NEIC SAFETY MANUAL.

REPORT WRITING

The Project Coordinator, in cooperation with other personnel, will develop an outline and determine the writing assignments for a project report.

To facilitate readability by the diverse audiences from technical, administrative, and judicial fields, the NEIC enforcement report* may be structured in two major sections: the Executive Summary and the Technical Analysis. The Executive Summary clearly states study objectives and presents conclusions supported by pertinent findings; recommendations are made if appropriate. The Technical Analysis more comprehensively describes the study, giving specific details about the facility, legal case facts, NEIC data collection and analysis, and other pertinent aspects of the field work. It is important that findings in the Technical Analysis be correlated to the conclusions as stated in the Executive Summary so that the report presents a uniform analysis.

The Project Coordinator is responsible for assembling the report and circulating review copies; all reports are dated. Draft reports are numbered in red and each page is marked DRAFT. The Coordinator shall make every attempt to ensure that all draft copies are returned and that all appropriate comments are incorporated. These draft reports are disposed of upon completion of the final report.

The quality of a report's content, and the ability to substantiate and defend it, are foremost. The Project Coordinator, NEIC management, and supervisory personnel are responsible for assuring that all NEIC reports achieve this goal.

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* *A black cover report prepared to support an ongoing or potential enforcement action. The format described above is also recommended for other appropriate NEIC reports.*

SAMPLE CONTROL

A sample is physical evidence collected from a facility or the environment. An essential part of all NEIC enforcement investigations is the control of the evidence gathered. To accomplish this, the following sample identification and chain-of-custody procedures have been established. Any other procedures specific to a program must be documented and approved by the Chief of the Enforcement Specialist Office.

SAMPLE IDENTIFICATION

The method of identification of a sample depends on the type of measurement or analyses performed. When in-situ measurements are made, the data are recorded directly in logbooks* or Field Data Records (FDRs), with identifying information (project code, station numbers, station location, date, time, samplers), field observations, and remarks. Examples of in-situ measurements include pH, temperature, conductivity, flow measurement, continuous air monitoring, and stack gas analysis.

Samples, other than in-situ measurements, are identified by a sample tag (page II-14) or other appropriate identification (hereinafter referred to as a sample tag).

These samples are removed and transported from the sample location to a laboratory or other location for analysis. Before removal, however, a sample is often separated into portions depending upon the analyses to be performed. Each portion is preserved in accordance with applicable procedures and the sample container is identified by a sample tag. The information recorded on the sample tag includes:

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* *For purposes of this manual, the term "logbook" includes remote sensing imagery and data recorded on magnetic tape.*

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Denver, Colorado 80225

EPA

Project Code	Station No	Month/Day/Year	Time	Designate	
				Comp	Grab

Tag No: N-1301

Lab Sample No:

Station Location

Samplers (Signatures)

Remarks	Bacteriology	Mutagenicity	Pesticides	Volatile Organics	Priority Pollutants	Organics GC/MS	Oil and Grease	Cyanide	Metals	Mercury	Phenolics	COD, TOC, Nutrients	Solids (TSS) (TDS) (SS)	BOD Anions	**ANALYSES**	**Preservative: Yes ☐ No ☐**

Project Code	-	A three-digit number assigned by NEIC
Station Number	-	A two-digit number assigned by the Project Coordinator
Date	-	A six-digit number indicating the month, day, and year of collection - for example: 031782 is March 17, 1982
Time	-	A four-digit number indicating the 24-hour time of collection - for example: 0954 is 9:54 am and 1629 is 4:29 pm
Station Location	-	The sampling station description as specified by the Project Coordinator
Samplers	-	Each sampler signs the tag
Remarks	-	The samplers record pertinent observations
Lab Sample No.	-	May be completed by the receiving laboratory

The sample tag contains an appropriate place for designating the sample as a grab or a composite and identifying the type of sample collected for analyses. When used for air samples, the sampler may use the remarks section to designate the sequence number and identify the sample type. The Project Coordinator will detail procedures for completing tags used for soil, sediment, and biotic or other samples. The sample tags are attached to each sample or container.

After collection, separation, identification, and preservation, the sample is maintained under chain-of-custody procedures discussed below. If the composite or grab sample is to be split, it is aliquoted into similar sample containers. Identical information is completed on the tag attached to each split and one is marked "___ Split"*. In a similar fashion, tags will be marked for "Blank" or "Duplicate" samples.

CHAIN-OF-CUSTODY PROCEDURES

Due to the evidentiary nature of samples collected during enforcement investigations, possession must be traceable from the time the samples are

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* *The blank is completed to identify the split sample for the appropriate government agency, facility, laboratory, or company.*

collected until they or their derived data are introduced as evidence in legal proceedings. To maintain and document sample possession, chain-of-custody procedures are followed.

Sample Custody

A sample is under custody if:

1. It is in your possession, or
2. It is in your view, after being in your possession, or
3. It was in your possession and you locked it up, or
4. It is in a designated secure area.

Field Custody Procedures

1. Collect only the number of samples needed to represent the media being sampled. To the extent possible, determine the quantity and types of samples and sample locations prior to the actual field work. As few people as possible should handle samples.

2. The field sampler is personally responsible for the care and custody of the samples collected until they are properly transferred or dispatched.

3. Sample tags shall be completed for each sample, using waterproof ink unless prohibited by weather conditions. For example, a log-book notation would explain that a pencil was used to fill out the sample tag because a ballpoint pen would not function in freezing weather.

4. The Project Coordinator determines whether proper custody procedures were followed during the field work and decides if additional samples are required.

Transfer of Custody and Shipment

1. Samples are accompanied by a Chain-of-Custody Record (see page II-19). When transferring the possession of samples, the individuals relinquishing and receiving will sign, date, and note the time on the Record. This Record documents sample custody transfer from the sampler, often through another person, to the analyst in a mobile laboratory or at the NEIC laboratory in Denver.

2. Samples will be packaged* properly for shipment and dispatched to the appropriate NEIC laboratory** for analysis, with a separate custody record accompanying each shipment (e.g., one for each field laboratory, one for samples shipped, driven, or otherwise transported to NEIC). Shipping containers*** will be padlocked or sealed for shipment to the laboratory. The method of shipment, courier name(s), and other pertinent information is entered in the "Remarks" section on the custody record.

3. Whenever samples are split with a source or government agency, a separate Receipt for Samples form (see page II-21) is prepared for those samples and marked to indicate with whom the samples are being split. The person relinquishing the samples to the facility or agency should request the signature of a representative of the appropriate party acknowledging receipt of the samples. If a representative is unavailable or refuses to sign, this is noted in the "Received by" space. When appropriate, as in the case where the representative is unavailable, the custody record should contain a statement that the samples were delivered to the designated location at the designated time.

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* *See Appendix B.*

** *See Appendix C for Safety Precautions when Accepting Samples from Outside Sources.*

*** *Lidar data magnetic tapes are transported in locked magnetic-safe metal containers.*

4. All shipments will be accompanied by the Chain-of-Custody Record identifying its contents. The original Record will accompany the shipment, and the copy will be retained by the Project Coordinator.

5. If sent by mail, the package will be registered with return receipt requested. If sent by common carrier, petty cash will be used for expenditures of less than $100, otherwise a Government Bill of Lading will be used. Air freight shipments are sent collect. Freight bills, post office receipts, and Bills of Lading will be retained as part of the permanent documentation.

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CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME	NO. OF CONTAINERS								REMARKS
SAMPLERS: *(Signature)*										
STA. NO	DATE	TIME	COMP.	GRAB	STATION LOCATION					

Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
Relinquished by: *(Signature)*	Date / Time	Received for Laboratory by: *(Signature)*	Date / Time	Remarks	

Distribution: Original Accompanies Shipment, Copy to Coordinator Field Files

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(12/81)

Receipt for Samples Form

Section 3007(a)(2) of the Resources Conservation and Recovery Act (RCRA) states ". . .If the officer, employee or representative obtains any samples, prior to leaving the premises, he shall give to the owner, operator, or agent-in-charge a receipt describing the samples obtained and, if requested, a portion of each such sample equal in volume or weight to the portion retained." Section 104 of the Comprehensive Environmental Response, Compensation and Liability Act contains identical requirements.

A completed Receipt for Samples form (see page II-21) complies with these requirements and is used whenever splits are provided. This form must be completed and a copy given to the owner, operator, or agent-in-charge even if the offer for split samples is declined. The original is retained for the Project Coordinator.

Laboratory Custody Procedures

1. A designated sample custodian accepts custody of the shipped samples and verifies that the information on the sample tags matches that on the Chain-of-Custody Records. Pertinent information as to shipment, pickup, courier, etc. is entered in the "Remarks" section. The custodian then enters the sample tag data into a bound logbook which is arranged by project code and station number.

   The laboratory custodian will use the sample tag number or assign a unique laboratory number to each sample tag and assure that all samples are transferred to the proper analyst or stored in the appropriate secure area.

2. The custodian distributes samples to the appropriate analysts. Laboratory personnel are responsible for the care and custody of samples from the time they are received until the sample is exhausted or returned to the custodian.

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Denver, Colorado 80225

RECEIPT FOR SAMPLES

PROJ. NO.	PROJECT NAME	Name of Facility
SAMPLERS: *(Signature)*		Facility Location
Split Samples Offered ( ) Accepted ( ) Declined		

STA NO	DATE	TIME	COMP	GRAB	SPLIT SAMPLES	TAG NUMBERS	STATION DESCRIPTION	NO OF CON-TAINERS	REMARKS

Transferred by: *(Signature)*	Received by: *(Signature)* Telephone
Date Time	Title Date Time

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Distribution: Original to Coordinator Field Files; Copy to Facility

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3. When sample analyses and necessary quality assurance checks have been completed in the field laboratory, the unused portion of the sample must be disposed of properly. All identifying tags, data sheets, and laboratory records shall be retained as part of the permanent documentation. Samples received by the Denver laboratory will be retained until after analyses and quality assurance checks are completed. When investigative documents are requested by the Evidence Audit Unit for the evidentiary file, all identifying tags are removed for retention in the permanent documentation. Sample containers and remaining sample material should be disposed of appropriately.

4. Samples of materials which have been associated with high hazard levels are received in a specialized Regulated laboratory. This laboratory reduces the hazardous characteristics of these samples and prepares them for routine analysis. To avoid potential contamination, tags from samples received by the Regulated laboratory are not considered permanent documents and will not be incorporated into the evidentiary file. The Regulated laboratory will verify that the information on arriving sample tags is accurately recorded on the appropriate Chain-of-Custody Records and notify the Evidence Audit Unit of any discrepancies. The sample tag number is entered on the Chain-of-Custody Record in the "Comments" column. Regulated laboratory personnel will initial the entry after verifying sample tag data or resolving a discrepancy.

5. The Regulated laboratory will submit a memorandum to EAU when the project documents are assembled. The memorandum, to be retained in the evidentiary file, certifies that the sample tags have been appropriately disposed of together wi h the sample containers and any remaining portions.

6. Lidar data magnetic tapes will be copied into the appropriate NEIC minicomputer disc files. The original tapes will then be stored in the locked cabinets and the disc data will be used for computer data processing.

DOCUMENT CONTROL

The goal of the NEIC Document Control Program is to assure that all project documents issued to or generated by NEIC personnel will be accounted for when the project is completed. This program includes a serialized document system, a document inventory procedure, and an evidentiary filing system, all operated and controlled by the Evidence Audit Unit (EAU). The Document Control Officer maintains separate locked files for securing confidential information.

Accountable documents used or generated by NEIC employees include logbooks, field data records, correspondence, sample tags, graphs, Chain-of-Custody Records, bench sheets, and photographic prints (see page II-31 for a more complete list). Each document is listed in a project inventory assembled by the appropriate Branch or Division at the project's completion. Unused serialized documents returned to the EAU may be disposed of or reissued. Unless prohibited by weather, waterproof ink is used to record all data on serialized accountable documents.

SERIALIZED DOCUMENTS

The Project Coordinator designates the person to receive all serialized NEIC documents for the field activities. The EAU is responsible for assigning all field logbooks, field data records, sample tags, Chain-of-Custody Records, Receipt for Samples forms, and custody locks and keys to this person. The Coordinator is responsible for ensuring that a sufficient supply of documents is obtained for an investigation and that these documents are properly distributed to the appropriate personnel. The EAU provides the Project Coordinator with a list of the serialized project documents that were issued to personnel for that project.

PROJECT LOGBOOKS

The Project Coordinator is responsible for the transfer of logbooks to the individuals who have been designated to perform specific tasks on the survey. Individuals sign their logbooks* upon receipt and use them to record all pertinent information until the project is completed. Observations made into a recording device must be promptly transcribed. The inspector verifies the accuracy of the transcription and signs it. The original recording of the data is retained for the evidentiary files.

Logbook entries should be dated, legible, and contain accurate and inclusive documentation of an individual's project activities. Because the logbook forms the basis for the later written reports, it must contain only facts and observations. Language should be objective, factual, and free of personal feelings or other terminology which might prove inappropriate. Entries made by individuals other than the person to whom the logbook was assigned are dated and signed by the individual making the entry.

Field analysts who conduct their assigned project analyses in a mobile laboratory are assigned a logbook by the appropriate Branch. In addition to information documenting the analyses performed, field analysts document in their logbooks or on bench sheets the date and results of any calibration of mobile laboratory equipment. A record is also kept of any incidents related to the survey; for example, the electricity going off in the laboratory, tampering with government vehicles or equipment, etc. Appropriate notations of visitors to the mobile laboratory, such as facility personnel, are entered in the logbook.

All project logbooks are the property of NEIC and are to be returned to the Project Coordinator when a survey assignment has been concluded.

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* *Or the label for remote sensing or data recorded on magnetic tape.*

FIELD DATA RECORDS

Where appropriate, serialized Field Data Records (in the form of individual sheets or bound logbooks) are maintained for each survey sampling station or location and the project code and station number are usually recorded on each page. All in-situ measurements and field observations are recorded in the FDRs with all pertinent information necessary to explain and reconstruct sampling operations. Each page of a Field Data Record is dated and signed by all individuals making entries on that page. The Coordinator and the field team on duty are responsible for ensuring that FDRs are present during all monitoring activities and are stored safely to avoid possible tampering. Any lost, damaged, or voided FDRs are reported to the Project Coordinator.

SAMPLE IDENTIFICATION DOCUMENTS

All necessary serialized sample tags are distributed to field personnel by the Project Coordinator (or designated project participant) and must be accounted for upon completion of the project. Individuals are responsible for each tag assigned to them. A tag is considered in their possession until it has been filled out, attached to a sample, and transferred to another individual with the corresponding Chain-of-Custody Record. Sample tags contaminated with a hazardous substance are disposed of properly with any other hazardous wastes. These and lost tags are noted in the appropriate Field Data Record, logbook, or Chain-of-Custody Record immediately upon discovery and the Project Coordinator is notified. At the completion of the field investigation activities, all unused, voided, or damaged sample tags are returned to the designated individual. The Receipt for Samples form is used to account for those tags attached to samples split with the source or another government agency.

CHAIN-OF-CUSTODY RECORDS

Serialized Chain-of-Custody Records are distributed in a manner similar to that used for sample tags. When samples are transferred to mobile laboratory personnel, the analyst, after signing, retains the white (original) custody record and files it in a safe place. The courier returns a copy of the custody record to the Project Coordinator. A similar procedure is followed when dispatching samples via common carrier, mail, etc., so that the original accompanies the shipment and is signed and retained by the receiving laboratory sample custodian while the copy retained for the Coordinator is returned from the dispatch point.

When samples are split with the source or another government agency, this is documented by the Receipt for Samples form (see page II-21). The tag serial numbers from all splits are recorded on the form and a copy of the receipt will be provided for the source or agency. The white originals are returned to the Project Coordinator.

OTHER CONTROLLED DOCUMENTS

The logbooks and data sheets that are used for various purposes such as chemical, bacteriological, and biological analyses; equipment calibration; etc. within the NEIC laboratories are neither serialized nor distributed by the EAU. These documents are accountable by the procedures discussed in the following paragraphs.

The computer printouts of lidar data analyses, opacity calculations, and verification results are retained, uniquely numbered, and submitted to EAU with the branch files.

Bench sheets and other similar documents will be numbered. Each document will show the project number, dates, name(s) of analyst(s) and other pertinent information. Instrument printouts and other separate documents, except laboratory logbooks, will be labeled in a similar manner. These documents will be sent to the evidentiary file when requested.

Laboratory observations and calculations not recorded on numbered bench sheets, instrument graph printouts, etc., are entered in numbered logbooks assigned by a Branch custodian or other designated individual. Each numbered page of the logbook* actually consists of two pages - an original and a copy. The original is perforated so that it can be removed from the logbook when project files are compiled for the Evidentiary File. When this type of logbook is unavailable, duplicates of individual pages will be identified.

The logbook needs to contain information sufficient to recall and describe succinctly each step of the analysis performed because it may be necessary for the analyst to testify in subsequent enforcement proceedings. Moreover, sufficient detail is necessary to enable others to reconstruct the procedures followed should the original analyst be unavailable for testimony. Any irregularities observed during the testing process need to be noted. If, in the technical judgment of the analyst, it is necessary to deviate from a particular analytical method, the deviation shall be justified and properly documented.

The numbered logbook assigned to an individual can be used for more than one project. However, only one project is discussed on each page. That page is labeled with the project code, dated, and signed by the individual. The custodian closes out each completed laboratory logbook and may retain it or return it to the analyst for reference purposes.

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* *The original page requires no carbon paper. The logbook is referred to as an NCR logbook.*

Where applicable, the Branch file custodian issues a numbered instrument logbook in which all information relating to calibration and maintenance of a particular laboratory instrument is recorded.

PHOTOGRAPHS

When movies, slides, or photographs are taken which visually show the effluent or emission source and/or any monitoring locations, they are numbered to correspond to logbook entries. The name of the photographer, date, time, site location, and site description are entered sequentially in the logbook as photos are taken. A series entry may be used for rapid sequence photographs. The photographer is not required to record the aperture settings and shutter speeds for photographs taken within the normal automatic exposure range. Special lenses, films, filters, or other image enhancement techniques must be noted in the logbook. Chain-of-custody procedures depend upon the subject matter, type of film, and the processing it requires. Film used for aerial photography, confidential information, or criminal investigations require chain-of-custody procedures. Adequate logbook notations and receipts may be used to account for routine film processing. Once developed, the slides or photographic prints shall be serially numbered corresponding to the logbook descriptions and may be labeled.

CORRECTIONS TO DOCUMENTATION

As previously noted, unless prohibited by weather conditions, all original data recorded in logbooks, FDRs, sample tags, custody records, and other data sheet entries are written with waterproof ink. None of the accountable serialized documents listed above are to be dest oyed or thrown away even if they are illegible or contain inaccuracies which required a replacement document.

If an error is made on an accountable document assigned to one individual, that individual may make contemporaneous corrections simply by crossing a line through the error and entering the correct information. Any subsequent error discovered on an accountable document should be corrected

by the person who made the entry. All subsequent corrections must be initialed and dated.

If a sample tag is lost in shipment, or a tag was never prepared for a sample(s), or a properly tagged sample was not transferred with a formal NEIC Chain-of-Custody Record, the following procedure applies:

> A written statement is prepared detailing how the sample was collected, air-dispatched, or hand-transferred to the field or NEIC laboratory. The statement should include all pertinent information, such as entries in field logbooks regarding the sample, whether the sample was in the sample collector's physical possession or in a locked compartment until hand-transferred to the laboratory, etc.

Copies of the statement are distributed to the Project Coordinator and the appropriate Branch project files.

CONSISTENCY OF DOCUMENTATION

Usually before the release of a final project report, each Branch or Division assembles its documents and cross-checks information on corresponding sample tags, custody records, bench sheets, analyst logbooks, and other logbooks to ensure that data pertaining to each particular sample is complete and consistent throughout the record. The Project Coordinator concurrently performs a cross-check of field documents (FDRs, logbooks, custody records, etc.) to ensure that the information recorded corresponds with that of the NEIC laboratories and is consistent throughout the project record. An inventory accounting for all project evidentiary data accompanies the transfer of the assembled Branch file to the EAU.

The EAU is responsible for correlating accountable documents for a project when there has been a change in the project number.

DOCUMENT NUMBERING SYSTEM AND INVENTORY PROCEDURE

To provide document accountability to the appropriate individuals,

each of the document categories discussed above features a unique serialized number for each item within the category. Logbooks, FDRs, sample tags, custody records, and receipts for samples are serially numbered by the EAU before assignment to project personnel. The logbooks and FDRs are usually given a five-digit number, with the project code as the first three digits followed by a two-digit document number. Sample tags, custody records, and receipts for samples are labeled with the prefix "N", a four-digit document number, and the project code.

All project documentation (such as analyst's logbooks, graph paper, data calculation sheets, memoranda, correspondence, photos, etc.) which are generated during a project are uniquely identified with the project code, the Branch initials, and a sequential number (e.g., 707-CIB-01), usually at the time the Branch file is assembled.

BRANCH OR DIVISION FILES

After a Branch has completed its work for a particular investigation, all documents generated from that project should be assembled in the Branch or Division file. Individuals may retain clean (no handwritten comments) copies of documents for their personal files but only after personally verifying that the original or similar copy is in the file. Each Branch Chief is responsible for assuring the collection, assembly, and inventory of all documents relative to a particular project at the time the project objectives are completed. The file then becomes accountable. Any records leaving the file must be signed out.

EVIDENTIARY FILE

When NEIC has completed the project objectives, all inventoried Branch and Division file documents are reviewed and submitted to the Evidence Audit Unit. By this time each document will have been labeled with a unique number as specified above. The format of the evidentiary file is to arrange each project by Branch documents and includes the following document classes:

A. Project Plan
B. Project logbooks
C. Field Data Records
D. Sample identification documents
E. Chain-of-Custody Records
F. Analytical logbooks, lab data, calculations, bench cards, graphs, etc.
G. Correspondence
    1. Intra-office
    2. EPA
    3. Facility
    4. Record of confidential material
H. Report notes, calculations, etc.
I. References, literature
J. Sample (on-hand) inventory
K. Check-out logs
L. Litigation documents
M. Miscellaneous - photos, maps, drawings, etc.
N. Final report

Once deposited in the evidentiary file, documents may only be checked out through the EAU or designated representative.

REPORTS

All draft reports are dated and numbered in red, and each page is marked DRAFT. The author is responsible for disseminating draft reports for internal NEIC review and preparing the appropriate transmittal memorandum to the requestor. All draft copies of the report are to be returned to the author. Once comments have been incorporated and the final report has been prepared, the author disposes of all draft copies. However, Regional offices may retain a copy of the draft report with their comments until they receive the final report at which time the draft will be returned to the NEIC for disposal. The author must account for all draft copies when the files are submitted to EAU.

LITIGATION DOCUMENTS

Any litigation reports, letters, memoranda, draft court documents, etc. from the Enforcement Specialist Office or other government attorney which discuss legal matters or strategies should be separately identified in individual Branch and Division files (see Evidentiary File format class L). These documents will be marked by the Enforcement Specialist Office to identify the privileged nature of their contents. All NEIC materials prepared at the request of the case attorney will be transmitted by the Chief of the Enforcement Specialist Office. Internal distribution is limited to the appropriate project participants and the yellow "rainbow" copy for the Central Files.

CONFIDENTIAL INFORMATION

Any information received by NEIC with a request of confidentiality is handled as "confidential." A separate, locked file is maintained by the Evidence Audit Unit for the segregation and storage of all confidential and trade-secret information. Upon receipt by NEIC, this information is directed to and recorded in the Confidential Inventory Log by the Document Control Officer (DCO). The information is then made available to NEIC personnel, but only after it has been logged out. The information should be returned to the locked file at the conclusion of each working day unless the employee can guarantee its security. Confidential information may not be reproduced except upon approval by and under the supervision of the DCO. Any reproduction should be kept to an absolute minimum. The DCO will enter all copies into the document control system and apply the same requirements as for the original. In addition, this information may not be entered into any computer or data handling system. Confidential documents may not be destroyed except upon approval by and under the supervision of the Chief, Enforcement Specialist Office. The Project Coordinator will be notified prior to destruction of confidential information. The DCO shall remove and retain the cover page of any confidential information disposed of for 1 year and shall keep a record of the destruction in the Confidential Inventory Log.

All analytical work on confidential samples will be separately performed in a secure matter. The resulting documentation will be isolated from the Branch or Division files when the records are called in by the EAU. Specific procedures for handling confidential information collected under authority of the Toxic Substances Control Act are discussed in the next section.

Toxic Substances Control Act (TSCA)
Confidential Business Information (CBI)

Provisions of the Toxic Substances Control Act (TSCA) allow a company to make a claim of confidentiality for any or all information collected by EPA during an inspection if the material meets all of the following criteria:

1. The company has taken measures to protect the confidentiality of the information, and it intends to continue to take such measures.

2. The information is not, and has not been, reasonably obtainable without the company's consent by other persons (other than govenment bodies) by use of legitimate means (other than discovery based on a showing of special need in a judicial or quasi-judicial proceeding).

3. The information is not publicly available elsewhere.

4. Disclosure of the information would cause substantial harm to the company's competitive position.

Once confidentiality is claimed, there are stringent procedures that must be followed. Only persons who have been granted special clearance may have access to the material in the files.

Obtaining Clearance

1. The supervisor of the individual to be cleared contacts the Document Control Officer (DCO) or Document Control Assistant (DCA). The DCO/DCA will complete the "Authorization for Access to TSCA Confidential Business Information (CBI)" form.

2. The DCO/DCA will check with the Personnel Office to determine if the individual to be cleared has had the National Agency Check and Inquiries (NACI). If the individual has not had an NACI, then those forms must be completed and forwarded to the Security and Inspection Division in Washington before clearance can be granted.

3. The individual to be cleared accepts the employee responsibilities when signing the Confidentiality Agreement.

4. The NEIC Director signs as authorizing official.

5. The authorization form is forwarded to Washington, D.C. and the individual is placed on the authorized access list.

6. If an employee no longer needs access to TSCA information or has terminated his/her employment, a "Confidentiality Agreement for United States Employees Upon Termination or Transfer" must be completed.

Handling TSCA CBI

1. Documents must be checked out from and returned to the DCO/DCA. Documents must be returned each day unless user has approved TSCA document storage facilities.

2. TSCA CBI can be discussed only with authorized persons.

3. Information must be safeguarded when in use by keeping it under constant surveillance by covering it or placing material face

down when unauthorized persons enter the area. It must be returned to approved storage containers when not in use.

4. TSCA CBI may not be reproduced. Copies must be obtained from the DCO/DCA.

5. TSCA CBI cannot be destroyed except upon approval by and under the supervision of the DCO.

6. TSCA CBI cannot be discussed over the telephone without prior written approval.

7. If TSCA CBI must be sent to another authorized individual, the transmittal is accomplished through the respective Document Control Officers.

The penalties for violating the required procedures are severe. A "violation" is the failure to comply with any provision in the TSCA Confidential Business Information Security Manual, whether or not such failure leads to actual unauthorized disclosure of TSCA Confidential Business Information.

Violators of these procedures may be removed from the authorized access list and be subject to disciplinary action with penalties up to and including dismissal.

Willful unauthorized disclosure of TSCA Confidential Business Information may subject the discloser to a fine of not more than $5,000 or imprisonment for not more than 1 year, or both.

It is essential that personnel be familiar with and abide by these requirements. TSCA confidential files are subject to inspections by personnel from the EPA Security and Inspection Division, as well as personnel from the Office of the Inspector General.

The routine TSCA CBI security measures in the manual specify that documents are to be placed in double envelopes and locked in a briefcase that remains in the sight of the inspector while on the road. The manual recommends that this information be mailed, shipped, or hand delivered to an authorized person as soon as possible.

The briefcase may not be checked as luggage nor left unattended in a hotel room. It may be stored in a key-locked area for which the inspector has the only key or in the hotel safe.

EVIDENCE AUDIT

The Evidence Audit Unit (EAU) provides an evaluation of enforcement investigation activities for evidentiary requirements. This evaluation addresses document control, chain-of-custody, file assembly, and evidence security.

The eight primary functions of the EAU are:

- Maintaining the evidence audit file for each project
- Issuing accountable documents to project coordinators
- Conducting evidence audits of field investigation activities
- Conducting evidence audits of laboratory investigation activities
- Conducting evidence audits of document files
- Assembling and storing evidentiary files
- Maintaining confidential files
- Certifying completeness of evidentiary files

EVIDENCE AUDIT FILE

An evidence audit file is maintained for each project. It contains checkout logs, document return logs, memoranda, audit logbook, and file certification.

ACCOUNTABLE DOCUMENTS

The NEIC document control program requires the use of serialized accountable documents for field investigations. These documents include, but are not limited to, logbooks, field data records, sample tags, Chain-of-Custody Records, and Receipt for Samples forms. These items are issued to the Project Coordinator's designee by the EAU.

EVIDENCE AUDIT OF FIELD ACTIVITIES

The audit of field activities is the evaluation of sampling operations and data recording. The evaluation is based on the project plan, this manual, instructions by the Coordinator to field personnel, and standard procedures instituted by each Branch. The auditor contacts the Coordinator and discusses the various activities described in the project plan and schedules the audit activities pertaining to each field team. The auditor periodically accompanies the team on their regular tour and evaluates sampling and measurement procedures.

The auditor works closely with the Project Coordinator during the entire audit process. If deviations from standard procedures occur, the Coordinator is notified immediately.

EVIDENCE AUDIT OF LABORATORY ACTIVITIES

The laboratory activities audit is the evaluation of sample custody, laboratory procedures, quality assurance, and documentation. The evaluation is based on the project plan, this manual, and standard procedures instituted by each Branch. The audit covers each parameter or task described in the project plan.

EVIDENCE AUDITS OF DOCUMENT FILES

The EAU requires submission of all records for inclusion in the evidentiary file at the completion of a project. The review of these files consists of checking document accountability to assure that all documents issued are returned or accounted for. The individual Branch files are checked for completeness against the inventory. The case record is checked for completeness and consistency throughout and any discrepancies are brought to the attention of the Project Coordinator.

ASSEMBLING AND STORING EVIDENTIARY FILES

Evidentiary files are assembled by each NEIC organizational unit according to the outline on Page II-31 of this manual. They are stored in a secure area and may be checked out as needed by NEIC personnel. Records are periodically sent to the Federal Records Center for storage as project files become inactive.

CONFIDENTIAL FILES

A separate file is maintained for information when a company has made a claim of confidentiality. These records are labeled confidential, stored in EAU locked filing cabinets, and may be checked out to NEIC employees on a need-to-know basis. All incoming confidential information is submitted to the EAU for log-in and distribution.

Confidential Business Information (CBI) received under the Toxic Substances Control Act (TSCA) requires strict adherence to procedures outlined in the TSCA Confidential Business Information Security Manual. Access to material in these files is restricted to those who have received special clearance.

CERTIFICATION OF COMPLETENESS OF EVIDENTIARY FILE

A memorandum certifying the completeness of the evidentiary file is prepared for the Chief, Enforcement Specialist Office. This memorandum addresses adherence to or deviations from NEIC policies and procedures for chain-of-custody, document control, and evidence security.

QUALITY ASSURANCE

A Quality Assurance (QA) program is established at the NEIC to assure that data produced are of known and documented quality. The authority and responsibility for directing QA activities within NEIC are delegated to the QA Officer (QAO). QA direction and guidance are specified in the NEIC QA Program Plan. QA program requirements cover all measurement activities performed, supported, or required by NEIC.

QA PROGRAM PLAN

The NEIC QA Program Plan provides policy and guidance for QA activities. The plan specifies measurement activities requiring QA documentation and data quality assessment for precision, accuracy, representativeness, comparability, and completeness. It provides for a line of communication of the progress and deficiencies of QA to NEIC management. The plan is the basis for conducting system audits and determining adherence to NEIC QA requirements.

QA PERSONNEL

The Quality Assurance Officer's (QAO's) responsibilities include development, evaluation, and documentation of QA policies and procedures at NEIC. The QAO is assisted by QA Division Representatives from the Operations and Laboratory Services Divisions in implementing and coordinating the QA program. Other personnel involved in measurement activities are responsible for carrying out quality assurance requirements in accordance with the QA Program Plan and NEIC Standard Operating Procedures and for informing the QAO or Division representatives of the need for corrective actions.

The QAO develops and conducts system audits to monitor the QA program and is available to consult with and recommend to the NEIC staff appropriate and necessary QA methods and plans for assuring the quality of data produced.

DATA GENERATION

QA is applied throughout the entire monitoring process to assure that the data produced are of known and acceptable quality. The QA elements included in the monitoring activities are described in project plans or Standard Operating Procedures (SOPs) which are prepared for measurement activities conducted by the NEIC. Routine tasks are specified in SOPs. These include:

- Sampling and analytical methodology
- Sample holding times and preservation
- Federal reference, equivalent, and alternate test procedures
- Instrumentation selection and use
- Calibration and standardization
- Preventive and remedial maintenance
- Replicate sampling and analysis
- Blind and spiked samples
- Data handling, evaluation, and storage procedures

Measurement procedures will be in accordance with EPA regulations and guidelines and NEIC Standard Operating Procedures. Deviations must be justified and documented. Adherence to approved procedures will be determined during internal systems audits.

DATA PROCESSING

To prevent introducing errors or losing or misinterpreting the data, adequate precautions must be taken during the reduction and storage of data.

A. Checks will be made at data handling points between the analysts determining the data values and the individual entering the data into the data storage system.

- All data must be recorded clearly and accurately in field logbooks or on laboratory data sheets.

- All data must be transferred and reduced from field logbooks and bench sheets completely and accurately.
- All field and bench records will be retained in permanent files.
- Whenever possible, data will be organized into standard formats.

B. A data storage and information system will be capable of:

- Receiving all entered data.
- Screening and validating data to identify and reject outliers or errors.
- Preparing, sorting, and entering all data into the data storage files (which are either computerized or manual).
- Providing stored data points with associated QA/QC "labels" which can indicate the level of confidence or quality of the data. These labels should possess the capability of:
  - Indicating what QA/QC activities were included in the major steps of the monitoring process.
  - Quantitatively describing the precision/accuracy of the analysis.
  - Making data available to users as required. Specific requirements and procedures for the above aspects of data processing will be described in Standard Operating Procedures.

DATA QUALITY ASSESSMENT

The quality of measuremen' data generated and processed will be assessed for precision, accuracy, representativeness, comparability, and completeness based on Standard Operating Procedures and available external measures of quality (e.g., audit materials).

EPA-approved and/or best available methodology will be used for data quality assessment. For many measurements of the NEIC, suitable methodology must be developed and verified.

Aspects of data quality which will be addressed are:

Precision - Standard Operating Procedures will contain a mechanism for demonstrating the reproducibility of each measurement process. Examples of activities to assess precision are: replicate samples, co-located monitors, and instrument checks.

Accuracy - Standard Operating Procedures will contain mechanisms for demonstrating the relationship of the reported data compared to the "true" value(s).

Traceability of Instrumentation - Each measurement device will be assigned a unique identification number. Documentation shall identify the specific measurement device, where and when used, maintenance performed, and the equipment and standards used for calibration.

Traceability of Standards - Standards and each measurement device will be calibrated against a standard of known or higher accuracy when possible. Calibration standards will be traceable to available standards of the National Bureau of Standards (NBS). If NBS standards are not available, other available validated (primary) standards will be used.

Traceability of Data - Data will be documented to allow complete reconstruction, from initial field records through data storage system retrieval.

Methodology - If available, Federal reference, equivalent, or approved alternate test methods will be used. Other methodology must be fully documented and justified.

Reference or Spiked Samples - Recoveries shall be within predetermined acceptance limits. Unacceptable recoveries are identified and documented.

Performance Audits - NEIC will participate in the EPA Performance Audit Programs

Representativeness, Comparability, Completeness - Where appropriate, statements on representativeness, comparability, and completeness will be included.

DEFINITIONS

ACCURACY - the degree of agreement of a measurement with an accepted reference or true value. Accuracy is expressed as (1) the difference between the two values, (2) a percentage of the reference or true value, or (3) a ratio of the two values.

AUDIT - a systematic check to determine the quality of operation of some function or activity. Audits may be of two basic types: (1) performance audits in which quantitative or qualitative data are independently obtained for comparison with routinely obtained data in a measurement system, or (2) systems audits of a qualitative nature that consist of an onsite review of a laboratory's quality assurance system and physical facilities for sampling, calibration, and measurement.

COMPARABILITY - a measure of the confidence with which one data set can be compared to another

COMPLETENESS - a measure of the amount of valid data obtained from a measurement system compared to the amount that was expected to be obtained under normal circumstances

PRECISION - the degree of agreement between repeated measurements of one property using the same method or technique

QUALITY ASSURANCE - the total integrated program for assuring the reliability of monitoring and measurement data

QUALITY ASSURANCE PROGRAM PLAN - an orderly assembly of management policies, objectives, principles, and general procedures by which an agency or laboratory outlines how it intends to produce quality data

QUALITY CONTROL - the routine application of procedures for obtaining prescribed standards of performance in the monitoring and measurement process

REPRESENTATIVENESS - the degree to which data accurately and precisely represent a characteristic of a population, parameter variations at a sampling point, or an environmental condition

STANDARD OPERATING PROCEDURE - an operation, analysis, or action whose mechanics are thoroughly prescribed and documented and which is commonly accepted as the usual or normal method for performing certain routine or repetitive tasks

APPENDICES

A WITNESS GUIDELINES

B PROCEDURES FOR AIR SHIPMENT OF ENVIRONMENTAL LABORATORY SAMPLES

C SAFETY PRECAUTIONS WHEN ACCEPTING SAMPLES FROM OUTSIDE SOURCES

APPENDIX A

WITNESS GUIDELINES

APPENDIX A

WITNESS GUIDELINES

The following suggestions are made for prospective witnesses in order to lessen the fears and apprehensions which almost everyone has when first testifying before a board, commission, hearing officer, or in court. Even those who have testified previously encounter a certain anxiety when called for a repeat performance. When a witness is properly prepared, both with regard to the subject matter of testimony and conduct on the witness stand, there should be little fear about testifying.

It is of utmost importance that the witness be thoroughly prepared as to the subject matter of his testimony. Only the witness can recall what occurred in the field and/or laboratory and why. Since many cases are tried substantially after field and laboratory activities are conducted, it is imperative that adequate documentation be originally prepared in order that a witness' memory may be refreshed. A thorough and detailed review of all survey documents is the only way prospective witnesses can be adequately prepared.

In order to assist witnesses on how they should conduct themselves the following suggestions are given.

The witness will be required to take an oath to tell nothing but the truth. The important point is to remember that there are two ways to tell the truth---one is a halting, stumbling, hesitant manner, which makes the board member, hearing officer, judge or jury doubt that the witness is telling all the facts in a truthful way; and the other way is in a confident, straightforward manner, which inspires faith in what is being said. It is most important that the witness testify

in the latter manner. To assist a witness in testifying in such a manner, a list of time-proven hints and aids are provided below.

GENERAL INSTRUCTIONS FOR A WITNESS

If you are to be a witness in a case involving testimony concerning the appearance of an object, place, condition, etc., try to refresh your recollection by again inspecting the object, place, condition, field notes and records, etc., before the hearing or trial. While making such inspection, close your eyes and try to picture the item and recall, if you can, the important points of your testimony. Repeat the test until you have thoroughly familiarized yourself with the features of your testimony that will be given.

Before you testify, visit a court trial or board hearing and listen to other witnesses testifying. This will make you familiar with such surroundings and help you to understand some of the things you will come up against when you testify. At least be present at the hearing of the matter in which you are to testify in sufficient time to hear other witnesses testify before you take the witness chair. This, however, may not always be possible since, on occasion, witnesses are excluded from the court room.

A good witness listens to the question and then answers calmly and directly in a sincere manner. The facts should be well known so they can be communicated. Testimony in this manner applies to cross-examination as well as direct examination.

Wear neat, clean clothes when you are to testify. Dress conservatively.

Do not chew gum while testifying or taking an oath. Speak clearly and do not mumble. You will not be permitted to smoke while testifying.

DIRECT EXAMINATION

In a discussion on administrative procedures, E. Barrett Prettyman, Retired Chief Judge, U.S. Court of Appeals for the District of Columbia, gave the following advice:

> The best form of oral testimony is a series of short, accurate, and complete statements of fact. Again, it is to be emphasized that the testimony will be read by the finder of the facts, and that he will draw his findings from what he reads . . . Confused, discursive, incomplete statements of fact do not yield satisfactory findings.

Stand upright when taking the oath. Pay attention and say "I do" clearly. Do not slouch in the witness chair.

Do not memorize what you are going to say as a witness. If you have prepared answers to possible questions, by all means do not memorize such answers. It is, however, very important that you familiarize yourself as much as possible with the facts about which you will be called upon to testify.

During your direct examination, you may elaborate and respond more fully than is advisable on cross-examination. However, when you volunteer information, do not ramble and do not stray from the main point raised in your lawyer's question. The taking of testimony is a dialogue, not a monologue. If your testimony concerns a specialized technical area, the Court or hearing board will find it easier to understand if it is presented in the form of short answers to a

logical progression of questions. In addition, by letting your lawyer control the direction of your testimony, you will avoid making remarks which are legally objectionable or tactically unwise.

Be serious at all times. Avoid laughing and talking about the case in the halls, restrooms or any place in the building where the hearing or trial is being held.

While testifying, talk to the judge, hearing officer or jury. Look at him or them most of the time, and speak frankly and openly as you would to any friend or neighbor. Do not cover your mouth with your hand. Speak clearly and loudly enough so that anyone in the hearing room or courtroom can hear you easily. At all times make certain that the reporter taking the verbatim record of your testimony is able to hear you and record what you actually say. The case will be decided entirely on the words that are finally reported as having been the testimony given at the hearing or trial. Always make sure that you give a complete statement in a complete sentence. Half statements or incomplete sentences may convey your thought in the context of the hearing, but may be unintelligible when read from the cold record many months later.

CROSS EXAMINATION

Concerning cross-examination, Judge Prettyman gives the following advice to prospective witnesses:

> Don't argue. Don't fence. Don't guess. Don't make wisecracks. Don't take sides. Don't get irritated. Think first, then speak. If you do not know the answer but have an opinion or belief on the subject based on information, say exactly that and let the hearing officer decide whether you shall or shall not give such information as you have. If a 'yes or no' answer to a question is demanded but you think that a

> qualification should be made to any such answer, give the 'yes or no' and at once request permission to explain your answer. Don't worry about the effect an answer may have. Don't worry about being bulldozed or embarrassed; counsel will protect you. If you know the answer to a question, state it as precisely and succinctly as you can. The best protection against extensive cross-examination is to be brief, absolutely accurate, and entirely calm.

The hearing officer, board member or jury wants only the facts, not hearsay, conclusions, or opinions. You usually will not be allowed to testify about what someone else has told you.

Always be polite, even to the attorney for the opposing party.

Do not be a smart aleck or cocky witness. This will lose you the respect and objectivity of the trier of the facts in the case.

Do not exaggerate or embroider your testimony.

Stop instantly when the judge, hearing officer or board member interrupts, or when the other attorney objects to what you say. Do not try to sneak your answer in.

Do not nod your head for a "yes" or "no" answer. Speak out clearly. The reporter must hear an answer to record it.

If the question is about distances or time and your answer is only an estimate, be certain that you say it is only an estimate.

Listen carefully to the question asked of you. No matter how nice the other attorney may seem on cross-examination, he may be trying to

hurt you as a witness. Understand the question. Have it repeated if necessary; then give a thoughtful, considered answer. Do not give a snap answer without thinking. You cannot be rushed into answering, although, of course, it would look bad to take so much time on each question that the board member, hearing officer or jury would think that you are making up the answers.

Answer the question that is asked--not the question that you think the examiner (particularly the cross-examiner) intended to ask. The printed record shows only the question asked, not what was in the examiner's mind and a nonresponsive answer may be very detrimental to your side's case. This situation exists when the witness thinks "I know what he is after but he hasn't asked for it." Answer only what is asked.

Explain your answers if necessary. This is better than a simple "yes" or "no." Give an answer in your own words. If a question cannot be answered truthfully with a "yes" or "no," you have a right to explain the answer.

Answer directly and simply the question asked you and then stop. Never volunteer information.

If by chance your answer was wrong, correct it immediately; if your answer was not clear, clarify it immediately.

You are sworn to tell the truth. Tell it. Every material truth should be readily admitted, even if not to the advantage of the party for whom you are testifying. Do not stop to figure out whether your answer will help or hurt your side. Just answer the question to the best of your ability.

Give positive, definite answers when at all possible. Avoid saying "I think," "I believe," "in my opinion." If you do not know, say so. Do not make up an answer. You can be positive about the important things which you naturally would remember. If asked about little details which a person naturally would not remember, it is best to say that you do not remember.

Do not act nervous. Avoid mannerisms which will make it appear that you are scared, or not telling the truth, or all that you know.

Above all, it is most important that you do not lose your temper. Testifying at length is tiring. It causes fatigue. You will recognize fatigue by certain symptoms: (a) tiredness, (b) crossness, (c) nervousness, (d) anger, (e) careless answers, (f) willingness to say anything or answer any question in order to leave the witness stand. When you feel these symptoms, recognize them and strive to overcome fatigue. Remember that some attorneys on cross-examination are trying to wear you out so you will lose your temper and say things that are not correct, or that will hurt you or your testimony. Do not let this happen.

If you do not want to answer a question, do not ask the judge, hearing officer or board member whether you must answer it. If it is an improper question, your attorney will object for you. Do not ask the presiding officer, judge or board member for advice.

Do not look at your attorney or at the judge, hearing officer or board member for help in answering a question. You are on your own. If the question is an improper one, your attorney will object. If the judge, hearing officer or board member then says to answer it, do so.

Do not hedge or argue with the opposing attorney.

There are several questions which are known as "trick questions." That is, if you answer them the way the opposing attorney hopes you will, he can make your answer sound bad. Here are two of them:

"Have you talked to anybody about this matter?" If you say "no," the hearing officer or board member, or a seasoned jury, will know that is not right because good lawyers always talk to the witnesses before they testify. If you say "yes," the lawyer may try to imply that you were told what to say. The best thing to say is that you have talked to Mr. _____, your lawyer, to the appellant, etc., and that you were just asked what the facts were. All we want you to do is simply tell the truth.

"Are you getting paid to testify in this appeal?" The lawyer asking this hopes your answer will be "yes," thereby implying that you are being paid to say what your side wants you to say. Your answer should be something like "No, I am not getting paid to testify; I am only getting compensation for my time off from work, and the expense it is costing me to be here."

In addition to the above suggestions and guidelines, several additional references are available for further background:

Expert Witnesses and Environmental Litigation, J. L. Sullivan and R. J. Roberts, Journal of the Air Pollution Control Assoc., April 1975, Vol. 25, No. 4.

Environmental Litigation and the In-House Engineer, F. Finn; R. C. Heidrick; K. Thompson, Journal of the Air Pollution Control Assoc., Feb. 1977, Vol. 27, No. 2.

Essentials of Cross-Examination, Leo R. Friedman, CEB 1968.

APPENDIX B

PROCEDURES FOR AIR SHIPMENT OF ENVIRONMENTAL LABORATORY SAMPLES

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PROCEDURES FOR AIR SHIPMENT OF ENVIRONMENTAL LABORATORY SAMPLES

Many NEIC surveys require shipment of environmental samples by air from field locations to NEIC-Denver laboratories to meet required EPA holding times. Environmental samples collected during water surveys are categorized as: drinking water, ambient water, effluent, biological sediment, sludge, and other environmental laboratory samples. Unless noted, the following NEIC procedures comply with Department of Transportation (DOT) regulations for packaging and shipping.

1. Unpreserved drinking water, ambient water, effluent, biological sediment and sludge samples.

   Normal unpreserved environmental samples collected by EPA employees are not regulated under DOT Hazardous Transporation Regulations and may be shipped using NEIC packaging and handling procedures for shipment of non-hazardous samples.

2. Preserved drinking water, ambient water, effluent, biological sediment and sludge samples.

   Table 1 lists the common preservatives and preservation techniques used by EPA and listed in the Hazardous Material Table, 49 CFR §172.101. Samples preserved in the recommended manner may be shipped using current NEIC packaging and handling procedures for shipment of non-hazardous samples.

TABLE 1

Standard Preservatives Listed in the Hazardous Materials Table (49 CFR §172.101) used by EPA for Preservation of Water, Effluent, Biological Sediment and Sludge Samples

Preservative	Sample Type/ Parameter	pH Recommendation	Quantity of Preservative Added	Weight % of Preservation	Hazard Class	Label	Packaging Exceptions	(49 CFR) Specific Requirements
HCl	Organic Carbon	<2 (~1.9)	2 ml of 1:1	0.04%	Corrosive Material	Corrosive	173.244	173.263
$HgCl_2$	Nitrogen Species	N.A.	40 mg	0.004%	Poison B	Poison	173.364	173.372
HNO_3	*Metals, Hardness	<2(~1.6)	3 ml of 1:1	0.15%	Oxidizer; Corrosive Material	Oxidizer and Corrosive; O. & Poison; Corrosive	None	173.268
H_2SO_4	Nitrogen Species COD, Oil & Grease P (hydrolyzable) Organic Carbon	<2(~1.15)	2 ml of 36N	0.35%	Corrosive Material	Corrosive	173.244	173.272 173.248
NaOH	Cyanides	>12 (~12.3)	2 ml of 10N	0.080%	Corrosive Material	Corrosive	173.244	173.245(b) 173.249
H_2PO_4	Phenolics	<4	Sufficient to yield desired pH		Corrosive Material	Corrosive	173.244	173.245
Freezing 0°C (Dry Ice)	Biological - Fish & Shellfish Tissue**	N.A.	N.A.	N.A.	ORM-A	None	None	173.615

* If sample must be shipped by passenger aircraft or railcar, the sample may be initially preserved by icing and immediately shipping it to the laboratory. Upon receipt in the laboratory, the sample must be acidified with cone, HNO_3 to pH 2. At time of analysis, sample container should be thoroughly rinsed with 1:1 HNO_3; washings should be added to sample.

** Dry ice is classified as a ORM-A hazard by DOT. There is no labeling requirements for samples preserved with dry ice, but samples must be packaged in accordance with the requirements of 49 CFR 173.615 and advance arrangements must be made between the shipper and the air carrier.

3. Reagents

Reagents which are designated as hazardous by DOT's Hazardous Material Table, 49, CFR §172.101, shall be shipped pursuant to the appropriate DOT regulations. The shipper (NEIC) is required to determine if an individually shipped reagent is likely to be classified as a hazardous material when it is not listed in the DOT Table. Nitric acid in any concentration is forbidden on passenger-carrying aircraft or railcar.

For investigations where nitric acid must be used for metals preservation, means other than transport by passenger-carrying aircraft or railcar must be used to transport the acid to the site of investigation.

4. Other Samples

Some environmental samples collected by EPA employees, such as leachates, untreated process materials or samples from spill investigations, may contain concentrations of contaminants in excess of those normally encountered in preserved drinking water, ambient water, effluent, biological sediment and sludge samples. If such samples are collected and shipped by air, and the technical name of a sample contaminant material is known, and if the contaminant material is designated in the Hazardous Materials Table, it must be shipped pursuant to applicable DOT Hazardous Materials regulations. If the technical name of the sample contaminant material is not known, the DOT regulations place the burden on the shipper to determine if the sample meets the definition of a hazardous material. In the case of samples being forwarded to a laboratory for analysis, it is assumed that the shipper would have some information concerning the sample,

and based on that information, be able to make a reasonable determination whether the sample is likely to be classified a hazardous material. When a reasonable doubt exists as to whether a sample is subject to DOT regulations, the shipper should consult the Hazardous Materials Transportation Coordinator as to the appropriate procedures to follow in the shipment of the sample.

When a sample is not listed in DOT's Hazardous Materials Table, 40 CFR §172.101, it is necessary for a shipper to make a reasonable determination whether the sample is likely to be classified as a hazardous material. The following classes of hazardous materials must be considered and they are listed below in the order of greatest concern, 40 CFR §173.3.

Radioactive material
Poison A
Flammable gas
Non-flammable gas
Flammable liquid
Oxidizer
Flammable solid
Corrosive material (liquid)
Poison B
Corrosive material (solid)
Irritating materials
Combustible liquid (in containers having capacities exceeding 110 gallons)
ORM-B (other regulated material, i.e., barium oxide, calcium oxide, copper chloride)
ORM-A (i.e., dry ice, carbon tetrachloride, chloroform, DDT, dieldrin, formaldehyde, lindane, malathion, naphthalene, vinyl acetate)
Combustible liquid (in containers having capacities of 110 gallons or less)

The above hazards likely to be applicable to NEIC survey samples as defined by DOT regulations are as follows:

Poison A (49 CFR 173.326) - Poisonous gases or liquids of such nature that a very small amount of gas, or vapor of the liquid mixed with air is dangerous to life. This class include the following:

Bromacetone
Cyanogen
Cyanogen chloride containing less than 0.9% water
Diphosgene
Ethyldichlorarsine
Hydrocyanic acid
Methyldichloratsine
Nitrogen peroxide (tetroxide)
Phosgene (diphosgene)
Nitrogen tetroxide - nitric oxide
Mixtures containing up to 33.2% weight nitric oxide

Flammable liquid [49 CFR 173.115(a)] - "Any liquid having a flash point* below 100°C (37.8°F) ... " Some of the flammable liquids listed in DOT's Hazardous Materials are acetone, alcohol n.o.s. (not otherwise specified), benzene, cyclopentane, hexane, ink, methyl alcohol, methyl ethyl ketone, toluene, and xylene.

Oxidizer (49 CFR 173.151) - "A substance such as a chlorate, permanganate, inorganic peroxide, nitro carbo nitrate, or a nitrate that yields oxygen readily to stimulate the combustion of organic matter."

Corrosive materials (49 CFR 173.240) - "A liquid ... that causes visible destruction or irreversible alterations in human skin

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* Flash point means the minimum temperature at which a substance gives off vapors which in contact with spark or flame will ignite, 49 CFR 171.8.

tissue at the site of contact, or in the case of leakage from its packaging, ... that has a severe corrosion rate of steel."

Poison B (49 CFR 173.343) - "Those substances, liquid or solid (including pastes and semisolids), other than Class A poisons or Irritating Materials, which are known to be so toxic to man as to afford a hazard to health during transporation; or which, in the absence of adequate data on human toxicity, are presumed to be toxic to man because they fall within any one of the following categories when tested on laboratory animals:

Oral toxicity ....
Toxicity on inhalation ....
Toxicity by skin absorption ....

Examples taken from DOT's Hazardous Material Table include aldrin, copper cyanide, mecuric acetate, nitroaniline, thiophosgene and zinc arsenate. The foregoing categories shall not apply if the "physical characteristics or the probable hazards to humans as shown by experience indicate that the substances will not cause serious sickness or death."

Irritating Material (49 CFR 173.381) - "A liquid or solid substance which upon contact with fire or when exposed to air gives off dangerous or intensely irritating fumes, such as brombenzylcyanide, chloracetophenone, diphenylaminechlorarsine, and diphenylchlorarsine, but not including any poisonous material, Class A."

Combustible liquids [49 CFR 173.115(b)] - Any liquid that .... has a flash point at or above 100°F (37.8°C) and below 200°F (93.3°C) ... " Examples of combustible liquids include alcohol-n.o.s., benzaldehyde, camphor oil, chlordane-liquid, creosote-coal tar, fuel oil, pine oil, road oil, and wax-liquid.

Etiological agent (49 CFR 173.386) - a viable microorganism or its toxin, which causes or may cause human disease. A "diagnostic specimen" means any human or animal material including, but not limited to, excreta, secreta, blood, and its components, tissue, and tissue fluids being shipped for purposes of diagnosis. The list of etiological agents in the Department of Health, Education and Welfare (HEW) regulations, 42 CFR 72.25(c), includes bacterial, fungal, and viral agents and would cover organisms found in sewage, human and animal waste. Diagnostic specimens of etiological agents are excepted from DOT hazardous materials regulations but HEW requires an etiological agent label to be affixed to all packages which contain etiological agents. However, so long as the shipper does not have reason to believe that viable disease-causing organisms are present in a sample based on the company's NPDES permit and DMR data, then the sample will not be considered an etiological agent. Therefore, the sample will not require an HEW etiological label and may be shipped pursuant to NEIC packing and handling procedures for shipment of non-hazardous samples.

The Clean Water Act (Section 311(b)(2)) requires the identification of hazardous substances which present an imminent and substantial danger to the public health and welfare. DOT has proposed that any substances not previously listed in the Hazardous Material Table be classified as ORM-E. The EPA Safety Manual for Hazardous Waste Site Investigations* details procedures for transporting unknown hazardous waste materials samples.

NEIC Packaging and Handling Procedures for Shipment of Non-Hazardous Samples

The basic guidelines for NEIC packaging procedures meet DOT standard requirements for all packages as specified in 49 CFR 173.24, e.g.:

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* In DRAFT circulation at time of this printing.

Each package ... shall be so designed and constructed, and its contents so limited, that under conditions normally incident to transportation:

> There will be no significant release of ... materials to the environment.
>
> the effectiveness of the packaging will not be substantially reduced; and
>
> there will be no mixture of gases or vapors in the package which could, through any credible spontaneous increase of heat or pressure, or through an explosion, significantly reduce the effectiveness of the packaging.

In addition, shipments by air must meet the requirements at 49 CFR Section 173.6:

Each package ... shall be so designed and constructed, and its contents so limited, that under conditions normally incident to transportation,

> There will be no significant release of ... materials to the environment.
>
> Inner containers that are breakable (such as earthenware, glass, or brittle plastic), must be packaged to prevent breakage and leakage under conditions normally incident to transportation. These completed packagings must be capable of withstanding a 4-foot drop on solid concrete in the position most likely to cause damage. Cushioning and absorbent materials must not be capable of reacting dangerously with the contents ....

> For any packaging with a capacity of 110 gallons or less containing liquids, sufficient outage (ullage) must be provided to prevent liquid contents from completely filling the packaging at 130°F. The primary packaging (which may include composite packaging), for which retention of the liquid is the basic function, must be capable of withstanding, without leakage, an internal absolute pressure of no less than 26 lbs/sq inch or no less than the sum of the absolute vapor pressure of the contents at 130°F (55°C) and,
>
> Stoppers, corks, or other such friction-type closures must be held securely, tightly, and effectively in place with wire, tape, or other positive means. Each screw-type closure or any inside plastic packaging must be secured to prevent the closure from loosening due to vibration or substantial changes in temperature.

Present NEIC custody procedures require samples to be placed in locked metal picnic coolers with hard plastic liners. EPA analytical methods recommend that samples be preserved with ice or below a temperature of 4°C. These must be adhered to in addition to the following packaging procedures based on the above DOT guidelines.

Samples in quart-size and smaller glass bottles should be enclosed in styrofoam packaging and sealed with filament reinforced tape. In the case of the 1-gallon bottles used for non-preserved organic samples, carved styrofoam sheets at the top and bottom will be used to hold the bottle in place. A picnic cooler containing plastic 16-ounce bottles and ice was dropped three times from a distance of four feet and did not experience any leakage nor damage to the inside bottles. This indicates that it affords the type of sturdy protection which is the goal of 49 CFR 173.24 and 173.6. Therefore, 16 ounce polyethylene bottles will be used for samples containing acid preservatives and the bottles will not require additional styrofoam enclosures.

The caps will be tightly screwed on before being placed in the cooler. Small volatile organics glass bottle samples will be placed inside quart cubic containers to prevent breakage. Plastic containers and quart-size glass bottles (enclosed in styrofoam containers) will be put into large heavy-duty plastic bags inside the cooler, ice will be placed around the samples and the bags will be tightly closed. The cooler drainage hole must be secured to prevent leakage. All sides of the cooler will have arrows which indicate the proper upward position of the cooler and a "THIS SIDE UP" sticker will be placed on top. Following these packaging procedures, will minimize to the greatest degree presently possible, any harm which could occur from transportation of NEIC environmental samples in commerce.

APPENDIX C

SAFETY PRECAUTIONS WHEN ACCEPTING SAMPLES FROM OUTSIDE SOURCES

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In order to minimize hazards to NEIC analytical personnel and to prevent laboratory contamination, procedures for collection and transportation of samples for analysis by the NEIC laboratory are as follows:

1. NEIC will accept potentially dangerous samples only in cases where there has been active participation in the planning and execution of the sampling program by a designated NEIC staff member.* Such active participation must include full sharing of knowledge relative to process, previous analytical data, and other information relative to the characteristics of the material to be sampled.

2. Samples from municipal sewage treatment plants or the ambient environment will be accepted only after detailed discussion and agreement between the Regional project coodinator and the NEIC Chemistry Branch Chief or his representative. This exchange of information must include a positive sample identification scheme, full discussion of known characteristics of the material sampled, and sample preservation and shipment procedures. Except in emergency situations such agreement will be confirmed in writing by NEIC prior to sampling.

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* In an emergency precluding participation of NEIC personnel, procedures can be worked out by a telcon.

3. Submission of unusual or non-routine kinds of samples, i.e., bag samples of gaseous emissions, core samples from landfills, etc., will be governed by procedures similar to those in item 2 above. However, if there is a possibility of toxic exposure, the procedures in item 1 will be followed.