

United States
Environmental Protection
Agency

EPA-831-R-81-100

Office of Water Enforcement
Enforcement Division (EN-338)
Washington, DC 20460

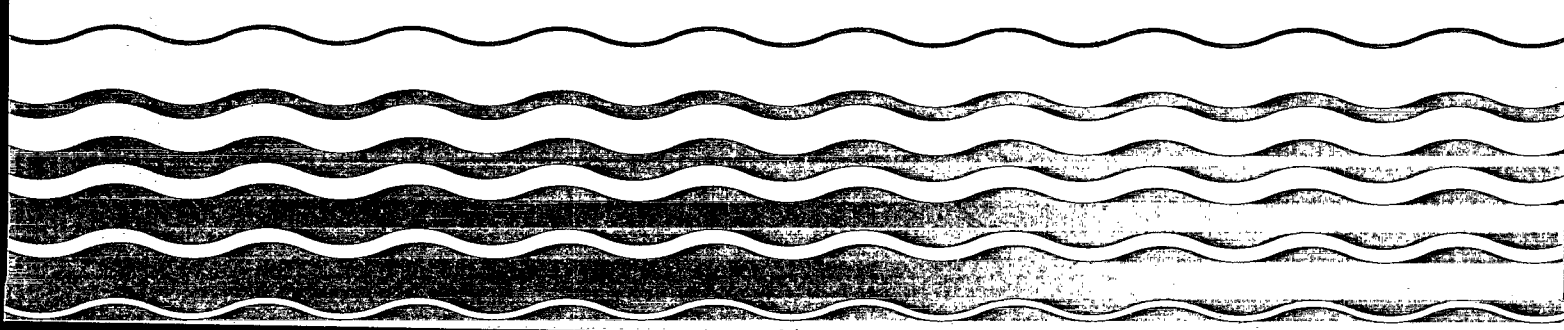
January 1981

Water



NPDES Compliance Evaluation Inspection Manual

MCD — 75



NOTES

To order this publication, MCD-75 "NPDES Compliance Evaluation Inspection Manual", write to:

General Services Administration (8BRC)
Centralized Mailing Lists Services
Building 41, Denver Federal Center
Denver, Colorado 80225

Please indicate the MCD number and title of publication.

Multiple copies maybe purchased from:

National Technical Information Service
Springfield, Virginia 22151

NPDES COMPLIANCE EVALUATION
INSPECTION MANUAL

JANUARY 1981

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF WATER ENFORCEMENT
COMPLIANCE BRANCH
TECHNICAL EVALUATION AND SUPPORT SECTION
EN-338
WASHINGTON, D.C. 20460

DISCLAIMER

This manual has been reviewed by the Office of Water Enforcement, U.S. Environmental Protection Agency, and approved for publication. Mention of trade names or commercial products does not constitute endorsement or recommendation for use.

NPDES COMPLIANCE EVALUATION INSPECTION MANUAL

TABLE OF CONTENTS

	PAGE
INTRODUCTION	i
1. ADMINISTRATION	
I. Work Ethics	1-1
II. Disclosure of Official Information	1-5
III. Diaries and Field Notes	1-8
2. PREPARATION FOR INSPECTION	
I. General	2-1
II. Objectives	2-1
III. Inspector's Responsibility	2-2
IV. Preinspection Techniques	2-2
V. Compliance Files	2-4
VI. Types of Compliance Inspections	2-11
3. TREATMENT FACILITY REVIEW	
I. Authority	3-1
II. General	3-2
III. Objectives	3-3
IV. Inspector's Obligation	3-4
V. Inspection Procedures	3-6
VI. Post-Inspection Discussion with Management	3-15
4. RECORDS AND REPORTS REVIEW	
I. Authority	4-1
II. General	4-1
III. Objectives	4-2
IV. Inspection Procedures	4-3
5. COMPLIANCE SCHEDULE STATUS REVIEW	
I. Authority	5-1
II. General	5-1
III. Objectives	5-2
IV. Inspection Procedures	5-2
6. SELF-MONITORING PROGRAM REVIEW	
I. Authority	6-1
II. Objectives	6-1
III. Inspection Procedures	6-2
IV. Quality Assurance	6-10
7. MULTIMEDIA INSPECTIONS	
I. Authority	7-1
II. Inspector's Responsibility	7-3
III. Inspection Procedures	7-4

8.	SPECIAL CONSIDERATIONS AND TECHNIQUES	
	I. Citizen Complaint Investigations	8-1
	II. Photographs	8-3
	III. Best Management Practices	8-8
	IV. Spill Prevention Control and Countermeasure Plan	8-12
	V. Interagency Regulatory Liaison Group Referral Inspection Program	8-12
9.	FEDERAL AND STATE COOPERATION	
	I. Authority	9-1
	II. Objectives	9-1
	III. Policy	9-2
10.	SAFETY	
	I. General	10-1
	II. Safety Equipment	10-2
	III. Safety Precautions	10-3
	IV. Hazardous Waste Disposal Sites	10-4
11.	ACCESS AND WARRANTS	
	I. General	11-1
	II. Objectives	11-3
	III. Unreasonable Search and Seizure	11-4
	IV. Neutral Inspection Scheme	11-4
	V. Right of Entry	11-6
	VI. Privilege Against Self-Incrimination	11-10
12.	COMPLIANCE INSPECTION REPORT	
	I. General	12-1
	II. Objectives	12-1
	III. Procedures	12-2
	IV. Abbreviated Narrative Reports	12-12
	V. Deficiency Notice	12-13

REFERENCES

SECTION REFERENCES

APPENDICES

COMPLIANCE EVALUATION INSPECTION MANUAL

INTRODUCTION

The objective of the Clean Water Act (33 U.S.C. 1251 et. seq), hereafter referred to as the Act, is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. The mission of the field staff engaged in the enforcement of the Act is to implement the plans that have been adopted to achieve the Act's objective, thereby guarding the environment against the adverse effects of water pollution.

The U.S. Environmental Protection Agency (EPA) is a regulatory Agency and believes that a vigorous and thorough enforcement program, fairly but firmly administered, is the best way to guarantee that the Agency will succeed in its mission. An effective enforcement program requires highly-trained, well-qualified and dedicated personnel to conduct inspections aimed at detecting violations and to provide evidence for the successful enforcement of National Pollutant Discharge Elimination System (NPDES) permit requirements.

The Compliance Evaluation Inspection (CEI) is a type of Compliance Inspection which is non-sampling in nature and designed to verify permittee compliance with applicable NPDES permit requirements and compliance schedules. This inspection is based on record reviews and cursory observations such as walk-through evaluations of waste sources and wastewater treatment facilities,

visual observations of effluents, receiving waters, etc. The CEI applies to both chemical and biological self-monitoring programs of the permittee.

This Manual is a guide for the professional field staff in carrying out their responsibilities in field surveillance, facility inspection, and enforcement activities. It contains the authorities, objectives, responsibilities, policies, and procedures required by the field staff to do a thorough and effective job. This Manual is not intended to cover every possible situation confronting an inspection team; but it should enable the inspector, especially the new inspector, to deal objectively with the many complex situations that arise during a CEI.

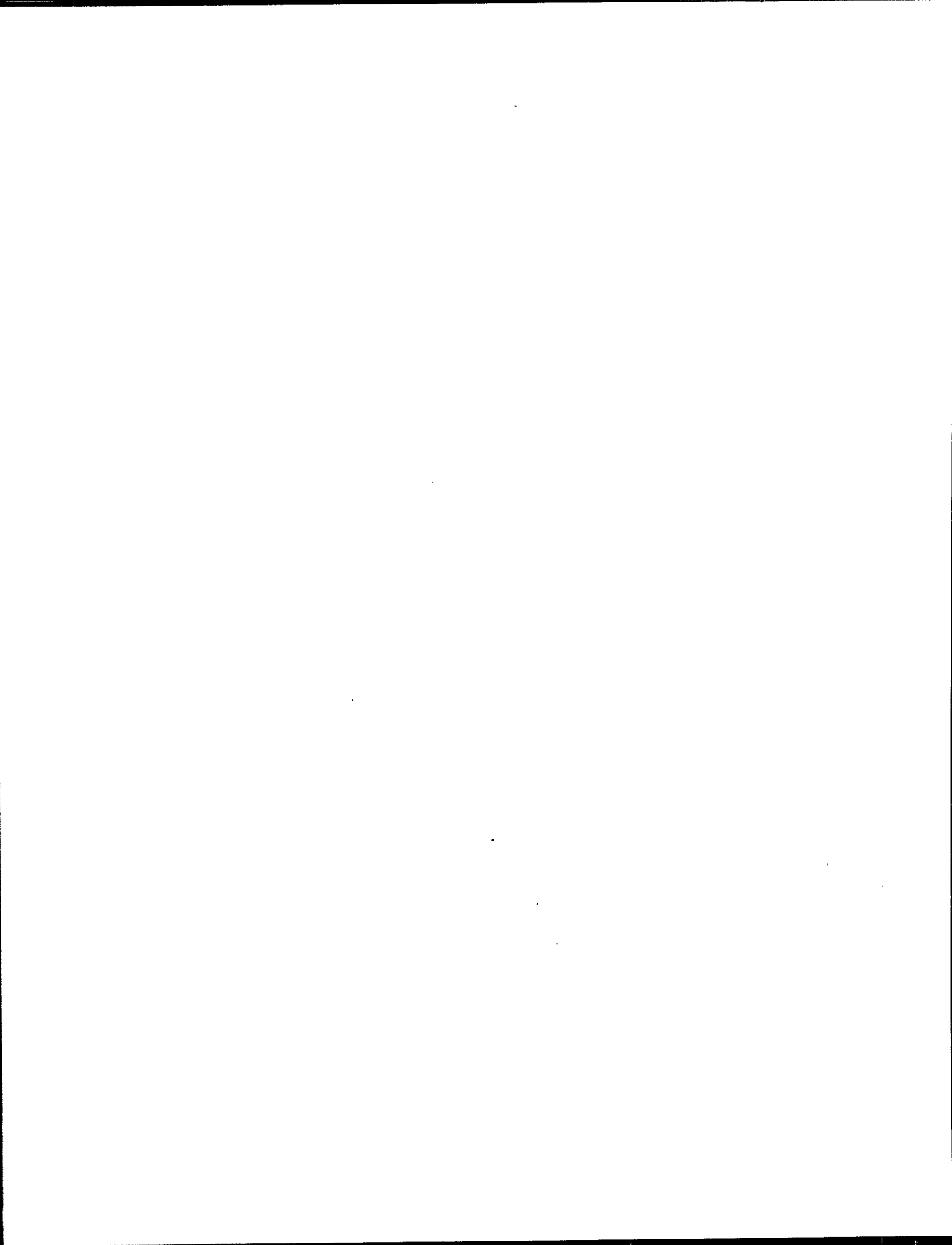
The Compliance Evaluation Inspection Manual was originally developed in 1976 by a working group consisting of EPA Headquarters and Regional personnel including:

1. Ira W. Thompson
2. James Patrick
3. David Stoltenberg
4. Robert Reeves
5. G. R. Stigall
6. Gerald Klug
7. David Shedroff
8. Donald M. Olson

Meetings were held in Washington, D.C. and EPA Regions to obtain maximum Regional input. Comments and suggestions were requested from EPA Regional offices, NPDES approved States, selected Federal Agencies, and Headquarters personnel.

The original CEI Manual has been revised and updated as needed in order to keep the Manual a useful working tool. This revised Manual has been developed by David Rogers, Environmental Engineer, Technical Evaluation and Support Section, Compliance Branch, Office of Water Enforcement. Comments were solicited from EPA Regional offices, State Water Program offices and Headquarters personnel. Special thanks are due to the Regional offices and Headquarters personnel, specifically, Edward S. Bender, Biologist; Gary R. Polvi, Chief, Technical Evaluation and Support Section; and Rosanne Light, Acting Chief, Compliance Branch, for their guidance in developing this revised Manual. Also, commendations are due to Mrs. Wilma L. Haney and Mrs. Mary F. Rogers of the Technical Evaluation and Support Section secretarial staff for their assistance in the preparation of this Manual.

Comments and suggestions for revising and improving the Manual are invited and should be directed to Chief, Compliance Branch (EN-338), Enforcement Division, Office of Water Enforcement, U.S. Environmental Protection Agency, 401 M Street S.W., Washington, D.C. 20460.



SECTION 1

ADMINISTRATION

I. WORK ETHICS

A. Professional Stature

Inspectors are expected to perform their duties in a professional and responsible manner. Inspectors shall:

1. Develop and report the facts of an investigation completely, accurately, and objectively;
2. Conduct themselves at all times in accordance with the regulations in the EPA handbook, Responsibilities and Conduct for EPA Employees (40 CFR Part 3);
3. Avoid, in the course of an investigation, any act or failure to act which could be considered to have been motivated by reason of personal or private gain; and
4. Make a continuing effort to improve their professional knowledge and technical skill in the investigation field.

B. Conflict of Interest

A conflict of interest may exist whenever an EPA employee has a personal or private interest in a matter which is related to the employee's 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, be constantly aware of situations which are, or give the appearance of, conflicts of interest when dealing with others in or outside the Government. For a detailed discussion of the situations and/or activities which may result in conflict of interest, the inspector is directed to Employee Responsibilities and Conduct (40 CFR Part 3).

C. Attire

Good public relations and common sense require that you dress appropriately for the activity in which you are engaged. Safety standards (see EPA Occupational Health and Safety Manual) may dictate requirements of a hard hat, safety glasses,

respirator, long sleeve shirts, safety shoes, etc. Consult your supervisor for Regional policy relative to proper attire and be guided accordingly.

D. Industry and Public Relations

It is important that cooperation be obtained and good working relations established when working with the permittees and the public. This can best be accomplished by using diplomacy, tact, and persuasion. Even a hostile person should be treated with courtesy and respect. Inspectors should not speak of any person, other regulatory agency, manufacturer, or industrial product in a derogatory manner.

E. Gifts, Gratuities, Favors, and Luncheons, Etc.

An EPA employee is forbidden to solicit or accept any gift, gratuity, entertainment (including meals), favors, loans, or any other thing of monetary value from any person, corporation, or group which:

- 1) has a contractual or financial relationship with EPA,
- 2) has interests which may be substantially affected by such employee's official actions, or
- 3) conducts operations which are regulated by EPA.

Acceptance of food and refreshments of nominal value,

such as a luncheon during a plant tour where the arrangements are consistent with the transaction of official business, is an exception to the above stated general rule.

F. Attempted Bribery

You may be offered money in varying amounts by persons whose activities you are investigating. Such incidents usually arise from ignorance on the part of an individual who is unfamiliar with EPA Inspectors. Other cases may be outright attempts to bribe you to whitewash a serious violation or condition, or to cause you to withhold damaging information or observations. Inspectors shall:

1. Ask "What is this for?" if they are offered something of value;
2. Explain politely, if the offer is repeated, that both parties to such transactions may be guilty of violating the Federal statutes;
3. Not accept money or goods of any kind; and
4. Immediately report the incident in detail to their supervisor.

II. DISCLOSURE OF OFFICIAL INFORMATION

A. Requests for Information

1. General

EPA has an "open door" policy on releasing information to the public. It aims to make information about EPA and its work available, freely and equally, to all interested individuals, groups, and organizations. This policy, however, does not extend to information relating to the suspicion of a violation, evidence of possible misconduct, or information for which the company has claimed confidentiality.

2. Media Contacts

Inspectors should cooperate with representatives of the press, other communications media, and interested groups. Information concerning the Agency's responsibility for inspections, monitoring activities and investigations of alleged NPDES permit violations, and water enforcement policy should be referred to the Regional Enforcement Director for response.

B. Request by State and Local Cooperating Officials

State and local water enforcement officials, cooperating with EPA in the enforcement and implementation of the Act, are permitted access to official information subject to approval by the appropriate Regional official. Although inspectors are not responsible for answering requests for the release of confidential information, they should keep informed as to who is permitted access to such information. Consult with your supervisor immediately after receiving such a request.

C. Confidential Information

1. Section 308(b) of the Act addresses the protection of trade secrets and confidential information.
2. A permittee may claim confidential treatment on any information the inspector requests or has access to while on-site. Once a claim is made, the inspector must honor the request and initiate the procedure listed below. The EPA legal office, not the inspector, will determine the validity of the claim.

3. Inspectors, either EPA or contractors, shall not sign a pledge of secrecy, a confidentiality agreement regarding information received while inspecting the business. Denial of entry based on claims of confidentiality should be treated in the same manner as a denial of entry as discussed in Section 11 (V.) of this Manual.
4. All confidential information received shall be marked as such, and a chain-of-custody record maintained and placed in a locked filing cabinet or a safe immediately following the completion of the inspection.
 - a. Only personnel authorized by the Regional Administrator, Division Director, or Branch Chief shall be allowed access to the file.
 - b. Copies of information marked "trade secret" and/or "confidential" should not be made unless authorized in writing by the Regional Administrator, Division Director, or Branch Chief.

5. Requests for access to confidential information by any member of the public, or a State, local, or Federal Agency shall be handled according to the procedures contained in the Freedom of Information Act Regulations (40 CFR Part 2). All such requests shall be referred to the responsible Regional organizational unit.

III. DIARIES AND FIELD NOTES

A. Responsibility

Each inspector will maintain a legible daily diary containing an accurate and inclusive documentation of inspection activity. Since the diary will form the basis for later written files and reports, it must contain only facts and observations. Language will be objective, factual, and free of personal feelings or other terminology which might prove inappropriate.

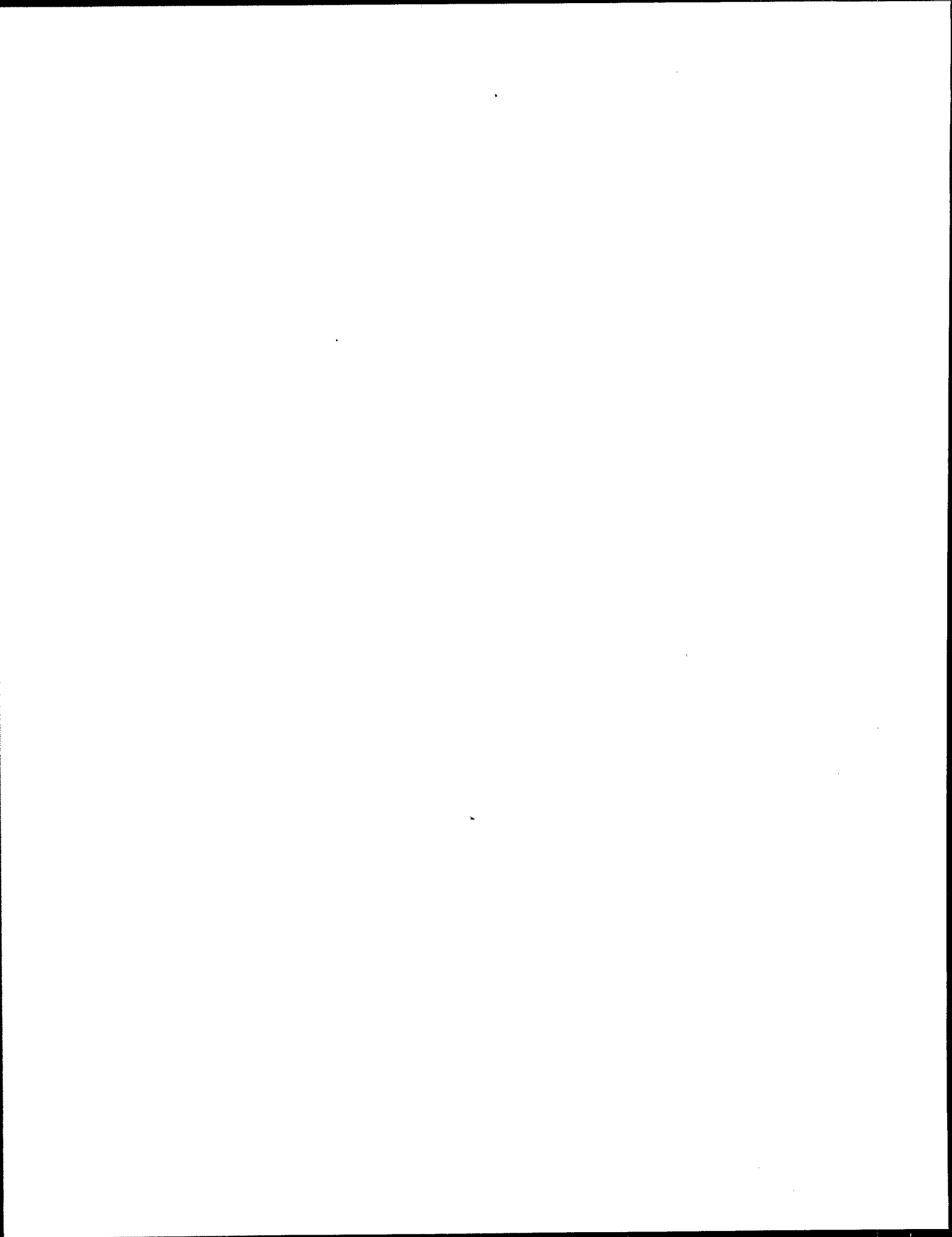
B. Entries

The Government's case in a formal hearing or criminal prosecution often hinges on the evidence

gathered by the inspector. Vigorous Regional enforcement efforts have increased the probability of inspectors being called upon to testify. Therefore, it is imperative that each inspector keep detailed records of inspections, investigations, photographs taken, etc. Field notes and observations should be maintained in a bound, consecutively numbered notebook. This data will serve as an aid in giving testimony.

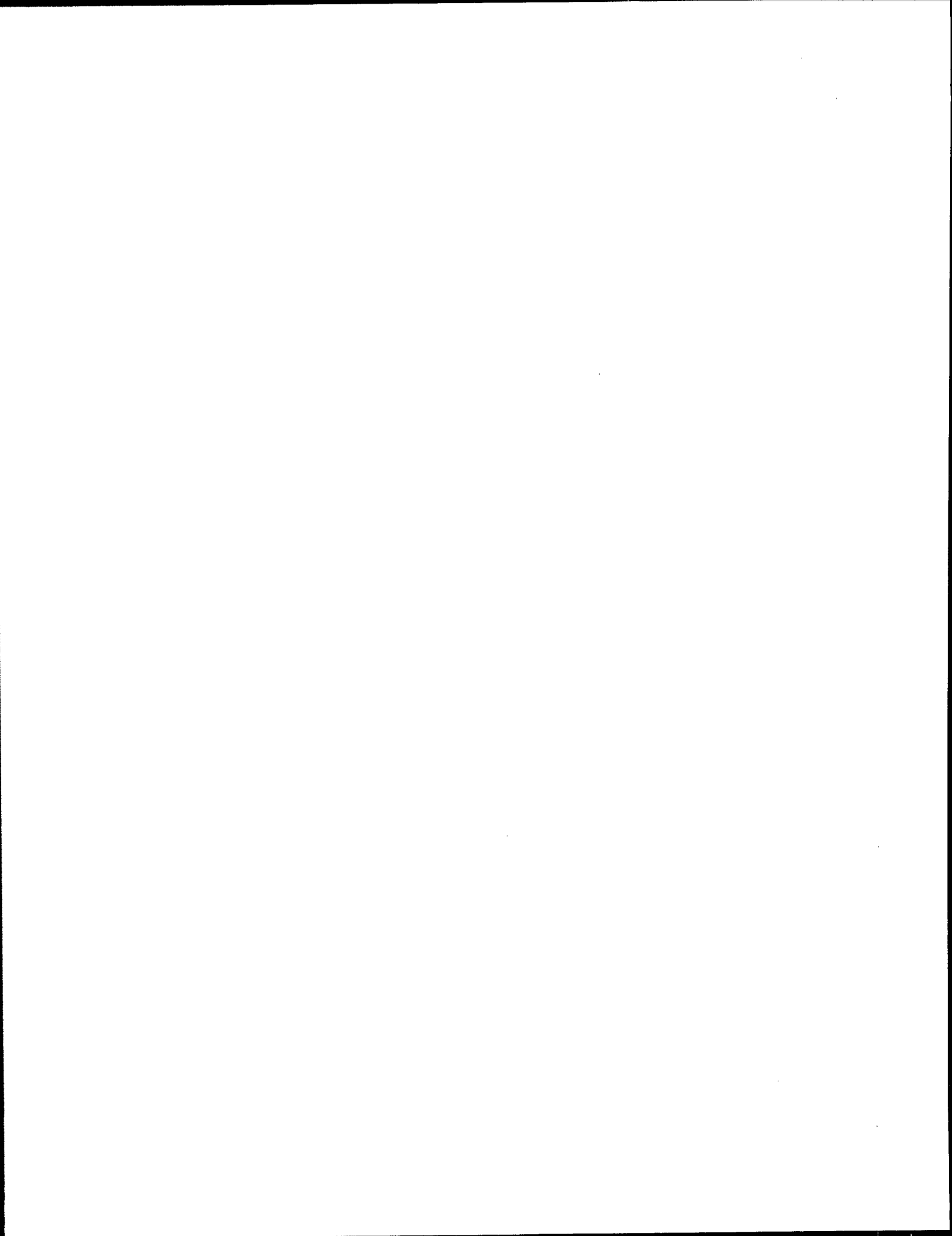
C. Disposition of Diaries

The diary is a part of the EPA's Regional files and should not be considered the inspector's personal record. Diaries shall be held in field offices indefinitely, pending disposition instructions from the Regional Enforcement Director.



SECTION 2

PREPARATION FOR INSPECTION



I. GENERAL

Along with the review of self-monitoring reports, the Compliance Evaluation Inspection and other investigation efforts are compliance functions. Compliance Evaluation Inspections must be designed to accomplish meaningful results, not just the completion of a planned number of inspections called for in a work schedule. These inspections must be considered an important mechanism in the attainment of the Agency's goal of cleaning up the Nation's waters.

II. OBJECTIVES

The primary objectives of preparation for inspection are:

- A. To obtain and review all Agency information essential for conducting an effective inspection;
- B. To permit completion of the scheduled number of inspections in a timely manner; and
- C. To minimize inconvenience to permittees by not requiring them to either explain or produce information which is already in the hands of the regulatory agency.

III. INSPECTOR'S RESPONSIBILITY

Inspectors are responsible for:

- A. Knowledge of permit conditions, effluent limitations, monitoring requirements, etc.;
- B. Knowledge of applicable EPA policies and procedures;
- C. Short-range inspection scheduling;
- D. Adequate preinspection planning;
- E. The compliance inspection itself;
- F. Completion of follow-up procedures; and
- G. Adequate records maintenance.

IV. PREINSPECTION TECHNIQUES

To achieve these objectives, several steps should be taken:

- A. Review compliance files consisting of pertinent portions of permits and other related documents, prior inspection reports and previously issued

Deficiency Notices, the permittees' Discharge Monitoring Reports, and other reporting data for the determination of compliance/noncompliance status;

- B. Review of other pertinent files that may be available and maintained by State agencies, local planning agencies (208 agencies), and other program offices within EPA;
- C. Develop an inspection trip schedule to promote maximum utilization of available inspection personnel and travel expenses; and
- D. Establish procedures to call/contact inspection and office personnel to insure that emergencies and urgent requests for immediate attention (i.e., right-of-entry denial) can be handled without unnecessary travel or loss of time.

These steps will be outlined in more detail in the succeeding sections of this Manual.

V. COMPLIANCE FILES

A. General

Noted below are materials pertaining to the permittee with which the inspector should be familiar prior to making the inspection. Because a summary of the information will be needed for future inspections, a "compliance file" should be prepared for each NPDES permittee. When inspectors take such files with them on inspections, it assures them that needed information for timely completion of an inspection is readily available. Afterwards, the file can be updated for the next inspection.

Generally, the "compliance file" should include:

1. A copy of the NPDES and applicable State permits;
2. A sketch or a copy of a U.S. Geological Survey map showing the waste facility location and/or its effluent discharge point (overflow and bypass discharge points should also be shown);

3. A summary of names, titles, locations, and phone numbers of the responsible persons (operators, municipal or industrial officials) involved with the permittee's water pollution control programs;
4. A flow chart or summary of the present and planned treatment and/or abatement facilities (if appropriate, include industrial production processes);
5. Inspection reports from previous inspections;
6. Previously issued Deficiency Notices and the permittee's written response to the Notice (if applicable);
7. The permittee's most recent Compliance Schedule and Discharge Monitoring Report;
8. Section 308 letter (see Appendix) sent to the discharger and the response (if applicable);
9. Any other recent correspondence and/or regulatory action, noting the status of

requested actions and/or compliance with enforcement actions; and

10. Previous EPA studies, consultant's reports and laboratory procedures describing non-routine analyses.

B. Industrial Wastes

"Compliance Files" for nonmunicipal permits should include a plot plan of plant facilities and other diagrams pertaining to the facility showing:

1. Sources of raw water supply (intakes, wells, etc.);
2. Water supply and waste treatment facilities;
3. Drainage and wastewater collection systems, including appurtenances such as catch basins;
4. By-passes;
5. Storage facilities, including solid waste storage facilities;

6. Monitoring stations;
7. Effluent discharge points and receiving waters; and
8. Manufacturing operations on a process flow sheet.

All inspectors should find the compliance file inherently valuable. It will often assure an efficient and complete inspection in a minimum amount of time.

Special attention must be given to the preinspection review of names, titles and hierarchical relationships of the operating and/or administrative personnel for each permit. The cooperation of municipal and industrial officials involved in pollution control is essential for an effective field inspection. This cooperation is dependent upon a satisfactory professional relationship between the Agency, Industry, Municipal and State personnel as well as upon a deserved respect for the technical proficiency of the Agency's inspectors.

C. Inspector's Obligation

The inspectors should:

1. Review and become familiar with the essential information in each "compliance file" before the on-site visit;
2. Review the inspection trip schedule to insure that all inspections are conducted to optimize time and minimize expenses;
3. File a projected route and stops with supervisor before leaving on the inspection trips; and
4. Check to see that a Section 308 letter has been sent to permittees whose facilities are scheduled for inspection. It should be noted, however, that in certain cases where illegal discharges or dumping are suspected, prior notification may not be practical or appropriate.

D. Equipment Needed by the Inspector

Depending on the facilities to be inspected, equipment should consist of some or all of the following items.

1. Personal Protection

See Section 10 of this Manual, "SAFETY".

2. Miscellaneous

- a. Inspection forms
- b. Inspector's diary/log book
- c. EPA credentials
- d. Clipboard (with appropriate check-lists and pen/pencils)
- e. Camera
- f. Pocket calculator
- g. Ruler

- h. Tape measure
- i. Stopwatch
- j. Handbook of flow tables and USDI Flow Measurement Manual
- k. Copy of the permittees most recent NPDES permit
- l. Copy of the CWA and applicable regulations
- m. Sample bottles
- n. Thermometer
- o. Square
- p. Level
- q. Compass

It should be noted that this is a minimum list of equipment which may be required by the inspector. However, it is recognized that all the equipment may not be needed on any given inspection.

E. Review of Inspection Check Lists

The Compliance Inspection Report form, EPA Form 3560-3, was developed to insure that all necessary areas of concern are reviewed during the inspection. This report form or any subsequent revision is to be used for all Compliance Inspections. The form contains a listing of the items that must be checked on each inspection to verify the permittee's compliance status. Additional information concerning the Compliance Inspection Report form is presented in Section 12 of this Manual.

VI. TYPES OF NPDES COMPLIANCE INSPECTIONS

NPDES Compliance Inspections are field inspections which document the accuracy and completeness of self-monitoring and reporting activities and provide documentation and verification to justify and support enforcement actions. In addition to the Compliance Evaluation Inspection which is described in this Manual, other types of NPDES Compliance Inspections have been developed. The major objectives for each inspection type are given below. For further information, the inspector should consult the appropriate manuals which are listed at the end of this manual.

A. Performance Audit Inspection (PAI)

The PAI focuses on quality assurance of the permittee's self-monitoring program by evaluation of permittee performance and/or simulation of all the steps in the NPDES self-monitoring process from sample collection and flow measurement through laboratory analyses, data workup, and reporting. The PAI still includes the basic objectives and tasks of a CEI and applies to both chemical and biological self-monitoring programs. The PAI is more resource intensive than a CEI because additional effort and higher technical ability are required for in-depth evaluation of the permittee's self-monitoring tasks, but is generally less resource intensive than a Compliance Sampling Inspection (CSI) because sample collection and analyses are not a part of the inspection.

B. Compliance Sampling Inspection (CSI)

During the CSI, a representative sample(s) of a permittee's effluent is collected and chemically analyzed. The results of the analyses are used to verify the accuracy of the permittee's self-monitoring program and reports, gather evidence for

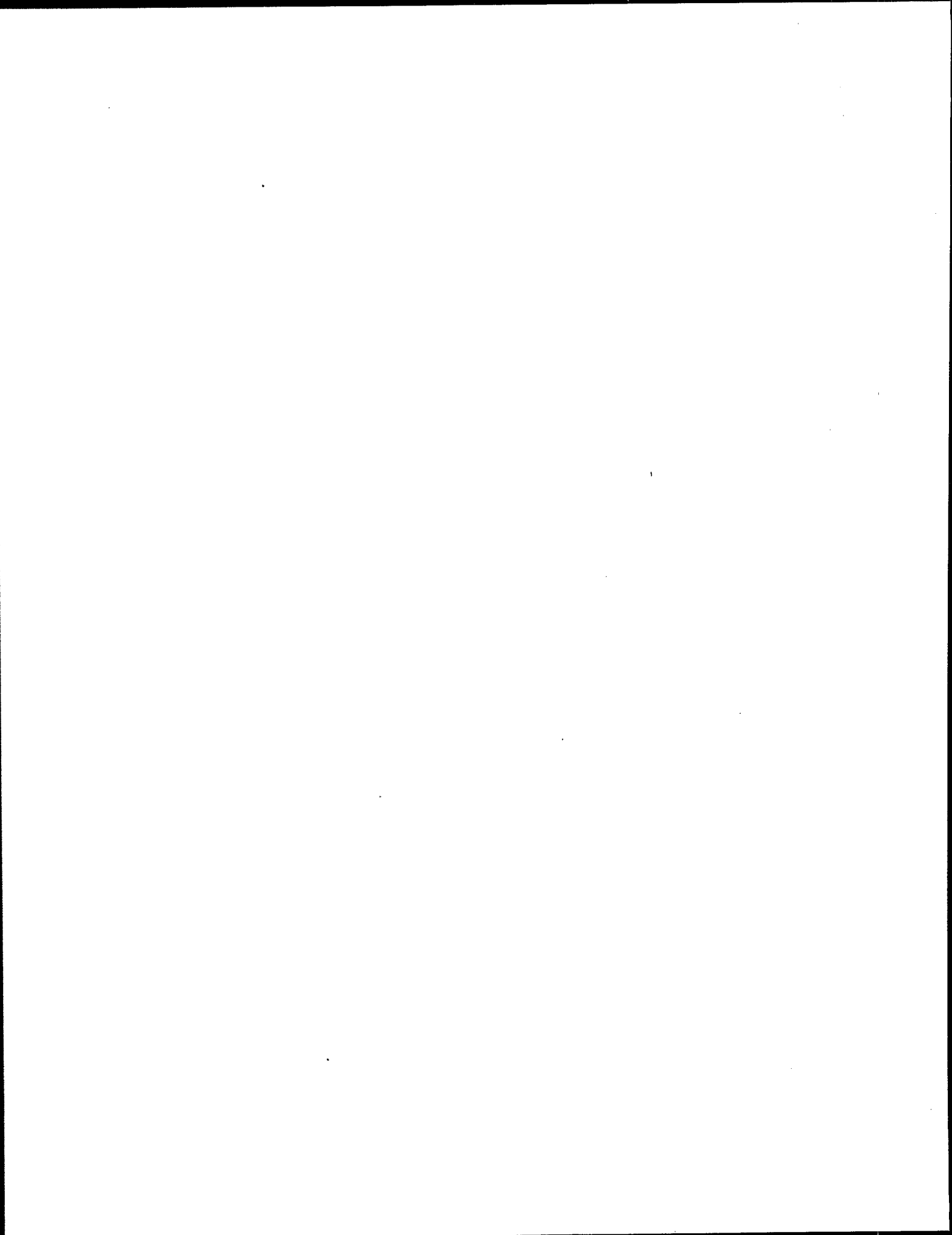
enforcement proceedings, determine the quantity and quality of effluents, etc. In addition, a CSI includes the same objectives and tasks as a CEI.

C. Compliance Biomonitoring Inspection (CBI)

A CBI evaluates the biological effect of a permittee's effluent discharge(s) on test organisms through the utilization of acute toxicity bioassay techniques. In addition, this inspection includes the same objectives and tasks as a CEI.

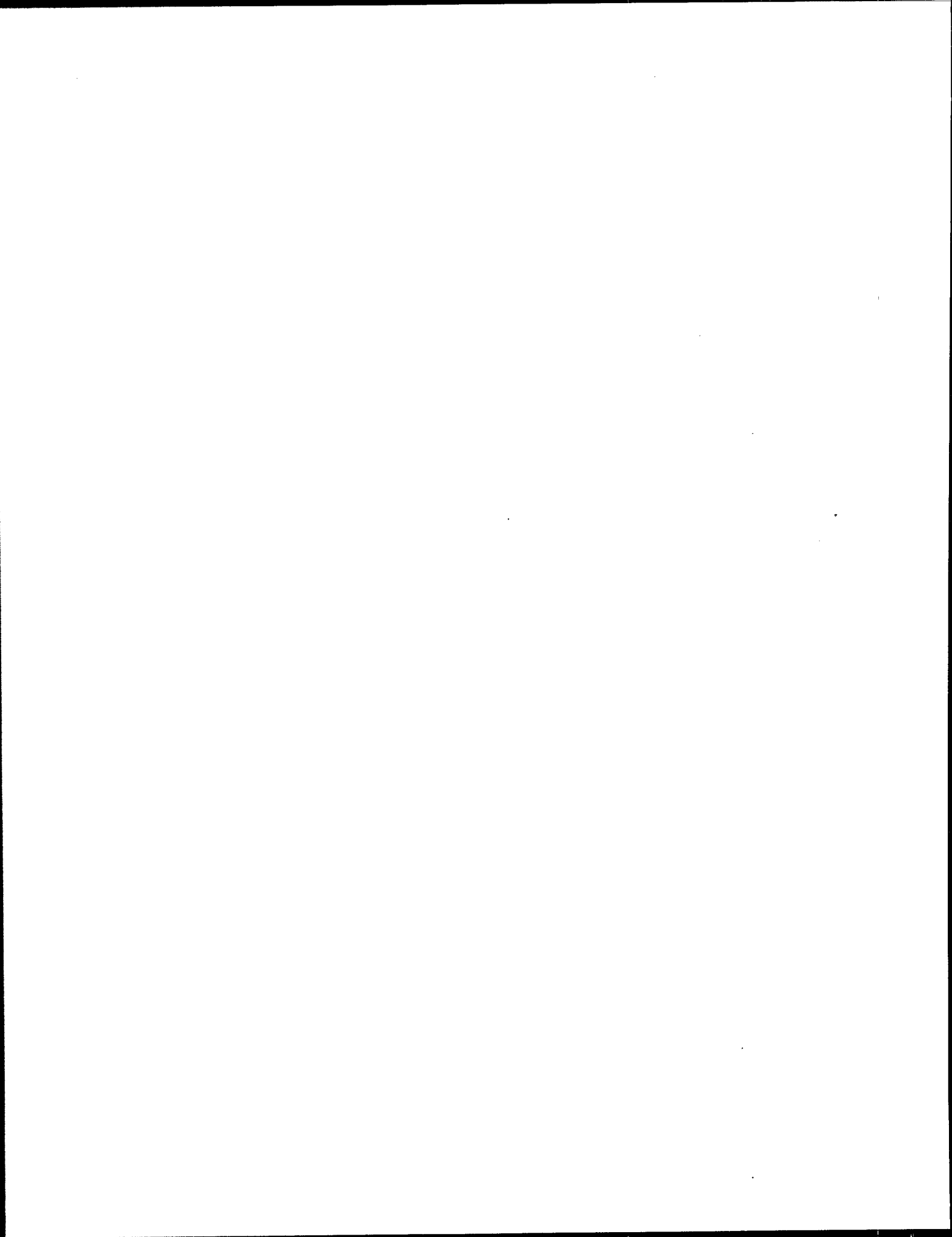
D. Discharge Monitoring Report/Quality Assurance Inspection (DMR/QA)

A Compliance Evaluation Inspection (CEI) for DMR Quality Assurance (QA) includes the same objectives and requires the same resources as a typical CEI, but it focuses on limited aspects of quality assurance in the permittee's self-monitoring program as follow-up on DMR/QA performance sample findings. The DMR/QA type of CEI does not involve the thorough evaluation of a permittee's self-monitoring program that is done during a Performance Audit Inspection (PAI).



SECTION 3

TREATMENT FACILITY REVIEW



AUTHORITY

Section 308 of the Act authorizes the Administrator to require the owner or operator of any point source to:

- A. Establish and maintain records;
- B. Prepare reports;
- C. Install, use, and maintain monitoring equipment or methods (including biological monitoring methods where appropriate);
- D. Sample effluent as prescribed; and
- E. Provide other information that may be reasonably required.

Also, the Administrator, or authorized representatives (which include EPA inspectors and contractors retained by EPA) upon presentation of credentials are authorized to:

- 1. Enter into, upon, or through premises in which an effluent source is located or in which any required records are maintained; and

2. At reasonable times, have access to and copy any records, inspect any required monitoring equipment or method and sample any effluents which the owner or operator is required to sample.

Under Section 309 of the Act, EPA can issue a compliance order or bring a civil action for any Section 308 related NPDES permit condition.

II. GENERAL

A. Limitation of Inspection

The Compliance Inspection program will normally be restricted to inspections of effluent discharge sources in support of the NPDES permit program. However, other sources of water pollution or potential pollution, including nonpoint sources, observed by inspectors should not be ignored. They should be reported to the appropriate EPA organizational unit or State Water Pollution Control Agency for proper action. In addition, observations of concern to other Federal agencies such as FDA and OSHA should be referred when appropriate.

B. Timing of Inspection

All inspections should be conducted at "reasonable times" as defined in Section 11 of this Manual, "ACCESS AND WARRANTS". However, in some instances day-shift flows may not be truly representative of industries or contributing industries because of flow variation or process discharge procedures. In addition, some municipal wastewater facilities treat major industrial waste during times other than weekday shifts. Therefore, it may become necessary to conduct the inspection other than during weekday shifts.

III. OBJECTIVES

A Compliance Evaluation Inspection is undertaken to accomplish one or more of the following objectives:

- A. Observe the status of construction required by the permit;
- B. Assess the adequacy of the permittee's self-monitoring reporting program;

- C. Check on the completeness and accuracy of the permittee's performance/compliance records;
- D. Evaluate the permittee's operation and maintenance activities;
- E. Determine if permit requirements are being met; and
- F. Assess the adequacy of the permit.

IV. INSPECTOR'S OBLIGATIONS

In making field contacts, the principles or rules an inspector should follow are:

- A. Enter the permittee's premises through the main gate or through the entrance designated by the permittee in response to the Section 308 letter;
- B. In a dignified, courteous manner, introduce yourself as an EPA inspector to the owner, operator or agent in charge;
- C. Present your official EPA credentials whether or not identification is requested;

- D. Do not sign "waiver" or "visitors releases" (U.S. EPA inspectors only) that absolve the permittee of responsibility for injury due to the permittee's negligence;*
- E. If possible, make prior arrangements for a joint inspection with the operator in those cases where full-time attendance is not provided; and
- F. Complete the inspection in a timely manner. Any problems experienced that greatly forestall or prevent the completion of the inspection should be reported promptly to your supervisor.

*If the owner refuses entry without a signed waiver, the inspector should refuse to sign it, leave and immediately report the matter to the Regional Enforcement Director in the same manner as other refusals of entry (See Section 11 of this Manual).

V. INSPECTION PROCEDURES

A. Scope of Inspection

1. The inspection of any permittee's premises includes: any building, structure, facility or installation from which there is or may be the discharge of pollutants.
2. The inspector has access to all areas of the permittee's premises where:
 - a. Pollutants are generated, pumped, conveyed, treated or stored or may be discharged;
 - b. Records referred to in Section 308 of the Act or in the discharger's NPDES permit are located; and
 - c. Any monitoring equipment or monitoring methods referred to in the NPDES permit are located or conducted.

B. Preinspection Discussion with Management

1. If necessary, the inspector should explain

that Section 308 of the Act authorizes entry into any premises from which there are or may be the discharge of pollutants or in which any records required to be maintained are located.

2. Discuss other applicable provisions of the Act and, if requested, furnish a copy of the Act, and appropriate regulations. If such information is not readily available, the inspector should inform the permittee where it may be obtained.
3. A joint review of most recent self-monitoring reports and field reports is usually mutually beneficial, especially if violations or apparent violations of discharge requirements are involved.

C. Conducting the Inspection

1. General

To fully evaluate the overall plant operation an inspector should have a full understanding of each treatment process, how each process fits into the overall treatment process and the "upstream" conditions that

affect treatment operations. A good understanding of operating details is invaluable and will enable the inspector to determine if operating personnel understand how the unit operations and processes, individually and collectively, perform their functions. (Caution: In the course of an inspection, an inspector may observe, or be asked about the operational problems that can be readily corrected by providing advice or assistance to the operator. Where the inspector is knowledgeable about plant operations and simple actions to improve plant performance can be readily identified, such advice or informal assistance may be given. However, caution must be exercised to ensure that the State's or Agency's regulatory posture with respect to subsequent enforcement action is not compromised. Any advice or informal assistance offered by the inspector must be adequately documented in his/her field diary.)

Recommendations for major corrective actions must not be made at the time of inspection but rather reviewed with appropriate enforcement personnel following

the inspection and submitted to the permittee in writing subsequent to the review.

2. Industrial

Because of the wide variety and the complex nature of industrial wastes, special knowledge and techniques are essential for adequate compliance inspection of industrial facilities. The inspector must have knowledge of:

- a. Flow diagram of water uses, schematic diagram of the processing operations including wastewater sources, and flow diagram of the wastewater streams incorporating all treatment systems and outfalls;
- b. Water intakes, distribution, uses, reuses and consumptive uses, as well as the hydraulics of drainage and collection systems for process waters and wastewaters;
- c. Nature of the processing operations such as continuous, semicontinuous and/or batch, as well as the types

of wastewater discharges. The major raw materials, intermediates, byproducts, and products associated with the manufacturing and the characterization of all wastewater, gaseous and solid waste discharges from the plant; and

- d. A description of the in-plant and final wastewater treatment methods utilized including the disposal of all sludges and other residues produced by the plant.

On an initial facility visit, it may be advantageous to have the plant engineer or chief operator describe the plant and its principal operating characteristics as a supplement to the inspector's review of plans from the compliance file. This step will help to orient you and give an indication of how well the operating personnel understand the system.

3. Treatment Observations

During the plant tour the inspector should be alert and inquire about:

- a. Accumulations of solids and scum in wet wells, excessive scum buildup, grease, foam or floating materials in tanks;
- b. Surcharging of influent lines, over-flow weirs and other structures;
- c. Obnoxious odors in wet wells, grit chambers, around aerobic and anaerobic biological units, scum removal devices and sludge handling facilities;
- d. Vital treatment units out of service for repairs. Determine when they were taken out of service, the type of failure and when the units will be put back in service;
- e. Excessive weed and tule growths in stabilization ponds, etc. Check maintenance of earthen retention walls (dikes) and for breaches, or leaks;
- f. Freezing wastewater in ammonia stripping towers and formation of excessive calcium carbonate deposits on tower structures, fouling of fabric in microscreens with

grease and solids and mechanical fouling of activated carbon columns;

- g. Alternate discharge points, channels or other areas likely to have overflows. Discoloration on the ground may indicate past spills at the plant and further investigation may be warranted;
- h. Sludge decomposing in clarifiers as indicated by gas bubbles rising to the surface or by floating sludge pads;
- i. Any unusual equipment such as special pumps, floating aerators in diffused air systems, chemical feeders, temporary construction or structures, or any jerry-rigged systems intended to correct operational problems;
- j. Excessive suspended solids, turbidity, foam, grease, scum, color, and other macroscopic particulate matter in the plant effluent and the receiving waters;
- k. Collected screenings, slurries, sludges or other by products of treatment. Their disposal, including the runoff of wastewaters,

must be in such a manner as to prevent entry into navigable waters or their tributaries;

1. Alternate power sources which can be used during electrical failures to prevent the discharge of untreated or inadequately treated wastes;
- m. Infiltration and inflow problems;
- n. Spills or mishandling of chemicals; and
- o. Proper storage of chemicals and hazardous substances, noting whether storage areas are properly diked.

4. Process Verification: Industrial

Industries frequently make production changes because of the introduction of new technology, new products, new processes, etc. Therefore, the inspector should inquire:

- a. If a permittee has made any changes in production processes, raw material,

amount of finished product, water usage, waste treatment processes or other such changes. Specifically, the inspector should determine if the permittee has made any process or production modifications that would change the types or loads of pollutants respectively, so the permit can be updated to reflect these modifications; and

- b. If the EPA (or the State) was notified of such changes. The inspector should verify any changes and include the results of the findings and other pertinent information in the Compliance Inspection Report form.

5. Maintenance

Good operation and good maintenance go together. Good maintenance indicates that plant operating personnel are giving adequate emphasis to the plant's facilities and performance. Sloppy maintenance may indicate the operator's lack of concern or ability. The usual result is a number of problems, including poor operation and the discharge

of excessive pollutants into the receiving water and/or atmosphere.

The inspector should inquire about the maintenance programs for:

- a. All aspects of preventive, routine and remedial maintenance programs including spare parts inventory;
- b. Emergency operating and response programs;
- c. Qualifications, training, and certification of plant personnel;
- d. Alarm systems for power or equipment failures and whether alternate power sources are available; and
- e. The regularity of housekeeping throughout the plant.

VI. POST-INSPECTION DISCUSSION WITH MANAGEMENT

To achieve the most effective results from Compliance Evaluation Inspections, it is essential to have timely

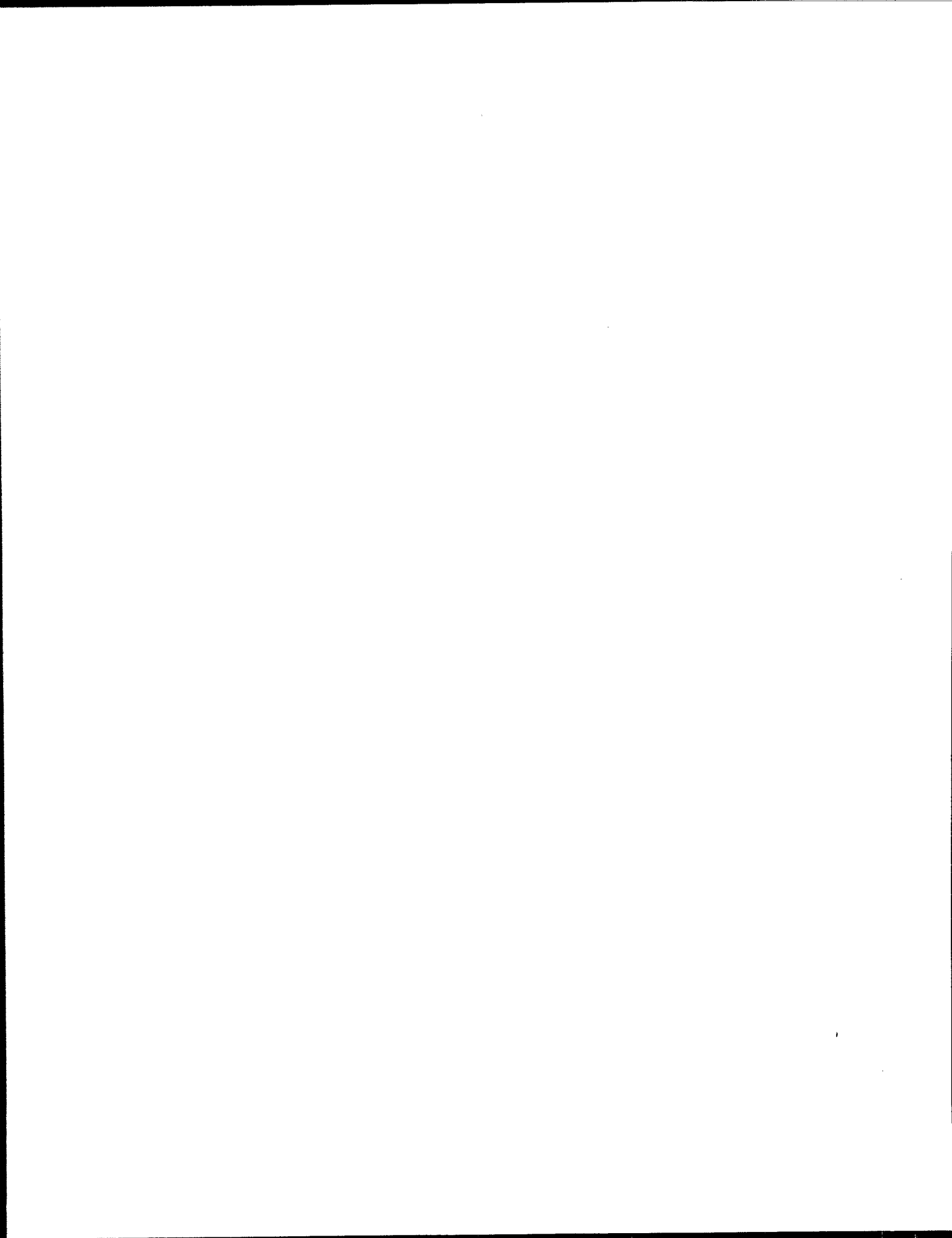
communication of the results to management and/or operating personnel. Failure to discuss the results can cause a loss of mutual respect. When this occurs, it is a deterrent to good inspector-operator relations and understanding. However, the inspector's discussion should be limited to specific findings of the visit. If appropriate, a comparison of these facts with the permittee's NPDES permit requirements should be made.

The inspector may issue a Deficiency Notice following an inspection which uncovered existing or potential problems in a permittee's self-monitoring program. Issuance of the Deficiency Notice at the completion of an inspection provides a swift and simple method for improving the quality of data from NPDES self-monitoring activities. However, the Enforcement Office of the regulatory authority, not the inspector, will continue to handle violations relative to compliance schedules for effluent limitations.

A. Precautions and Guidelines

Although a discussion of the inspection results is important, certain precautions are essential. The inspector must:

1. Realize that it is an unacceptable practice to recommend a particular consultant or consulting firm even if asked to do so. The fully ethical and acceptable alternative is to inform the permittee, operator, or agent to contact a professional society for advice concerning this matter;
2. Be careful not to provide any advice or assistance that would prejudice the Agency's case in a subsequent enforcement action or which would compromise the Agency's or State's authority to require full compliance with the effective permit;
3. Not discuss compliance status or any legal effects or enforcement consequences with the permittee or facility operating personnel. The facility's compliance is determined by the Enforcement Division upon review of the Compliance Inspection Report; and
4. These guidelines are subject to applicable rules promulgated by the Regional Administrator or State Director regarding permittee contacts in the Region/State.



SECTION 4

RECORDS AND REPORTS REVIEW

1

I. AUTHORITY

The NPDES permit system, as authorized by Section 402 of the Act, requires permittees to maintain records and to report periodically on the amount and nature of the waste components in their effluents. Section 308 of the Act authorizes inspections of such required records and reports.

II. GENERAL

An inspection for the purpose of determining compliance with the Agency's record keeping and report filing requirements generally will be limited to an inspection sufficient to determine if the permittee (1) keeps and files the required records; (2) maintains records in an up-to-date manner; (3) retains them for the time period required by the NPDES permit; and (4) needs assistance on how to comply with the regulatory agency's requirements on records and reports.

An in-depth review of a permittee's records and reports will be conducted only when it is necessary to substantiate a suspected violation, verify self-monitoring data which may be used as corroborative evidence in an enforcement action, to confirm apparent sampling, analysis,

or reporting discrepancies uncovered during the compliance inspection.

III. OBJECTIVES

The main objectives of a records and reports review are to:

- A. Assess compliance with the discharger's NPDES permit limitations and requirements;
- B. Allow Federal and State regulatory agencies to follow, on a continuing basis, the discharger's effluent quality trends as well as specific variations from established limitations;
- C. Help define the scope of a suspected violation and thereby enable the regulatory agency to plan the direction of its follow-up action;
- D. Determine if the records and reports required by the discharger's NPDES permit are being maintained; and
- E. Check on the adequacy of the permittee's reports.

IV. INSPECTION PROCEDURES

Conducting the Review

A. Cursory Review

On an initial visit to a permittee's premises, the inspector should discuss the record keeping and reporting requirements with management. This type of review should use the check list contained in Section G of the Compliance Inspection Report Form and be limited to the verification of:

1. The maintenance of sampling and analysis data;
2. The maintenance of daily operating logs. The operating logs are important, and they should be bound in notebooks to prevent their alteration or destruction. Information on the daily log sheet for a municipal and some industrial plants should include:
 - a. A summary of all laboratory tests run;
 - b. A format for calculating BOD and equivalent tests;

- c. Weather conditions (temperature, precipitation, etc.); and
 - d. Chemicals used, such as pounds of chlorine used per day.
3. The maintenance of management-generated records, such as average monthly operating records and annual reports, emergency conditions, such as power failures, bypass and chlorine failure reports. These records should be requested to facilitate the inspector's review but the permittee is only required to prepare and maintain those specified by the NPDES permit, or by grant requirements.
4. The maintenance of pretreatment records, including industrial waste ordinance (or equivalent documents), inventory of industrial waste contributors including compliance/noncompliance records and user charge information.
5. The maintenance of laboratory records, including all original strip charts from

continuous monitoring instrumentation and calibration and maintenance records.

6. The maintenance of plant records*. These include:

- a. O&M Plant Manual;
- b. "As built" engineering drawings;
- c. Copy of construction specifications;
- d. Equipment supplier manual; and
- e. Data cards on all equipment.

7. A well developed Best Management Practice Program including a properly completed Spill Prevention Control and Countermeasure Plan, if required.

*Preferably, these items should be available but they are only required for those facilities built with Federal construction grant funds.

8. The retention of records for a minimum of three years.
9. The conformity of required self-monitoring results with permit requirements and consistency with other operating data.

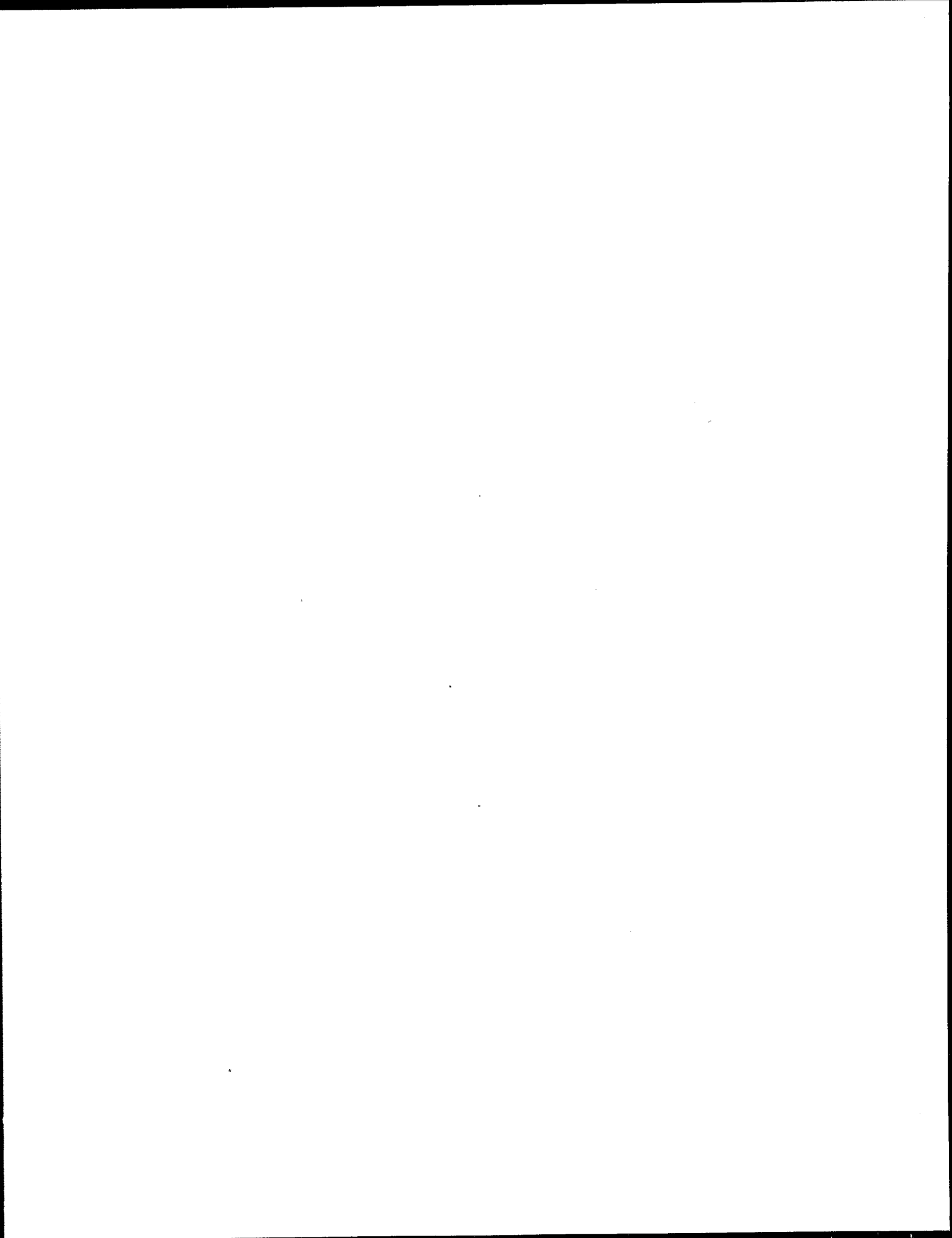
B. In-depth Reviews

This inspection may be conducted primarily to check records and reports. For example, such an review may be warranted:

1. If the self-reported data are suspected to be grossly inaccurate and the problem is believed to be with the record keeping and/or the filing of reports;
2. If the discharge does not meet required standards and no definite operational problem areas have been established; or
3. If the cursory review indicates omissions or laxity in the preparation of records.

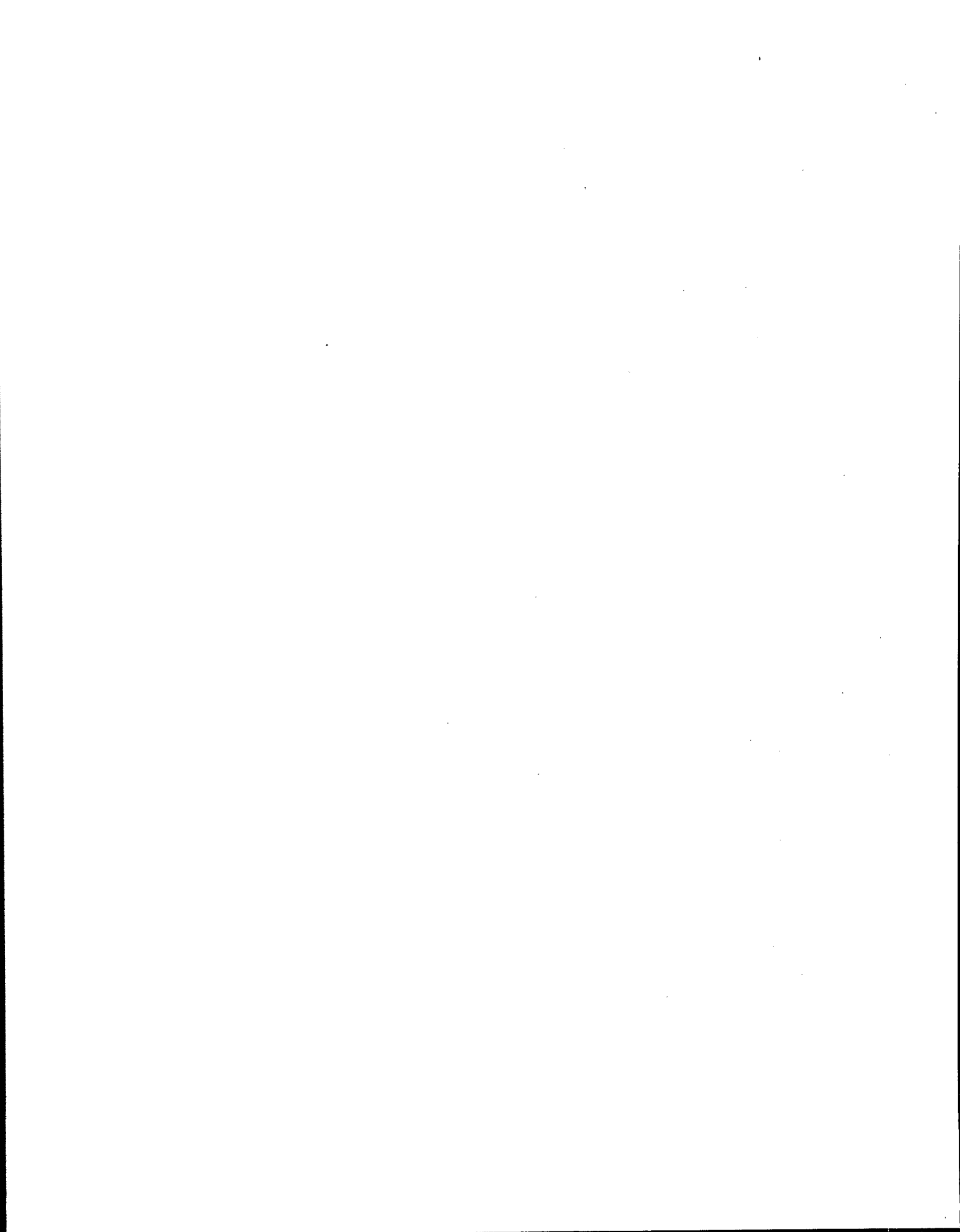
C. REFUSAL TO ALLOW REVIEW

Consult Section 11 of this Manual and advise your supervisor of the refusal to allow review and/or copy of records.



SECTION 5

COMPLIANCE SCHEDULE STATUS REVIEW



I. AUTHORITY

Pursuant to the general authority to issue permits in Section 402 of the Act, regulations have been issued outlining procedures to be followed in setting compliance schedules for permittees whose abatement facilities require modification in order to meet the effluent limitations set forth in Section 301 of the Act. Sections 122.7(1)(5) and 122.10(a)(4) of the May 19, 1980, Consolidated Permit Regulations requires permittees to furnish periodic reports of progress and current status. The guidance contained in this section does not apply if the permit does not contain a compliance schedule.

II. GENERAL

All point source dischargers shall conform to treatment requirements set forth in Section 301 of the Act. The Agency is concerned that compliance schedule status be determined at critical intervals to assure that abatement is attained on schedule. This phase of the inspection is not appropriate for facilities which have achieved final effluent limitations.

III. OBJECTIVES

The objectives of this phase of the Compliance Inspection are to determine:

- A. The accuracy of reports relating to compliance schedules;
- B. Whether the permittee is currently conforming to the compliance schedule and, if not, whether final requirements will be achieved on time;
- C. Whether schedule violations, if any, are the result of matters beyond the control of the discharger;
- D. The delay associated with a particular construction violation; and
- E. Whether requests for permit modifications have a valid basis.

IV. INSPECTION PROCEDURES

A. Inspector's Obligations

The inspector should determine whether these objectives are being achieved. To do this properly,

the inspector must become thoroughly familiar with the compliance schedule requirements of the permit and with the permittee's progress reports. The inspector should be able to determine, primarily from the permittee's project files, whether compliance with interim schedule requirements has been achieved. Using section J of the Compliance Inspection Report Form, the inspector should also review appropriate documents and make a supplemental visual observation of the construction project and/or equipment installation to confirm the determination of compliance status indicated by the project files.

B. Conducting the Inspection

1. Authorization and Financing

If the necessary treatment works are not in place, the inspector should ascertain whether the permittee has authority to construct the necessary installation (corporate resolutions, etc.) and has made arrangements for proper financing (mortgage commitments, etc.).

2. Contract and Equipment Orders

The inspector should review the appropriate documents to determine:

- a. If contracts for engineering services have been executed. Review to determine the specific date of execution and dates for completion of design plans and specifications;
- b. That the permittee has obtained the necessary approvals from the appropriate agencies in order to begin construction;
- c. If bids have been advertised. Review a copy of the advertised "request for proposal";
- d. If construction contracts have been executed. Review to determine the dates of execution, the start, completion and scope of construction;
- e. If equipment contracts have been executed. Review to determine their validity, the name and address of the supplier, the dates of execution, schedule delivery dates, and the identification of equipment.

3. Construction Progress

In this area it is important to know if contracts for labor and material are timely and that the permittee or the permittee's engineering consultant are monitoring progress. These aspects are extremely important, particularly for plants where there is likely to be numerous contracts for labor and equipment. If the permittee or the engineering consultant reports that construction or the acquisition of equipment is behind schedule, the inspector should:

- a. Ask to see the permittee's or the resident engineer's progress report and determine whether the report indicates that the final compliance schedule date required by the permit can be met;
- b. If the report indicates that the final date will not be met, advise the permittee that the compliance schedule of the NPDES permit requires the permittee to notify the permit issuing authority promptly of any possible delay in

achieving compliance and of measures taken to minimize the delay;

- c. Inquire whether the facility superintendent or chief operator and operating personnel are receiving adequate training concerning the operational aspects of the new treatment unit, while construction work is in full progress. They must be ready, and have the capability, to perform the minimum essential operating functions when the facility is placed in service.

4. Attainment of Operational Status

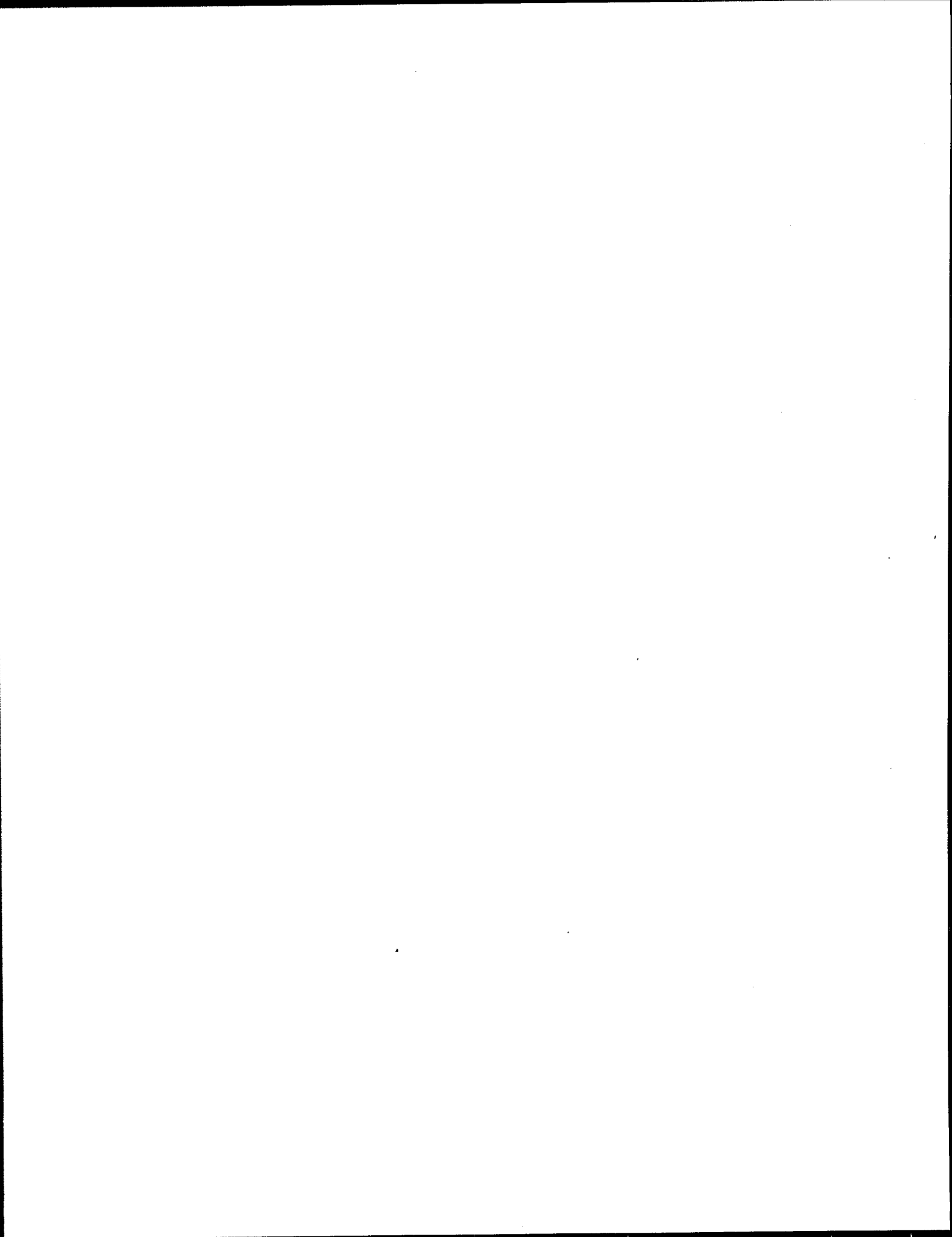
If construction has been completed but operational status not yet attained, the inspector should determine whether appropriate procedures are being used to assure attainment of working levels at the earliest possible time.

The inspector should verify whether:

- a. Adequate self-monitoring program procedures have been initiated. It is especially appropriate that the

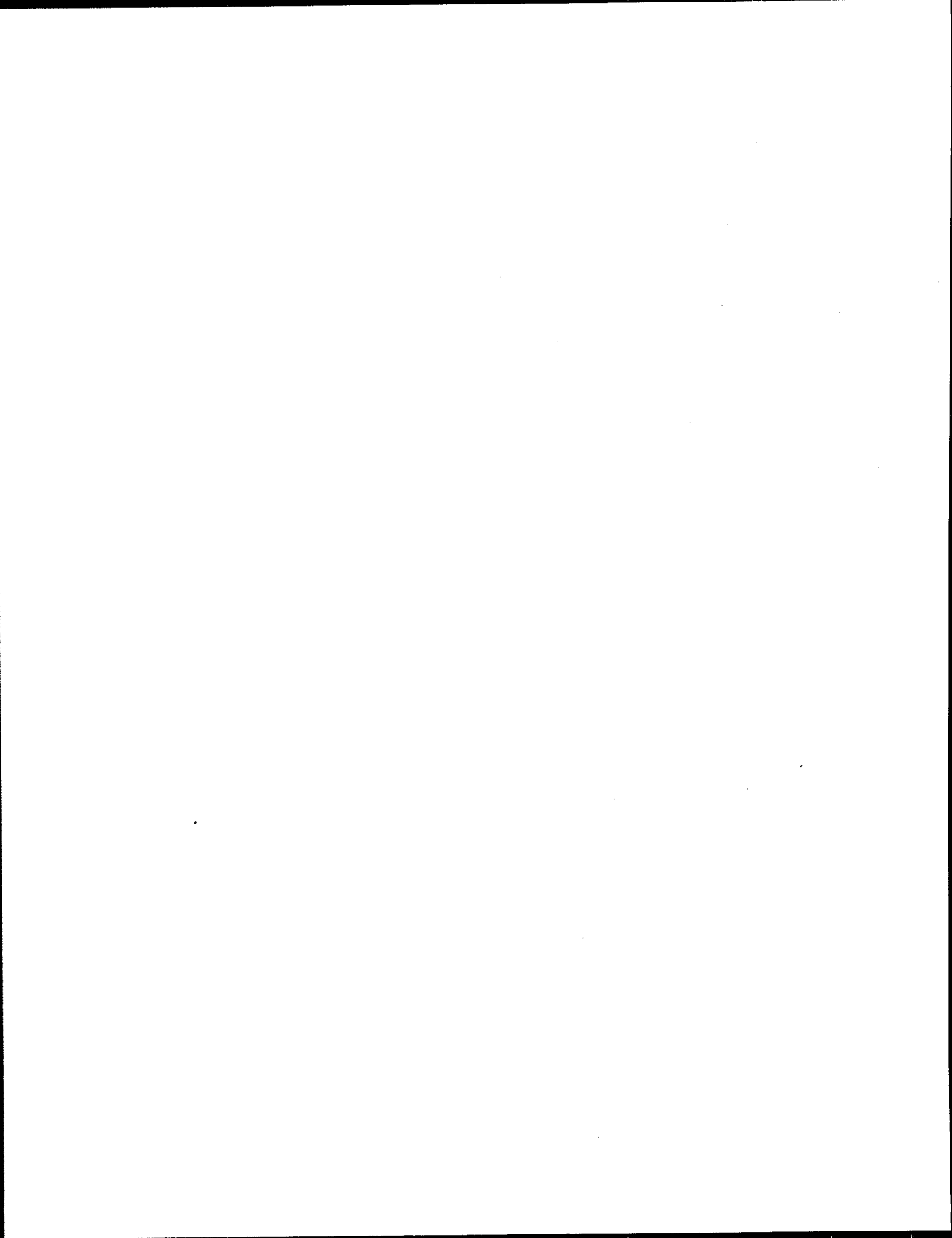
operational and effluent quality results be reviewed to determine whether progress is being made toward optimum efficiency in each treatment unit and in the entire plant;

- b. Adequate work schedules and assignments have been established. For municipal facilities, the O&M Manual should provide the essential guidance in this regard;
- c. Adequate record keeping procedures have been established and initiated.



SECTION 6

SELF-MONITORING PROGRAM REVIEW



I. AUTHORITY

Section 308(a)(B)(ii) of the Act authorizes the Administrator or his authorized representative, upon presentation of credentials, to inspect monitoring equipment and methods required by permits issued under the NPDES program.

II. OBJECTIVES

The objective of this phase of the Compliance Inspection is to:

- A. Confirm that representative samples are being obtained for each wastewater discharge and that the sampling and flow measurement equipment meet the specifications required in the permit and are being properly operated and maintained;
- B. Verify that the analyses are being performed with the proper equipment and by persons who have the requisite skills;
- C. Confirm that the analytical test methods used for pollutants or parameters specified in NPDES permits conform with the Agency's regulations as specified in the Federal Register (40 CFR Part 136).

III. INSPECTION PROCEDURES

A. Inspector's Obligations

The inspector should determine the conformance of the permittee's self-monitoring program with the permit and appropriate regulations. To do this properly the inspector must become thoroughly familiar with the monitoring requirements as contained in the permit and any pertinent documents which may have modified or reestablished sampling points or analytical procedures. Using Section K of the Compliance Inspection Report Form, a review should be made of appropriate documents and a visual inspection made of flow measurement, sampling and analytical equipment and facilities.

B. Conducting the Investigation

1. Flow Measurement: Weirs

The inspector should confirm that flow measurement devices utilized are appropriate for the waste stream being measured. In addition, the inspector should verify that each device is free of sticks, rags and other debris and that

it is properly installed. Proper installation*
of a weir means that:

- a. The device is installed exactly level;
- b. The weir plate is plumb and the top edge is sharp and clean;
- c. There is free access for air below the nappe of the overflowing stream;
- d. The channel upstream from the weir is reasonably straight, level, and free from disturbing influences so that the stream assumes a quiet flow; and
- e. The stilling basin is of sufficient size.

*These criteria apply to sharp-crested weirs. However, a permittee could have a broad-crested weir with a developed rating curve. The inspector should verify that the proper curve is being used. For a more detailed discussion of flow measurement techniques see Section VI of the NPDES Compliance Sampling Inspection Manual.

2. Flow Measurement: Other Devices

Other types of flow measuring devices used in municipal and industrial applications include:

- a. Parshall flume,
- b. Venturi meter,
- c. Magmeter,
- d. Palmer-Bowlus flume, and
- e. Orifice Meter.

It is not within the province of this Manual to discuss and describe the various flow measurement devices since those details are readily available in other publications. For such detailed information the inspector should consult the EPA Handbook For Monitoring Industrial Wastewater, the Department of Commerce, National Bureau of Standards - Publication 421, A Guide To Methods And Standards For The Measurement Of Water Flow or the Department of Interior, Bureau of Reclamation's Water Measurement Manual.

All flow measuring devices are subject to calibration. Therefore, the inspector should check

to determine if calibration records are available, the most recent date of calibration and the flow measurement accuracy obtained. Then comparison should be made with the manufacturer's accuracy for the device. The inspector should check to see if proper and accurate rating curves or tables are being used for accurate measurement of flows.

3. Flow Recording: Continuous Measurement

This requires permanent recording devices with a strip chart or circular chart. The inspector should verify that a continuous recorder exists, that it is being operated properly, and that flow records are being kept on file.

4. Sampling

The inspector should verify:

- a. That samples are taken at the locations prescribed in the NPDES permit;
- b. That the sampling locations specified in the permit are adequate to provide well mixed and representative samples;

- c. That the frequency of sampling (grab samples and sampling interval for composites) is in accordance with the NPDES permit;
- d. That grab sample devices, if used, are clean and are properly operated;
- e. That sample containers are clean and appropriate for the parameter(s) to be analyzed;
- f. That automatic sample collectors, if used, operate properly. Refrigeration should be provided for certain parameters such as BOD and TOC. In winter, samples should be protected from freezing;
- g. The chemical preservatives used for composite (time) samples and for grab samples which are not analyzed immediately following sample collection are in accordance with 40 CFR Part 136;
- h. That samples are received and analyzed within holding times specified in the appropriate method of analysis;

- i. If there is more than one sampling point, verify that appropriate measures are used to prevent cross contamination between samples and that sample containers are properly identified; and
- j. That all field testing equipment is routinely calibrated.

6. Laboratory: On-Site

The inspector should review the latest EPA guidelines establishing test procedures for the analysis of pollutants, 40 CFR Part 136, in order to verify:

- a. That the specific methods of analysis used are approved for the particular parameter, or are an approved alternate method;
- b. That the laboratory has written instructions on the methodology employed;
- c. That quality control methods such as the analysis of blank, spiked, and split samples are employed;

- d. That the presence of known interferences in the analyzed samples is established and steps taken to remove the interferences;
- e. That laboratory personnel are familiar with the analysis being performed including:
 - 1) The associated quality control procedures;
 - 2) Procedures for cleaning equipment;
 - 3) Reagent quality control, including the source of distilled water, frequency of reagent standardization, and reagent shelf life;
 - 4) Media preservation and sterilization techniques;
 - 5) Use of bench cards and/or notebooks;
 - 6) Use of available analytical instrumentation; and
 - 7) Calculation of results.

- f. That "sign off" procedures which identify the person performing a specific portion of an analysis are utilized when several technicians are responsible for the complete analysis.
- g. That for analyses performed using automatic sampling and analytical instrumentation, the device(s) is identified by manufacturer model, etc., and the operation, calibration, and procedures followed are noted; and
- h. That the location of the laboratory equipment and/or instrumentation is noted.

7. Laboratory: Off-Site or Contract

For "off-site" analyses performed by a contract laboratory, the inspector should verify:

- a. The name and address of the contract laboratory;
- b. The permittee's procedures for the labeling and shipping of samples to the contract laboratory;
- c. That the results reported by the laboratory use the discharger's NPDES permit number.

The inspector, if appropriate, may issue a Deficiency Notice when discrepancies are uncovered as a result of the inspection of the permittee's laboratory and/or procedures. However, the Regional laboratory should be contacted to determine whether an in-depth evaluation, such as a Performance Audit Inspection is warranted. Inspectors should be careful not to draw the conclusion that a permit violation exists every time deficiencies are uncovered. Nevertheless, deficiencies should always be called to the Enforcement Division Director's attention for appropriate corrective action.

IV. QUALITY ASSURANCE

A. Objectives

The purpose of this section is to provide general guidelines which the inspector can utilize to evaluate a permittee's quality assurance program. The Consolidated Permit Regulations, May 19, 1980, Section 122.7(e) states that appropriate quality assurance

procedures are needed to assure proper operation and maintenance of facilities and systems used for collection and treatment of wastewater.

The permittee's NPDES Quality Assurance (QA) Program should be documented and include quality control procedures which the laboratory personnel are required to follow. These quality control checks should address all major constituents of NPDES self-monitoring process including but not limited to the following:

1. Skills and training;
2. Wastewater sampling;
3. Laboratory services;
4. Selection of reagents;
5. Cleaning and proper use of glassware;
6. Instrument selection;
7. Analytical performance;
8. Microbiological testing; and

9. Data handling and reporting.

Quality assurance programs have two primary functions in promoting analytical data improvements. First, the programs should continually monitor the reliability (accuracy and precision) of the results reported. This function evaluates the quality of the data. The second function is to control the quality. As an example of the distinction between the two functions, the processing of spiked samples may be a determination of measurement quality; but the use of analytical grade reagents is a control measure.

Each analytical method has a rigid protocol. Similarly, Quality Control (QC) associated with a test must include definite steps for monitoring the test and insuring that its results are correct. The steps in QC vary with the type of analysis. In any instrumental method, calibration and checking out of instrumentation response are also QC functions. All of the experimental variables that affect the final results should be considered, evaluated and controlled.

B. Procedures

The following provides a brief summary of the techniques which must be monitored and controlled by

the permittee's quality assurance program. Control of these elements will assure that analytical results are more reliable. While this list only highlights the major areas which a typical quality assurance program should address, the March 1979 "Handbook for Analytical Quality Control in Water and Wastewater Laboratories" provides a much more detailed discussion and should be referenced.

1. Skills and Training

Analytical operations in the laboratory can be graded according to the degree of complexity. Some analyses require no sample treatment, and the measurement can be performed in minutes on a simple instrument. Other determinations require extensive sample preparation prior to complex instrumental examination. Consequently, work assignments in the laboratory should be clearly defined. Each analyst should be completely trained and should fully understand all the assignments of his/her job before being given new responsibilities. In this regard, all analysts, subprofessional or professional, should be thoroughly instructed in basic laboratory operations, according to the degree of professional maturity.

2. Wastewater Sampling

- a. Collection of representative samples at the site designated in the NPDES permit, in an area where the effluent is well mixed;
- b. Correct procedures are utilized when obtaining grab and/or composite samples;
- c. Proper operation and maintenance of flow* measuring devices and flow totalizers are employed;
- d. Proper sample preservation, identification and handling techniques are being employed;
- e. Duplicate, split and spiked samples included at random without the knowledge of the analyst at least once per ten sample analyzed; and
- f. Proper calibration of field equipment.*

*Manufacturers operating manuals should be referenced for maintenance and calibration requirements.

3. Laboratory Services

a. Distilled Water

- 1) Each type of chemical analysis requires a specific grade of distilled water. The more qualitative the analysis the higher the grade of water needed.
- 2) The still must be maintained and cleaned periodically.
- 3) Pretreatment of incoming feed water by using either carbon filtration or mixed-bed ion exchange may be needed to produce the refined grade of distilled water.
- 4) Certain chemical analyses require ammonia-free water, carbon dioxide-free water or ion-free water; and all must be properly prepared and used as needed.

b. Electric Services

Instruments such as spectrophotometers, flame photometers, atomic absorption equipment, emission spectrographs, and gas chromatographs have complicated electronic circuits that require constant voltage to maintain stable, drift free instrument operation. Voltage regulation is necessary to assure optimum performance of this equipment.

4. Selection of Reagents

- a. Reagent Quality - all reagents, solvents and gases used in the laboratory should be at least "Analytical Reagent Grade" (AR).
- b. Elimination of Determinate Errors - all reagent, solvents and gases should be checked to see that they are free of interfering substances under the conditions of the analyses.

5. Cleaning and Proper Use of Glassware

- a. Laboratory glassware, such as Pyrex or Simex, is to be used throughout the laboratory.

- b. Volumetric glassware should be carefully selected. The proper selection is dependent on how accurate the volume of the solution must be measured in accordance with a specific type of an analysis. Glassware marked "To Contain" (TC) will contain the amount of liquid measured. Glassware marked "To Deliver" (TD) will deliver the amount of liquid measured.
- c. Method of cleaning should be adapted to both the substances that are to be removed, and the determination to be performed.

6. Instrumentation*

- a. Analytical balances should be used in the laboratory when a high degree of precision is required. These balances should be located in a secluded part of the laboratory, properly mounted and leveled, monitored and checked as needed.
- b. pH meters

*Manufacture's operating manuals should be referenced for maintenance procedures and requirements.

1) Properly calibrated at the temperature of the solution to be measured using at least two buffers of known pH bracketing the expected pH range;

2) Temperature compensating dial is to be set at the temperature of the buffer; and

3) Electrodes should be rinsed with distilled water after each reading. When the pH meter is not in use the electrodes are to be immersed in a buffer solution.

c. Conductivity meters - cell plates should be maintained and serviced as needed.

d. Spectrophotometers

1) Proper light source and filter should be utilized;

2) Wavelength alignment should be checked periodically; and

3) Absorption cells should be kept clean and free of scratches, fingerprints, etc.

e. Atomic absorption

- 1) Proper lamp should be used and adjusted according to manufacturer's recommendations.
- 2) The flame should be adjusted so that the most sensitive area of the flame for the specific element sought is used.

7. Analytical performance

The accuracy of testing methodology is evaluated indirectly through the reviewing of standards and spike samples. In addition, quality control charts for accuracy and precision should be developed for each parameter and method of analysis.

8. Microbiology

Quality Control used in a microbiology laboratory must emphasize the control of laboratory operations and analytical procedures because the tests measure living organisms that continually change in response to their environment.

a. Microbiology laboratory review should cover:

- 1) Sample collection and handling;
- 2) Laboratory facilities;
- 3) Laboratory personnel;
- 4) Laboratory equipment and instrumentation;
- e) Laboratory supplies;
- f) Culture media; and
- g) Analytical methodology.

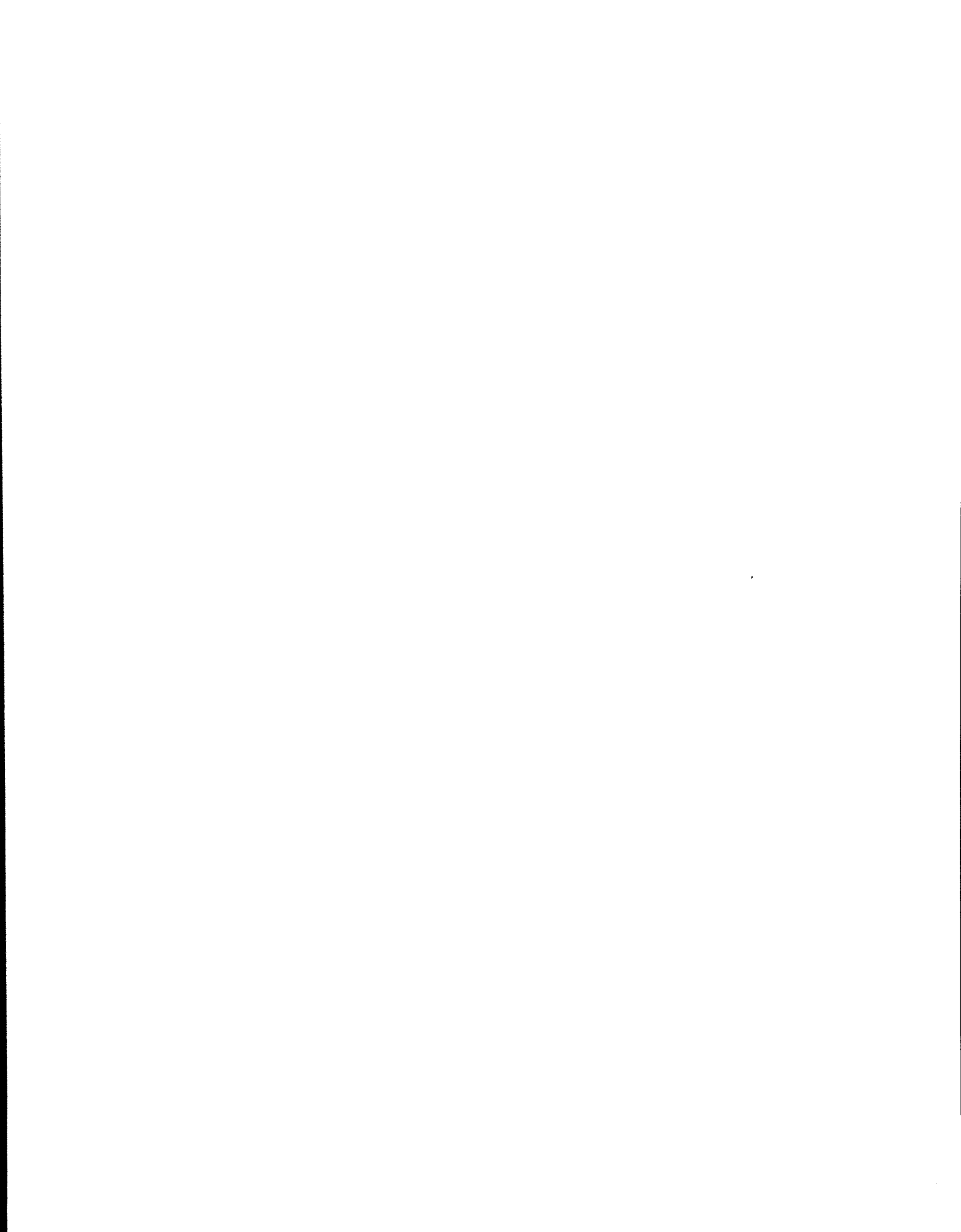
b. Analytical QC for microbiology laboratories should include:

- 1) Sterility checks;
- 2) Positive and negative controls;
- 3) Duplicate analyses;

- 4) Single-analyst precision;
- 5) Comparison of results between analyst;
- 6) Verification of membrane filter analyses; and
- 7) Completing most probable number analyses.

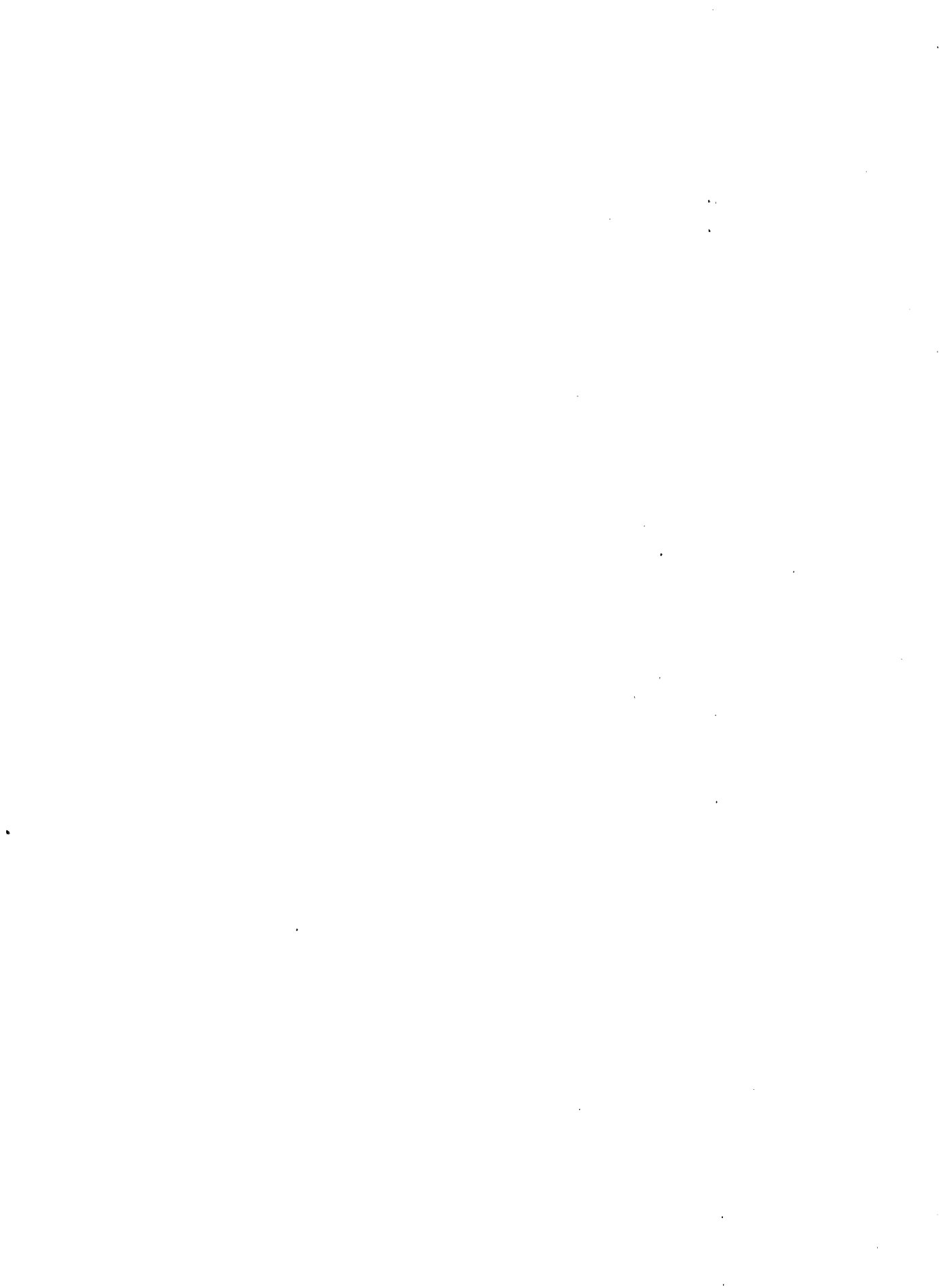
9. Data Handling and Reporting

- a. Proper use of significant figures;
- b. Data reported in bound notebooks;
- c. Correct logging of data onto the Discharge Monitoring Report form and other applicable reporting forms.



SECTION 7

MULTIMEDIA INSPECTIONS



I. AUTHORITY

A. Water

The Agency's authority under Section 308 of the Act is discussed in Section III of this manual.

B. Air

Section 114 of the Clean Air Act authorizes qualified inspectors upon presentation of credentials:

1. To enter any premises in which an emission source is located or in which any records required to be maintained under the Act are located;
2. At reasonable times, have access to and copy any records and inspect any required monitoring equipment; and
3. To sample any emissions which the owner or operator is required to sample.

C. Toxic Substances

Section II of the Toxic Substance Control Act allows a duly designated representative of the Administrator to inspect any establishment, facility, or other premises in which chemical substances or mixtures are manufactured, processed, stored, or held before or after distribution in commerce and any conveyance being used to transport chemical substances, mixtures, or such articles in connection with distribution in commerce.

D. Pesticides

Section IX of the Federal Insecticide, Fungicide and Rodenticide Act, as amended, allows a duly authorized inspector to inspect and obtain samples of pesticides or devices (after release for shipment) and samples of containers and labeling.

E. Solid Waste

Section 3007 of the Resource Conservation and Recovery Act allows a duly authorized inspector:

1. To enter at reasonable times any establishment or other place maintained by any person where

hazardous wastes are generated, stored, treated, disposed of, or transported from; and

2. To inspect and obtain samples from any person of any such wastes and samples of any containers or labeling for such wastes.

II. INSPECTOR'S RESPONSIBILITY

It is the inspector's responsibility to assure that:

- A. The Agency's goals in abating and controlling environmental pollution are carried out without undue delay;
- B. The Agency's credibility is maintained by reporting all known sources of environmental pollution to the appropriate Federal and/or State personnel for appropriate action;
- C. All media inspections be totally coordinated to assure compliance with all environmental requirements; and
- D. All photographs used for documentation are properly labeled and referenced to ensure admissibility as evidence.

III. INSPECTION PROCEDURES

A. Inspector's Obligations*

Inspectors shall:

1. Report all readily observable sources of environmental pollution and occupational health and safety hazards to their immediate supervisors;
2. Become familiar with readily observable indicators of environmental pollution and any health or safety hazards encountered when making inspections;
3. Be aware of the basic environmental requirements in other media programs to which a specific source is subject; and
4. Be adequately trained in the use of special techniques generally employed for a particular

*Compliance Evaluation Inspectors should not attempt any type of environmental inspection unless their credentials authorize such activity, and then only in compliance with all statutory requirements.

medium program before conducting in-depth inspections. However, for cursory inspections, inspectors need not be well versed on all environmental programs but only capable of identifying potential problems.

B. Conducting Multimedia Inspections*

In addition to water, inspectors should be capable of investigating a facility's compliance status with respect to air and land (solid wastes) environmental requirements. One area where multimedia inspections should be made is at a wastewater treatment facility where two or more types of environmental pollution (common source pollution) are evident. For example, excessive odor problems at aerobic biological treatment facilities may be accompanied by the discharge of an inadequately treated effluent.

*For additional information concerning inspection techniques utilized by other program offices, inspectors should refer to references listed in the Appendix of this Manual.

Multimedia inspections must be properly coordinated with appropriate inspection personnel of other environmental programs. This procedure is essential to avoid a duplication of effort and/or multiple coverage of an establishment by more than one inspector. In any case, inspectors should:

- a. Inquire about the apparent cause and sources of common source pollution;
- b. Determine the steps being taken to abate it; and
- c. Include the above information in the inspection report.

1. Air Pollution

Some of the readily observable indicators of air pollution sources include:

- a. Heavy plumes of black smoke;
- b. Excessive and unusual odors;
- c. Excessive dust and fugitive emissions;

- d. Severely damaged vegetation;
- e. Excessive corrosion; and
- f. Dust buildup on nearby homes, cars and roads that could result from emissions by a source.

2. Solid Wastes

Sanitary landfills and incinerators are also types of waste disposal facilities amenable to multimedia inspections as these sites are often:

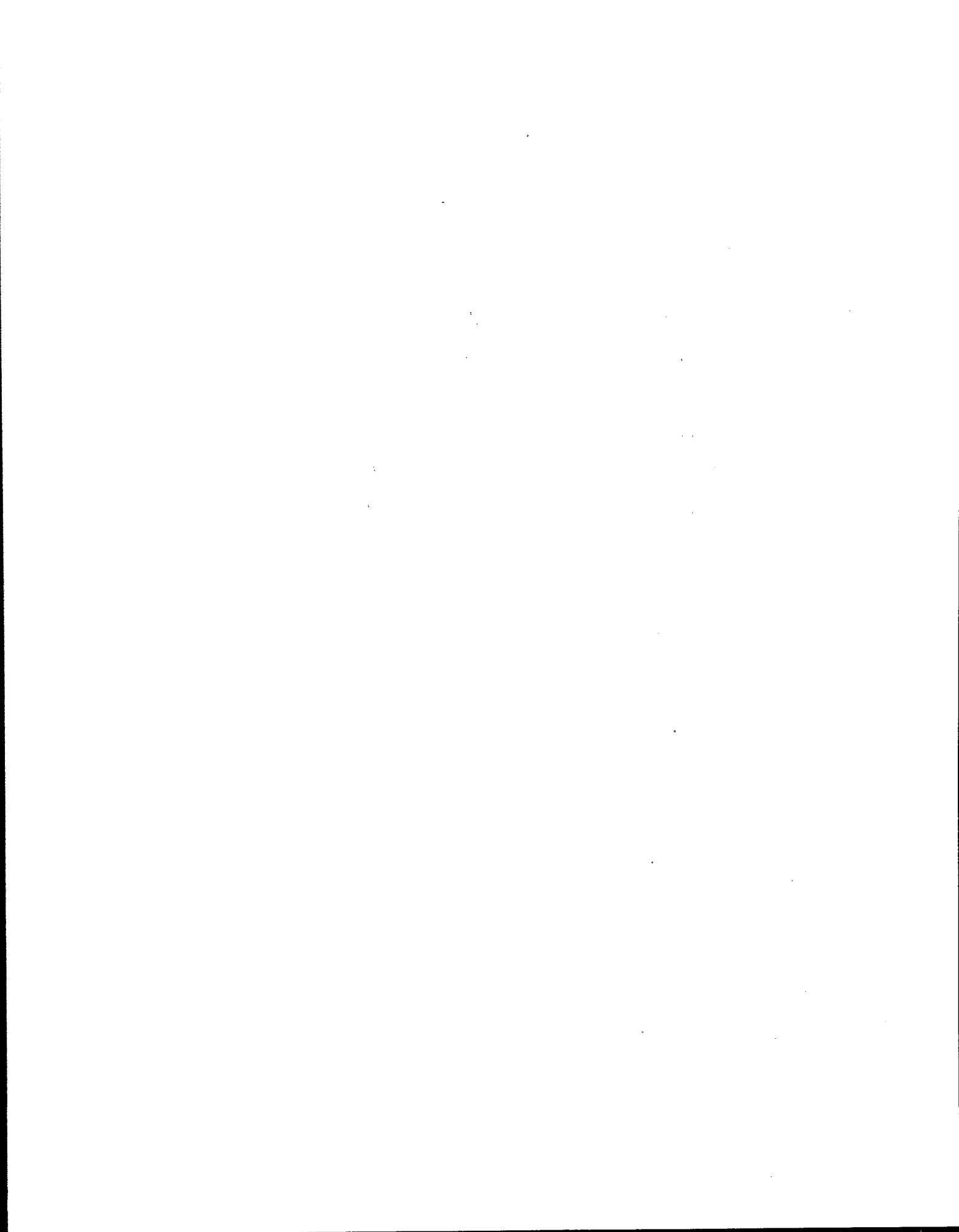
- a. Used for the ultimate disposal of solid residues resulting from the treatment of wastewaters;
- b. Located near treatment facilities and frequently owned and operated by the same NPDES permittees; and
- c. Sources of gross surface and/or ground water pollution.

Inspection of landfills/solid waste disposal sites is often essential to determine compliance with the Act or NPDES permit requirements. Multimedia inspections at such facilities can be readily conducted in minimum time with minimal expense. Readily observable indicators of pollution and/or improper operations at solid waste disposal sites include:

- 1) Refuse in direct contact with surface or ground waters including water ponding on site;
- 2) Leachate from the site entering surface and/or ground waters;
- 3) Excessive odors and/or smoke;
- 4) Lack of maintenance of surface water diversion barriers or dikes;
- 5) Inadequately incinerated solid wastes; and
- 6) The acceptance of toxic or hazardous wastes for disposal at a site where such wastes are prohibited.

SECTION 8

SPECIAL CONSIDERATIONS AND TECHNIQUES



I. CITIZEN COMPLAINT INVESTIGATIONS

A. General

Every public agency, including EPA, is the recipient of many citizen's complaints. From a public relations standpoint, complaints should be welcomed from those the Agency is supposed to serve since this is one of several ways in which its overall surveillance activities may be improved. In any case, field surveillance personnel may be called upon to investigate complaints that concern reports of alleged pollution, inquiries regarding discharges and requests to abate specific problems.

B. Conducting Complaint Investigations

Certain steps should be followed in handling complaint investigations. The first is to determine if sufficient information is available to conduct an investigation. This should include:

1. The complainant's name, address and telephone number;
2. Exact location of the alleged discharge or conditions the complainant made reference to; and

3. Details of the complaint.

The next step is to check at once, if possible, whatever records exist that might substantiate or disprove the complaint. Following this, the appropriate State agency should be contacted to determine whether it has any information regarding the complaint and whether it wishes to make a joint investigation. If possible, the operator or agent in charge of an alleged discharge should also be present during the investigation. In some instances, it is desirable to have the complainant present during the investigation. However, circumstances will dictate whether or not this is wise.

If the complaint concerns a wastewater discharge, the same information should be reported as for a Compliance Evaluation Inspection, including the circumstances of any property damage, fish, bird, or wildlife kills or injuries.

When the investigation has been completed, the discharger and complainant should be informed of the results and that each can expect a timely written response regarding the appropriate action that will be taken to correct the problem.

II. PHOTOGRAPHS

A. General

The Agency has the right to take photographs of:

1. Overall view, where possible, showing arrangement, relative size and general condition of the facility;
2. All sampling points;
3. Major process units within the waste treatment facility;
4. Operation and maintenance conditions;
5. Effluent discharge points; and
6. Receiving water areas.

B. Purpose

The specific procedures to be followed when an on-site photographic essay is used to supplement a Compliance Inspection report are given below.

Photographic supplements will typically:

1. Aid in the explanation of problem conditions in the wastewater treatment plant and receiving waters;
2. Assist the inspector in follow-up procedures;
3. Enable the inspector to prepare a more thorough and accurate inspection report; and
4. Serve as evidence in enforcement proceedings.

Some photographically identifiable areas are: bypass discharges, floating solids, excessive foaming, iridescent sheen, discoloration, and unauthorized discharge points. When performing a multi-media inspection the above list may include solid waste disposal sites and smoke-stack plumes.

C. Scope

When a situation arises which dictates the use of a photographic essay, the inspector will obtain the permittee's approval prior to the photographing of any problem conditions. The inspector is to handle any concerns or objections a permittee may have over

the use of a camera in a tactful manner. When appropriate, the inspector may convey to the permittee that waste streams, receiving waters and wastewater treatment facilities are not trade secrets but public information. In the event the permittee still refuses to allow the use of a camera and the inspector feels the photographs will have a substantial impact on future enforcement proceedings, Regional enforcement attorneys should be consulted for further instructions. At all times the inspector is to avoid confrontations which might jeopardize the completion of the inspection.

In some cases the Enforcement Division may anticipate that permit violations of an enforceable nature will be uncovered in an upcoming inspection and request that the inspector photograph the violations. In this case an agreement concerning the use of a camera during the upcoming inspection may be made between EPA attorneys and the attorneys representing the permittee prior to the inspection. The inspector is to be aware of any problems or special arrangements this agreement has established.

D. Equipment

A single lens reflex camera should be used whenever one is available. This type of camera will give high quality photographs, enable the inspector to use a variety of film speeds, and allow the use of wide angle and zoom lenses.

All photographs should be taken using color print film since additional equipment such as a projector and screen are not needed for review of the photographs. Also, if the photographs are used in an enforcement proceeding, the negatives are easily duplicated and the prints can be enlarged and distributed as needed.

E. Documentation

Whenever photographs are to be used as evidence in an enforcement proceeding, they are to be handled in such a way that a chain of custody can be established. This chain of custody includes the handling of the film before, during, and after development. Also, before the services of a film processing laboratory are contracted, the laboratory must sign

a statement which guarantees that all film will be processed using film developing techniques which will not alter the undeveloped film in any way.

A photographic log should be maintained for all photographs taken during an inspection, and the entries are to be made at the time the photograph is taken. The log entries are to be numerically identified so that after the film is developed the prints can be serially numbered corresponding to the logbook descriptions and, if necessary, pertinent information can be easily transferred to the back of the photograph. The log entries are to include:

1. Signature of the photographer;
2. Description of film used (i.e. its expiration date, ASA number, origin, etc.);
3. Focal length of the lens being used;
4. F-stop and shutter speed at which the camera is set;
5. Lighting conditions encountered;
6. Time of day;

7. Date;
8. Location; and
9. A brief description of the subject being photographed.

Photographs should be keyed to the plot plan, flow diagram or location on the map whenever possible.

III. BEST MANAGEMENT PRACTICES

A. General

Best Management Practices (BMPs) are practical and effective measures or a combination of measures which, when applied to an industrial activity, will prevent or minimize the potential for release of toxic pollutants and hazardous substances in significant amounts to surface waters from sources such as plant-site runoff, spillage or leaks, sludge or waste disposal, or damage from raw-material storage areas.

B. Authority

The authority for imposing BMPs in NPDES permits is contained in Section 304(e) of the Act.

In the absence of BMPs promulgated pursuant to the authority of Section 304(e), permitting authorities may impose BMPs in permits under authority of Section 402(a)(1) using Best Professional Judgement (BPJ). Criteria and standards for BMPs are described in 40 CFR Part 125, Subpart k.

C. Objectives

A company's BMP plan may be evaluated by the permitting authority during a routine compliance inspection or as required for any of a number of reasons including a recent spill of toxic and/or hazardous substances to navigable waters, a history of incidents, a citizen complaint, a fishkill, or an application for a renewed or a new NPDES discharge permit. The extent of BMPs development at a particular site is directly related to factors such as plant size and location, topography, specific chemicals, ancillary sources, water quality, impacts, and quality of materials on-site.

The minimum requirements of a BMP plan are prescribed by the BMP regulation and are listed below:*

*Additional information is available in the "NPDES Best Management Practices Guidance Document", December 1979 (EPA-600/9-79-0450).

1. General Requirements

- a. Name and location of facility
- b. Statement of BMP policy and objectives
- c. Review by plant manager

2. Specific Requirements

- a. BMP Committee
- b. Risk identification and assessment
- c. Reporting of BMP incidents
- d. Materials compatibility
- e. Good housekeeping
- f. Preventive maintenance
- g. Inspections and records
- h. Security
- i. Employee training

The size and complexity of the BMP plan will vary with the corporate environmental policy, size, complexity, and location of the facility. It is anticipated that the length and detail of the BMP plan will be commensurate with the quantity of toxic and hazardous chemicals on-site and their opportunity for discharge.

D. Inspector Reporting Procedures

The Deficiency Notice may be completed at the end of the inspection to cite inadequacies in a permittee's BMP plan. The inspector should identify the inadequate areas in either the "Other Self-Monitoring Deficiencies" block or the "Additional Comments" block.

The NPDES Compliance Inspection Report form may also be used to record the inspector's assessment of a permittee's BMP plan. The "Other" block in Section C of the Inspection Report form can be labelled BMP and be used to identify whether the BMP plan was satisfactory or unsatisfactory. Also, the inspector should consider the permittee's BMP plan when completing Section I(h), (k), and (i) of the Compliance Inspection Report form.

IV. SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN

It is important that inspectors determine if permittees have prepared a SPCC plan of oil storage facilities having sufficient capability to subject them to the requirements of the Oil Pollution Prevention Regulations (40 CFR Part 112). However, this determination is not applicable to facilities which have been previously inspected for SPCC compliance.

V. INTERAGENCY REGULATORY LIAISON GROUP REFERRAL INSPECTION PROGRAM

A. Background

The Interagency Regulatory Liaison Group (IRLG) was formed to more closely coordinate activities between the U.S. Environmental Protection Agency (EPA), Food and Drug Administration (FDA), Consumer Product Safety Commission (CPSC) and Food Safety and Quality Service (FSQS). As part of this coordinated effort, the Agencies agreed to coordinate their compliance and enforcement programs.

B. Definition and Authority

A referral inspection is not reviewed as a means of having an agency perform routine inspectional work

for another agency, but rather its purpose is to ensure that obvious suspected violations of other laws are not overlooked.

The basis for referral inspections is the plain view-doctrine which holds that during the course of his authorized activities, an inspector is not required to ignore irregularities which are within his view, even though these problems are not under the jurisdiction of the law(s) which he enforces.

C. Purpose and Scope

The purpose of the IRLG referral inspection program is to make the interagency referral process more formal and to heighten the sensitivity of each agency's inspectors to situations which may be indicative of a serious hazard or illegal activity.

D. Referral Guide

The effectiveness of the referral program will depend on the inspector's ability to recognize situations which are symptoms of more serious problems. Given below is an Agency specific list of visual signals which generally connote potential violations.

1. FDA

- a. Actual or potential food, drug or cosmetic contamination from: animal activity, pesticide misuse, equipment breakdown/malfunction, filthy processing equipment, airborne dust, contaminated/rotten raw materials, natural disaster damage, accident damage.
- b. Packaging: inadequate product labeling or label control, containers damaged/leaking.

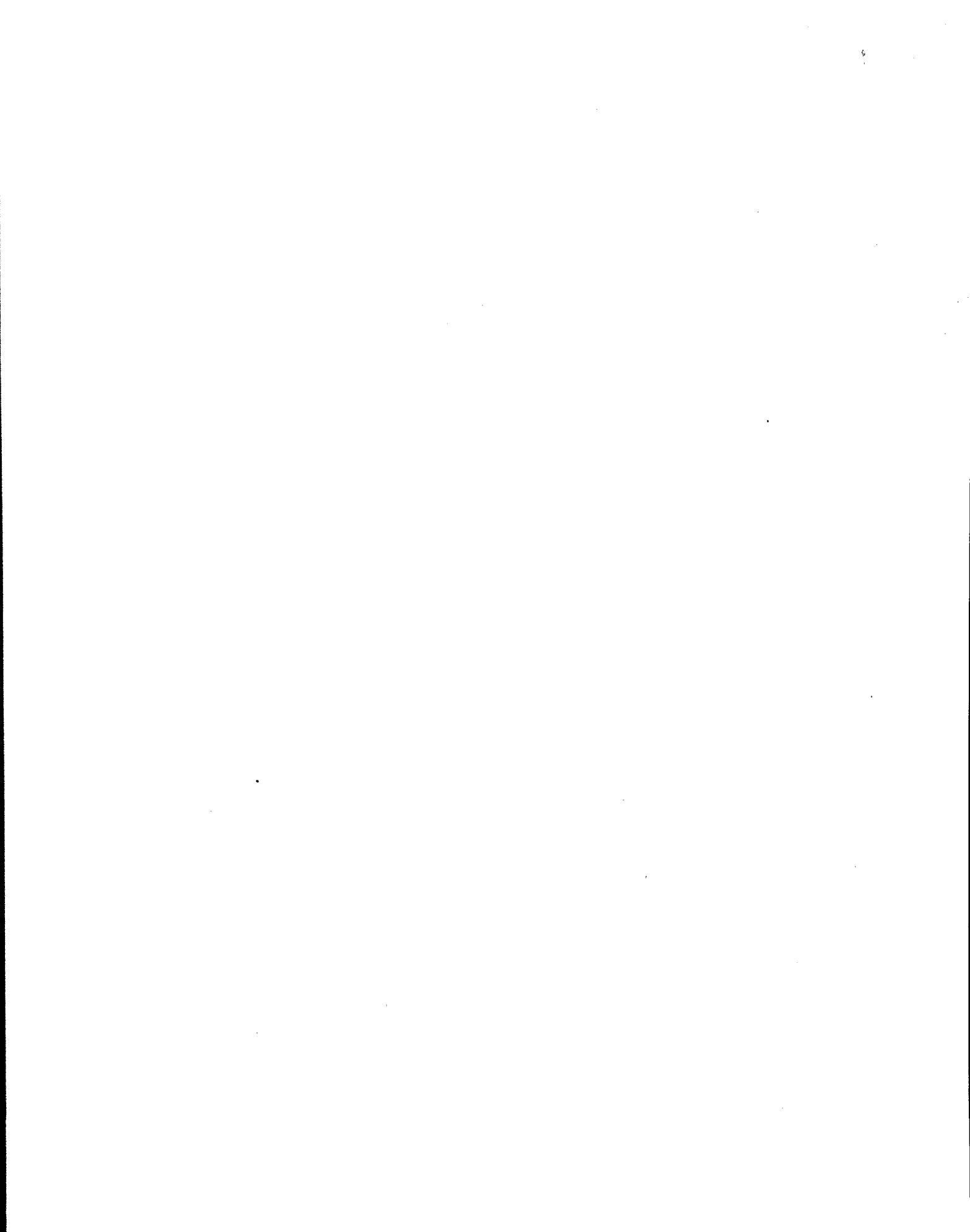
2. CPSC

- a. Lack of child resistant packaging on: aspirin preparations with methyl salicylate, manufacturer's consumer size package Rx oral drugs, drugs/dietary supplements with iron, kindling/illuminating compounds with petroleum distillates, furniture polish with petroleum distillates, turpentine, sulfuric acid, methanol, ethylene glycol, paint solvents, sodium/potassium hydroxide.

- b. Hazardous household chemicals (toxic, corrosive, irritating, flammable, or pressure generating), which are not conspicuously labeled with signal word: DANGER, WARNING, CAUTION, statement of principal hazard; Vapor Harmful, Harmful if Fatal or Swallowed, Flammable etc., precautionary, warning/storage instructions, names of hazardous ingredients, first aid instruction, name/location of manufacturer, statement "Keep Out of Reach of Children."
- c. Paint with more than 0.06 percent lead: for consumer use, furniture except metal, applied to toys/children's articles.
- d. Consumer patching compounds containing asbestos.

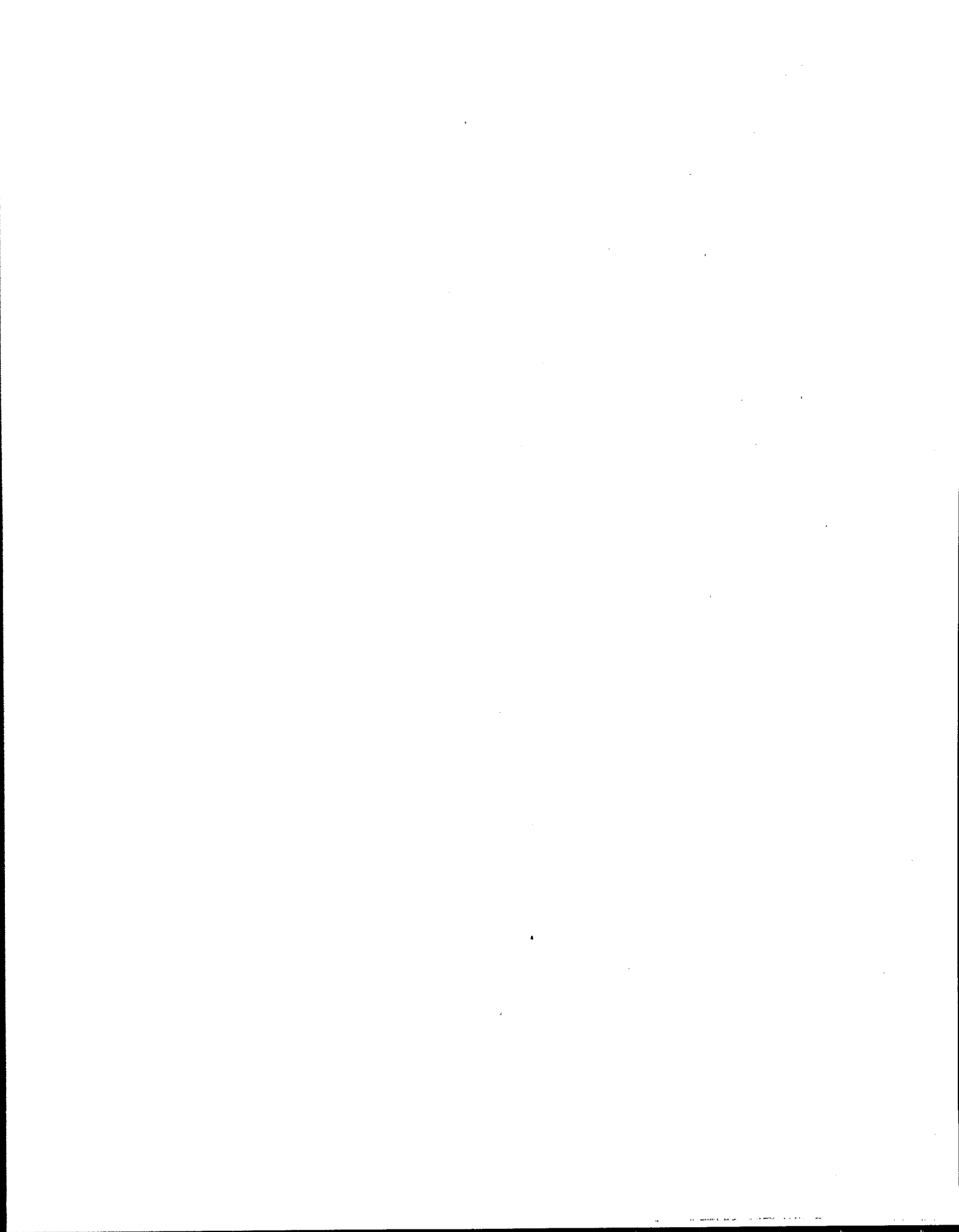
E. Referral Memorandum

The referral memorandum is the mechanism through which information concerning pertinent observations will be transmitted from one agency to another. The memorandum is filled out only when a pertinent observation has been made and not for every inspection.



SECTION 9

FEDERAL AND STATE COOPERATION



I. AUTHORITY

Sections 308 and 402 of the Act provide for the transfer of Federal authority, relative to NPDES permits and compliance monitoring, to the States. Section 308 authorizes the transfer of the monitoring function to the States without transferring the full NPDES program.

Presumptive of these authorities, Regional Administrators and some State Water Pollution Control Agencies have signed formal agreements or have entered into formal agreements on the cooperative monitoring of permittees' effluents.

II. OBJECTIVES

Within the framework of this authority, the objectives of Federal and State cooperation from the inspector's standpoint are to ensure that:

- A. Information exchange and responsibilities called for under the cooperative agreements are carried out in a timely manner;
- B. The information gathered is complete and in an acceptable form so the agency which has the primary

role in the enforcement of the NPDES permit requirements is able to use the information in its own enforcement programs; and

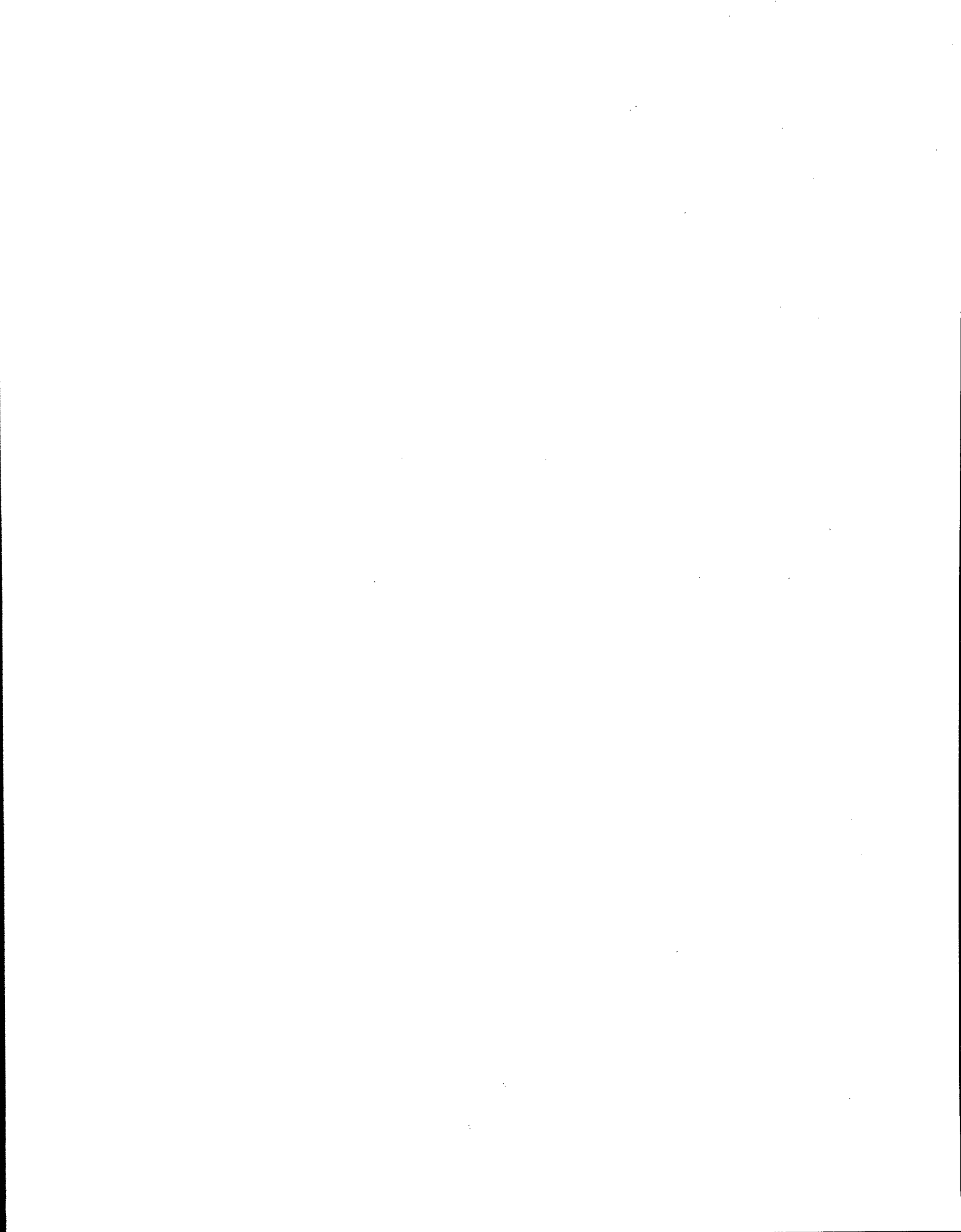
- C. A successful inspection program is implemented to ensure a high degree of permittee compliance with permit conditions, effluent limitations and compliance schedules.

III. POLICY

The Agency is committed to ensuring full partnership with the States in field investigations and other NPDES monitoring activities.

SECTION 10

SAFETY



I. GENERAL

The inspection of wastewater and other environmental pollution control facilities always poses a certain degree of hazard. The objective of this section is to assure the safety of inspection and operating personnel by the use of proper safety equipment and the use of safe practices.

A. Inspector's Responsibility

It is the responsibility of each inspector to:

1. Be thoroughly familiar with all safety guidance and practices;
2. Maintain safety equipment in good condition and proper working order;
3. Use safety equipment in accordance with guidance received, and labeling instructions or as dictated by common sense; and
4. Guard against body infections by periodically obtaining typhoid and tetanus inoculations.

II. SAFETY EQUIPMENT

A. Personal Safety Gear

When performing their inspection duties, inspection personnel should properly use the following safety equipment:

1. Hard hats;
2. Rubber-soled, non-skid, metal-toed shoes and boots;
3. Safety glasses (prescription if required), goggles and face shield;
4. Gloves: liquid-proof, natural or synthetic rubber, or throw-away plastic;
5. Ear protectors; and
6. Breathing mask or respirator.

B. Additional Equipment

The following safety equipment should be carried with the inspector for use when needed:

1. First aid kit;
2. Fire extinguisher;
3. Soap, waterless hand cleaner, towels, and
4. Snakebite kit.

III. SAFETY PRECAUTIONS

A. Inspection and Operating Personnel

1. Authority

Section 204 of the Act requires POTW's, under construction grants, to adequately operate and maintain the wastewater treatment facilities. Safety is considered to be an integral component of operation and maintenance since unsafe conditions and practices adversely affect the operation and maintenance of wastewater facilities.

2. Inspector's Obligations

The inspector should guard against personal injury which may result from unsafe conditions or practices at the wastewater treatment facility. As a guide in this area, all field

inspectors should read Safety in Wastewater Works published by the Water Pollution Control Federation. This publication discusses safety precautions necessary for the:

- a. Prevention of physical injuries;
- b. Prevention of bodily infections;
- c. Prevention of asphyxiation due to lack of oxygen or presence of noxious gases;
- d. Proper operation of safety equipment; and
- e. Rescue of injured employees.

IV. HAZARDOUS WASTE DISPOSAL SITES

Special safety precautions must be taken when inspecting a hazardous waste site. In many instances the inspector may be unaware of the types of substances he/she will encounter while inspecting a hazardous waste site. Therefore, extreme caution should be exercised at all times.

All personnel to be assigned on-site duties in hazardous waste site investigation must be provided hands-on training

on simulated sites to achieve competence in the safety and operational aspects. Training should include basic first aid, cardio-pulmonary resuscitation, and the use of protective clothing and equipment. Also, preparation for on-site investigations must include detailed briefings, particularly for inexperienced personnel.

Typically, all hazardous waste site inspections should be performed by an inspection team rather than a single individual. All individuals touring the facility should be aware of the activities and location of each team member. Also, the closest rescue unit should be located and then notified as to the type of inspection about to be undertaken. This should be done prior to entering the hazardous waste disposal facility so that in an emergency their services can be secured without delay.

Personal protective equipment must be worn by all assigned personnel while on a suspected or confirmed Hazardous Waste Site until sufficient data has been acquired to enable the Project Leader to make an informed judgement regarding the need. In the absence of clear indications that work can proceed safely without personal protective equipment, required items include respirators, chemical resistant pants and jacket, rubber boots, protective gloves, hard hat or head cover, face shield or chemical safety goggles.

The following provides a brief description of the types of personal protective equipment which should be available when conducting a hazardous waste site inspection. The inspector should consult the Safety Manual for Hazardous Waste Site Investigations published by EPA's Office of Occupational Health and Safety, September 1979, or the Guidelines for Entering Field Sites of Unknown Chemical Toxicity by the same Office, May 1979 ,for more detailed information.

A. Respiratory Protection

1. Self-contained breathing apparatus - a respirator which employs a self-contained supply of air carried by the wearer to provide him/her with a respirable atmosphere. This apparatus should be used when entering an oxygen deficient area; for potential exposures over 2 percent by volume of gases or organic vapor or 3 percent ammonia, such as a storage building or other enclosed area without adequate ventilation.

2. Gas mask - consists of a large air-purifying canister attached to a full facepiece either directly or indirectly by means of a flexible tube. This apparatus should be used in a gaseous environment for potential exposures

up to 3 percent by volume of ammonia gas; 2 percent by volume for other gases or organic vapors which are immediately dangerous to life or health. It does not protect against oxygen deficiency or airborne particulates. The canisters are specifically labeled as to type and limitations and are color coded for fast, accurate recognition. This apparatus must be properly maintained and checked periodically.

3. Chemical-Cartridge Respirator - consists of one or two small cartridge shaped containers of granular absorbent or catalyst attached to a facepiece. These respirators protect the wearer in atmospheres for potential exposures up to 0.1 percent by volume of organic vapors which are not immediately dangerous to life or health. It does not protect against oxygen deficiency or airborne particulates. The cartridge is labeled and color coded in order to identify the type respiratory protection afforded.

4. Filter Respirators - are used for nuisance or low toxicity dusts which are not immediately dangerous to life or health. This apparatus

does not provide protection against organic vapor or gases and is not recommended for hazardous waste disposal site inspections.

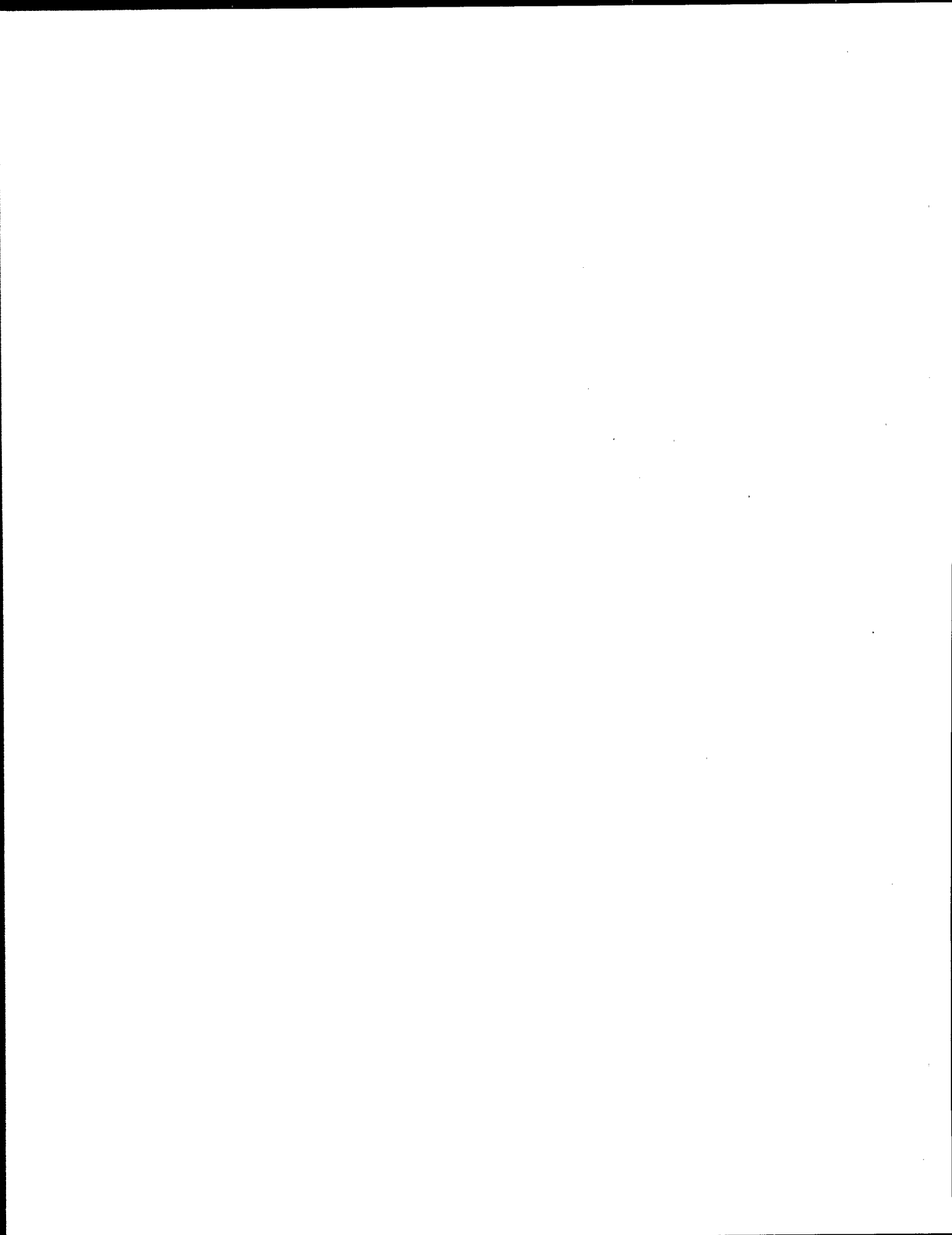
B. Protective Clothing

To protect against chemical agents, impervious clothing should be worn. Clothing to cover all parts of the body is available; work shirts and pants, solvent impervious coveralls and aprons, gloves, boots, safety glasses or goggles, and face shields.

1. Eye and Face Protection - Goggles must be of noncorrosive materials and fit snugly to the face so that no splash can penetrate to the eyes. They may have hooded vents if no irritating vapors are involved. In severe conditions where chemicals are concentrated or where splash hazards are continuous, the goggles should be worn under face shields or acid hoods for greater protection. The type of eye and face protection needed depends on the type of sampling or other activities performed by the inspector.

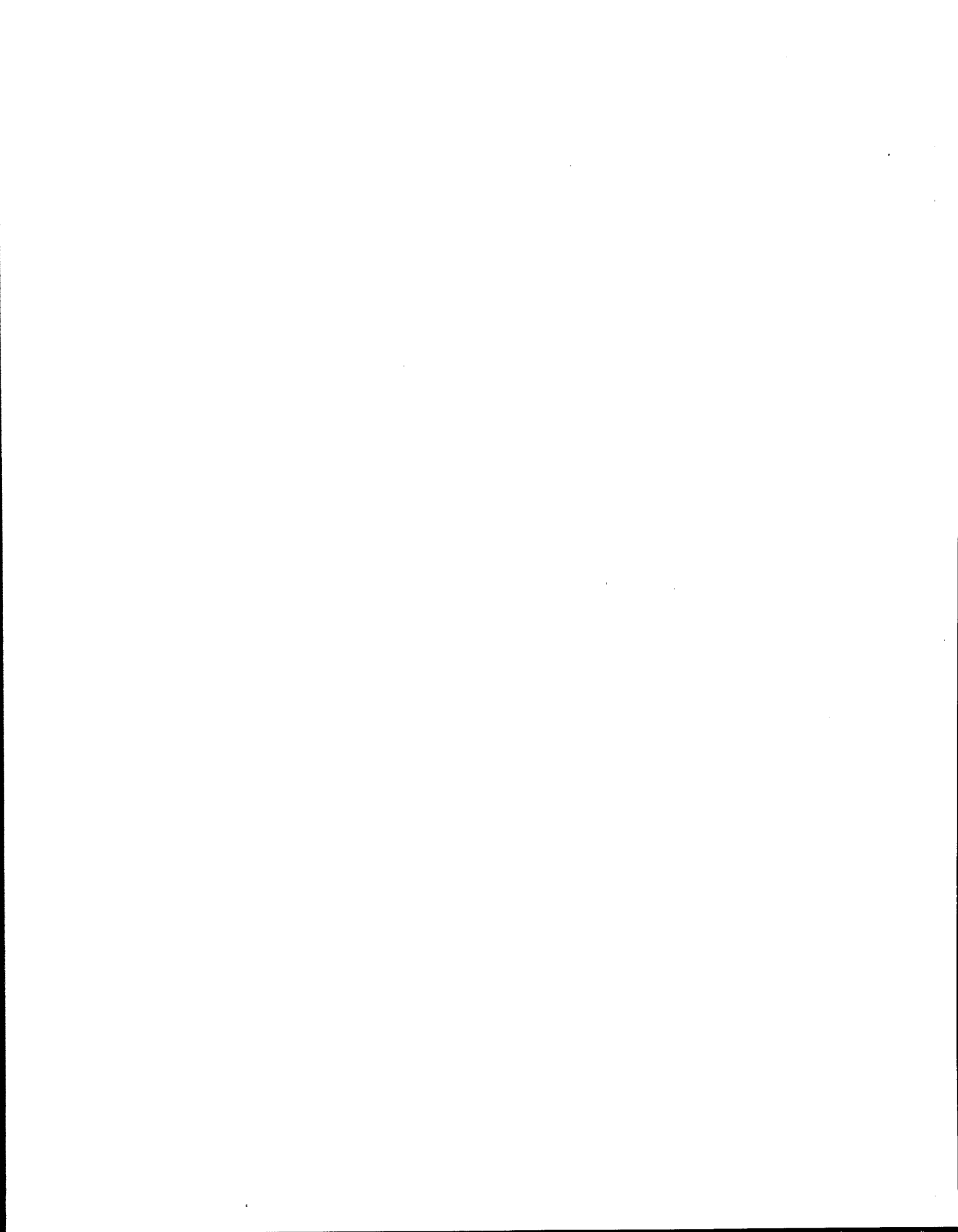
2. Hand Protection - Solvent impervious gloves with a gauntlet cuff (covers part of the forearm and permits folding back to prevent liquids from dripping from the glove to the arm) should be worn if samples are collected or other activities requiring this type of protective equipment are performed.

3. Foot Protection - Solvent impervious overshoes or boots should be worn if there is any possibility of encountering pools of liquid material on the surface of the ground.



SECTION 11

ACCESS AND WARRANTS



I. GENERAL

The Act grants the Administrator or his authorized representative the authority to:

- A. Enter a facility or the place where effluent records are held;
- B. Inspect the permittee's monitoring equipment and techniques;
- C. Inspect and copy the permittee's self-monitoring records;
- D. Take samples of discharges which the permittee is required to sample; and
- E. Examine any other records which the Administrator requires to be kept as delineated in Section IV of this manual.

All of the above should be done, whenever practical, during the normal working hours observed at the permittee's facility (e.g., office hours at a steel mill even though operating three shifts) after presentation of credentials. However, the taking of composite samples over an extended period to confirm compliance with permit limitation will not

be considered contrary to this requirement so long as the sampling commences during normal working hours. If initial entry to the premises of an alleged "midnight dumper" is to be made after normal working hours, prior instructions from an Enforcement or Regional Counsel Attorney must be obtained and followed.

All permitting authorities are subject to the "Unreasonable Search and Seizure" provisions of the Fourth Amendment to the Constitution. The ability to use statements (including supportive documents) by permittees or their agents, samplers and analysts, may also be subject to the limitations of the "privilege against self incrimination" provisions of the Fifth Amendment. This limitation may occur directly as a result of Federal action, or indirectly as a result of State action through interpretation of the "due process" provision of the Fourteenth Amendment. The applications will be discussed in the following subsections.

The Act also gives the Administrator or a designee authority to require a permittee (on a nonroutine basis) to provide other information as may be reasonably required in order to determine if the permittee is complying with the law. The inspector may wish to make use of this authority as the designee of the Administrator in order to request information not contained in records which the permittee is

required to maintain under the terms of the permit. Examples of this type of material are:

1. Changes of processes, products, or volume of discharge;
2. Treatment processes, and the interrelationship of components; and
3. Purchases of equipment, etc.

Since these materials are first being requested "on-site", the instructions to the inspector on what to do if entry or information is refused do not apply. The inspector should, if this material is not forthcoming, continue the inspection. However, make note of the information or documents requested but not received so that the same may thereafter be requested in the form of a Section 308 letter.

II. OBJECTIVES

The objectives of this section are to inform or advise the inspector of:

- A. The need for obtaining consent prior to entry, or sampling;

- B. The procedures to be followed if consent is not given; and
- C. The limits imposed on the use of documents or statements of individuals in criminal or civil penalty proceedings against them. The self-incrimination provisions apply only to individuals, not to corporations.

III. UNREASONABLE SEARCH AND SEIZURE

The Fourth Amendment prohibition is not against searches and seizures, but only those which are unreasonable or to which valid consent, if required, has not been given. Consent, in this context, means the intentional foregoing of right to privacy which is not the result of either fear, ignorance or trickery. For additional information on unreasonable searches and seizures, consult the current edition of the U.S. Justice Department booklet entitled Handbook on the Law of Search and Seizure.

IV. NEUTRAL INSPECTION SCHEME

In Marshall v Barlow's Inc., the Supreme Court addressed the issue of the need for and use of warrants in conducting administrative inspections under various regulatory schemes. The Court stated, in general, that a warrant was necessary

when requested by the owner or person-in-charge of the establishment to be inspected, but that the warrant need not be based on a showing of criminal probable cause. Rather a warrant would be issued if it could be shown that the establishment was being inspected pursuant to a neutral administrative scheme.

The Agency's procedures for inspections, particularly where entry was denied, were largely in accordance with the provisions of Barlow's before the Supreme Court issued its ruling. Therefore, it has had only a limited effect on EPA inspections and they will generally continue as usual. Where an inspector is refused entry, EPA will seek a warrant through the local U.S. Attorney; and sanctions will not be imposed upon owners of establishments who insist on a warrant before allowing inspections of the nonpublic portions of an establishment.

The Barlow's decision prompted the Office of Enforcement, on April 11, 1979, to issue a memorandum to all Regional Administrators, Surveillance and Analysis Division Directors, and Enforcement Division Directors providing guidance on how to conduct inspections after the Barlow's Decision and should be referenced if necessary (see Appendix D).

V. RIGHT OF ENTRY

The following procedures are to be followed when entering a facility for the purpose of conducting a NPDES Compliance Inspection.

- A. All inspectors shall have in their possession credentials which identify them as EPA inspectors and any safety equipment required during an NPDES inspection.
- B. One inspector shall be in charge of the inspection team, and this inspector will be referred to as the team leader in the following instructions. All inspections shall be commenced during normal work hours of the premises. There is no objection to reentry thereafter outside normal working hours for the purpose of taking or checking composite samples or conducting flow-through biomonitoring.
- C. Upon arrival at the facility, the team leader shall ask for the facility representative, who has been designated through the 308 letter response, or in his/her absence the person in charge of the premises at the time of the inspection (in either case, hereafter referred to as the "facility representative").
- D. The team shall not:

1. Have any dealings with gate guards other than to ask for the facility representative;
2. Make any threats or statements as to the consequences of denial of entry to the gate guard, facility representative or other personnel at the facility; or
3. Sign any waiver of responsibility or liability.

E. Upon contact with the facility representative, the team leader shall present all necessary credentials and explain the purpose of the inspection. All other inspectors shall also display their credentials. The team leader shall state that the purpose of the inspection is as follows:

1. It is an NPDES inspection dealing with water and is authorized by Section 308 of the Clean Water Act.
2. A review will be performed of all self-monitoring and other records which are required by the permit.
3. It will include a review of all the pollution control systems at the facility.

4. If appropriate, it is a sampling inspection and samples will be taken at the facility's discharge and other NPDES permit-designated monitoring points.
 5. If appropriate, it is a biomonitoring inspection to determine the relative toxicity of the effluent.
- F. If you are denied entry under the following circumstances:
1. By the gate guard, then ask for the facility representative. If the guard refuses to make the call, leave immediately without challenge or argument, making no statements;
 2. By the facility representative, after identifying yourself and presenting your credentials, leave immediately without challenge or argument, making no statements.
- G. If a confidentiality agreement is required as a prerequisite to entry, the inspector shall refuse to sign it and contact the Regional Enforcement Division for further instructions.

H. If at any time during the inspection the inspection team is requested or ordered to leave by a responsible facility representative, the team leader shall commence action to leave immediately in a prompt, orderly manner as follows:

1. Make no threats or statements regarding consequences.
2. Ask the responsible facility representative to explain the reason for the request to leave and accurately document the circumstances in your field diary.
3. Proceed to collect your equipment, data and samples already obtained prior to leaving. If the facility representative objects to this, make no arguments and leave immediately.
4. Document the events in your field diary immediately after you leave the facility. This documentation is to include specific statements made and by whom; and the names of all persons present when particular statements were made.

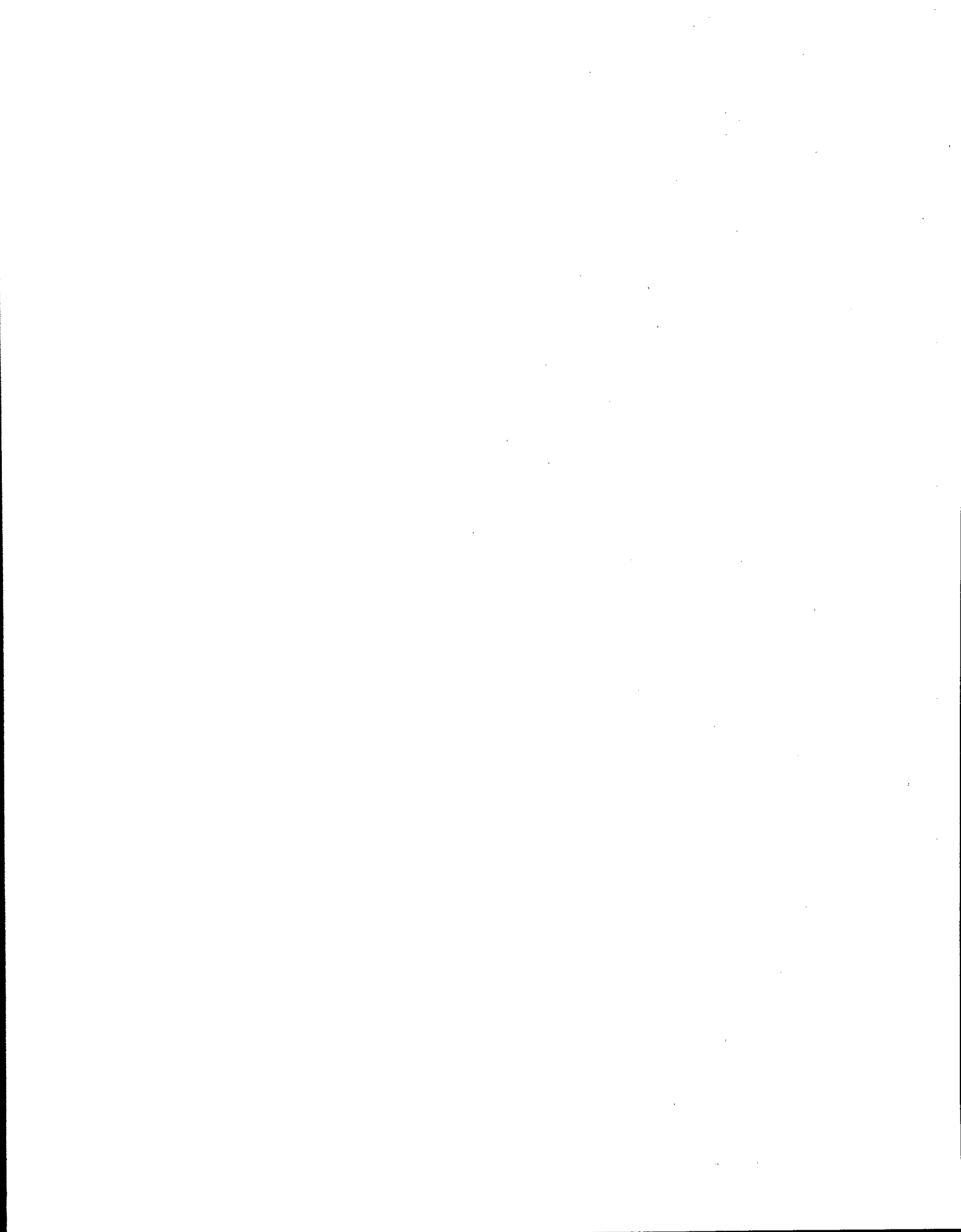
5. After leaving the facility, the team leader shall immediately telephone the Regional Enforcement Division for further instructions.

VI. PRIVILEGE AGAINST SELF-INCRIMINATION

The privilege against self incrimination clause of the Fifth Amendment to the Constitution prevents the use of involuntary confessions or private papers, against a defendant. Since the privilege does not apply to corporations or partnerships, and documents required to be prepared or maintained by law, such as reports and records required to maintained by a dischargers' NPDES permit are excluded from what is defined as "private papers", this privilege has minimal application to Compliance Evaluation Inspections. In those cases where the discharger is an individual or there is some possibility that the person from whom information or documents are sought is a potential criminal defendant, no questions should be asked, nor any documents other than those called for in the permit be requested (of the potential defendant) without having first consulted with an Enforcement Division Attorney or an Attorney in the Regional Counsel's office.

SECTION 12

COMPLIANCE INSPECTION REPORT



I. GENERAL

The Compliance Inspection Report form 3560-3 replaces EPA form T-51 and serves to report the results of both sampling and nonsampling Compliance Inspections. The Compliance Inspection Report consists of two major parts. The first part, Section A-L, is completed for all compliance inspections as appropriate. The second part, Sections M-N, is completed only for Compliance Sampling Inspections.

The cover sheet, Section A-E, is a summary of inspection results and is designed to meet enforcement data needs. In addition to Sections A-E, page one contains three lines at the top of the page that identify the facility, date, type of inspection, and the agency or agencies performing the inspection. This information is in a format so that it can be keypunched and entered directly into the Permit Compliance System (PCS) for national data. The inspection data which is entered on the form will assist in the tracking of inspection results and will be used in the Agency's Formal Program Reporting System (FPRS). An explanation of the procedure to be used to enter inspection tracking data into Water Enforcement National Data Base (WENDB) is provided on the reverse side of page one (gold copy) of the Compliance Inspection form.

II. OBJECTIVES

Clear, concise, and accurate reporting is essential to the management of the Compliance Inspection program. It is

the basis for important administrative decisions concerning program effectiveness, enforcement actions, and the proper programming of future work.

III. PROCEDURES

A. Inspector's Obligation

Report all Compliance Evaluation Inspections by completing a Compliance Inspection Report EPA form 3560-3 within 15 days after the inspection and, if needed, an Abbreviated Narrative Report (see instructions in this Section). Narrative reports prepared to support or explain information included in the Compliance Inspection Report should be attached to each copy of the form.

B. NPDES Compliance Inspection Report

The Compliance Inspection Report and, if needed, a supporting narrative report, typewritten or legibly handwritten, should be prepared.

Complete the sections of the report form as follows:

WENDB Data Summary

Column 1 Transaction Code - Use N, C, or D

for New, Change, or Delete. All inspections will be new unless there is an error in the data keypunched into WENDB.

Column 2 Card Code - always 5 for this form.

Column 3-11 NPDES - The NPDES permit number.
(The State permit number may be accommodated in the remarks or additional spaces).

Inspection Date - entered in the year/month/day format (e.g. 80/06/30= June 30, 1980).

Column 18 Inspection Type - The inspection types are to be coded as follows:

"C" for Compliance Evaluation
Inspection

"A" for Performance Audit
Inspection

"S" for Compliance Sampling
Inspection

"B" for Compliance Biomonitoring
Inspection

"X" for Toxics Sampling
Inspection

"P" for Pretreatment Compliance
Evaluation Inspection

"E" for Construction
Verification Inspections
conducted by the U.S. Army
Corps of Engineers

Column 19

Inspection Code - An inspection may be performed by the Region, State or NEIC (EPA National Enforcement Investigations Center). It may also be the result of a joint effort. (Credit in FPRS for a joint inspection is given to the lead agency.) Acceptable codes for WENDB are:

R - EPA Regional inspections

S - State inspections

J - Joint EPA and State
inspections - EPA lead

T - Joint EPA and State
inspections - State lead

N - NEIC inspections

E - Corp of Engineer
inspections.

Column 20

Facility Type - This code describes the type of facility that was inspected. Acceptable codes are (1) Municipal - Publicly-Owned Treatment Works (POTWs) with 1972 Standard Industrial Classification (SIC) 4952; (2) Industrial - Other than Municipal, Agricultural, and Federal facilities; (3) Agricultural - those facilities classified with 1972 SIC 0111-0971; and (4) Federal - Those facilities identified as Federal by EPA Regional Office.

Column 21-70

Remarks - this field provides the inspector with a vehicle to store descriptive information about the inspection. There is no set format within this 50-position field except for a CBI which uses the

first three spaces to indicate the type of test performed (i.e., **S for static or **F for flow-through bioassays). Individual Regions or States may choose to set aside portions of this field for their own specific needs.

The "Time" and "Additional" boxes can also describe the inspection but will not be keypunched. Supplementary information that the performing Agency or Region needs may be entered in the Addition box, (e.g., STORET numbers, basin codes, etc.)

Section A - Permit Summary

Name and Address of Facility - include the legal name of the facility inspected and the street name or State route on which it is located. Also enter the county, State and zip code number.

Responsible Official, Title, and Telephone Number - Enter the name, title, and telephone number of the person or official responsible for signing the Discharge Monitoring Report or who is responsible for wastewater management at the facility.

Facility Representative, Title, and Telephone Number - Enter the name, title, and telephone

number of the person who assisted you during the inspection if different from the Responsible Official.

Section B - Effluent Characteristics

The Effluent Characteristics section contains a summary of those parameters (e.g. BOD, pH, flow) that are regulated by the permit and other parameters that are measured but not regulated by the permit. If more than one outfall is inspected, the parameter and outfall should be indicated and additional sheets attached as required. If the inspection does not include the collection of samples, it may be advisable, but is not required, to substitute the data from the latest Discharge Monitoring Report in the "Sample Measurement" row before performing the inspection. However, if self-monitoring data are entered in the space instead of sampling data, they should be clearly identified as such to avoid confusing the reviewer. The column marked "Additional" is for the performing agency's own requirements (e.g., design data, comments or explanations of the measurements).

Section C - Facility Evaluation

The Facility Evaluation section provides a summary evaluation of the inspection results.

The evaluations made in this section should be documented and supported by notation in the appropriate checklist portions of the form and by any additional comments as required.

Section D - Comments

Little space is allowed for comments in this section. Rather than fragmenting the narrative detailing comments and possible recommendations, the form allows detailed comments in an attachment, on the back of the form, or in Section N. The Section D comments should be used to flag lengthy comments (e.g., "Recommendations on page 4") or used for those inspections which only merit abbreviated comments. Procedures for making recommendations and comments should be worked out with the Enforcement Director of the organization responsible for the permit. All comments or recommendations that are made should be documented and supported by the checklist portions of the form.

Section E - Inspection Review

This section provides the inspector's and reviewer's names and agencies. Compliance status is to be determined only by Enforcement personnel.

Section F - Facility and Permit Background

If the permittee's address is different from that of the facility, it should be so indicated. If the facility was inspected previously, the date and findings summary should be noted before performing the current inspection.

Sections G through L are to be completed based on information obtained from an inspection conducted in accordance with the objectives and procedures described in the appropriate sections of this Manual. The following statements briefly summarize the purpose of report Sections G - L.

Section G - Records and Reports

This portion of the form documents that the records and reports maintained by the permittee are in compliance with permit requirements. As mentioned earlier, if the checklist does not adequately represent the situation, further explanation should be attached and so indicated.

Section H - Permit Verification

Each inspection should identify discrepancies, if any, between the issued permit and actual

conditions. Again, if further explanation is necessary, it should be provided and so indicated.

Section I - Operation and Maintenance

Each inspection of an operating facility should evaluate its operation and maintenance. Operating facilities include those on final limits and those in the process of being upgraded.

Section J - Compliance Schedule

The compliance schedule progress should be evaluated when the permittee is on a compliance schedule. Any grant-related inspections of facilities should be coordinated with Regional Construction Grants personnel. The current phase of compliance schedule status should be marked on the form.

Section K - Self-Monitoring Program

The permittee's flow measurement, sampling, and laboratory procedures should be checked, as appropriate, on all inspections. If deficiencies are noted, additional pertinent information should be provided if necessary. For example,

if the laboratory is not calibrating or maintaining the equipment satisfactorily, the calibration or maintenance intervals should be noted. If parameters other than those required by the permit are analyzed, the parameters and analytical methods should be noted. If the permittee laboratory, flow-measurement, or sampling procedures are not inspected, an explanation should be provided (e.g., contract laboratory off the premises).

Section L - Effluent/Receiving Water Observations

Visual observations made during the inspection should be noted, as applicable, for each outfall. The inspector's observations are subjective and qualitative, but serve to focus attention on potential treatment problems. Discharge of floating solids or visible foam in other than trace amounts is prohibited by the permit. Thus, observations of greater than trace amounts present permit violations and indicate poor treatment.

Sections M and N of the form are intended for use only in reporting the procedures, observations and analytical results obtained from a Compliance Sampling Inspection. Policies and

procedures to be used in the collection, handling, and transportation of samples are described in the appropriate sections of the NPDES Compliance Sampling Inspection Manual. The following statements briefly summarize the purpose of report Sections M and N.

Section M - Sampling Inspection Procedures and Observations

The performing agency's sampling procedures should be noted for each sampling inspection. Details documenting the procedures should be provided (e.g., the composite time interval).

Section N - Analytical Results

If the analytical results or laboratory report from a sampling inspection provides more information than can be inserted in Section C, the additional information should be noted in this part or attached to the report form. This Section also offers more space for comments or additional materials (e.g., flow diagrams) as the situation warrants.

IV. ABBREVIATED NARRATIVE REPORTS

Abbreviated narrative reports will be used to supplement the information contained in the Compliance Inspection

Report, not to replace it entirely. The narrative report may be used to explain in more detail the facts and observations developed during the inspection. Only those details sufficient to provide a clear picture of the relevant findings should be included. The inspector should:

- A. Be factual and objective;
- B. Not present speculative opinions;
- C. Not include opinions about possible regulatory enforcement;
- D. Make sure to clearly identify each section or caption referred to; and
- E. Sign the report and attach it to EPA form 3560-3.

DEFICIENCY NOTICE

The Deficiency Notice is a tool to be used in conjunction with any type of EPA NPDES Compliance Inspection, during which the inspector identifies problems with the permittee self-monitoring activities.

Use of the Deficiency Notice does not apply to a wide range of possible permit violations. It is to be used by the inspector to alert permittees to deficiencies in their self-monitoring activities only. The enforcement office of the regulatory authority (i.e., the EPA Regional Enforcement Division or its State counterpart), not the inspector, will continue to handle violations relative to compliance schedules or effluent limitations.

Inspectors can issue the Deficiency Notice to a permittee immediately following a compliance inspection if they discover any permit deficiencies which the Notice addresses. Under unusual circumstances inspectors may delay issuing a Deficiency Notice until after conferring with other officials of the regulatory authority.

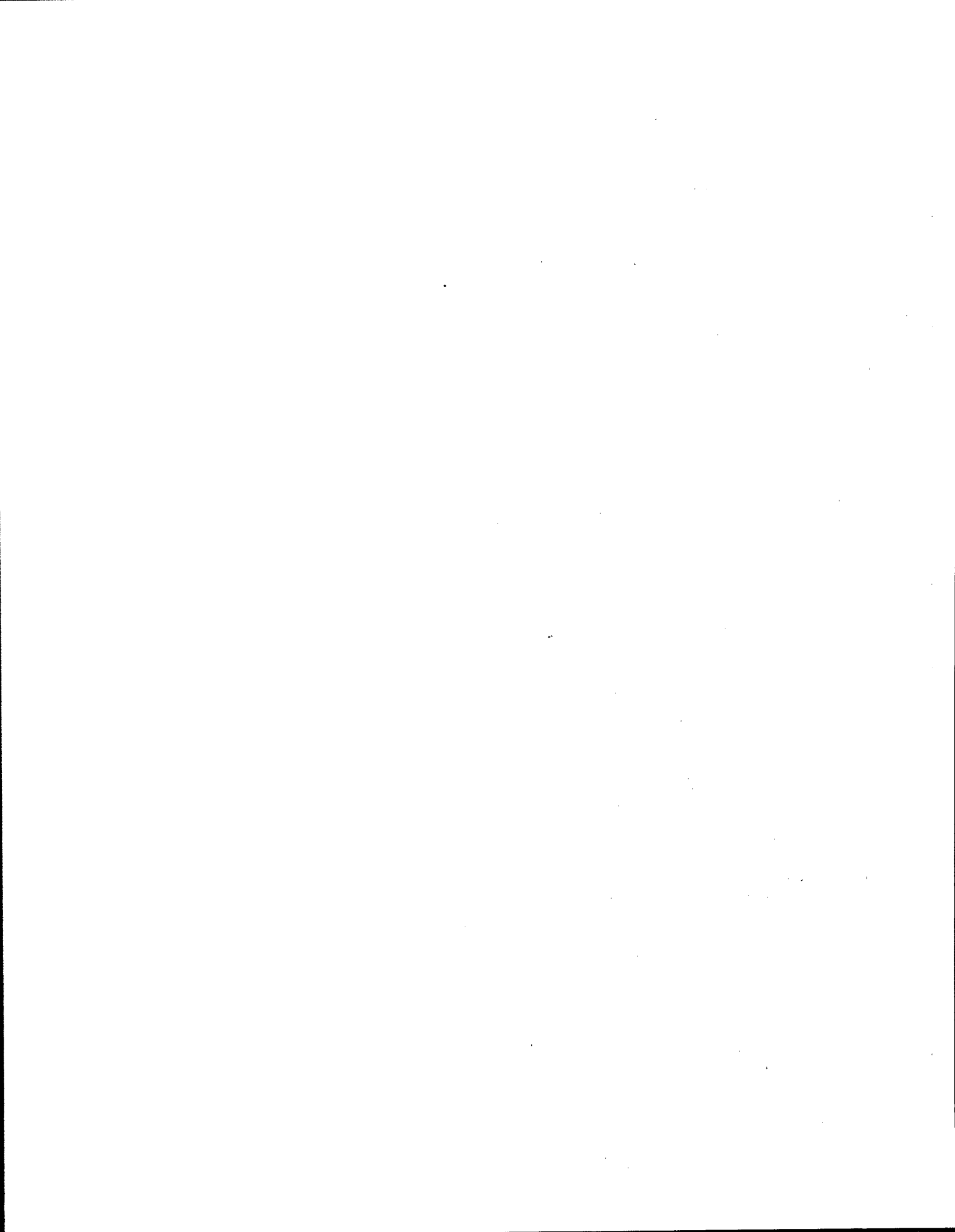
The issuance of a Deficiency Notice is not a formal enforcement action. It is not intended and must not be construed as an administrative or legal order to the permittee. Therefore, the action by the permittee to respond is voluntary, but incentive for such response comes from the positive consideration it may have on further formal enforcement follow-up of the inspection.

REFERENCES

1. American Public Works Association, Municipal Refuse Disposal, 1961.
2. American Public Health Association, Standard Methods for the Examination of Water and Wastewater (14th Edition), 1975.
3. Babrock, Russel H., Instrumentation and Control in Water Supply and Wastewater Disposal, R.H. Donnelley Corp., 1968.
4. Code of Federal Regulations, Public Information, (40 CFR 2), 1979.
5. Code of Federal Regulations, Employee Responsibilities and Conduct, (40 CFR 3), 1979.
6. Culp, Russell, and Gordon, L., Advanced Wastewater Treatment, Van Nostrand, Reinhold, Environmental Engineering Series, 1971.
7. Eckinfelder, W.W., Water Quality Engineering for Practicing Engineers, Barnes & Noble, 1970.
8. Federal Register, Guidelines Establishing Test Procedures for Analysis of Pollutants, Proposed Regulations 40 CFR Part 136, December 3, 1979.
9. Harris, Daniel J. and Keffer, William J., Wastewater Sampling Methodologies and Flow Measurement Techniques, U.S.E.P.A. (EPA 907/9-74-005), 1974.
10. Lund, H.F., Industrial Pollution Control Handbook, McGraw-Hill Book Co., 1971.
11. State Water Resources Control Board, State of California, Surveillance and Enforcement Manual, 1974.
12. Texas Water Utilities Association, Manual of Wastewater Operations, 1971.
13. U.S. Department of Commerce/National Bureau of Standards, A Guide to Methods and Standards for the Measurement of Water Flow, Publication 421, May 1975.

14. U.S. Environmental Protection Agency, Estimating Staffing for Municipal Wastewater Treatment Facilities, 1973.
15. U.S. Environmental Protection Agency, Guidelines for Evaluation of Visible Emissions. (EPA-340/1-75-007), 1975.
16. U.S. Environmental Protection Agency, Maintenance Management for Municipal Wastewater Facilities, (EPA-430/9-74-004), 1973.
17. U.S. Environmental Protection Agency, Model State Water Monitoring Program, (EPA-440/9-74-002), 1974.
18. U.S. Environmental Protection Agency, Procedural Manual for Evaluating the Performance of Wastewater Treatment Plants, 1972.
19. U.S. Environmental Protection Agency, Office of Enforcement, Safety Manual for Hazardous Waste Site Investigations, 1979.
20. U.S. Environmental Protection Agency, Pesticides and Toxic Substances Enforcement Division, Toxic Substances Control Act Inspection Manual, 1980.
21. U.S. Environmental Protection Agency, Office of Research and Development, Environmental Monitoring and Support Laboratory, Handbook for Analytical Quality Control in Water and Wastewater Laboratories, (EPA-600/4-79-019), 1979.
22. U.S. Environmental Protection Agency, Office of Research and Development, Environmental Monitoring and Support Laboratory, Methods for Chemical Analysis of Water and Wastes (EPA-600/4-79-020), 1979.
23. U.S. Environmental Protection Agency, Office of Research and Development, Industrial Environmental Research Laboratory, NPDES Best Management Practices Guidance Document, (EPA-600/9-79-045), 1979.
24. U.S. Environmental Protection Agency, Stationary Source Enforcement Division, Field Operations and Enforcement Manual for Air Pollution Control, Volumes I, II, and III, 1973.
25. U.S. Environmental Protection Agency, Stationary Source Enforcement Division, Visible Emission Inspection Procedures, 1975.
26. U.S. Environmental Protection Agency, "Technical Bulletin", Wastewater Treatment Ponds, (EPA-430/9-74-011), 1974.

27. U.S. Environmental Protection Agency, Office of Technology Transfer, Handbook for Monitoring Industrial Wastewater, 1973.
28. U.S. Environmental Protection Agency, Office of Water Enforcement, Compliance Branch, Interim NPDES Compliance Biomonitoring Inspection Manual, 1979.
29. U.S. Environmental Protection Agency, Office of Water Enforcement, Compliance Branch, NPDES Compliance Sampling Manual, 1977.
30. U.S. Environmental Protection Agency, Office of Water Enforcement, Enforcement Division, Performance Audit Inspection Policy and Guidance, 1979.
31. U.S. Environmental Protection Agency, Toxic Substances Control Act Inspection Manual, 1980.
32. U.S. Environmental Protection Agency, Pesticides Inspection Manual, 1975.
33. U.S. Environmental Protection Agency, Office of Water Program Operations, Municipal Operations Branch, Inspectors Guide for Evaluation of Municipal Wastewater Treatment Plants, (EPA-430/9-79-010), 1979.
34. U.S. Department of the Interior, Bureau of Reclamation, Water Measurement Manual, 2nd Edition (Revised), 1974.
35. U.S. Justice Department, Handbook on the Law of Search and Seizure, Revised, 1971.
36. U.S. Department of Labor, Office of Occupational Health and Safety, Guidelines for Entering Fields of Unknown Chemical Toxicity, 1979.
37. Water Pollution Control Federation, Operation of Wastewater Treatment Plants, WPCF Manual of Practice No. 11, 1974.
38. Water Pollution Control Federation, Safety in Wastewater Works, WPCF Manual of Practice No. 1, 1969.
39. Water Pollution Control Federation, Sewage Treatment Plant Design, WPCF Manual of Practice No. 8.
40. Water Pollution Control Federation, Sludge Dewatering, WPCF Manual of Practice No. 20, 1969.
41. Chen and McCarthy, RCRA Inspection Manual, U.S. Environmental Protection Agency, 1980.



SECTION REFERENCES

SECTION 1

4,5

SECTION 2

11,14,28,29,30

SECTION 3

3,6,7,12,13,16,18,26,39,40

SECTION 4

5,21

SECTION 5

16,18,33

SECTION 6

2,8,9,13,17,18,21,22,26,27,29,34

SECTION 7

1,10,13,15,20,24,25,31,32,41

SECTION 8

23

SECTION 9

None

SECTION 10

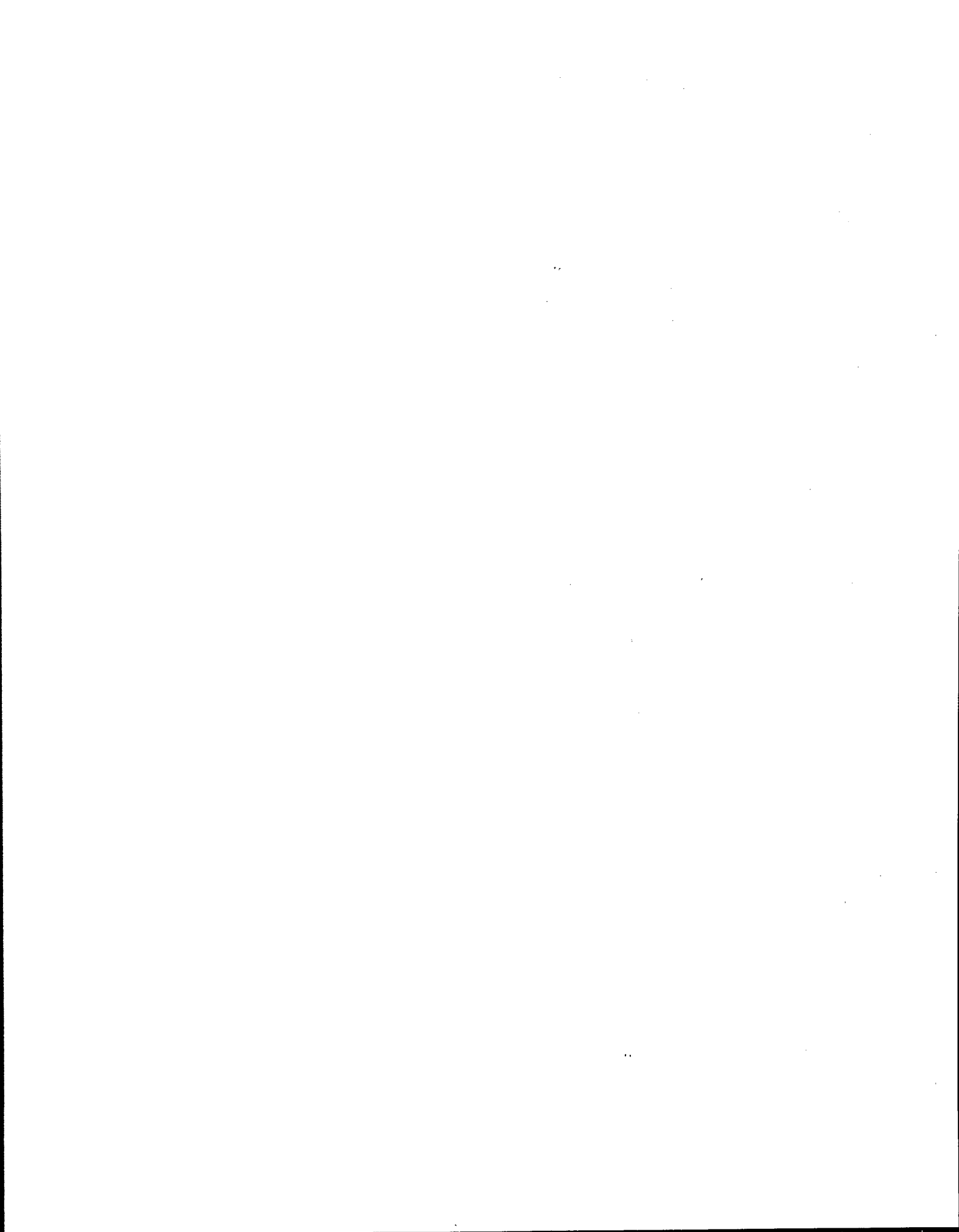
19,36,41

SECTION 11

35

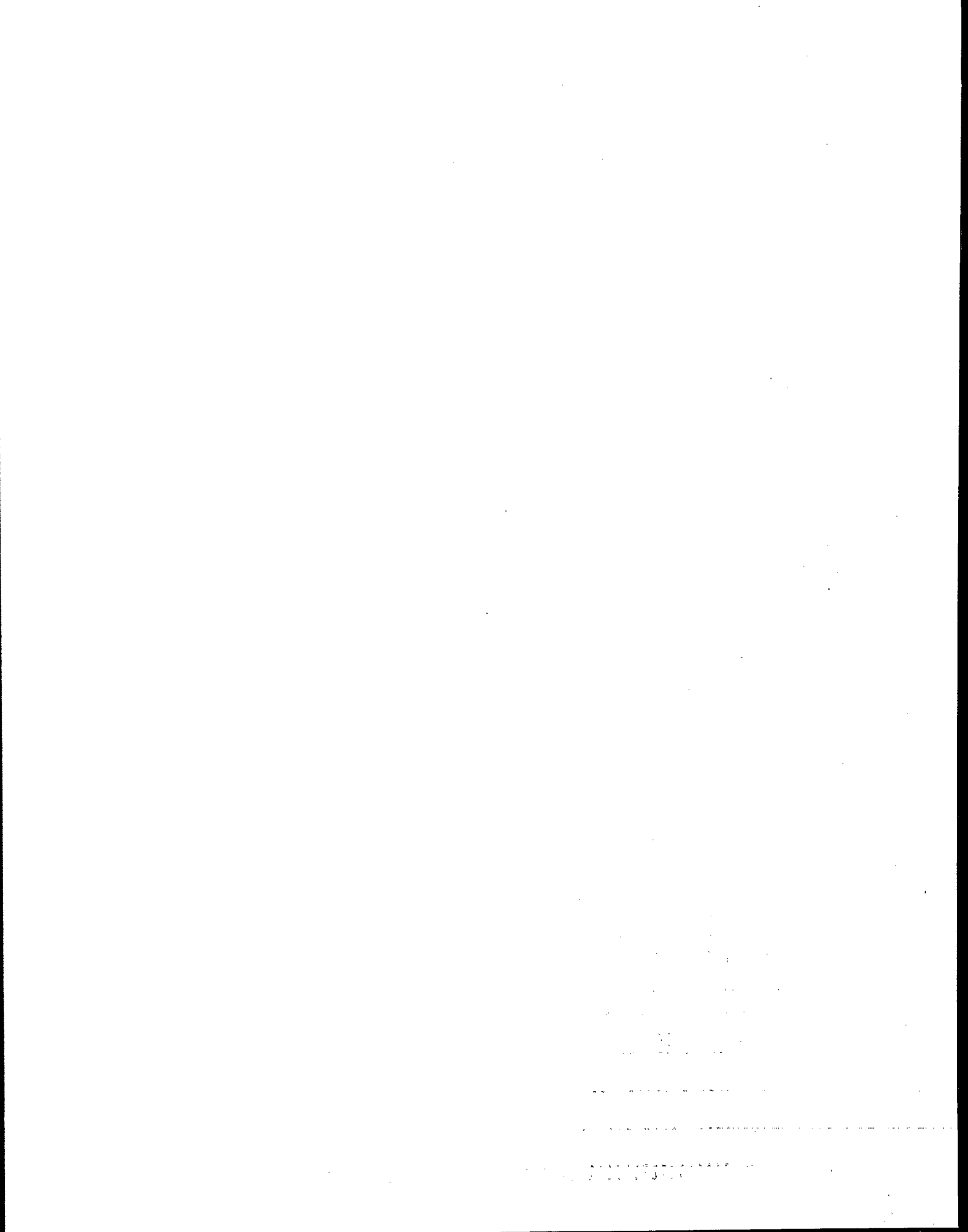
SECTION 12

None



APPENDIX A

NPDES COMPLIANCE INSPECTION REPORT



NPDES COMPLIANCE INSPECTION REPORT (Coding Instructions on back of last page)

TRANSACTION CODE	NPDES										YR	MO	DA	TYPE	INSPEC- TOR	FAC TYPE	TIME	
<div>1</div>	<div>5</div>	<div>3</div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div>12</div>	<div></div>	<div></div>	<div>17</div>	<div></div>	<div></div>	<div>a.m.</div>	<div>p.m.</div>
REMARKS																		

21																		
----	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

65																		
70																		

SECTION A - Permit Summary

NAME AND ADDRESS OF FACILITY (Include County, State and ZIP code)															EXPIRATION DATE			
															ISSUANCE DATE			
RESPONSIBLE OFFICIAL										TITLE					PHONE			
FACILITY REPRESENTATIVE										TITLE					PHONE			

SECTION B - Effluent Characteristics (Additional sheets attached _____)

PARAMETER/ OUTFALL		MINIMUM	AVERAGE	MAXIMUM	ADDITIONAL
	SAMPLE MEASUREMENT				
	PERMIT REQUIREMENT				
	SAMPLE MEASUREMENT				
	PERMIT REQUIREMENT				
	SAMPLE MEASUREMENT				
	PERMIT REQUIREMENT				
	SAMPLE MEASUREMENT				
	PERMIT REQUIREMENT				
	SAMPLE MEASUREMENT				
	PERMIT REQUIREMENT				

SECTION C - Facility Evaluation (S = Satisfactory, U = Unsatisfactory, N/A = Not applicable)

EFFLUENT WITHIN PERMIT REQUIREMENTS	OPERATION AND MAINTENANCE	SAMPLING PROCEDURES
RECORDS AND REPORTS	COMPLIANCE SCHEDULE	LABORATORY PRACTICES
PERMIT VERIFICATION	FLOW MEASUREMENTS	OTHER:

SECTION D - Comments

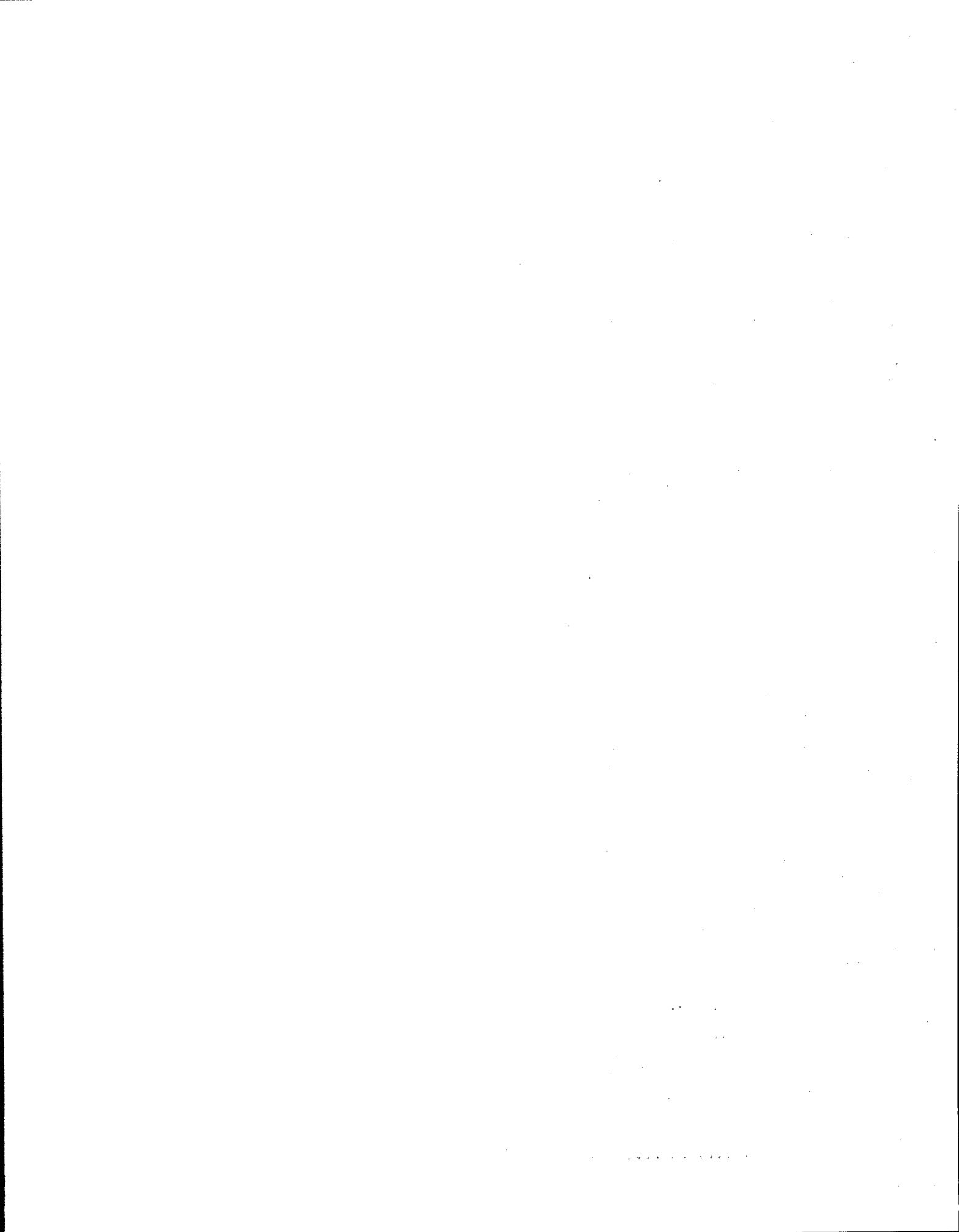
SECTION E - Inspection/Review

SIGNATURES			AGENCY	DATE	ENFORCEMENT DIVISION USE ONLY
INSPECTED BY					
INSPECTED BY					
REVIEWED BY					
					COMPLIANCE STATUS
					<input type="checkbox"/> COMPLIANCE
					<input type="checkbox"/> NONCOMPLIANCE

CODING INSTRUCTIONS

- Column 1 Transaction Code - Use N, C, or D for New, Change or Delete. All inspections will be new unless there is an error in the data keypunched into WENDB.
- Column 2 Card Code - Always 5 for this card.
- Columns 3-11 NPDES - The NPDES permit number. (The State permit number may be accommodated in the remarks or additional spaces).
- Column 12-17 Inspection Date - Entered in the year/month/day format (e.g. 77/06/30= June 30, 1977).
- Column 18 Inspection Type - An inspection will fall into one of two possible categories: 'C' for Compliance Evaluation or 'S' for Compliance Sampling.
- Column 19 Inspector Code - An inspection may be performed by the Region, State or NEIC (U.S. EPA National Enforcement Investigations Center). It may also be the result of a joint effort. (Credit in FPRS for a joint inspection is given to the lead agency.) Acceptable codes for WENDB are:
- R - EPA Regional inspections
 - S - State inspections
 - J - Joint EPA and State inspections - EPA lead
 - T - Joint EPA and State inspections - State lead
 - N - NEIC inspections
- Column 20 Facility Type - This code describes the type of facility that was inspected. Acceptable codes are:
- 1 - Municipal - Publicly-Owned Treatment Works (POTWs) with 1972 Standard Industrial Classification (SIC) 4952.
 - 2 - Industrial - Other than Municipal, Agricultural, and Federal facilities.
 - 3 - Agricultural - Those facilities classified with 1972 SIC 0111-0971.
 - 4 - Federal - Those facilities identified as Federal by EPA Regional office.
- Columns 21-70 Remarks - This remarks field provides the inspector with a vehicle to store descriptive information about the inspection. There is no set format within this 50-position field. Individual Regions or States may choose to set aside portions of this field for their own specific needs.

Sections F thru L: Complete on all inspections, as appropriate. N/A = Not Applicable		PERMIT NO.
SECTION F - Facility and Permit Background		
ADDRESS OF PERMITTEE IF DIFFERENT FROM FACILITY (Including City, County and ZIP code)	DATE OF LAST PREVIOUS INVESTIGATION BY EPA/STATE	
	FINDINGS	
SECTION G - Records and Reports		
RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT. <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A (Further explanation attached _____)		
DETAILS:		
(a) ADEQUATE RECORDS MAINTAINED OF:		
(i) SAMPLING DATE, TIME, EXACT LOCATION	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(ii) ANALYSES DATES, TIMES	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(iii) INDIVIDUAL PERFORMING ANALYSIS	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(iv) ANALYTICAL METHODS/TECHNIQUES USED	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(v) ANALYTICAL RESULTS (e.g., consistent with self-monitoring report data)	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(b) MONITORING RECORDS (e.g., flow, pH, D.O., etc.) MAINTAINED FOR A MINIMUM OF THREE YEARS INCLUDING ALL ORIGINAL STRIP CHART RECORDINGS (e.g. continuous monitoring instrumentation, calibration and maintenance records).		
	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(c) LAB EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS KEPT.		
	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(d) FACILITY OPERATING RECORDS KEPT INCLUDING OPERATING LOGS FOR EACH TREATMENT UNIT.		
	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(e) QUALITY ASSURANCE RECORDS KEPT.		
	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(f) RECORDS MAINTAINED OF MAJOR CONTRIBUTING INDUSTRIES (and their compliance status) USING PUBLICLY OWNED TREATMENT WORKS.		
	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
SECTION H - Permit Verification		
INSPECTION OBSERVATIONS VERIFY THE PERMIT. <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A (Further explanation attached _____)		
DETAILS:		
(a) CORRECT NAME AND MAILING ADDRESS OF PERMITTEE.		
	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(b) FACILITY IS AS DESCRIBED IN PERMIT.		
	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(c) PRINCIPAL PRODUCT(S) AND PRODUCTION RATES CONFORM WITH THOSE SET FORTH IN PERMIT APPLICATION.		
	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(d) TREATMENT PROCESSES ARE AS DESCRIBED IN PERMIT APPLICATION.		
	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(e) NOTIFICATION GIVEN TO EPA/STATE OF NEW, DIFFERENT OR INCREASED DISCHARGES.		
	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(f) ACCURATE RECORDS OF RAW WATER VOLUME MAINTAINED.		
	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(g) NUMBER AND LOCATION OF DISCHARGE POINTS ARE AS DESCRIBED IN PERMIT.		
	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(h) CORRECT NAME AND LOCATION OF RECEIVING WATERS.		
	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(i) ALL DISCHARGES ARE PERMITTED.		
	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
SECTION I - Operation and Maintenance		
TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED. <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A (Further explanation attached _____)		
DETAILS:		
(a) STANDBY POWER OR OTHER EQUIVALENT PROVISIONS PROVIDED.		
	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(b) ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE.		
	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(c) REPORTS ON ALTERNATE SOURCE OF POWER SENT TO EPA/STATE AS REQUIRED BY PERMIT.		
	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(d) SLUDGES AND SOLIDS ADEQUATELY DISPOSED.		
	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(e) ALL TREATMENT UNITS IN SERVICE.		
	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(f) CONSULTING ENGINEER RETAINED OR AVAILABLE FOR CONSULTATION ON OPERATION AND MAINTENANCE PROBLEMS.		
	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(g) QUALIFIED OPERATING STAFF PROVIDED.		
	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(h) ESTABLISHED PROCEDURES AVAILABLE FOR TRAINING NEW OPERATORS.		
	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(i) FILES MAINTAINED ON SPARE PARTS INVENTORY, MAJOR EQUIPMENT SPECIFICATIONS, AND PARTS AND EQUIPMENT SUPPLIERS.		
	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(j) INSTRUCTIONS FILES KEPT FOR OPERATION AND MAINTENANCE OF EACH ITEM OF MAJOR EQUIPMENT.		
	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(k) OPERATION AND MAINTENANCE MANUAL MAINTAINED.		
	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(l) SPCC PLAN AVAILABLE.		
	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(m) REGULATORY AGENCY NOTIFIED OF BY PASSING. (Dates _____)		
	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(n) ANY BY-PASSING SINCE LAST INSPECTION.		
	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A
(o) ANY HYDRAULIC AND/OR ORGANIC OVERLOADS EXPERIENCED.		
	<input type="checkbox"/> YES	<input type="checkbox"/> NO <input type="checkbox"/> N/A



PERMIT NO. _____

SECTION J - Compliance Schedules

PERMITTEE IS MEETING COMPLIANCE SCHEDULE. ☐ YES ☐ NO ☐ N/A (Further explanation attached _____)

CHECK APPROPRIATE PHASE(S):

- ☐ (a) THE PERMITTEE HAS OBTAINED THE NECESSARY APPROVALS FROM THE APPROPRIATE AUTHORITIES TO BEGIN CONSTRUCTION.
- ☐ (b) PROPER ARRANGEMENT HAS BEEN MADE FOR FINANCING (mortgage commitments, grants, etc.).
- ☐ (c) CONTRACTS FOR ENGINEERING SERVICES HAVE BEEN EXECUTED.
- ☐ (d) DESIGN PLANS AND SPECIFICATIONS HAVE BEEN COMPLETED.
- ☐ (e) CONSTRUCTION HAS COMMENCED.
- ☐ (f) CONSTRUCTION AND/OR EQUIPMENT ACQUISITION IS ON SCHEDULE.
- ☐ (g) CONSTRUCTION HAS BEEN COMPLETED.
- ☐ (h) START-UP HAS COMMENCED.
- ☐ (i) THE PERMITTEE HAS REQUESTED AN EXTENSION OF TIME.

SECTION K - Self-Monitoring Program

Part 1 - Flow measurement (Further explanation attached _____)

PERMITTEE FLOW MEASUREMENT MEETS THE REQUIREMENTS AND INTENT OF THE PERMIT. ☐ YES ☐ NO ☐ N/A
DETAILS:

- (a) PRIMARY MEASURING DEVICE PROPERLY INSTALLED. ☐ YES ☐ NO ☐ N/A
TYPE OF DEVICE: ☐ WEIR ☐ PARSHALL FLUME ☐ MAGMETER ☐ VENTURI METER ☐ OTHER (Specify _____)
- (b) CALIBRATION FREQUENCY ADEQUATE. (Date of last calibration _____) ☐ YES ☐ NO ☐ N/A
- (c) PRIMARY FLOW MEASURING DEVICE PROPERLY OPERATED AND MAINTAINED. ☐ YES ☐ NO ☐ N/A
- (d) SECONDARY INSTRUMENTS (totalizers, recorders, etc.) PROPERLY OPERATED AND MAINTAINED. ☐ YES ☐ NO ☐ N/A
- (e) FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGES OF FLOW RATES. ☐ YES ☐ NO ☐ N/A

Part 2 - Sampling (Further explanation attached _____)

PERMITTEE SAMPLING MEETS THE REQUIREMENTS AND INTENT OF THE PERMIT. ☐ YES ☐ NO ☐ N/A
DETAILS:

- (a) LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES. ☐ YES ☐ NO ☐ N/A
- (b) PARAMETERS AND SAMPLING FREQUENCY AGREE WITH PERMIT. ☐ YES ☐ NO ☐ N/A
- (c) PERMITTEE IS USING METHOD OF SAMPLE COLLECTION REQUIRED BY PERMIT.
IF NO, ☐ GRAB ☐ MANUAL COMPOSITE ☐ AUTOMATIC COMPOSITE FREQUENCY _____ ☐ YES ☐ NO ☐ N/A
- (d) SAMPLE COLLECTION PROCEDURES ARE ADEQUATE. ☐ YES ☐ NO ☐ N/A
- (i) SAMPLES REFRIGERATED DURING COMPOSITING ☐ YES ☐ NO ☐ N/A
- (ii) PROPER PRESERVATION TECHNIQUES USED ☐ YES ☐ NO ☐ N/A
- (iii) FLOW PROPORTIONED SAMPLES OBTAINED WHERE REQUIRED BY PERMIT ☐ YES ☐ NO ☐ N/A
- (iv) SAMPLE HOLDING TIMES PRIOR TO ANALYSES IN CONFORMANCE WITH 40 CFR 136.3 ☐ YES ☐ NO ☐ N/A
- (e) MONITORING AND ANALYSES BEING PERFORMED MORE FREQUENTLY THAN REQUIRED BY PERMIT. ☐ YES ☐ NO ☐ N/A
- (f) IF (e) IS YES, RESULTS ARE REPORTED IN PERMITTEE'S SELF-MONITORING REPORT. ☐ YES ☐ NO ☐ N/A

Part 3 - Laboratory (Further explanation attached _____)

PERMITTEE LABORATORY PROCEDURES MEET THE REQUIREMENTS AND INTENT OF THE PERMIT. ☐ YES ☐ NO ☐ N/A
DETAILS:

- (a) EPA APPROVED ANALYTICAL TESTING PROCEDURES USED. (40 CFR 136.3) ☐ YES ☐ NO ☐ N/A
- (b) IF ALTERNATE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED. ☐ YES ☐ NO ☐ N/A
- (c) PARAMETERS OTHER THAN THOSE REQUIRED BY THE PERMIT ARE ANALYZED. ☐ YES ☐ NO ☐ N/A
- (d) SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT. ☐ YES ☐ NO ☐ N/A
- (e) QUALITY CONTROL PROCEDURES USED. ☐ YES ☐ NO ☐ N/A
- (f) DUPLICATE SAMPLES ARE ANALYZED. _____ % OF TIME. ☐ YES ☐ NO ☐ N/A
- (g) SPIKED SAMPLES ARE USED. _____ % OF TIME. ☐ YES ☐ NO ☐ N/A
- (h) COMMERCIAL LABORATORY USED. ☐ YES ☐ NO ☐ N/A
- (i) COMMERCIAL LABORATORY STATE CERTIFIED. ☐ YES ☐ NO ☐ N/A

LAB NAME _____

LAB ADDRESS _____

	PERMIT NO.
--	------------

SECTION L - Effluent/Receiving Water Observations *(Further explanation attached _____)*

OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	VISIBLE FLOAT SOL	COLOR	OTHER

(Sections M and N: Complete as appropriate for sampling inspections)

SECTION M - Sampling Inspection Procedures and Observations *(Further explanation attached _____)*

- ☐ GRAB SAMPLES OBTAINED
- ☐ COMPOSITE OBTAINED
- ☐ FLOW PROPORTIONED SAMPLE
- ☐ AUTOMATIC SAMPLER USED
- ☐ SAMPLE SPLIT WITH PERMITTEE
- ☐ CHAIN OF CUSTODY EMPLOYED
- ☐ SAMPLE OBTAINED FROM FACILITY SAMPLING DEVICE

COMPOSITING FREQUENCY _____ PRESERVATION _____

SAMPLE REFRIGERATED DURING COMPOSITING: ☐ YES ☐ NO

SAMPLE REPRESENTATIVE OF VOLUME AND NATURE OF DISCHARGE _____

SECTION N - Analytical Results *(Attach report if necessary)*

APPENDIX B

NPDES DEFICIENCY NOTICE

1. The first part of the paper is devoted to a general discussion of the problem of the existence of a solution of the system of equations (1) for arbitrary values of the parameters α and β . It is shown that the system (1) has a solution for arbitrary values of the parameters α and β if and only if the condition $\alpha + \beta = 1$ is satisfied. In this case the solution is unique and is given by the formula

$$x = \frac{1}{\alpha + \beta} \left(\alpha x_1 + \beta x_2 \right) \quad (2)$$

where x_1 and x_2 are the solutions of the system of equations (1) for $\alpha = 1$ and $\beta = 0$ and for $\alpha = 0$ and $\beta = 1$ respectively.

2. In the second part of the paper the problem of the existence of a solution of the system of equations (1) for arbitrary values of the parameters α and β is considered. It is shown that the system (1) has a solution for arbitrary values of the parameters α and β if and only if the condition $\alpha + \beta = 1$ is satisfied. In this case the solution is unique and is given by the formula

$$x = \frac{1}{\alpha + \beta} \left(\alpha x_1 + \beta x_2 \right) \quad (3)$$

where x_1 and x_2 are the solutions of the system of equations (1) for $\alpha = 1$ and $\beta = 0$ and for $\alpha = 0$ and $\beta = 1$ respectively. It is also shown that the system (1) has a solution for arbitrary values of the parameters α and β if and only if the condition $\alpha + \beta = 1$ is satisfied. In this case the solution is unique and is given by the formula

$$x = \frac{1}{\alpha + \beta} \left(\alpha x_1 + \beta x_2 \right) \quad (4)$$

where x_1 and x_2 are the solutions of the system of equations (1) for $\alpha = 1$ and $\beta = 0$ and for $\alpha = 0$ and $\beta = 1$ respectively. It is also shown that the system (1) has a solution for arbitrary values of the parameters α and β if and only if the condition $\alpha + \beta = 1$ is satisfied. In this case the solution is unique and is given by the formula

$$x = \frac{1}{\alpha + \beta} \left(\alpha x_1 + \beta x_2 \right) \quad (5)$$

where x_1 and x_2 are the solutions of the system of equations (1) for $\alpha = 1$ and $\beta = 0$ and for $\alpha = 0$ and $\beta = 1$ respectively. It is also shown that the system (1) has a solution for arbitrary values of the parameters α and β if and only if the condition $\alpha + \beta = 1$ is satisfied. In this case the solution is unique and is given by the formula

$$x = \frac{1}{\alpha + \beta} \left(\alpha x_1 + \beta x_2 \right) \quad (6)$$

where x_1 and x_2 are the solutions of the system of equations (1) for $\alpha = 1$ and $\beta = 0$ and for $\alpha = 0$ and $\beta = 1$ respectively. It is also shown that the system (1) has a solution for arbitrary values of the parameters α and β if and only if the condition $\alpha + \beta = 1$ is satisfied. In this case the solution is unique and is given by the formula

$$x = \frac{1}{\alpha + \beta} \left(\alpha x_1 + \beta x_2 \right) \quad (7)$$

DEFICIENCY NOTICE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) <i>(Read instructions on back of last part before completing)</i>		PERMITTEE (Facility) NAME AND ADDRESS	
PERMITTEE REPRESENTATIVE (Receiving this Notice)/ TITLE		NPDES PERMIT NO.	
During the compliance inspection carried out on (date) _____ the deficiencies noted below were found. Additional areas of deficiency may be brought to your attention following a complete review of the Inspection Report and other information on file with the REGULATORY AUTHORITY administering your NPDES PERMIT.			
D E F I C I E N C I E S			
MONITORING LOCATION (Describe)			
FLOW MEASUREMENT (Describe)			
SAMPLE COLLECTION/HOLDING TIME (Describe)			
SAMPLE PRESERVATION (Describe)			
TEST PROCEDURES, SECTION 304(h), 40 CFR 136 (Describe)			
RECORD KEEPING (Describe)			
OTHER SELF-MONITORING DEFICIENCIES (Describe)			
ADDITIONAL COMMENTS			
REQUESTED ACTION —Your attention to the correction of the deficiencies noted above is requested. Receipt of a description of the corrective actions taken will be considered in the determination of the need for further Administrative or Legal Action. Your response is to be (Inspector line out inappropriate response method): (1) included with your next NPDES Discharge Monitoring Report (DMR) or (2) submitted as directed by the inspector. Questions regarding possible follow-up action can be answered by the REGULATORY AUTHORITY to which your DMRs are submitted and which administers your NPDES Permit.			
INSPECTOR'S SIGNATURE	INSPECTOR'S ADDRESS/PHONE NO.	REGULATORY AUTHORITY/ADDRESS	DATE
INSPECTOR'S PRINTED NAME			

GENERAL INSTRUCTIONS

This form is only intended to address problems with the permittee's self-monitoring program. It shall not address specific permit violations relating to effluent limitations, compliance schedules, etc. Issuance of this notice is not intended and must not be construed as a formal enforcement order or citation. It does not preclude the REGULATORY AUTHORITY from taking additional Administrative or Legal Action at any time regardless of when or if this notice has been issued. (See wording "REQUESTED ACTION" on face of form.)

This notice is to be completed at the end of the inspection. The Original Copy (*white*) is to be routed to the REGULATORY AUTHORITY in the same manner as the original Inspection Report. One copy is to be given to the permittee at the completion of the inspection. The remaining color coded copies are to be distributed in the same manner as color matching copies of the Inspection Report.

Enter Permittee (*facility*) Name/Address, Permittee Representative/Title, and NPDES Permit Number.

Enter the date the compliance inspection is carried out.

Describe any deficiencies in self-monitoring activities in the appropriate boxes.

In the "Requested Action" section the inspector is to indicate the appropriate permittee response method which conforms with established NPDES Regulatory Authority policy. Line out the response method which does NOT apply. When the Regulatory Authority policy dictates the use of the second response method, the one NOT associated with the DMR, the inspector will (1) inform the permittee when written response is due and to whom it is to be forwarded, (2) record both of these reporting requirements under the "Additional Comment" section on the face of this form.

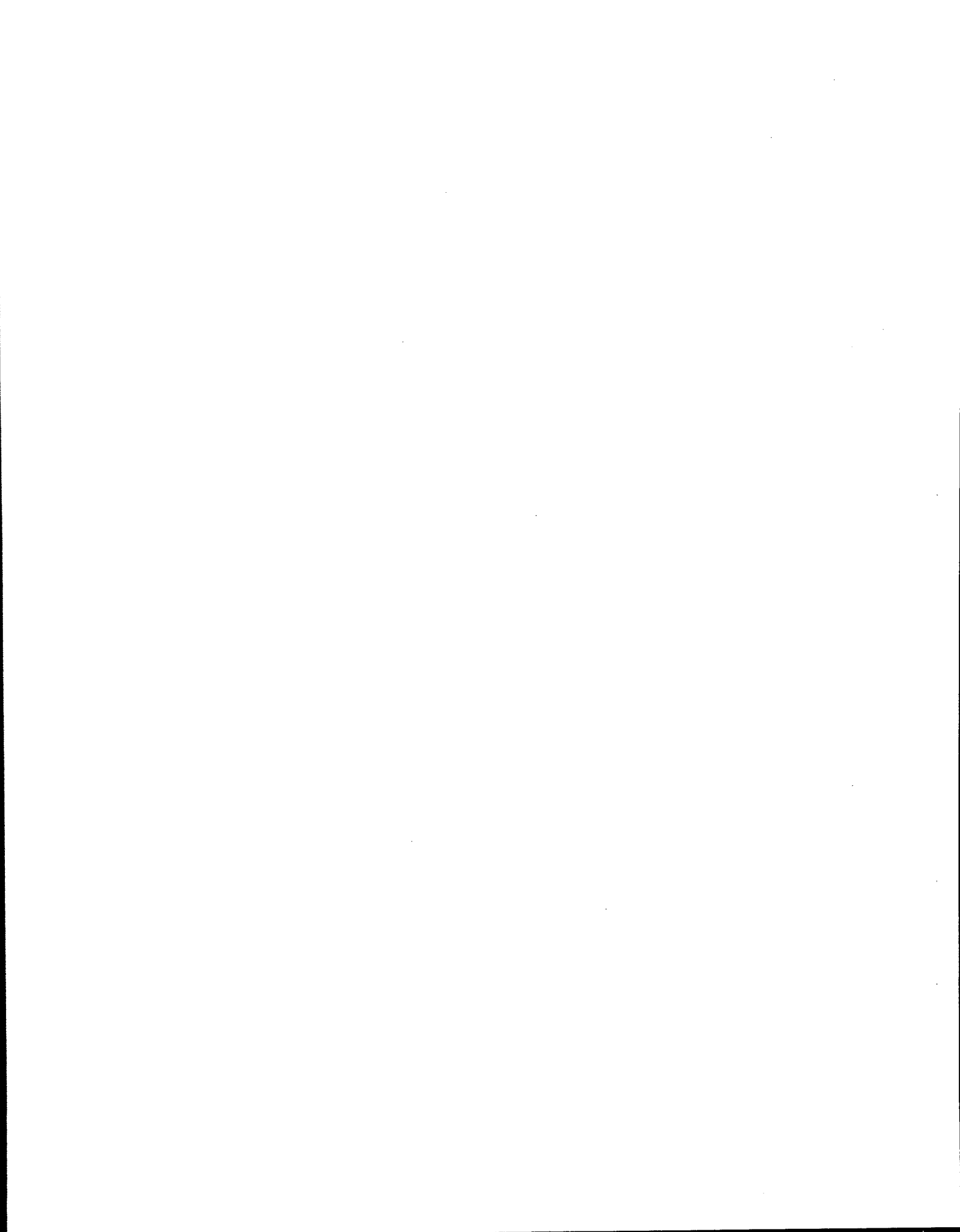
Enter inspector's Name/Signature/Address/Telephone Number.

Enter REGULATORY AUTHORITY Name/Address.

Enter date this notice is completed and issued.

APPENDIX C

SAMPLE 308 LETTER



Certified Mail - Return Receipt Requested

Date

Dear Sir:

Pursuant to the authority contained in Section 308 of the Clean Water Act (33 U.S.C. 1251 et seq.), representatives of the U.S. Environmental Protection Agency (EPA), or a contractor retained by EPA, shall conduct, within the next year, a compliance monitoring inspection of your operations including associated waste treatment and/or discharge facilities located at
This inspection will ascertain the degree of compliance with the requirements of the National Pollutant Discharge Elimination System (NPDES) permit issued to your organization.

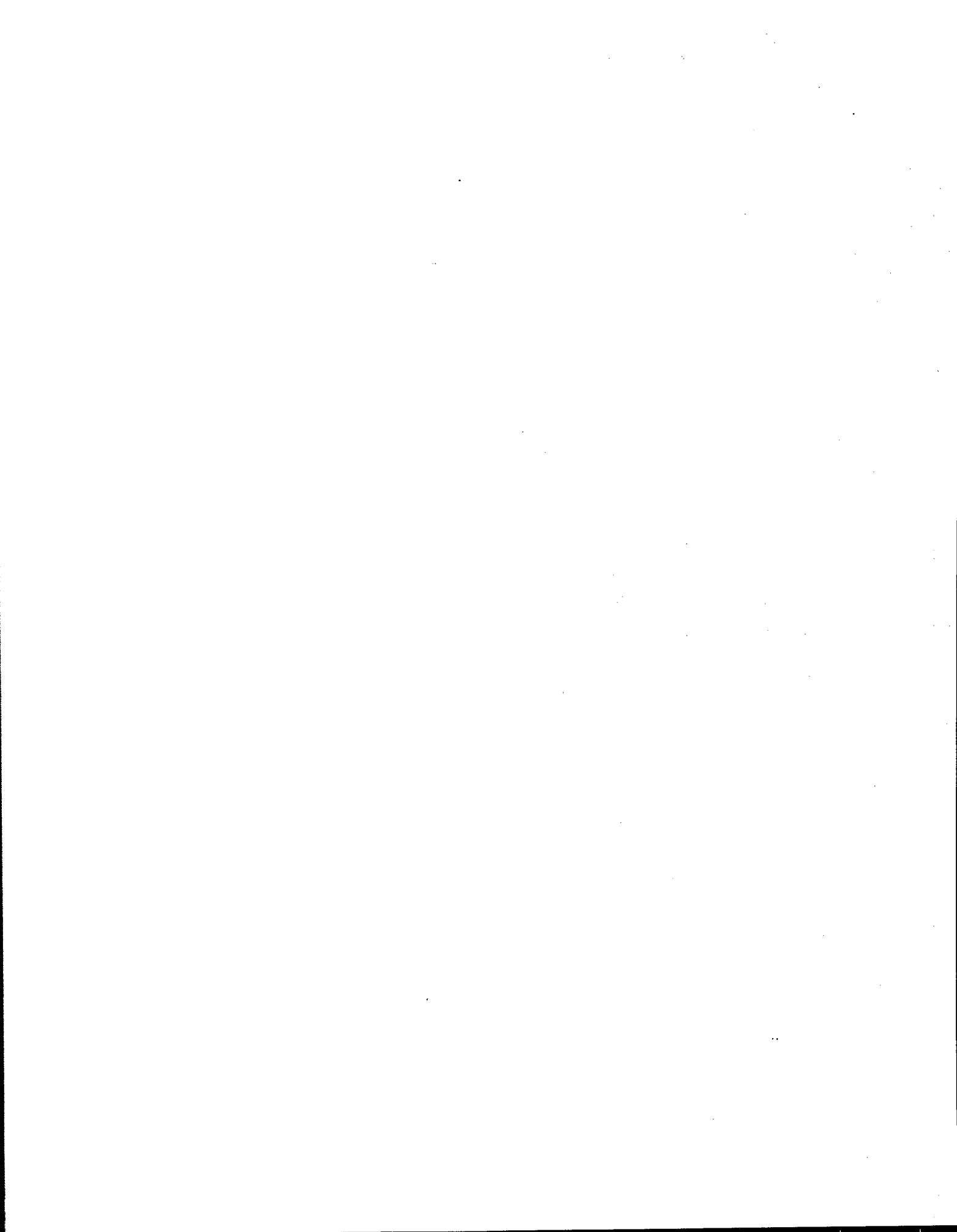
Our representatives will observe your process operations, inspect your monitoring and laboratory equipment and methods, collect samples, examine appropriate records, and will be concerned with related matters.

In order to facilitate easy access to the plant site, please provide the name of an individual whom we can contact upon arrival at the plant. Additionally, we would appreciate receiving a list of the safety equipment you would recommend that our representatives have in their possession in order to safely enter and conduct the inspection. Please provide the information requested within 14 days of receipt of this letter.

If you have any questions relating to anything concerning this inspection, please call _____ at _____

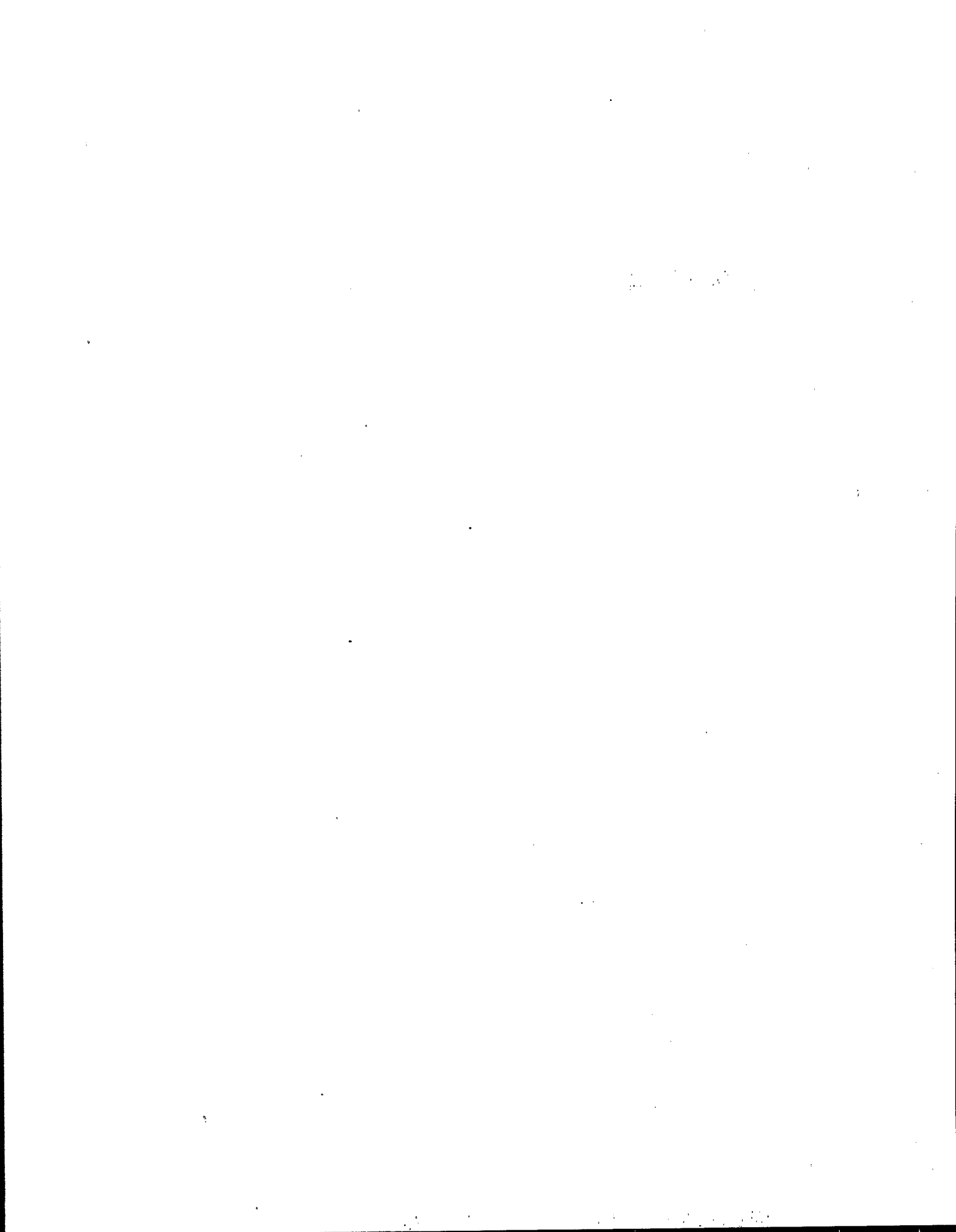
Sincerely yours,

Director
Enforcement Division



APPENDIX D

CONDUCT OF INSPECTIONS AFTER THE
BARLOW'S DECISION





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

11 APR 1979

MEMORANDUM

OFFICE OF ENFORCEMENT

TO: Regional Administrators
Surveillance and Analysis Division Directors
Enforcement Division Directors

FROM: Assistant Administrator
for Enforcement

SUBJECT: Conduct of Inspections After the Barlow's Decision

I. Summary

This document is intended to provide guidance to the Regions in the conduct of inspections in light of the recent Supreme Court decision in Marshall v. Barlow's, Inc., U.S., 98 S. Ct. 1816 (1978). The decision bears upon the need to obtain warrants or other process for inspections pursuant to EPA-administered Acts.

In Barlow's, the Supreme Court held that an OSHA inspector was not entitled to enter the non-public portions of a work site without either (1) the owner's consent, or (2) a warrant. The decision protects the owner against any penalty or other punishment for insisting upon a warrant.

In summary, Barlow's should only have a limited effect on EPA enforcement inspections:

- o Inspections will generally continue as usual;
- o Where an inspector is refused entry, EPA will seek a warrant through the U.S. Attorney;
- o Sanctions will not be imposed upon owners of establishments who insist on a warrant before allowing inspections of the non-public portions of an establishment.

The scope of the Barlow's decision is broad. It affects all current inspection programs of EPA, including inspections conducted by State personnel and by contractors. The Agency's procedures for inspections, particularly where entry is denied, were largely in accord with the provisions of Barlow's before the Supreme Court issued its ruling. Nevertheless, a number of changes in Agency procedure are warranted. Thus, it is important that all personnel involved in the inspection process be familiar with the procedural guidelines contained in this document.

This document focuses on the preparation for and conduct of inspections, including (1) how to proceed when entry is denied, (2) under what circumstances a warrant is necessary, and (3) what showing is necessary to obtain a warrant.

II. Conduct of Inspections

The following material examines the procedural aspects of conducting inspections under EPA-administered Acts. Inspections are considered in three stages: (1) preparation for inspection of premises, (2) entry onto premises, and (3) procedures to be followed where entry is refused.

A. Preparation

Adequate preparation should include consideration of the following factors concerning the general nature of warrants and the role of personnel conducting inspections.

(1) Seeking a Warrant Before Inspection

The Barlow's decision recognized that, on occasion, the Agency may wish to obtain a warrant to conduct an inspection even before there has been any refusal to allow entry. Such a warrant may be necessary when surprise is particularly crucial to the inspection, or when a company's prior bad conduct and prior refusals make it likely that warrantless entry will be refused. Pre-inspection warrants may also be obtained where the distance to a U.S. Attorney or a magistrate is considerable so that excessive travel time would not be wasted if entry were denied. At present, the seeking of such a warrant prior to an initial inspection should be an exceptional circumstance, and should be cleared through Headquarters. If refusals to allow entry without a warrant increase, such warrants may be sought more frequently. (For specific instructions on how to obtain a warrant, see Part D.)

(2) Administrative Inspections v. Criminal Investigations

It is particularly important for both inspectors and attorneys to be aware of the extent to which evidence sought in a civil inspection can be used in a criminal matter, and to know when it is necessary to secure a criminal rather than a civil search warrant. There are three basic rules to remember in this regard: (1) If the purpose of the inspection is to discover and correct, through civil procedures, noncompliance with regulatory requirements, an administrative inspection (civil) warrant may be used; (2) if the inspection is in fact intended, in whole or in part, to gather evidence for a possible criminal prosecution, a criminal search warrant must be obtained under Rule 41 of the Federal Rules of Criminal Procedure; and (3) evidence obtained during a valid civil inspection is generally admissible in criminal proceedings. These principles arise from the recent Supreme Court cases of Marshall v. Barlow's, Inc., supra; Michigan v. Tyler, U.S., 98 S.Ct. 1942 (1978); and U.S. v. LaSalle National Bank, U.S., 57 L. Ed. 2d 221 (1978). It is not completely clear whether a combined investigation for civil and criminal violations may be properly conducted under a civil or "administrative" warrant, but we believe that

a civil warrant can properly be used unless the intention is clearly to conduct a criminal investigation.

(3) The Use of Contractors to Conduct Inspections

Several programs utilize private contractors to aid in the conduct of inspections. Since, for the purpose of inspections, these contractors are agents of the Federal government, the restrictions of the Barlow's decision also apply to them. If contractors are to be conducting inspections without the presence of actual EPA inspectors, these contractors should be given training in how to conduct themselves when entry is refused. With respect to obtaining or executing a warrant, an EPA inspector should always participate in the process, even if he was not at the inspection where entry was refused.

(4) Inspections Conducted by State Personnel

The Barlow's holding applies to inspections conducted by State personnel and to joint Federal/State inspections. Because some EPA programs are largely implemented through the States, it is essential that the Regions assure that State-conducted inspections are conducted in compliance with the Barlow's decision, and encourage the State inspectors to consult with their legal advisors when there is a refusal to allow entry for inspection purposes. State personnel should be encouraged to contact the EPA Regional Enforcement Office when any questions concerning compliance with Barlow's arise.

With regard to specific procedures for States to follow, the important points to remember are: (1) The State should not seek forcible entry without a warrant or penalize an owner for insisting upon a warrant, and (2) the State legal system should provide a mechanism for issuance of civil administrative inspection warrants. If a State is enforcing an EPA program through a State statute, the warrant process should be conducted through the State judicial system. Where a State inspector is acting as a contractor to the Agency, any refusal to allow entry should be handled as would a refusal to an Agency inspector as described in section II.B.3. Where a State inspector is acting as a State employee with both Federal and State credentials, he should utilize State procedures unless the Federal warrant procedures are more advantageous, in which case, the warrant should be sought under the general procedures described below. The Regions should also assure that all States which enforce EPA programs report any denials of entry to the appropriate Headquarters Enforcement Attorney for the reasons discussed in section II.B.4.

B. Entry

(1) Consensual Entry

One of the assumptions underlying the Court's decision is that most inspections will be consensual and that the administrative inspection framework will thus not be severely disrupted. Consequently, inspec-

tions will normally continue as before the Barlow's decision was issued. This means that the inspector will not normally secure a warrant before undertaking an inspection but, in an attempt to gain admittance, will present his credentials and issue a notice of inspection where required. The establishment owner may complain about allowing an inspector to enter or otherwise express his displeasure with EPA or the Federal government. However, as long as he allows the inspector to enter, the entry is voluntary and consensual unless the inspector is expressly told to leave the premises. On the other hand, if the inspector has gained entry in a coercive manner (either in a verbal or physical sense), the entry would not be consensual.

Consent must be given by the owner of the premises or the person in charge of the premises at the time of the inspection. In the absence of the owner, the inspector should make a good faith effort to determine who is in charge of the establishment and present his credentials to that person. Consent is generally needed only to inspect the non-public portions of an establishment - i.e., any evidence that an inspector obtains while in an area open to the public is admissible in an enforcement proceeding.

(2) Withdrawal of Consent

The owner may withdraw his consent to the inspection at any time. The inspection is valid to the extent to which it has progressed before consent was withdrawn. Thus, observations by the inspector, including samples and photographs obtained before consent was withdrawn, would be admissible in any subsequent enforcement action. Withdrawal of consent is tantamount to a refusal to allow entry and should be treated as discussed in section II.B.3. below, unless the inspection had progressed far enough to accomplish its purposes.

(3) When Entry is Refused

Barlow's clearly establishes that the owner does have the right to ask for a warrant under normal circumstances.¹ Therefore, refusal to allow entry for inspectional purposes will not lead to civil or criminal penalties if the refusal is based on the inspector's lack of a warrant and one of the exemptions discussed in Part C does not apply. If the owner were to allow the inspector to enter his establishment only in response to a threat of enforcement liability, it is quite possible that any evidence obtained in such an inspection would be inadmissible. An inspector may, however, inform the owner who refuses entry that he intends to seek a warrant to compel the inspection. In any event, when entry is

1

FIFRA inspections are arguably not subject to this aspect of Barlow's See discussion, p. 5 and 6.

refused, the inspector should leave the premises immediately and telephone the designated Regional Enforcement Attorney as soon as possible for further instructions. The Regional Enforcement Attorney should contact the U.S. Attorney's Office for the district in which the establishment desired to be inspected is located and explain to the appropriate Assistant United States Attorney the need for a warrant to conduct the particular inspection. The Regional Attorney should arrange for the United States Attorney to meet with the inspector as soon as possible. The inspector should bring a copy of the appropriate draft warrant and affidavits. Samples are provided in the appendix to this document.

(4) Headquarters Notification

It is essential that the Regions keep Headquarters informed of all refusals to allow entry. The Regional Attorney should inform the appropriate Headquarters Enforcement Attorney of any refusals to enter and should send a copy of all papers filed to Headquarters. It is necessary for Headquarters to monitor refusals and Regional success in obtaining warrants to evaluate the need for improved procedures and to assess the impact of Barlow's on our compliance monitoring programs.

C. Areas Where a Right of Warrantless Entry Still Exists

1. Emergency Situations.

In an emergency, where there is no time to get a warrant, a warrantless inspection is permissible. In Camara v. Municipal Court, 387 U.S. 523 (1967), the Supreme Court states that "nothing we say today is intended to foreclose prompt inspections, even without a warrant, that the law has traditionally upheld in emergency situations". Nothing stated in Barlow's indicates any intention by the court to retreat from this position. The Regions will always have to exercise considerable judgment concerning whether to secure a warrant when dealing with an emergency situation. However, if entry is refused during an emergency, the Agency would need the assistance of the U.S. Marshal to gain entry, and a warrant could probably be obtained during the time necessary to secure that Marshal's assistance.

An emergency situation would include potential imminent hazard situations, as well as, situations where there is potential for destruction of evidence or where evidence of a suspected violation may disappear during the time that a warrant is being obtained.

(2) FIFRA Inspections.

There are some grounds for interpreting Barlow's as not being applicable to FIFRA inspections. The Barlow's restrictions do not apply to areas that have been subject to a long standing and pervasive history

of government regulation. An Agency administrative law judge held recently that even after the Barlow's decision, refusal to allow a warrantless inspection of a FIFRA regulated establishment properly subjected the owner to civil penalty. N. Jonas & Co., Inc., I.F. & R Docket No. III-121C (July 27, 1978). For the present, however, FIFRA inspections should be conducted under the same requirements applicable to other enforcement programs.

(3) "Open Fields" and "In Plain View" situations.

Observation by inspectors of things that are in plain view, (i.e., of things that a member of the public could be in a position to observe) does not require a warrant. Thus, an inspector's observations from the public area of a plant or even from certain private property not closed to the public are admissible. Observations made even before presentation of credentials while on private property which is not normally closed to the public are admissible.

D. Securing a Warrant

There are several general rules for securing warrants. Three documents have to be drafted: (a) an application for a warrant, (b) an accompanying affidavit, and (c) the warrant itself. Each document should be captioned with the District Court of jurisdiction, the title of the action, and the title of the particular document.

The application for a warrant should generally identify the statutes and regulations under which the Agency is seeking the warrant, and should clearly identify the site or establishment desired to be inspected (including, if possible, the owner and/or operator of the site). The application can be a one or two page document if all of the factual background for seeking the warrant is stated in the affidavit, and the application so states. The application should be signed by the U.S. Attorney or by his Assistant U.S. Attorney.

The affidavits in support of the warrant application are crucial documents. Each affidavit should consist of consecutively numbered paragraphs, which describe all of the facts that support warrant issuance. If the warrant is sought in the absence of probable cause, it should recite or incorporate the neutral administrative scheme which is the basis for inspecting the particular establishment. Each affidavit should be signed by someone with personal knowledge of all the facts stated. In cases where entry has been denied, this person would most likely be the inspector who was denied entry. Note that an affidavit is a sworn statement that must either be notarized or personally sworn to before the magistrate.

The warrant is a direction to an appropriate official (an EPA inspector, U.S. Marshal or other Federal officer) to enter a specifically described location and perform specifically described inspection functions. Since the inspection is limited by the terms of the warrant, it is important to specify to the broadest extent possible the areas that are intended to be inspected, any records to be inspected, any samples to be taken, any articles to be seized, etc. While a broad warrant may be permissible in civil administrative inspections, a vague or overly broad warrant will probably not be signed by the magistrate and may prove susceptible to constitutional challenge. The draft warrant should be ready for the magistrate's signature at the time of submission via a motion to quash and suppress evidence in Federal District court. Once the magistrate signs the draft warrant, it is an enforceable document. Either following the magistrate's signature or on a separate page, the draft warrant should contain a "return of service" or "certificate of service". This portion of the warrant should indicate upon whom the warrant was personally served and should be signed and dated by the inspector. As they are developed, more specific warrant-issuance documents will be drafted and submitted to the Regions.

E. Standards or Bases for the Issuance of Administrative Warrants.

The Barlow's decision establishes three standards or bases for the issuance of administrative warrants. Accordingly, warrants may be obtained upon a showing: 1) of traditional criminal probable cause, 2) of civil probable cause, or 3) that the establishment was selected for inspection pursuant to a neutral administrative inspection scheme.

1. Civil specific probable cause warrant.

Where there is some specific probable cause for issuance of a warrant, such as an employee complaint or competitor's tip, the inspector should be prepared to describe to the U.S. Attorney in detail the basis for this probable cause.

The basis for probable cause will be stated in the affidavit in support of the warrant. This warrant should be used when the suspected violation is one that would result in a civil penalty or other civil action.

2. Civil probable cause based on a neutral administrative inspection scheme.

Where there is no specific reason to think that a violation has been committed, a warrant may still be issued if the Agency can show that the establishment is being inspected pursuant to a neutral administrative scheme. As the Supreme Court stated in Barlow's:

"Probable cause in the criminal law sense is not required. For purposes of an administrative search, such as this, probable cause justifying the issuance of a warrant may be based not only on specific evidence of an existing violation, but also on a showing that "reasonable legislative or administrative standards for conducting an . . . inspection are satisfied with respect to a particular [establishment]". A warrant showing that a specific business has been chosen for an OSHA search on the basis of a general administrative plan for the enforcement of the act derived from neutral sources such as, for example, dispersion of employees in various type of industries across a given area, and the desired frequency of searches in any of the lesser divisions of the area, would protect an employers Fourth Amendment rights."

Every program enforced by the Agency has such a scheme by which it prioritizes and schedules its inspections. For example, a scheme under which every permit holder in a given program is inspected on an annual basis is a satisfactory neutral administrative scheme. Also, a scheme in which one out of every three known PCB transformer repair shops is inspected on an annual basis is satisfactory, as long as, neutral criteria such as random selection are used to select the individual establishment to be inspected. Headquarters will prepare and transmit to the Regions the particular neutral administrative scheme under which each program's inspections are to be conducted. Inspections not based on specific probable cause must be based on neutral administrative schemes for a warrant to be issued. Examples of two neutral administrative schemes are provided in the appendix. (Attachments II and III)

The Assistant U.S. Attorney will request the inspector to prepare and sign an affidavit that states the facts as he knows them. The statement should include the sequence of events culminating in the refusal to allow entry and a recitation of either the specific probable cause or the neutral administrative scheme which led to the particular establishment's selection for inspection. The Assistant U.S. Attorney will then present a request for an inspection warrant, a suggested warrant, and the inspector's affidavit to a magistrate or Federal district court judge.²

3. Criminal Warrants.

Where the purpose of the inspection is to gather evidence for a criminal prosecution, the inspector and the Regional Attorney should request that the U.S. Attorney seek a criminal warrant under Rule 41 of the Federal Rules of Criminal Procedure. This requires a specific showing of probable cause to believe that evidence of a crime will be discovered. Agency policy on the seeking of criminal warrants has not been affected by Barlow's. The

2

The Barlow's decision states that imposing the warrant requirement on OSHA would not invalidate warrantless search provisions in other regulatory statutes since many such statutes already "envision resort

distinction between administrative inspections and criminal warrant situations is discussed in Section II.A.2.

F. Inspecting with a Warrant

Once the warrant has been issued by the magistrate or judge, the inspector may proceed to the establishment to commence or continue the inspection. Where there is a high probability that entry will be refused even with a warrant or where there are threats of violence, the inspector should be accompanied by a U.S. Marshal when he goes to serve the warrant on the recalcitrant owner. The inspector should never himself attempt to make any forceful entry of the establishment. If the owner refuses entry to an inspector holding a warrant but not accompanied by a U.S. Marshal, the inspector should leave the establishment and inform the Assistant U.S. Attorney and the designated Regional Attorney. They will take appropriate action such as seeking a citation for contempt. Where the inspector is accompanied by a U.S. Marshal, the Marshal is principally charged with executing the warrant. Thus, if a refusal or threat to refuse occurs, the inspector should abide by the U.S. Marshal's decision whether it is to leave, to seek forcible entry, or otherwise.

The inspector should conduct the inspection strictly in accordance with the warrant. If sampling is authorized, the inspector must be sure to carefully follow all procedures, including the presentation of receipts for all samples taken. If records or other property are authorized to be taken, the inspector must receipt the property taken and maintain an inventory of anything taken from the premises. This inventory will be examined by the magistrate to assure that the warrant's authority has not been exceeded.

2 continued from page 8.

to Federal court enforcement when entry is refused". There is thus some question as to whether the existence of a non-warrant Federal court enforcement mechanism in a statute requires the use of that mechanism rather than warrant issuance. We believe that the Barlow's decision gives the agency the choice of whether to proceed through warrant issuance or through an application for an injunction, since the decision is largely based on the fact that a warrant procedure imposes virtually no burden on the inspecting agency. In addition, an agency could attempt to secure a warrant prior to inspection on an ex parte basis, something not available under normal injunction proceedings. Several of the acts enforced by EPA have provisions allowing the Administrator to seek injunctive relief to assure compliance with the various parts of a particular statute. There may be instances where it would be more appropriate to seek injunctive relief to gain entry to a facility than to attempt to secure a warrant for inspection, although at this point we cannot think of any. However, since the warrant process will be far more expeditious than the seeking of an injunction, any decision to seek such an injunction for inspection purposes should be cleared through appropriate Headquarters staff.

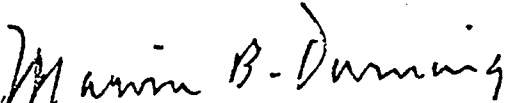
G. Returning the Warrant.

After the inspection has been completed, the warrant must be returned to the magistrate. Whoever executes the warrant, (i.e., whoever performs the inspection), must sign the return of service form indicating to whom the warrant was served and the date of service. He should then return the executed warrant to the U.S. Attorney who will formally return it to the issuing magistrate or judge. If anything has been physically taken from the premises, such as records or samples, an inventory of such items must be submitted to the court, and the inspector must be present to certify that the inventory is accurate and complete.

III. Conclusion

Except for requiring the Agency to formalize its neutral inspection schemes, and for generally ending the Agency's authority for initiating civil and/or criminal actions for refusal to allow warrantless inspections, Barlow's should not interfere with EPA enforcement inspections.

Where there is doubt as to how to proceed in any entry case, do not hesitate to call the respective Headquarters program contact for assistance.


Marvin B. Durning