

Rhode Island Department of Environmental Management Hazardous Waste Management Program Generic Quality Assurance Program Plan

Written By: Laurie Grandchamp
Tracey Tyrrell
Mark Dennen
Sean Carney
Yan Li

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-Hazardous Waste Management Program Generic Quality Assurance Program Plan

Title and Approval Page

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Address 235 Promenade Street, Providence, RI 02908-5767

Telephone Number: TEL#: (401) 222-4700; FAX#: (401) 222-3812

Approval Signatures*

Approved Dates:

Terrence Gray, Associate Director RI Department of Environmental Management	Terrence Gray	Date 06/12/09
Leo Hellested, P.E., Chief – Office of Waste Management, RI Department of Environmental Management	Leo Hellested	Date 06/03/09
Laurie Grandchamp, Supervising Sanitary Engineer, RIDEM/OWM	Laurie Grandchamp	Date 05/20/09
David Chopy, Acting Chief – Office of Compliance & Inspection, RI Department of Environmental Management	David Chopy	Date 06/09/09
Tracey Tyrrell, Supervising Environmental Scientist, RIDEM/OC&I	Tracey Tyrrell	Date 05/05/09
Sean Carney Principal Environmental Scientist, RIDEM /OC&I	Sean Carney	Date 05/05/09
Mark Dennen, RIDEM/OWM	Mark Dennen	Date 05/22/09
Yan Li, RIDEM/OWM	Li Yan	Date 5/29/09
Thomas D. Getz, RIDEM, Quality Manager	Thomas D. Getz	Date 05/05/09
Steven DiMattei QA Chemist, USEPA Region I	Steven DiMattei	Date 06/30/09
Frank Battaglia EPA Region I, RCRA Project Manager	Frank Battaglia	Date 07/06/09

*Original Signature Page with actual signatures is on file with the DEM Quality Assurance Manager.

Hazardous Waste Management Program Quality Assurance Program Plan

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1.0 Distribution List

Upon approval and implementation of this Quality Assurance Program Plan (QAPP), an original shall be kept with the Quality Assurance (QA) Coordinator for each of the designated RCRA programs in the Office of Waste Management (OWM) and the Office of Compliance & Inspection (OC&I). The RIDEM OWM/WFMP RCRA Staff and OC&I RCRA Staff will be required to review this QAPP within 360 days of implementation. New RCRA staff hired by the RIDEM OWM and OC&I programs will be required to review this QAPP within 90 days of the hiring date. Once staff has reviewed the QAPP, he/she will be required to sign the "QAPP Distribution List" found in Appendix A. The QA Coordinator for each program will maintain the distribution list. A copy of the approved QAPP will be available of the RIDEM internet website.

2.0 Background

The United States Environmental Protection Agency (USEPA) requires that all environmental monitoring and measurement efforts mandated or supported by USEPA have in place a centrally managed QAPP. As stated in USEPA's QA/R5 document, "*Organizations must ensure that data collected for the characterization of environmental processes and conditions are of the appropriate type and quality for their intended use and that environmental technologies are designed, constructed, and operated according to defined expectations.*"

Any party generating data under this program has the responsibility to implement minimum procedures to assure that the precision, accuracy, completeness, comparability and representativeness of its data are known and documented. All Quality Assurance/Quality Control (QA/QC) procedures must be in accordance with applicable professional technical standards, USEPA requirements, government regulations and guidelines, and specific project goals and requirements.

This QAPP presents the standard operating policies and procedures of the Rhode Island Department of Environmental Management/Offices of Waste Management Waste Facilities Management Section (RIDEM/OWM) and the OC&I RCRA Compliance Program (RIDEM/OC&I) as well as a description of their respective activities. This document will describe:

1. The RIDEM/OWM and OC&I functional statement and organization;
2. The basic flow of project activities, including preparation of study plans, report preparation, and peer review;
3. RIDEM procedures for obtaining analytical support; and;
4. The RIDEM basic safety program.

3.0 Quality Assurance Statement

It is the goal of the RIDEM OWM and OC&I RCRA Programs to implement a QAPP for all the environmental activities that generate data. The QAPP is a management tool that will help guarantee that data is of sufficient known quality to withstand scientific and legal challenge relative to the use for which the data is obtained. The elements of a QAPP should be reviewed annually and updated every five years to reflect any operational changes in the organization per the Department's Quality Management Plan.

All data gathering field activities performed by RIDEM OWM and OC&I personnel will require adherence to this QAPP. The majority of the sampling activities performed by the RIDEM OWM and OC&I will not require the development of a site specific QAPP, however, if a site specific SAP is needed, one will be developed.

Elements that are not addressed in the QAPP are included in the SAP if a SAP is generated for the project. RIDEM Procedures for Developing QAPPs and SAPs is further described in SOP OD-QM-2.

3.1 Quality Assurance Management -

The goal of the DEM is to implement a QAPP for all the environmental activities that generate data. The QAPP is a management tool that will help guarantee that data is of sufficient known quality to withstand scientific and legal challenge relative to the use for which the data is obtained. All programs are required to perform a self-assessment of their quality assurance program on a yearly basis. As part of this self-assessment, the programs will review the elements of the QAPP annually and will be updated every five years to reflect any operational changes in the organization per the Department's Quality Management Plan.

The revised QAPP will be posted on the DEM Intranet/Internet. This will be considered the official DEM RCRA QAPP. The DEM Quality Assurance Manager will be responsible for ensuring the latest revision of the QAPP is posted on the Intranet.

This QAPP covers the activities of two DEM Offices. RIDEM/OWM has responsibility for program development and RIDEM/OC&I has responsibility for the enforcement of the RCRA regulations. The one exception is that RIDEM/OC&I has both program and enforcement responsibility for the RCRA small generator and waste oil programs.

All data gathering field activities performed by the DEM personnel will require adherence to this QAPP and the development of a site specific SAP. The majority of the sampling activities performed by the DEM will not require the development of a site specific QAPP.

Contract laboratories provide analytical services that have been approved by RIDEM through the state Master Contract process. RIDEM has required all laboratories to meet appropriate EPA quality assurance procedures that are needed to assure that data collected can be used for decision-making including enforcement.

3.2 Organization

The Office of Compliance and Inspection and the Office of Waste Management report to the Assistant Director of the Bureau of Environmental Protection. Appendix C -1 is a general organization chart of the Bureau.

Waste Facilities Management Section (WFMP)

The section conducts the licensing and permitting components of the RCRA Program. This program is located in the Office of Waste Management. Appendix C-2 is the organizational chart of this Office. License and permit applications are reviewed by WFMP staff, decisions are rendered on such applications, and inspections of licensed and permitted transporters and facilities are conducted to ensure compliance with permit conditions and applicable laws and regulations. The licensing/permitting of these facilities is primarily performed under the following laws and regulations:

1. Rhode Island General Law 23-19.1 Hazardous Waste Management Act.
2. Rhode Island General Law 23-19.4 Septage, Industrial Wastes and Waste Oil Pumping, Cleaning and Transportation
3. The Rules and Regulations for Hazardous Waste Management DEM-OWM-HW01-07 as amended (Hazardous Waste Regulations).
4. Code of Federal Regulations Title 40 – Protection of Environment, Chapter I – Environmental Protection Agency, as amended.

RIDEM OWM and OC&I RCRA Programs work with and are authorized by the United States Environmental Protection Agency (USEPA). The RCRA Program includes regulation of generation, transportation, storage and treatment of hazardous waste.

RCRA Compliance Program

The RIDEM OC&I RCRA Program conducts inspections of hazardous waste generators, investigates complaints of improper storage and generation of hazardous waste, inspects facilities that store hazardous waste and the supervises the cleanup of hazardous waste and petroleum releases. This program resides in the Office of Compliance and Inspection. Appendix C-3 is an organization chart of this Office. This is primarily performed under the statutes and regulations listed below.

1. Rhode Island General Laws 23.19.1
2. Rhode Island General Laws 23.18.9
3. The Rules and Regulations for Hazardous Waste Management for generators of hazardous waste and facilities that store hazardous waste DEM-OWM-HW-01-05 as amended (Hazardous Waste Regulations). (<http://www.dem.ri.gov/pubs/regs/index.htm#WM>).

4. The Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases DEM-DSR-01-93 as amended (Remediation Regulations) - for releases of hazardous materials. (<http://www.dem.ri.gov/pubs/regs/index.htm#WM>).
5. The Oil Pollution Control Regulations- For above ground petroleum facility releases. RIDEM's Emergency Response program responds to releases of oil or hazardous materials 24-hours per day, 7-days per week and ensures clean up of the environment as a result of these spills or releases. (<http://www.dem.ri.gov/programs/benviron/compinsp/index.htm>)
6. The Regulations for Underground Storage Facilities Used for Petroleum Products and Hazardous Materials DEM-OWM-UST-08-07 (UST Regulations) as amended - For leaking underground storage tanks. Note that the OWM's UST Program has a separate QAPP.
7. The Rules and Regulations for the Assessment of Administrative Penalties DEM-AAD-00 for the assessment of administrative penalties contained within formal enforcement actions.
8. Code of Federal Regulations Title 40 – Protection of Environment, Chapter I – Environmental Protection Agency, as amended

In addition to these specific references to regulations and statute, the OC&I and OWM Programs may use, on occasion, other regulatory references if needed in the enforcement of environmental regulations.

3.3 Personnel Qualifications

There are several job titles with the RIDEM OC&I and OWM/WFM RCRA Program including the following titles: Engineering Technician III, Junior Sanitary Engineer, Senior Environmental Scientist, Principal Environmental Scientist, Supervising Environmental Scientist, Principal Sanitary Engineer, Associate Supervising Sanitary Engineer, as well as the Chiefs of OC&I and OWM. The job descriptions for the above mentioned titles are included in Appendix B and updated periodically on the web (<http://hrwebsrvr.doa.state.ri.us/hrl/RR1.home>).

Figure 3-1 shows the organizational hierarchy of the RIDEM OWM, which includes the WFMP Hazardous Waste (RCRA) Program. The QA Manager(s) will receive specific QA/QC training to ensure that the QA Manager(s) are qualified to perform the tasks relating to the QAPP. This training will include attending conferences and training classes provided by private industry, RIDEM or USEPA.

It shall be the policy of the Department to provide resources to receive training related to permitting, inspections, environmental assessment, data gathering, corrective action, financial assurance and health. A Senior Word Processing Typist maintains a record of all training classes taken by all OWM staff. An Implementation Aide has been designated as the training information coordinator for OC&I.

3.4 Assignment of Responsibilities

The Chiefs of each Office, OWM and OC&I shall name a QA Coordinator for each of their respective Offices. For OWM, Laurie Grandchamp has been named the QA coordinator. For OC&I, Tracey Tyrrell has been named the QA Coordinator.

3.5 Communications

The Quality Assurance (QA) Coordinator for OWM and OC&I will maintain all files and reports describing the QA activities within two programs. If used by either program, private laboratories will be required to maintain their own files and reports describing these respective QA activities.

The award official for all OWM/OC&I Program grants, cooperative agreements, contract and interagency agreements should communicate to the QA Coordinator that grants have been approved. Guidance and information of particular value is available in the following documents, as updated:

“USEPA Requirements for Quality Management Plans”, March 2001, USEPA QA/R-2

“USEPA Requirements for Quality Assurance Project Plans”, March 2001, USEPA QA/R-5

4.0 Program Description

The RCRA program is organized broadly into two distinct units: RCRA Generation and RCRA Permitting.

Waste Facilities Management (WFM) Section The RCRA Permitting Program

The RCRA Permitting Program that is delegated to the Office of Waste Management involves the oversight of Hazardous Waste Permitting and Tracking Issues. These involve regulation of hazardous waste once it has left the generator’s property until it is finally disposed of. It also involves tracking of hazardous waste manifests and compilation of hazardous waste biennial reports. The Program also oversees implementation of regulatory changes and issues regulatory interpretations when appropriate. Specific functions are described below:

- Permitting, inspection and oversight of RCRA Treatment Storage and Disposal Facilities (TSDF) and 72 Hour Transfer Stations. This also involves writing permits, permit conditions and permit modifications of these facilities.
- Permitting, inspection and oversight of RCRA Hazardous Waste and Septage Transporters.
- Permitting and oversight of Emergency Treatment for hazardous waste that is judged too dangerous to transport to a TSDF.
- Promulgation of Hazardous Waste Regulations including coordination of federal authorization issues with USEPA.
- Receipt and Storage of Hazardous Waste Manifests

- Oversight of collection of Hazardous Waste Generator Fee and processing of associated hazardous waste transporter reports.
- Collection and Processing of Biennial Hazardous Waste Reports

RCRA Compliance Program

Hazardous Waste Generator and Non-permitted Facilities Inspection Program

This program involves the inspection of the processes by which hazardous waste is generated, the facilities that store hazardous waste and the containers within, and the compliance activities conducted by hazardous waste generators. Hazardous waste compliance programs are overseen by a Supervising Environmental Scientist and a Principal Environmental Scientist.

Program Purpose

To ensure that the activities conducted by hazardous waste generators, the facilities that store hazardous waste and the containers therein, are in compliance with the applicable regulations and laws. To ensure that hazardous waste generated and stored in the state is ultimately disposed in a manner consistent with applicable laws and regulations. To provide technical oversight for the investigation and remediation of releases of hazardous waste or petroleum products to the environment; to ensure that those investigations and remedial activities are conducted in a consistent manner that adequately protects human health and the environment; and to enforce regulations regarding the proper disposal of abandoned hazardous waste.

Program Objectives

- To inspect Large Quantity Generators (LQG) and Small Quantity Generators (SQG) of hazardous waste and their facilities;
- To ensure that the generation, storage and disposal of hazardous waste is conducted in a manner consistent with applicable regulations and laws;
- To assure the proper tracking of hazardous waste;
- To conduct inspections of suspected hazardous waste disposal sites to determine if further action is warranted;
- To effectively track and report the level of effort expended completing tasks under this program for effective program management.

The data results of every action is collected by inspection and entered into a national database. Data points are set by regulation.

4.1 Quality Objectives and Criteria

Performance criteria for the OC&I RCRA inspection program are set by a Performance Partnership Agreement with USEPA. Generators are categorized by amount generated into Large Quantity

Generators or Small Quantity Generators and inspection numbers are set for each category by USEPA. For FFY 2007-2008, 25 LQG and 50 SQG are required to be inspected to meet the USEPA's program objectives.

4.2 Special Training and Criteria

Personnel shall have received training in accordance with Occupational Safety and Health Administration (OSHA) 29 CFR 1910.120(e) including annual refresher courses. All training shall be documented. Training records shall be maintained by the employer of the staff and be available upon request.

A Medical surveillance program shall be maintained by the Department in fulfillment of the requirements of the Occupational Safety and Health Administration (OSHA) 29 CFR 1910.120(b) (1) (E).

Appropriate and effective health and safety practices shall be integrated into all daily operations to promote safe and healthful working conditions. At minimum procedures shall comply with OSHA and other applicable local, State, and federal laws and regulations.

Additional training will be made available as resources permit through USEPA and NEWMOA on training specific to RCRA related issues.

5.0 Documents & Records

It is the responsibility of the respective Office QA Coordinator to ensure program personnel are notified of the approved QAPP. When the QAPP is finalized, all staff will be notified with a link to the web site where it is posted. All staff will be notified by email of any modifications.

5.1 Records Used in Office Business Practices

Waste Facilities Management Section

The Permitting Program uses the following procedures to document its processes. The permitting program does not conduct field sampling, or laboratory analysis.

Transporters: When transporter applications are received their review is documented in the Transporter Database that is currently written in Microsoft Access 2000. The Database includes a checklist that roughly mirrors the application. It also includes a table of vehicles that are permitted. New transporters are assigned a unique 3 digit transporter number. The transporter number is a key field so two hazardous waste transporters cannot be assigned the same number. Any deficiencies are noted and a form letter is sent back requiring they be corrected. Upon approval of the permit, an approval letter is signed and sent, a copy is maintained for the file. For each vehicle, a sticker is issued and a Vehicle Permit is printed out. Copies of the vehicle permits are not kept, although all data from the permit is available in the database. These checklists are kept as a record of the inspection. Normally additional documentation for vehicle inspections is not needed. (Appendix D: Application, Screen Print of database, transporter permit and vehicle permit)

For Inspection of Transporters: Checklists shown in Appendix A are filled out in the field, and placed along with photographs in the permanent permit file. Significant non-compliance is documented in a memo from OWM to OC&I.

For Facility Permits: TSDF, 72 Hour Transfer Stations and Emergency permit reviews are conducted on a case-by-case basis. If the application is deficient, the applicant is given a letter explaining what deficiencies were found and how they need to be corrected. When the reviewer is ready to render a decision, the findings and recommendations are documented in a memo. In the case of approval, draft permit conditions are created as well. The entire package, along with the attached sign off sheet is sent up the chain of command for approval.

For inspections of facilities: TSDF and 72 Hour Transfer Stations inspections are conducted using the checklists in Appendix D-1. The purpose of these checklists is to help guide the inspectors in conducting the inspections and taking notes. Upon completion of the inspection, the findings are documented in a Field Investigation Report. Information in the Field Investigation Report should be factual and objective. If significant non-compliance is observed, the nature of the non-compliance, and the permit conditions it violates are documented in a memo from the head inspector. The memo can include subjective opinions about the nature of the violation. After the Field Investigation Report is completed, the checklist is discarded. Any digital photographs taken during an inspection will be managed according to the Department's Digital Photograph Record Collection and Storage SOP. (Appendix E)

RCRA Compliance Program

OC&I uses the following procedures to document its processes. The project manager shall review the file at the conclusion of the project to ensure that it is complete.

Photo documentation will be stored in the project file and will include at a minimum, the date and time of the investigation, site name, site location, personnel present and description of the photograph. When a field investigation report has been created referencing digital photographs, RIDEM/OC&I personnel may use Standard Procedures for Storage of Digital Photographs (Appendix E). Or digital pictures may be stored on a separate CD including the minimum information necessary as outlined above. In the future, digital photographs can be stored in a site directory subfolder on the network server, once capacity is available. All other document samples are attached.

OC&I uses the following guidance when handling public records:

"Public record" or "public records" has been derived from two RI statutes: the Access to Public Records Act (RIGL §38-2-2) and the State Archives statute (RIGL §42-8.1-17) and shall mean:

All documents, papers, letters, maps, books, tapes, photographs, films, sound recordings, magnetic or other tapes, electronic data processing records, computer stored data, electronic mail messages, and/or other material regardless of physical form or characteristics made or received pursuant to law or ordinance or in connection with the transaction of official business by an agency to ensure adequate and proper documentation of the organization, functions, policies, decisions, procedures, and essential transactions of the agency and to maintain and furnish the information necessary to

protect the legal rights of the government and of the persons directly affected by the agency's activities.

Document control is a systematic procedure for ensuring that all sampling/monitoring documents are properly identified and accounted for during and after the completion of investigations and project reports. Document control will encompass the following:

Document inventory and assignment record; and

Document file repository

The term document control, as it applies to RIDEM/OC&I inspections and investigations, refers to the maintenance of inspection, investigation and report project files. The appropriate project manager shall maintain all project files. All documents as outlined below shall be kept in project files. RIDEM/OC&I personnel may keep their own files, however, all official and original documents relating to inspections and investigations shall be placed in the official project files. The following documents shall be placed in the project file:

- The original inspection report with associated photos;
- Original Chain-Of-Custody Records;
- All records obtained during the investigation;
- A complete copy of the analytical data reports and memorandums transmitting analytical data
- All official correspondence received by or issued by the RIDEM/OC&I relating to the investigation including records of telephone calls;
- Any documentation generated for the purpose of building the enforcement case (land evidence records, corporation certificate, maps, etc.)

- Any other relevant documents related to the original investigation/inspection or follow-up activities related to the investigation/inspection.

The following procedures are used by OC&I to document their field sampling, laboratory analysis and data collection activities:

Chain of Custody procedures and a sample chain of custody form are included in Appendix F. The following will apply to field documentation:

1. Entries made in logbooks, field records and forms, sample labels and tags, and chain of custody documents shall be made only with waterproof ink and/or grease pencils. If lead pencils or other writing instruments are used, note the reason in the logbook,
2. Correct errors by drawing a single line through the error and enter the correct information. Corrections should be signed and dated by the person making the correction. That person's signature should be recorded the for reference,
3. Initial and date all corrections (a list of names and initials should be part of the written record)

RIDEM/OC&I must use USEPA methodology while conducting activities that generate environmental data. Use of these methodologies and QC procedures is preferred since these procedures would simplify review of QAPPs, ensure uniformity to the remedial program and facilitate data audits. The RIDEM/OC&I approved USEPA laboratory methods, as updated, are listed in RIDEM/OWM's Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (Remediation Regulations).

The Department has Quality Assurance Manuals for RIDEM's contract laboratories. If a required analysis is not documented in the generic QA Manual, a copy of the lab's SOP will be requested and attached to the site-specific SAP. The following analytical methods apply to most of the samples that are submitted to or collected by RIDEM/OC&I personnel for analysis:

In Rhode Island, laboratories must be certified by the State or USEPA. The requirements of the Rhode Island (RI) Laboratory Certification Program is described in the Rhode Island Rules and Regulations for Certifying Analytical Laboratories (R23-16.2A/LAB), dated December 2005. These regulations apply to in-state and out-of-state laboratories analyzing potable and non-potable water samples. The RI Rules and Regulations are based on the USEPA Manual for the Certification of Laboratories Analyzing Drinking Water; USEPA 815-R-05-004, dated January 2005 and contemplated subsequent revisions, the 40 CFR Part 136 (non-potable water) and 40 CFR Part 141 (potable water).

5.2 Confidential Records

In the state of Rhode Island, confidential records that contain non-public information are protected by statute as non-public records. In general, records are assumed to be public unless specifically exempted by state law. The three exemptions that apply to environmental regulations may include the following:

(B) Trade secrets and commercial or financial information obtained from a person, firm, or corporation which is of a privileged or confidential nature.

(F) Scientific and technological secrets and the security plans of military and law enforcement agencies, the disclosure of which would endanger the public welfare and security.

(P) All investigatory records of public bodies, with the exception of law enforcement agencies, pertaining to possible violations of statute, rule, or regulation other than records of final actions taken provided that all records prior to formal notification of violations or noncompliance shall not be deemed to be public

The following procedures are used by the programs when handling confidential records:

Waste Facilities Management Section

Submissions by applicants, including permit applications, manifests, hazardous waste reports, transporter reports and modification requests are all considered to be public information. Any request to treat them otherwise must be accompanied by justification on why the information is confidential business information. The Department must be convinced that the information qualifies for exclusion from public view under Rhode Island Law.

Field Investigation Reports and transporter inspection checklists, along with any related photographs or documentation are only considered confidential until all the documentation is

complete. Until they are finalized, all inspection related documents are confidential. Internal memos discussing permit issues or violations are normally considered enforcement confidential

RCRA Compliance Program

The following records shall not be deemed public:

1. Trade secrets and commercial or financial information obtained from a person, firm, or corporation, which is of a privileged or confidential nature;
2. Preliminary drafts, notes, impressions, memoranda, working papers, and work products;
3. The contents of real estate appraisals, engineering or feasibility estimates and evaluations made for or by RIDEM/OC&I relative to the acquisition of property or to prospective public supply and construction contracts, until such time as all of the property has been acquired or all proceedings or transactions have been terminated or abandoned; provided the law of eminent domain shall not be affected by this provision;
4. All investigatory records of public bodies pertaining to possible violations of statute, rule, or regulation other than records of final actions taken provided that all records prior to formal notification of violations or noncompliance shall not be deemed public;
5. Financial records or tax returns;
6. Records, reports, opinions, information, and statements required to be kept confidential by federal or state law, rule, rule of court, or regulation or by state statute.

5.3 Databases

The following databases are used to maintain program business records:

Waste Facilities Management Section

The following databases are maintained by the Program:

Transporter Database (Access) - Contains information on hazardous, septage and medical waste transporters. Permits are effective on July 1 through June 30 of the following year. Current data is located in a database called current transporter.mdb. After the current year is over, the database is archived by renaming it using the format transporter2008.mdb. Starting in the spring before renewals are effective, a database of the format transporter2009.mdb is created. It is created by copying data from the current transporter database, and deleting application received dates, permit issued dates, deficiency dates, decal numbers and permit fee information. These deletions are performed by running queries designed for this purpose. These allows the permit reviewer to check off relevant data without having to duplicate data for the company and the vehicles that has not changed. When the new-year begins (July 1) the database name is changed from the format transporter2009.mdb to current transporter.mdb. In addition to tracking permitting and inspection data, this database is used to generate lists of permitted transporters for the web site allowing the public to find permitted waste transporters.

Current Fee Reporting Database (Access) - Transporters are required to collect the hazardous waste generator fee from transporters (currently 0.23 cents/lb or 19 cents/gallon) and submit the fee to the Department on a quarterly basis. Payment of the fee is recorded in a database named current fee reporting.mdb.

RCRA Compliance Program

Databases include information regarding enforcement actions generated by RIDEM/OC&I inspections and investigations, as well as significant routine environmental activities performed. The Office's electronic computer operator/data manager shall maintain all databases. The electronic computer operator/data manager will provide document accountability to the appropriate data users and to those who will use the data results to make decisions. At the conclusion of the environmental data gathering activities all documents will be cataloged, categorized, and have a unique identifier. The database will provide the name of the specific site, its location, reports which are completed, and status of the project (active, inactive, or closed).

5.4 Record Retention/Archives

Records retention is consistent with the Department's records retention schedule that can be found at the following link: <http://dem/intranet/recmgtindex.htm>

The OC&I has an approved record retention schedule. The program will use this retention schedule for the storage of documents. The OWM is currently undergoing review of its record retention schedule and will use the procedures in this schedule when it is finally approved by the Secretary of State's Office.

RIDEM/OC&I archives are catalogued for efficient file storage and retrieval using a computer database and are stored in the Foundry Basement.

6.0 Data Generation and Acquisition -

The primary data collected by the RCRA program is generated during site inspections of facilities that generate, transport, temporarily store or treat hazardous waste. The inspections are conducted in accordance with the Department's Administrative Inspections Guidelines (Attachment K) in order to evaluate a company's compliance with the Hazardous Waste Regulations. Prior to such an inspection RIDEM personnel will review records maintained by the Department including previous inspection reports, uniform hazardous waste manifests, analytical test results from previous waste analysis and other documentation. RIDEM personnel also research the company's compliance status listed on a federal database maintained by the USEPA. During an inspection RIDEM personnel collect information by interviewing company personnel, reviewing records and making observations during a physical walk through of the facility. RIDEM personnel also take photographs during the inspection to document instances of noncompliance.

While the primary data collected by RCRA program is acquired via interview and observation; there are certain occasions when staff determines it is necessary to collect samples of waste(s) generated by a company in order to confirm or determine the regulatory status of the waste(s). A Sampling and Analysis Plan (SAP) should be prepared for each site where environmental sample collection activities will take place. The SAP is a formal document that will define the proper procedures to be followed during the collection, identification and documentation of waste samples. The SAP should document the QA/QC goals and protocols for data collection activities to ensure that the data generated is of a quality commensurate with its intended use. This includes a sampling design for obtaining environmental data of sufficient quantity and quality to satisfy the project objectives.

Often the decision to collect samples is made during an inspection upon the discovery of uncharacterized or improperly managed waste after staff consult with a program supervisor. Such contemporaneous sampling events render the development of a written sampling and analysis plan counterproductive to the specific project objectives and goals. RCRA program staff will document the procedures followed during such an unplanned sampling event in their inspection report.

In these situations RCRA program staff will collect grab samples of the waste following the guidelines provided in section 6.1 below and the applicable sections of the SOPs contained in Appendix G.

6.1 Sampling Methods

The Standard Operating Procedures for sampling activities for the RCRA Program are listed in Table 6-1 and included as Attachment G. Under certain circumstances, as noted above, it may not be possible to follow these procedures exactly due to the occurrence of an unplanned sampling event, equipment limitations or site conditions. In general, the RCRA Program staff will follow these procedures to respond to an unplanned sampling event:

- The first step taken in the sampling process involves the determination of the type of the waste material or contaminated media that is to be sampled. This activity may involve the review of MSDS sheets, analytical profile data, waste manifests, product labels and other historical records. Inspectors will also interview employees of the company that is believed to have generated the waste in order to ascertain the nature and properties of the waste material.
- Site survey is typically the next step in the process and involves a visual survey of the area or location where the waste is stored or the contamination was discovered. This survey may be conducted via a site walk or if the hazards posed by the contamination require the survey may be done using binoculars or other remote sensing methods.
- Identification of sample media (e.g., soil, liquid, solids or semi-solid) is the next step conducted by the inspector in order to determine the proper type of sampling equipment to use for collecting the samples. During this step the inspector will also determine the proper analytical test methods to be run on the samples in order to achieve the data goals of the project so that the proper sample containers and preservatives are used during the sampling event.
- Determination of Sampling Method is the next step and involves the review of site conditions, safety hazards and data objectives in order to select the appropriate method. The general methods employed by inspectors include Judgmental, Random, Stratified-Random, Systematic or Systematic-Random Sampling. The method selection should include documenting the basis for the selection of a particular method. Typically, RCRA Program staff will use the Judgmental method due to its cost effectiveness and general time constraints involved with an unplanned sampling event.
- Selection of Personal Protective Equipment involves an evaluation of the hazards, both physical and chemical, posed by the site or location of the sampling event. Inspectors will review the site conditions, information gathered regarding the media to be sampled and any other factors that may affect their safety during the sampling event. Inspectors will also determine the proper decontamination procedures, if needed, to be followed during the completion of the sampling event.

- Once the sampling plan or approach has been developed, inspectors begin collecting the samples and label each sample container with a unique ID number, location of sample, date and time collected and other pertinent information. A sample log is completed during the event and either attached to the site inspection report or included as a section within the report. Samples are secured in a cooler, if available, and custody is maintained until the completion of the sampling event.
- At the conclusion of the sampling event, inspectors will decontaminate equipment, if required, and package any waste generated during the event in marked containers left onsite for the generator/owner to ship off for proper disposal. RCRA Program staff will also complete a Chain of Custody (COC) form detailing the required analytical test methods on the COC form. An example of a chain of custody form is located in Appendix F. The samples are transported directly to one of the contract laboratories listed on the State's Master Price Agreement and remitted for analysis. In the event that the samples can not be delivered to the lab on the date of collection custody will be maintained in a secure location until the samples are successfully delivered to the lab. RCRA Program staff will take steps to ensure compliance the hold time limits for specific analytical test methods.
- RCRA program staff will prepare a SAP or an inspection report detailing all of the steps and procedures followed above during the sampling event.

6.2 Sample Handling and Custody

The Standard Operating Procedures for sample handling and custody and other related environmental field activities for RIDEM SOPs are described above, listed in Appendix. Depending on circumstances and needs, it may not be possible or appropriate to follow these procedures exactly in all situations due to site conditions, equipment limitations, and limitations of the standard procedures. Whenever these procedures cannot be followed as written, they may be used as general guidance with any and all modifications fully documented in either the SAP or the final report of results

6.3 Analytical Methods

The Federal and State Hazardous Waste Regulations specify that test procedures used for solid waste characterization for the characteristics of ignitability, corrosivity and toxicity must follow the specific methodologies contained in USEPA SW-846, Test Methods for Evaluating Solid Waste, Edition II, or as updated in later editions of USEPA SW-846. The parameters for evaluating the characteristic of reactivity of a solid waste are contained in 40 CFR 261.23. The specific test method used for sample analysis must be listed according to reference and method number. Any modifications made to these methods by the laboratory must be noted and described in the analytical report.

[<http://www.epa.gov/SW-846/sw846.htm>]

6.4 Quality Control

Guidelines for QA/QC for field sampling activities are outlined in Appendix H. Procedures for data review and assessment are provided in Appendix I and are also listed in each laboratory's Quality Assurance Plan. In some cases the review and assessment of the analytical report associated with a specific sampling event may identify anomalies that require corrective actions. The general procedures to address significant anomalies that impact the project's DQOs are contained in Appendix I. Significant anomalies or deviations include, but are not limited to, the following:

- Samples submitted to laboratory are unable to be analyzed due to missing labels, broken bottles, damaged or missing custody seals, or insufficient sample volume;
- Elevated reporting limits or unusual change in reporting limits;
- Quality Control requirements for the project are not met.

If additional data collection is not possible, the usability of the available data will be discussed.

6.5 Instrument/Equipment Maintenance

Due to funding limitations the RCRA Program does not currently possess monitoring or field testing equipment that requires maintenance or calibration. Some staff members may have pH paper which if unused is discarded after its expiration date. As a result this section does not apply at this time.

6.6 Instrument/Equipment Calibration and Frequency

As noted in Section 6.5 above the RCRA Program does not have field testing or monitoring equipment and so this section does not apply at this time.

6.7 Non-Direct Measurements

Typical sampling procedures as mentioned above are used to characterize compliance with the RI regulations. Another useful tool used to document operations and processes while investigating complaints or conducting inspections is photographs. To this end, both programs have adopted a SOP concerning the use of digital photographs to ensure reliability of the photos for future program or enforcement uses.

In addition, the programs may rely on secondary data from sources, i.e. photocopies of generators reports, manifests, lab analysis, waste profile sheets and other technical information collected by the facilities.

6.8 Data Management -

Waste Facilities Management Section

Appendix J describes the standard operating procedures for the following forms of data:

- Transporter Quarterly Reports
- Hazardous Waste TSDF Manifest Data
- Combined Hazardous Waste Data
- Transporter Permit Data
- Hazardous Waste Biennial Report Data

RCRA Compliance Program

The primary method by which the RCRA Compliance Program collects data is through the hazardous waste generator inspection program. The generator inspection program is comprised of a series of targeted inspections of LQG and SQG and inspections conducted in response to citizen complaints received by RIDEM alleging mismanagement of hazardous waste. The data is collected by OC&I staff during site inspections and reduced to a hard copy inspection report. The reports

include the inspectors' observations, photographs taken during the inspection, copies of company records and findings regarding the company's compliance status. The hard copies of the reports containing this data along with a complaint data sheet (if applicable) are placed into a file folder and stored in file cabinets organized alphabetically by generator name and then by street address. The case files contain hard copies of all documents associated with the subject generator including any correspondence that is sent to the generator or received by RIDEM from the generator or from other sources. The subject files are stored in a secure section of OC&I and are maintained by RCRA Program staff.

When a company notifies the Department that it is no longer generating a regulated hazardous waste (e.g., business closed, processes changed, etc.) the hard copy file is archived and sent to the record storage room. Prior to archiving the file, RCRA Program staff review the file to ensure the generator identification number has been deactivated, the documents are in chronological order and all enforcement actions have been resolved. Staff then enters the generator information into a MS Access database which assigns a file box number to each file folder and then places the subject case file in the appropriate box in the storage room.

Data collected regarding generators is also entered into one Federal and several State databases which are used to track and maintain a history of generator compliance status. The Federal database is operated by the USEPA and RCRA Program staff enters inspection and enforcement data into this system via a secure internet portal. The Federal database, known as RCRA Info, is based on an Oracle platform and data is entered by RCRA Program staff on a case by case basis during routine processing of an enforcement case. RCRA Program staff also enters data into a State maintained and operated database in order to track individual generator's compliance with the Hazardous Waste Regulations. The State database currently in use by the RCRA Compliance Program is named the Inspection, Compliance & Enforcement (ICE) system. The ICE system is based on a FileNet platform and data is entered into the system by RCRA Compliance Program staff directly via an Intranet system. The ICE system is used to track the results of the generator inspection program for both targeted and complaint response inspections.

7.0 Assessment & Oversight

All non-routine reports and study plans generated by the OC&I/OWM shall be peer reviewed. The project manager shall consider all comments from reviewers. Appropriate changes/corrections shall be made and the entire document shall be resubmitted for peer review.

Assessments of the QAPP may take place periodically. Personnel responsible for performing field and laboratory activities are responsible for continually monitoring individual compliance with the QAPP and SAP. This includes review of field logbooks, sampling equipment calibration, chain of custody and sampling handling procedures. The SAP includes contact information for communicating field problems, which is part of field corrective action. The QA Manager reviews procedures, results and calculations to determine compliance with the QAPP and SAP. The results of this internal assessment are reported to the QA Coordinator with suggestions and/or recommended requirements for a plan to correct observed deficiencies.

Annually, the OC&I/OWM QA Coordinator submits the QA System Annual Program Self-Assessment to the Program Manager. A copy of the Self Assessment form can be found in

RIDEM's Quality Management Plan (<http://www.dem.ri.gov/pubs/qmp2005.pdf>). This self-assessment will be completed on an annual basis and tests the program use of this QAPP.

7.1 Assessment and Response Activities

Performance Evaluation

The programs do not usually perform large numbers of sampling. Most sampling is a result either of complaints or of a scheduled inspection of a regulated facility. Sampling is not a pre-planned activity and only occurs if conditions merit this activity. The first two bullets below will characterize data review. In the event there is a need for larger scale sampling that will be pre-planned, the four bullets below will be used for data assessment.

The project manager will review all routine data generated. Data review will include the following:

- **Completeness:** Were results received for all samples collected /documented on the Chain of Custody form, and were they analyzed by the appropriate method?
- **Accuracy/Bias:** Are the results of any trip or field blank below the reporting limit of the test? Are results of any surrogate spiking compounds within range?
- **Precision:** Were results of field duplicates within acceptable limits?
- **Sensitivity:** Was the sample quantization limit lower than the level of concern?

Additionally field notes, custody forms, and sample extraction and analysis dates will be reviewed the project manager to assure holding times and other standard procedures are met. A record of data quality review will be kept with the project file.

Data that is generated by a permitted facility usually consists of data that is generated on a routine basis. Since this data is a requirement of its permit, DEM will expect documentation to include the analysis of the type outlined in the four bullets above.

Internal Assessment

Personnel responsible for performing each duty are responsible for continually monitoring individual compliance with QAPP. The supervisor will periodically review procedures, results, and calculations to determine compliance with the QAPP. The results of this internal assessment are discussed with appropriate staff and supervisor with suggestions and/or recommended requirements for a plan to correct observed deficiencies.

External Evaluation

Personnel external to the RIDEM may review the field and laboratory activities. Such an assessment is an extremely valuable method for identifying overlooked problems. The result of the external assessment should be submitted to QA Manager with suggestions and requirements for a plan to correct observed deficiencies.

Annual Self-assessment

The project manager will conduct an annual review of the QAPP, and a review report will be sent to Program Manager and Department QA Officer.

Corrective Action

Corrective actions must be taken as soon as possible when data or field procedures are found to be of questionable quality. Any suspected problems should be brought to the attention of the Project Manager and QA Coordinator.

The need for corrective action may be identified in many ways. The steps in the corrective action are:

- Identification and definition of the problem;
- Investigation of the problem;
- Determination of the cause of the problem and appropriate corrective action;
- Implementation of the corrective action;
- Verification that the problem has been corrected;
- Modification of procedures, as necessary, to prevent recurrence; and
- Document the events.

7.2 Reports to Management

On an annual basis, the program will perform a self-assessment to evaluate the degree to which the goals of the QAPP have been achieved. The self-audit will identify areas where these goals have been achieved as well as those areas where changes are needed. Based on the self audit, a list of recommended remedial measures will be sent to the relevant Chief if necessary.

8.0 Data Review, Verification, Validation

8.1 Verification & Validation Methods

Unless an individual procedure is specified below, The RCRA Program follows RIDEM's *Summary Guidance for Reviewing Environmental Monitoring Data* (Standard Operating Procedure #-BEP-WR-1) when conducting data review, verification and validation activities at this time. The SOP #-BEP-WR-1 is included in Exhibit G of this QAPP. The RCRA Program intends to develop a data review SOP that is specific to its functions and practices and once completed will incorporate said SOP into the program's QAPP.

8.2 Data Usability

As stated earlier, the purpose of the RCRA Program is to monitor the activities of companies that generate, temporarily store, transport, treat and dispose of regulated hazardous waste in order to ensure compliance with the Hazardous Waste Regulations. The primary manner in which the RCRA Program completes the task is by conducting site inspections. RCRA Program staff collects data during the inspection regarding the company's compliance with management standards contained in the Hazardous Waste Regulations. The data, which may include photographs, copies of documents and analytical reports, collected by staff is incorporated into an inspection report that identifies areas of noncompliance with the Hazardous Waste Regulations. Managers in the RCRA Program review the reports prepared by staff and make determinations regarding the appropriate actions to be taken by the Department to ensure the subject company returns to or maintains compliance with the Hazardous Waste Regulations.

Corrective actions must be taken immediately when data collected in the field or analytical data are of questionable quality. These corrections may range from modifying certain procedures to conducting part of or the entire field investigation a second time to obtain useable data. The QA Manager or project manager shall notify the QA Coordinator of any suspected problems. A Corrective Action Plan shall be developed when necessary in cooperation with the QA Manager.

Corrective action procedures during field activities will be addressed in the QAPP, SAP or Field Investigation Report. These should include identification of the individual responsible for initiating the corrective action and the individual responsible for approving the corrective action, if necessary. The need for corrective action in the field may be identified by an internal assessment (Section 7.0) or by standard QC procedures. (Appendices G-I)

Inspection reports submitted to the program manager shall have all required fields completed or notations to indicate that a certain section does not apply to the subject project. Analytical data submitted to the program manager should include the results, a quality control section and explanation in the Narrative Summary. The program manager determines whether the quantity and quality of the data is acceptable using best professional judgment and standard QC procedures (Appendices G-I) Laboratories that conduct analytical testing on samples collected by the Department are listed in the Master Price Agreement and have individual quality assurance plans.

9.0 Implementation Requirements

All technical staff within the program will be required to complete the online training module in addition to being provided with a copy of the QAPP. In order to stay abreast of changes to the program, staff members will be selected as space and resources allow, attending yearly training provided by NEWMOA and USEPA. Any changes to the QAPP will be routinely discussed at staff meetings to inform staff and solicit input.

For new hires, or those transferring from other programs, the following training will be provided in addition to the measures above:

- Review of relevant RCRA training modules [current location is <http://www.epa.gov/epawaste/inforesources/pubs/hotline/rmods.htm>]
- On the job training including performing inspections with other staff members
- One or more staff members will be assigned to mentor the new member in reading and understand state and federal hazardous waste regulations.

10.0 List of Acronyms

CD	Compact Disc
CFR	Code of Federal Regulations
COC	Chain of Custody
DEM	Department of Environmental Management
DEM-AAD-00	Rules and Regulations for the Assessment of Administrative Penalties
DEM-DSR-01-93	RIDEM Remediation Regulations
DEM-OWM-HW-01-05	Hazardous Waste Regulations
DEM-OWM-UST-08-07	UST Regulations
DOA	Rhode Island Department of Administration
DOT	Department of Transportation
DQO	Data Quality Objectives
GIF	Graphic Interchange Format
GPS	Global Positioning System
IDL	Instrument Detection Limit
IWM	Integrated Waste Management
I Waste	
J	Estimate
JPEG	Joint Photographic Experts Group
LCL	Lower Control Limit
LQG	Large Quantity Generators
MDL	Minimum Detection Limit
MSDS	Material Data Safety Sheets
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NEWMOA	North East Waste Management Officials Organization
NFPA	National Fire Protection Association
OSHA	Occupational Safety and Health Administration
PAL	Project Action Limit
PNG	Portable Network Graphics
QA	Quality Assurance
QA/QC	Quality Assurance / Quality Control
QAPP	Quality Assurance Project Plan
R	Reject
R23-16.2A/LAB	RI Rules and Regulations for Certifying Analytical Laboratories
R Waste	
RCRA	Resource Conservation and Recovery Act
RPD	Relative Percent Difference
RIDEM OWM/WFMP	Rhode Island DEM Office of Waste Management, Waste Facilities Management Program
RIDEM OC&I	Rhode Island DEM Office of Compliance and Inspection
RIDEM OWM	Rhode Island DEM Office of Waste Management
RIGL	Rhode Island General Laws
SQG	Small Quantity Generators

SAP	Sampling and Analysis Plan
SOP	Standard Operating Procedure
TSDf	Treatment Storage and Disposal Facilities
UCL	Upper Control Limits
USEPA	United States Environmental Protection Agency
USEPA 815-R-05-004	USEPA Manual for the Certification of Laboratories Analyzing Drinking Water
USEPA SW-846	<u>Test Methods for Evaluating Solid Waste, Edition II</u>
WFP	Waste Facility Program (A section in the Office of Waste Management)
WWW	World Wide Web

11.0 References

Legislation

1. Rhode Island General Law 23-19.1 Hazardous Waste Management Act.
2. Rhode Island General Law 23-19.4 Septage, Industrial Wastes and Waste Oil Pumping, Cleaning and Transportation
3. Rhode Island General Laws 23.19.1
4. Rhode Island General Laws 23.18.9
5. Rhode Island Access to Public Records Act (RIGL §38-2-2)
6. State Archives statute (RIGL §42-8.1-17)
7. Rhode Island (RI) Laboratory Certification Program - Rhode Island Rules and Regulations for Certifying Analytical Laboratories (R23-16.2A/LAB), dated December 2005.

RIDEM Regulations

1. The Rules and Regulations for Hazardous Waste Management DEM-OWM-HW01-07 as amended (Hazardous Waste Regulations)
2. The Rules and Regulations for Hazardous Waste Management for generators of hazardous waste and facilities that store hazardous waste DEM-OWM-HW-01-05 as amended (Hazardous Waste Regulations). (<http://www.dem.ri.gov/pubs/regs/index.htm#WM>).
3. The Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases DEM-DSR-01-93 as amended (Remediation Regulations) - for releases of hazardous materials. (<http://www.dem.ri.gov/pubs/regs/index.htm#WM>).
4. The Oil Pollution Control Regulations- For above ground petroleum facility releases. (<http://www.dem.ri.gov/programs/benviron/compinsp/index.htm>)
5. The Regulations for Underground Storage Facilities Used for Petroleum Products and Hazardous Materials DEM-OWM-UST-08-07 (UST Regulations) as amended -
6. The Rules and Regulations for the Assessment of Administrative Penalties DEM-AAD-00 For the assessment of administrative penalties contained within formal enforcement actions.

EPA Regulations

1. Code of Federal Regulations Title 40 – Protection of Environment, Chapter I – Environmental Protection Agency, as amended. Code of Federal Regulations Title 40 – Protection of Environment, Chapter I – Environmental Protection Agency, as amended.

DEM Documents

1. Standard Operating Procedure for Developing QAPPs and SAPs (RIDEM SOP OD-QM-2)
2. RIDEM Digital Photograph Record Collection and Storage SOP (SOP-OD-QM-4)
3. DEM Records Management Policy May 25, 2004
4. DEM Quality Management Plan, December 3, 2007

USEPA Documents

1. USEPA Requirements for Quality Management Plans, March 2001, USEPA QA/R-2
2. USEPA Requirements for Quality Assurance Project Plans, March 2001, USEPA QA/R-5

3. USEPA Manual for the Certification of Laboratories Analyzing Drinking Water; USEPA 815-R-05-004, dated January 2005 - 40 CFR Part 136 (non-potable water) and 40 CFR Part 141 (potable water).
4. USEPA SW-846, Test Methods for Evaluating Solid Waste, Edition III B June 14, 2005
5. Standard Methods for the Examination of Water and Wastewater

Appendix A - QAPP Distribution List
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Appendix B -Job Descriptions

TITLE OF GROUP CLASSES: ENGINEERING TECHNICIAN III

TITLE OF CLASSES IN GROUP:

CONSTRUCTION & MAINTENANCE	02770801
MATERIALS	02770802
SURVEY IN TRAINING	02770803
ADMINISTRATIVE SERVICES	02770804
NATURAL RESOURCES	02770805
CONSTRUCTION RECORDS	02770806

Pay Grade: 23A
EO Code: C

CLASS DEFINITION

GENERAL STATEMENT OF DUTIES: Under supervision, to perform moderately complex engineering work in the area of specialization indicated by the title of the class of position; and, to do related work as required.

SUPERVISION RECEIVED: Works under the immediate of a civil engineer or engineering technician of higher rank, involving the exercise of some judgement in the application of the basic principles of engineering; work is reviewed in process and upon completion for results obtained.

SUPERVISION EXERCISED: Supervises the work of engineering technicians and/or other personnel assigned to assist.

ILLUSTRATIVE EXAMPLES OF WORK PERFORMED:

Under supervision, in the area of specialization indicated in the title of the class of position:

Construction and Maintenance:

On a public works construction or highway maintenance assignment, to assist in the inspection of all materials and workmanship going into the project; to furnish contractors with all lines, grades and elevations; to make weekly estimates of work accomplished; to submit reports as to progress of work and manner of performance; to submit final estimates for contract items; to assist in the inspection of the workmanship and practices of the contractors and/or state crews engaged in highway construction or maintenance projects; to supervise materials tests while work on projects is in process; to check the work of contractors or crews against plans specifications and to report immediately, findings contrary to such plans and specifications; and to supervise work of crews assigned to maintain highways; or to act as resident engineer on simple to moderately complex construction projects.

Materials:

To assist a civil engineer in exercising supervision over highway materials testing activities; to assist in locating and sampling test pits selected for materials survey; to take and test samples of aggregates, mixes, asphalt, steel and other materials used in highway or bridge construction; to prescribe asphalt and concrete mixes, when required; to prepare materials survey reports; to assist in the review of work by inspectors stationed at materials plants and construction projects; and to assist in materials research.

Surveyor-In-Training (S.I.T):

As a surveyor-in-training, to assist in the coordination and supervision of work of a field survey party performing all types of civil engineering surveys for the location, construction and reconstruction of state highways and bridges; and to perform complex technical survey work.

Administrative Services:

To assist in supervising the preparation of contracts and specifications for preliminary engineering, construction, reconstruction and maintenance of state highways and bridges; to assure compliance with all federal and state regulations; to monitor all preliminary engineering contracts, and to assist in the instruction of personnel in construction procedures; to prepare quantity computations and cost estimates for all contracts, and to assist in the updating of the Secondary Road Plan; to review and verify final quantities used in various construction projects in the transportation area, ensuring that all work accomplished is in conformance with state specifications and federal requirements.

Natural Resources:

To perform simple and routine engineering functions and to assist in the planning and supervision of technical engineering work related to the development, construction and maintenance of state parks, recreation areas, structures and grounds as part of the Green Acres Program; to assist a professional engineer, or an engineering technician of a higher classification, in planning and constructing of roads, water systems, building and related structures; to assist in the conduct of surveys and in the preparation of surveys and in the preparation of topographical maps and wetlands project evaluations.

Construction Records:

To provide technical computer support and perform record keeping tasks within the state's road and bridge construction program; to install the state's road and bridge construction program; to install appropriate personal computer software applications for new construction projects and render assistance in the resolution of any record keeping problems as they relate to individual projects; to provide computer orientation and training to new employees, and update existing employees on revisions and/or the implementation of new procedures and practices; to monitor problems and recommend program revisions to correct those problems that too frequently occur; to utilize standardized computer software applications in order to set up, input and maintain all recordkeeping documentation for bridge and/or road construction projects; to ensure that computerized records are maintained consistent with the Procedures of Uniform Record Keeping (PURK); to enter into a personal computer daily item slips and back-up for work performed by contractors; to consolidate vital specific project data, and prepare reports thereon related to item ledger sheets, other project worksheets, materials reports, and time sheets for projects; to enter via use of a personal computer the specific data as it relates to the appropriate category; to assist in the preparation of and to enter Reports of Change, contract agenda, bi-weekly progress payments, correspondence, updates, and other information related to the project; to maintain accountability of all phases of construction activity through the utilization of a computerized record keeping system; to utilize established practices and procedures resulting in the finalization of the record keeping process for the project, upon project completion.

To do related work as required.

REQUIRED QUALIFICATIONS FOR APPOINTMENT:

KNOWLEDGES, SKILLS AND CAPACITIES: A working knowledge of and the ability to apply the basic principles of civil engineering applicable to the area of specialization indicated in the title of the class of position; as a surveyor-in-training, must possess a S.I.T. certificate from the R.I. Board of Registration for Land Surveyors; a working knowledge of the kinds of basic materials, elements or products of the area of specialization indicated in the title of the class of position; a working knowledge of, and the ability to apply the basic principles of the system of measurements applicable to the area of specialization indicated in the title of the class of position; a working knowledge of the equipment, (to include on-line data terminals), instruments, techniques and procedures applicable to the area of specialization indicated in the title of the class of position; a working knowledge of the procedures, rules,

guidelines and standards in the area of specialization indicated in the title of the class of position; the ability to read and interpret technical specifications and engineering plans, maps and drawings; the ability to supervise the work of engineering technicians and others engaged in either design and/or construction or maintenance, or materials testing; and related capacities and abilities.

EDUCATION AND EXPERIENCE:

Education: Such as may have been gained through: completion of a technical institute curriculum accredited by the Engineer's Council for Professional Development, or completion of two years of study in an accredited college including the successful completion of courses in algebra, geometry, trigonometry, and highway and/or structural drafting; and

Experience: Such as may have been gained through: employment as an engineering technician in a public agency or in private industry which has provided some experience in an area of specialization indicated in the title of the class of position.

Or, any combination of education and experience that shall be substantially equivalent to the above education and experience.

Class revised: July 4, 1999

Editorial Review: 3/15/03

CLASS TITLE:

SANITARY ENGINEER

Class Code: 02900200

Pay Grade: 27A

EO Code: B

CLASS DEFINITION:

GENERAL STATEMENT OF DUTIES: To assist a superior by performing the less complex engineering tasks in the field of sanitary engineering; and to do related work as required.

SUPERVISION RECEIVED: Works under the general supervision of a superior from whom general and specific work assignments and instructions are received with some latitude for the exercise of independent judgement; work is reviewed in process and upon completion for application of accepted sanitary engineering methods and techniques.

SUPERVISION EXERCISED: As assigned, may supervise the work of others engaged in making sanitary inspections.

ILLUSTRATIVE EXAMPLES OF WORK PERFORMED:

To assist in the promotion of the establishment of safe drinking water supplies and make periodic determinations of the sanitary quality of all public water supplies; when requested, to determine the sanitary quality of private and industrial water supplies.

To make surveys for certification to the appropriate federal agency of the sanitary quality of all water supplies and the sanitation of all watering points used by interstate carriers.

In a program for the control of stream, lake, and tidal water pollution; to make field surveys to determine the degree of pollution, including the collection of physical data and the making of chemical determinations in the field; to make laboratory examinations of samples of water, sewage, and industrial waste; to make field surveys of the sources of pollution and their magnitude; to analyze the survey data and to assist in the planning of the highest future sanitary condition of the waters of the State that can be feasibly attained; to assist in determining the sewage and industrial waste treatment facility projects needed to achieve the planned condition.

To assist in determining the sanitary condition of shellfish grounds and, on the basis of such determinations, to assist in the regulating of the taking of shellfish therefrom.

To assist in the study and in the preparation of reports on the engineering plans of private, municipal, and industrial waste treatment systems essential to the prevention of water pollution; to assist in the study and preparation of reports on engineering plans for private, municipal, or industrial sewage disposal systems not essential to the prevention of water pollution, but necessary to avoid the establishment of unsanitary or unhealthful conditions.

To make surveys and determinations of the sanitary quality of the waters of all bathing areas and to assist in the control of other phases of environmental sanitation.

To assist in the preparation of engineering testimony for presentation at hearings to substantiate the charge of pollution as defined by law.

To assist a superior in the examination of engineering reports, concerning proposed sewage and industrial waste treatment plants, water treatment plants, swimming pools, submitted for approval by engineers and architects retained or employed by municipalities, industries, or private individuals.

To perform other engineering tasks involved in the less complex problems in sanitary engineering.

To do related work as required.

REQUIRED QUALIFICATIONS FOR APPOINTMENT:

KNOWLEDGES, SKILLS AND CAPACITIES: A working knowledge of the principles and practices of sanitary engineering as it relates to water supplies and purification, sewage and industrial waste treatment, and stream pollution control; a working knowledge of bacteriology and chemistry as they apply to public health problems involving water, sewage, and industrial waste; the ability to read and interpret the less complex engineering plans and specifications, particularly those relating to water purification, industrial waste, and sewage treatment and disposal facilities; the ability to make sanitary engineering field investigations; and related capacities and abilities.

EDUCATION AND EXPERIENCE:

Education: Such as may have been gained through: graduation from a college of recognized standing with specialization in either Sanitary Engineering, Civil Engineering with a sanitary option or Chemical Engineering.

Or, any combination of education and experience that shall be substantially equivalent to the above education and experience.

SPECIAL REQUIREMENT: At the time certification must possess at least an Engineer-in-Training certificate of registration issued by the Rhode Island State Board of Registration for Professional Engineers and Land Surveyors and must maintain such registration as a condition of employment.

Class Revised: December 22, 1985

Editorial Review: 3/15/03

CLASS TITLE: PRINCIPAL SANITARY ENGINEER

Class Code: 02900400
Pay Grade: 33A
EO: B

CLASS DEFINITION:

GENERAL STATEMENT OF DUTIES: To be responsible for the supervision, direction and administration of an assigned section within the sanitary engineering program; to perform professional engineering work within the section involving the most difficult and complex problems in sanitary engineering; and to do related work as required.

SUPERVISION RECEIVED: Works under the general supervision of the Division Chief with wide latitude for the exercise of initiative and independent judgement; work is subject to review through consultations and submitted reports for conformance to established policies and objectives and accepted sanitary engineering methods and techniques.

SUPERVISION EXERCISED: Plans, assigns, supervises and reviews the work of a professional, sub-professional, technical and clerical staff within an assigned section.

ILLUSTRATIVE EXAMPLES OF WORK PERFORMED:

To be responsible for the supervision, direction and administration of an assigned section within the sanitary engineering program; to perform professional engineering work within the section involving the most difficult and complex problems in sanitary engineering.

As assigned, to supervise and administer a variety of sanitary engineering programs of domestic waste disposal, and involving such activities as: reviewing results of soil percolation tests and water table determinations to evaluate the suitability of the soil for sewage disposal and submitting recommendations to proper authorities relative to such waste disposal systems; inspecting waste water treatment plants to evaluate their efficiency and to make recommendations to proper authorities for their improvement; making engineering reviews of detailed plans and specifications prepared by consulting engineers of proposed wastewater treatment plant facilities and to make recommendations for revision in the design of such facilities to improve their effectiveness and reliability of performance; and conferring with local town or city officials involving problems of pollution abatement; or,

As assigned, to supervise and administer a sanitary engineering program of industrial wastes, water quality, and oil spillage and pollution control, and involving such activities as: reviewing plans and specifications of industrial waste disposal systems and conferring with designing engineers regarding required modifications, inspecting approved systems under construction and checking the efficiency of such systems, and soliciting industries causing water pollution to adopt adequate means of wastewater treatment; organizing and supervising water quality studies and surveys of state waters and making recommendations of changes in water quality classifications; and supervising the conduct of periodic inspections of oil carrying vessels and terminals transferring petroleum products to determine that transfer procedures comply with state rules and regulations; or,

As assigned, to supervise and administer a sanitary engineering program to maintain the safety of public and private drinking water supplies and public swimming pools, and involving such activities as: investigating the source of public drinking water supplies, the adequacy of treatment provided, hazards of the distribution system and the potability of the water as supplied to the consumer; consulting with and advising city and town officials, industry representatives, state agencies, institutions and the general public on matters pertaining to source, treatment and distribution of drinking water; reviewing plans and specifications of proposed water treatment plants and alterations to existing water treatment plants; making surveys of watersheds of public drinking water supplies; evaluating, in terms of sanitary quality, the results of physical, chemical and bacteriological tests of water samples taken from public and private

drinking water supplies; reviewing plans and specifications of proposed swimming pools or alterations to existing pools; or,

As assigned, to supervise and administer any other similar sanitary engineering program in an assigned section of responsibility within the Division.

To perform professional engineering work within the section involving the most difficult and complex problems in sanitary engineering.

To do related work as required.

REQUIRED QUALIFICATIONS FOR APPOINTMENT:

KNOWLEDGES, SKILLS AND CAPACITIES: A thorough knowledge of the principles, practices and techniques of sanitary engineering and the ability to apply such knowledge in the supervision and administration of an assigned sanitary engineering program; a working knowledge of Bacteriology and Chemistry as they apply to water supply and pollution control; the ability to plan, assign, supervise and review the work of a professional, sub-professional, technical and clerical staff within an assigned section; the ability to perform the most difficult and complex problems in sanitary engineering; the ability to read and interpret complex engineering plans and specifications; the ability to provide consultation and advice to local planning boards, federal and state agencies, municipal and town officials, and representatives of industry regarding various problems of sanitary engineering; and related capacities and abilities.

EDUCATION AND EXPERIENCE:

Education: Such as may have been gained through: graduation from a college of recognized standing with specialization in Sanitary Engineering, Chemical Engineering, or Civil Engineering with a sanitary option; and advanced study at the graduate level, in Sanitary Engineering, or Civil Engineering with a sanitary option; and advanced study at the graduate level, in Sanitary Engineering or Public Health Engineering; and

Experience: Such as may have been gained through: employment in a responsible supervisory position in the field of Sanitary Engineering involving sewage and industrial waste detection and treatment, water supply and purification, or the detection and control of water pollution.

Or, any combination of education and experience that shall be substantially equivalent to the above education and experience.

SPECIAL REQUIREMENT: At the time of certification must possess an Engineer-in-Training certificate of registration issued by the Rhode Island Board of Registration for Professional Engineers and Land Surveyors and must maintain such certification as a condition of employment.

Class Revised: July 5, 1987

Editorial Review: 3/15/2003

**CLASS TITLE: SUPERVISING SANITARY ENGINEER
(DEM)**

**Class Code: 02900500
Pay Grade: 35A
EO: B**

CLASS DEFINITION:

GENERAL STATEMENT OF DUTIES: To assist in the coordination and administration of state-wide engineering programs involving water pollution control; land development regulation and air pollution control; and to do related work as required.

SUPERVISION RECEIVED: Works under the administrative direction of the Assistant Director for Regulation or a Division Chief with considerable latitude for the exercise of independent judgement in technical and administrative matters; work is reviewed for the application of accepted professional principles, methods and techniques, and for conformance to laws, rules and regulations.

SUPERVISION EXERCISED: Plans, organizes, reviews and evaluates the work of professional, technical, clerical and other personnel.

ILLUSTRATIVE EXAMPLES OF WORK PERFORMED:

To be responsible for the coordination of the state-wide engineering programs involving water pollution control, air pollution control, solid waste disposal, hazardous waste disposal and subsurface sewage disposal with other programs within the Department of Environment Management and with the Department of Health.

To assist in the administration of the Federal and State construction grants programs for public wastewater treatment systems.

To assist in the review and approval of plans and specifications of industrial waste disposal systems.

To confer with design engineers regarding recommended modifications in planned systems.

To assist in enforcing State water pollution control statutes.

To assist in the supervision of periodic inspections of oil carrying vessels and petroleum transfer terminals.

To review and make recommendations regarding the adequacy of Federal and State laws, rules and regulations.

To supervise the engineering review of detailed plans and specifications for the construction of wastewater treatment facilities, and to make recommendations for revisions where appropriate.

As required, to attend public meetings and scientific conferences for the Department.

To represent the Assistant Director or Division Chief, when requested.

To prepare various correspondence and reports regarding the department's environmental regulation programs.

To do related work as required.

REQUIRED QUALIFICATIONS FOR APPOINTMENT:

KNOWLEDGES, SKILLS AND CAPACITIES: A thorough knowledge of the principles, practices and techniques of environmental engineering, and the ability to apply such knowledge in the administration and maintenance of the several state-wide engineering programs; the ability to read and interpret all types of civil engineering plans and specifications, and to approve or reject proposed changes therein; the ability to plan, organize, review and evaluate the work of a staff of professional, technical, clerical and other personnel; the ability to establish and maintain effective working relationships with associates, federal, state, local agencies, community organizations, private business enterprises and the public; the ability to prepare written and oral reports; the ability to assist in a public information program; and related capacities and abilities.

EDUCATION AND EXPERIENCE:

Education: Such as may have been gained through: possession of a Master's Degree in Sanitary Engineering, Public Health, Environmental Health or a related field; and

Experience: Such as may have been gained through: employment in a responsible administrative position involving Federal and State programs in Sanitary Engineering, Environmental Sanitation, or an Allied Field or Public Health.

Or, any combination of education and experience that shall be substantially equivalent to the above education and experience.

SPECIAL REQUIREMENT: At the time of appointment, must possess a certificate of a Registered Professional Engineer issued by the Rhode Island State Board of Registration for Professional Engineers and Land Surveyors and must maintain such certification as a condition of employment.

Class Revised: December 22, 1985

Editorial Review: 3/15/2003

**CLASS TITLE: CHIEF OF WASTE MANAGEMENT
(DEM)**

**Class Code: 02516700
Pay Grade: 38A
EO: A**

CLASS DEFINITION:

GENERAL STATEMENT OF DUTIES: To plan and administer a statewide program to preserve, protect and improve the land resources of the state so as to promote the public health, welfare and safety, prevent injury or detriment to human, plant and animal life, physical property and other resources and to foster the comfort and convenience of the state's inhabitants; to administer the DEM solid waste control program; to formulate and administer a comprehensive program for the control of hazardous wastes and remediation of sites contaminated with hazardous materials; and to do related work as required.

SUPERVISION RECEIVED: Works under the broad direction of the Associate Director for Environment Protection (DEM) with wide latitude for the exercise of independent judgement and reviewed and evaluated through periodic reports and conferences and conformance to laws, rules and regulations, and departmental policies and objectives.

SUPERVISION EXERCISED: Plans, organizes, coordinates, supervises, and evaluates the work of a professional, technical, sub-professional and others engaged in the program.

ILLUSTRATIVE EXAMPLES OF WORK PERFORMED:

To plan and administer a statewide program to preserve, protect, and improve the land resources of the state so as to promote the public health, welfare and safety, prevent injury or detriment to human, plant, and animal life, physical property and other resources and to foster the comfort and convenience of the state's inhabitants.

To plan and administer a program associated with the restoration of sites contaminated with hazardous materials.

To cooperate in research on the identification and effects of land and groundwater contamination.

To study data resulting from laboratory examinations of soil and water sampling taken in areas revealing the presence of a high percentage of one or more contaminants, and plan and direct surveys to determine the proper remediation of such contaminants.

To be responsible for drafting and implementation of office programs.

To conduct regulation hearings and make recommendations to the Associate Director for promulgation to charge parties or officials with specific violations of state laws and regulations, and suggest proper measures be taken to rectify problems causing violations.

To confer with federal officials and neighboring state officials to implement and coordinate programs relating to oil spill reductions and hazardous waste disposal site remediation.

To work with the US Coast Guard and US EPA respectively on oil spill prevention and Superfund site cleanups.

To direct a public information program addressing the remediation of sites contaminated with hazardous materials.

To propose legislation and prepare testimony for legislative hearings concerning subjects under the jurisdiction of the office.

To prepare the annual budget for the office including federal grant proposals.

To represent the department on statewide boards or commissions in related areas of expertise.

To do related work as required.

REQUIRED QUALIFICATIONS FOR APPOINTMENT:

KNOWLEDGES, SKILLS AND CAPACITIES: A thorough knowledge of the principles and practices employed to preserve, protect and improve the land resources of the state; a thorough knowledge of the state laws and regulations as they relate to water pollution and solid and hazardous waste management, and the ability to interpret and apply such laws; the ability to testify as a witness in legal proceedings against violators of state laws and regulations; the ability to make recommendations of a technical nature for the institution of remedial action where illegal disposal is found; the ability to establish and maintain effective working relations with federal, state and local officials; the ability to plan, organize, supervise and review the work of professional and sub-professional personnel engaged in said program; the ability to effectively communicate in public the importance of the protection of water and land resources; and related capacities and abilities.

EDUCATION AND EXPERIENCE:

Education: Such as may have been gained through: graduation from a college of recognized standing with specialization in environmental engineering, chemical engineering or chemistry; and advanced study at the graduate level in sanitary or environmental engineering; and

Experience: Such as may have been gained through: employment in a responsible supervisory position in the field of environmental engineering with special emphasis on groundwater protection, solid waste management or hazardous waste management. Or, any combination of education and experience that shall substantially equivalent to the above education and experience.

SPECIAL REQUIREMENTS: At the time of appointment, must possess a certificate of Registered Professional Engineer issued by the Rhode Island State Board of Registration for Professional Engineers and must maintain such certificates as a condition of employment.

Class Revised: September 27, 1998

Editorial Review: 3-15-2003

CLASS TITLE: PRINCIPAL ENVIRONMENTAL SCIENTIST

Class Code: 02511400

Pay Grade: 32A

EO: B

CLASS DEFINITION:

GENERAL STATEMENT OF DUTIES: To perform the most complex and professional work related to environmental management and protection; to be responsible for and supervise studies or programs, special projects and phases of major projects; to provide direction, advice, assistance, and consultation on specialized scientific programs and problems; and to do related work as required.

SUPERVISION RECEIVED: Works under the direction of a superior with wide latitude for exercising initiative and independent judgement.

SUPERVISION EXERCISED: Plans, coordinates, reviews and evaluates the work of professional, technical, and clerical personnel.

ILLUSTRATIVE EXAMPLES OF WORK PERFORMED:

To perform the most complex and professional work related to environmental management and protection; to be responsible for and supervise studies or programs, special projects and phase of major projects; to provide direction, advice, assistance, and consultation on specialized scientific programs and problems.

To develop and organize new environmental protection programs.

To assist in the formulation of legislation implementing established Department policy and as requested, to review and comment on proposed legislation.

To provide direction, advice, assistance, and consultation on specialized scientific programs and problems.

To prepare statements of short, intermediate, and long-term goals necessary to improve or preserve the environment.

To develop basic conceptual plans from which courses of action may be derived to manage the environment and solve problems.

To keep abreast of developments pertaining to the improvement and preservation of the environment, keep current with trends of thought, literature, and new developments in ecology and environmental protection.

To develop proposals for submission to federal agencies for funding.

To assign, instruct, and supervise the work of other staff.

To provide determination of priority and policy problems.

To serve as a liaison between the Department and federal, state, and other establishments, organizations and agencies; to represent the Department in meetings with federal, state, regional, and local environmental agencies.

As required, to prepare and deliver general and technical papers at lay and scientific meetings and conferences.

To serve as project coordinator on special environmental projects which may develop.

To review research proposals and recommend necessary courses of action.

To draft technical and other correspondence in the course of official duties.

To prepare and direct the preparation of clear, technically sound scientifically accurate and comprehensive reports of environmental problems and ecological matters containing findings, conclusions, and recommendations.

To establish and supervise the maintenance of essential records and files.

To do related work as required.

REQUIRED QUALIFICATIONS FOR APPOINTMENT:

KNOWLEDGES, SKILLS AND CAPACITIES: A thorough knowledge of the principles, practices, procedures, and technology of the scientific field of concern; a thorough knowledge of the methods and techniques required in order to coordinate a program of environmental management or regulation; a thorough knowledge of the federal and state environmental laws and regulations; the ability to analyze, interpret and apply laws, rules and regulations; the ability to organize scientific work, analyze environmental pollution and protection problems and develop appropriate methods for their alleviation; the ability to develop and organize work programs and oversee their accomplishment; the ability to assign, supervise, and coordinate the activities of highly qualified specialists in a variety of scientific and engineering disciplines; the ability to analyze and interpret highly technical reports and scientific documents related to the environment; the ability to prepare scientifically sound papers, proposals, and technical correspondence; the ability to direct the maintenance of essential records and files; the ability to understand and carry out complex oral and written instructions; the ability to establish and maintain effective working relationships with federal, state, local, private and public agencies and organizations; and related capacities and abilities.

EDUCATION AND EXPERIENCE:

Education: Such as may have been gained through: possession of a Masters Degree in one of the Physical, Biological or Environmental Sciences, Environmental Engineering, or a closely related field; and

Experience: Such as may have been gained through: considerable employment in a responsible supervisory position involving the performance of complex professional work in the field of environmental regulation.

Or, any combination of education and experience that shall be substantially equivalent to the above education and experience.

Class Created: April 26, 1987

Editorial Review: 3-15-2003

CLASS TITLE: SENIOR ENVIRONMENTAL SCIENTIST

Class Code: 02511300
Pay Grade: 30A
EO: B

CLASS DEFINITION:

GENERAL STATEMENT OF DUTIES: To perform complex tasks related to environmental management and protection; as assigned, to be responsible for special projects and phases of major projects; and to do related work as required.

SUPERVISION RECEIVED: Works under the general supervision of a superior from whom instructions are received as to objectives, methods, and processes with latitude for the exercise of initiative and independent judgement.

SUPERVISION EXERCISED: Supervises and reviews the activities of professional, technical, and clerical personnel.

ILLUSTRATIVE EXAMPLES OF WORK PERFORMED:

To perform complex tasks related to environmental management and protection; as assigned, to be responsible for special projects and phases of major projects.

To assist in assigned scientific projects and programs in the field of environmental protection and may be charged with the responsibility for an assigned phase of such activity, ranging from development to implementation.

To coordinate various environmental activities within the Department and its component units.

As required, to assist in preparing project proposals for federal funds and in monitoring contracts.

To provide scientific advice and assistance when environmental problems arise.

To prepare technical correspondence in the course of official duties.

To review and evaluate the probable effect of proposed legislation concerning the environment.

To research, collect, and analyze data, formulate proposals, detail action programs, make cost estimates, and identify legislative and other implementing requirements.

To prepare technical scientific reports and other documents containing findings, conclusions, and recommendations about environmental and ecological matters.

To review materials such as permit applications, technical reports, and environmental impact statements for technical adequacy, subject matter coverage and conformance to policies and regulations and make recommendations for acceptance, modification or disapproval.

To keep current with trends through, literature, and new developments in environmental management and protection.

To maintain essential records and files.

To represent the Department at meetings and conferences dealing with environmental problems or policies.

To serve as project coordinator on special environmental projects which may develop.

To assist in reviewing research proposals initiated by outsiders.

To work closely with cooperating agencies, committees, and interested groups in carrying out various activities.

To do related work as required.

REQUIRED QUALIFICATIONS FOR APPOINTMENT:

KNOWLEDGES, SKILLS AND CAPACITIES: A thorough knowledge of basic principles, practices, procedures, and technology of the scientific field of concern; the ability to undertake studies

encompassing a complete phase of a major project, a special project, or division program in environmental management and protection; a working knowledge of the federal and state environmental laws and regulations; the ability to organize scientific work, analyze environmental pollution and protection problems and develop appropriate methods for their alleviation; the ability to review and interpret technical and scientific materials; the ability to prepare scientifically accurate proposals, papers, and informational reports; the ability to prepare technical correspondence; the ability to maintain essential records and files; the ability to understand and carry out complex oral and written instructions; the ability to maintain effective working relationships with federal, state, local, private, and public agencies and organizations; and related capacities and abilities.

EDUCATION AND EXPERIENCE:

Education: Such as may have been gained through: possession of a Masters Degree with specialization in one of the physical, biological or environmental sciences, environmental engineering, or in a closely related field; and

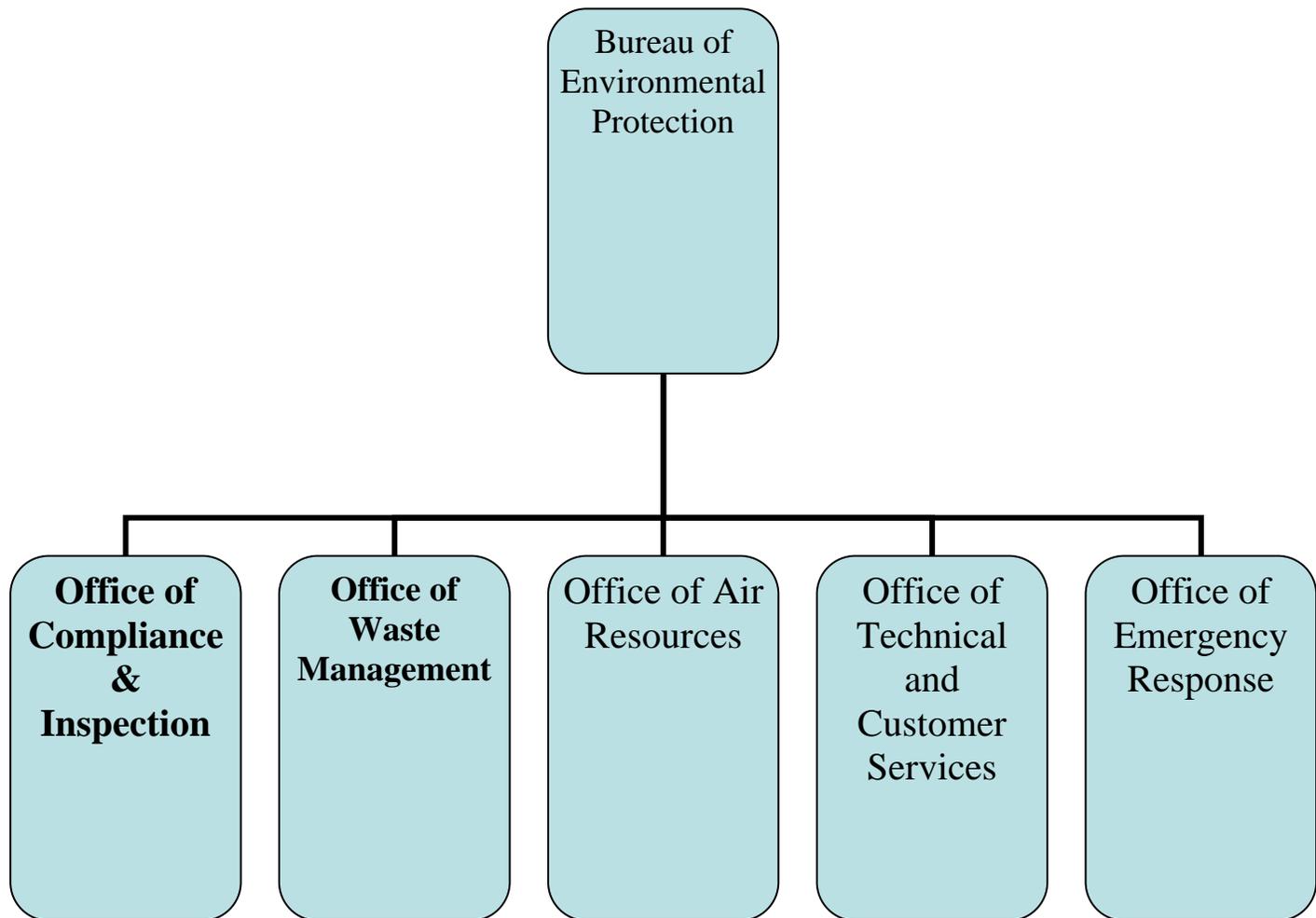
Experience: Such as may have been gained through: considerable employment in a responsible position involving the performance of professional work in the environmental field.

Or, any combination of education and experience that shall be substantially equivalent to the above education and experience.

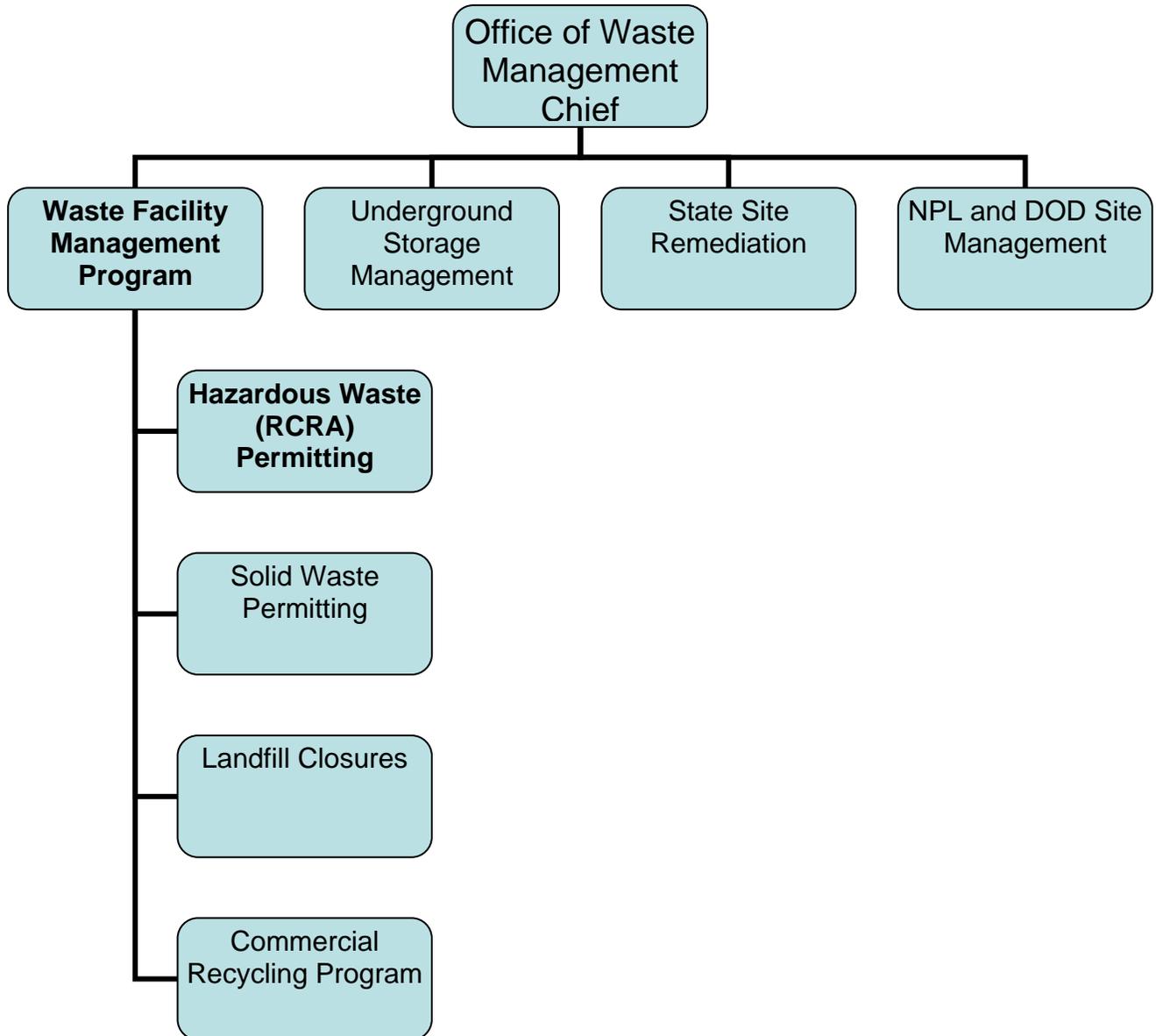
Class Created: April 26, 1987

Editorial Review: 3-15-2003

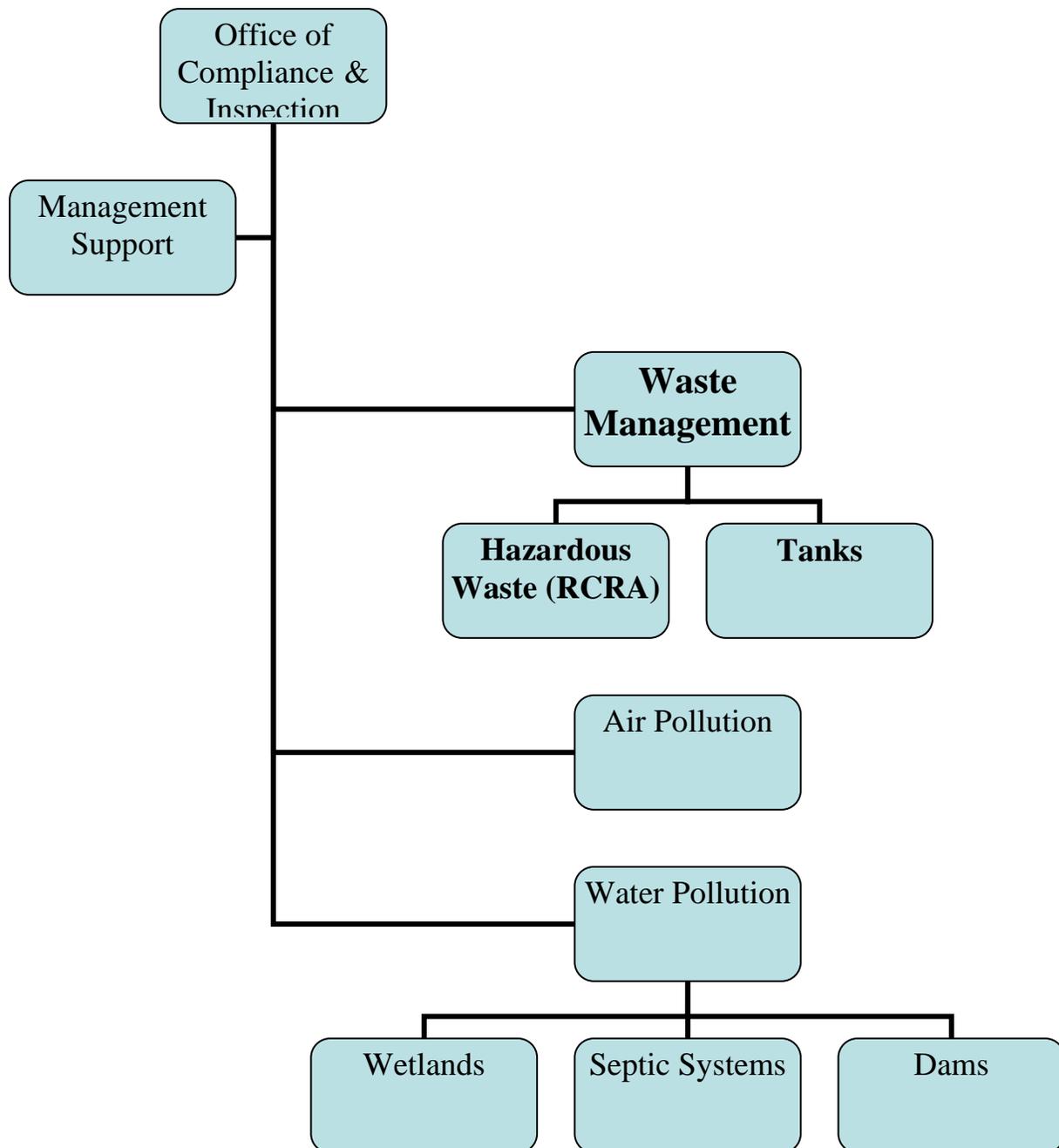
Appendix C -1 - DEM Bureau of Environmental Protection Organizational Chart



Appendix C -2 Office of Waste Management Organizational Chart



Appendix C -3 Office of Compliance and Inspection Organizational Chart



Appendix D1 - Inspection Checklist Hazardous Waste Treatment and Storage Facility

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF WASTE MANAGEMENT

HAZARDOUS WASTE TREATMENT AND STORAGE FACILITY INSPECTION CHECKLIST

PRE-INSPECTION

Company Name _____ Contact _____

Location _____ Title _____

_____ Telephone # _____

EPA ID No. _____ Permit Granted ? Yes ____ No ____

Date _____

Proper Manifest copies being submitted? Yes ____ No ____ (9.10)

Any re-occurring mistakes on manifests? Yes ____ No ____ (9.10)

Only authorized agents signing manifests? Yes ____ No ____ (9.15)

Any manifests discrepancy reports received? Yes ____ No ____ (9.11)

Any notices of foreign shipment? Yes ____ No ____ (9.01) (a)

Annual/Biennial reports receive? Yes ____ No ____ (9.14)

Any Notification of contingency plan implementation? Yes ____ No ____ (9.09)

Has company been inspected before? Yes ____ No ____

If yes, date? _____

Is this inspection the result of a compliant? Yes ____ No ____

If yes, Compliant No. _____ Nature of compliant _____

Waste type (s) facility is permitted to treat and/or store, and how _____

Enforcement actions? Yes _____ No _____ If yes, date(s) and type(s) _____

Outstanding violations _____

Special permit conditions? Yes _____ No _____ If yes, outline _____

Groundwater monitoring waiver granted? Yes _____ No _____, or is request pending?
Yes _____ No _____ (9.03)

Waste Analysis Yes _____ No _____ (8.04i)
Groundwater Monitoring Yes _____ No _____ (8.04 g)
Inspection Schedule Yes _____ No _____ (8.04k)
Preparedness and Prevention Yes _____ No _____ (8.04l)
Contingency Yes _____ No _____ (8.04m)
Training Yes _____ No _____ (8.04q)
Closure Yes _____ No _____ (8.04r)
Financial Yes _____ No _____ (8.04t)
Have local emergency authorities been contacted? Yes _____ No _____ (9.08,265.37)

ON – SITE CONFERENCE AND RECORD REVIEW

Was Company called before? Yes _____ No _____

Date _____ Inspector (s) _____

Present for Company _____

Does facility have notices to generators on file? Yes _____ No _____ (9.01b)

Is the waste analysis plan available? Yes _____ No _____ (9.02) (264.13)

Are all results on file? Yes _____ No _____ (9.02)

Is the plan being followed? Yes _____ No _____ (9.02)

Is the groundwater monitoring plan available? Yes _____ No _____ (9.03) or waived? _____

Are all results on file? Yes _____ No _____ (9.03)

Is the plan being followed? Yes _____ No _____ (9.03)

Is the inspection schedule available? Yes _____ No _____ (9.05) (264.15)

Is the log up to date? Yes _____ No _____ (9.05)

Is the schedule being followed? Yes _____ No _____ (9.05)

Is the personnel training plan available? Yes _____ No _____ (9.05)

Job titles/description/employees Yes _____ No _____ (9.06)

Training records Yes _____ No _____ (9.06)

Date of last training/review? Yes _____ No _____ (9.06)

Do personnel seem aware of procedures? Yes _____ No _____ (9.06)

Is the contingency plan available? Yes _____ No _____ (9.09) (264 Subpart D)

Any incidents? Yes _____ No _____ If yes, explain _____

Are manifests being properly maintained? Yes _____ No _____ (9.10) If no,
 Type of problem _____

Is the operating record available? Yes _____ No _____ (9.12) (264.73)

Description and quantity of waste, etc? Yes _____ No _____ (9.12)

Closure plan on-site? Yes _____ No _____ (9.12, 9.16)

Current closure cost estimate? Yes _____ No _____ (9.12, 9.17)

Financial assurance mechanism in-place? Yes _____ No _____ (9.17)
 (264 Subpart H)

and up to date? Yes _____ No _____ (9.17)

Insurance policy up-to-date? Yes _____ No _____ (9.17)

Is emergency equipment (sprinklers, extinguishers) being inspected, maintained? Yes _____ No _____ (9.08) (264.33)

Were all records available? Yes _____ No _____ (9.13)

OPERATING STANDARDS

- Security – 24-hour surveillance (264.14) Yes _____ No _____ (9.04) , or
 Artificial or natural barrier? Yes _____ No _____ (9.04) , and
 Means to control entry? Yes _____ No _____ (9.04) , and
 Warning signs posted? Yes _____ No _____ (9.04)
- Ignitable, reactive, or incompatible wastes? Yes _____ No _____ If yes,
 (264.17)
- Protected from ignition or reaction Yes _____ No _____ (9.07)
 sources?
- “No Smoking” signs posted? Yes _____ No _____ (9.07)
- Compliance with NFPA regulations? Yes _____ No _____ (Refer to recent fire authority
 inspections; you may have to request one)
- Preparedness and Prevention (9.08) (264 Subpart C)
- Is facility operated in a way to minimize
 chances of fire, explosion, or release?
 (264.31) Yes _____ No _____
- If needed, does facility have: (264.32)
- Internal communications? Yes _____ No _____ NA _____
- Telephone? Yes _____ No _____ NA _____
- Fire, spill control, and/or
 decontamination equipment? Yes _____ No _____ NA _____
- Hydrants, sprinklers, and/or foam? Yes _____ No _____ NA _____
- Do personnel have access to alarms, if
 needed? Yes _____ No _____ NA _____ (264.34 (a))
- Does single employee have access to
 telephone if applicable? Yes _____ No _____ NA _____ (264.34 (b))
- Is adequate aisle space being maintained? Yes _____ No _____ NA _____ (264.35)

Container Condition and Labeling (9.18) (264 Subpart I)

- Containers in good condition? Yes _____ No _____ NA _____
- Container compatible with waste? Yes _____ No _____ NA _____
- Containers closed? Yes _____ No _____ NA _____
- Containers handles to caused leak Yes _____ No _____ NA _____

Containers stored within spill control area	Yes _____	No _____	NA _____
Containers area-base free of cracks?	Yes _____	No _____	NA _____
Containers protected from contact with standing liquid?	Yes _____	No _____	NA _____
Containment volume equal to 10% of Stored, or volume of largest container?	Yes _____	No _____	NA _____
Run-on prevented?	Yes _____	No _____	NA _____
Liquids removed promptly?	Yes _____	No _____	NA _____
Containers with I or R waste 50 feet from property line?	Yes _____	No _____	NA _____
Any IWM in storage?	Yes _____	No _____	NA _____
IWM in same container?	Yes _____	No _____	NA _____
Hazardous waste in unwashed container which contained IWM?	Yes _____	No _____	NA _____
Hazardous waste stored near IWM?	Yes _____	No _____	NA _____
Do Labels contain the following information (9.18)			
Generator's name and address	Yes _____	No _____	NA _____
Waste Type	Yes _____	No _____	NA _____
Manifest number	Yes _____	No _____	NA _____
D.O.T. shipping name	Yes _____	No _____	NA _____
Date of containerization	Yes _____	No _____	NA _____
Words " Hazardous Waste "	Yes _____	No _____	NA _____
<u>Tank Storage</u> (9.19) (264 Subpart J)			
Waste incompatible with tank stored in lined tank?	Yes _____	No _____	NA _____
Is overfilling prevented?	Yes _____	No _____	
Does uncovered tank have sufficient fireboard?	Yes _____	No _____	
Hazardous waste removed at closure?	Yes _____	No _____	

Is I or R wastes in tank either:

Treated immediately to be not I or R? Yes _____ No _____

Protected from ignition or reaction? Yes _____ No _____

Used for emergencies only? Yes _____ No _____

Does I or R waste tank comply with NFPA buffer zone requirements in Tables 2-1 through 2-6 of Flammable and Combustible Code –1977? Yes _____ No _____

Does IWM in same tank create hazard? Yes _____ No _____

Is Hazardous waste placed in tank that contained IWM? Yes _____ No _____

Notes:

Follow-up Action - Letter of Compliance _____

Letter of Deficiency _____

Notice of Violation and Order _____

Appendix D-2 – Transporter Inspection Form



RIDEM OFFICE OF WASTE MANAGEMENT
TRANSPORTER INSPECTION FORM

Vehicle Type: Hazardous: ____ Medical: ____ Septage: ____

Inspection Date: ____ Driver: ____

Company: ____ Permit#: ____

Vehicle type: Straight Truck: ____ Tractor/Trailer: ____ Tanker: ____ Other: ____

Tractor or Truck Sticker #: ____ Tractor/Truck Registration: ____ State: ____

Trailer Sticker#: ____ Trailer Registration: ____ State: ____

General Checklist Items

Communication Device: ____ Absorbent Material: ____ Emergency procedures: ____

Shovel: ____ Markings (name/number): ____ Fire Extinguisher: ____ Valid Registration:

DOT Safety Inspection: ____ DOT Insp. Date: ____ DOT Tanker Inspection: ____

Eyewash: ____ First Aid Kit: ____

Waste in

Vehicle? _____

Hazardous Waste Transporters Only

Prohibited Travel Roads: ____ Protective Clothing: ____

Medical Waste Transporters Only

Disinfectant: ____ Sanitary and Enclosed body: ____ Biohazard Sign: ____

Comments:

_____ Inspector(s) (print)	_____ Signature of Inspector(s)	_____ Date of Signature
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_____ Driver (print)	_____ Signature of Driver	_____ Date of Signature
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Note: signature of driver denotes notification but not admission of violation.

Appendix E -DEM Digital Photograph Record Collection and Storage SOP

Digital Photograph Record Collection and Storage SOP SOP-OD-QM-4

1. **APPLICABILITY.** This SOP applies to all DEM programs where staff utilizes digital photography, including but not limited to, licensed facility inspections, shoreline surveys, environmental restoration or protection projects or any other photo-documentation purposes. Exemption from the use of this SOP for project work shall be allowed for reasons of inapplicability determined by management discretion. It is anticipated that individual programs will modify the SOP, as necessary, to account for differences in digital camera protocols.
2. **PURPOSE.** Photography that has a reasonable probability to be considered for use as legal evidence, historic record or other value to the State must be protected from loss or destruction. This SOP provides a method to collect and store digital photographs and associated documentation data. The use of digital photography for documentation has resulted in a proliferation of data files that can be lost or easily destroyed, since unlike traditional printed-paper, they may not physically exist except in the form of magnetic or optically read media. There are many types of digital cameras, photographic processing software and operating systems in use currently at DEM, however certain common elements can be used as a framework to establish a standard method to assist in preservation of these records for easy retrieval and future use.
3. **DEFINITIONS**
 - 3.1. WWW - World Wide Web
 - 3.2. JPG - is a commonly used image file format for photographic images. The acronym JPEG (usually pronounced JAY-pehg) stands for the group that invented the format (Joint Photographic Experts Group). Usually with the file suffix of .jpg¹. When you create a JPEG or convert an image from another format to a JPEG, you are asked to specify the quality of image you want. Since the highest quality results in the largest file, you can make a trade-off between image quality and file size.
 - 3.3. GIF- Graphic Interchange Format ² usually with the file suffix of .gif
 - 3.4. PNG - Image file format supported on the WWW, usually with the file suffix of .png³
 - 3.5. BLUETOOTH - a telecommunications industry specification that describes how cameras, mobile phones, computers, and personal digital assistants (PDAs) can be easily interconnected using a short-range wireless connection.
 - 3.6. THUMBNAIL - A reduced file size version of a photographic record used for indexing and previewing of images.
 - 3.7. GPS - The GPS (Global Positioning System) is a "constellation" of 24 well-spaced satellites that orbit the Earth and make it possible for people with ground receivers to pinpoint their geographic location. A basic GPS receiver provides geographic

¹ http://searchwebservices.techtarget.com/sDefinition/0,,sid26_gci212425,00.html

² *ibid.*

³ *ibid*

position - longitude and latitude, within 100 meters. Some receivers are equipped with a display screen that shows a map of the position.⁴

- 3.8. MEDIA** - Electronic device that is designed to store of storing electronic records such as magnetic and optical disks, cards containing microchips etc.

4. RESPONSIBILITIES

- 4.1. COMPLIANCE** - All staff engaged in collecting DEM digital photographic records are responsible to determine applicability of this SOP to their work. See Section 1 above. Supervisors are responsible for ensuring that staff is familiar with and adhere to any SOPs affecting their program functions.

5. GUIDELINES AND PROCEDURES

5.1. CAMERA AND FIELD NOTES

- 5.1.1. Verify that the date and time on the camera is accurate.
- 5.1.2. Activate the visible date and time option such that the recorded image will be imprinted with the date and time of the photo.
- 5.1.3. Select appropriate resolution quality. The higher the resolution the fewer the images that can be recorded for a given media.
- 5.1.4. Descriptive documentation should be recorded in sequentially numbered field notes immediately after the images are collected for specific photograph detail recall. (See 5.5.1)

5.2. COMPUTER SUBDIRECTORY CREATION AND FILE NAMING CONVENTIONS

- 5.2.1. Create a subdirectory on the computer to store the image files.
 - (A) File name conventions for subdirectory folders should be established to facilitate organization of records by Project, Station or Location.
 - (B) Multiple photo documentation sessions at a particular station or location should have date coding in the subdirectory name convention.
 - (C) Create a print image or report subdirectory to store the print versions of select images.
- 5.2.2. File name conventions for image files should be established to facilitate organization of records, for example, by: Project, Station or Location, Date, and a unique identifier, if necessary. (i.e. Project_Station_Date_UniquelIdentifier.jpg. An image taken for the Wood River Basin Monitoring Project at Station #2 on 19 August 2006 could be named "WRB_Station2_19AUG2006.jpg". If multiple pictures were taken at this station on this date, each file name should include a unique identifier (e.g. WRB_Station2_19AUG2006_Looking_Downstream.jpg".)

5.3. COMPUTER IMAGE TRANSFER AND THUMBNAIL PRINT

- 5.3.1. Transfer the image files to the computer by various methods below:
 - (A) Connect camera directly to the computer with the supplied cable.
 - (B) Remove the memory card from the camera and use a card-reading device connected to the computer.
 - (C) Use of Bluetooth or other wireless transfer protocol.
- 5.3.2. When the device connection is recognized by the computer you will typically be given the option of storage file location and whether to delete the image files after transfer.

⁴ http://searchmobilecomputing.techtarget.com/sDefinition/0,,sid40_gci213986,00.html

- (A) Do not select “delete after transfer” option until you are experienced with successful location and retrieval of your images from a previous photo transfer procedure.
- (B) Select the appropriate subdirectory for transfer of the photos..
- 5.3.3. Validate the transfer of images to the new directory by viewing the directory and comparing file sizes to originals.
- 5.3.4. Deleting images from the camera or camera media.
 - (A) If you are confident that the transfer was successful, avoid selecting and deleting the camera image processing files and delete only the camera image files with suffixes .jpg, .gif, or .png.
- 5.3.5. Print out a thumbnail sheet of photographs transferred to the file.

5.4. IMAGE ENHANCEMENT

- 5.4.1. Typical digital photography processing software enables simple improvement of images with respect to contrast, brightness and level of detail though special effects. Any image-modified versions must not result in the replacement of the original image. Any modified image should be saved as a new file name encoded in a convention that clearly discloses image enhancement.

5.5. CREATE REPORT OR PRINT IMAGE FROM TEMPLATE

- 5.5.1. Templates for print out of photographic documentation should include at minimum:
 - (A) Date of photo record.
 - (B) Originating DEM Office.
 - (C) Photographer name.
 - (D) Other DEM staff witnesses to photograph conditions.
 - (E) Image sequence number.
 - (F) Location or site of photography, GPS coordinates if available.
 - (G) Photo description or caption.
- 5.5.2. Load the template file and “Save-as” a new report name.
- 5.5.3. Select the best representative images for print out to a template appropriate in size to the level of detail required and copy them into the template.
- 5.5.4. Fill out section 5.5.1 details in the template from memory and/or field notes.
- 5.5.5. Print the report and file it with the other project records including the above said thumbnail sheet.

CREATE DUPLICATE ELECTRONIC RECORD (BACKUP)

To maintain a permanent record and to create an electronic backup of the original photos, programs shall adopt some of the mechanisms including but not limited to the following:

- burn a CD of the project work,
- copy to other internal drives,
- emailing them to storage areas,
- use of jump drives, or
- other available storage technology.
- If available and network storage capacity allows, utilize DEM network to archive image files.

6. REFERENCES

- 6.1. See Footnotes.

**DIGITAL PHOTOGRAPH RECORD COLLECTION AND STORAGE SOP
SOP-OD-QM-4**

Originator:

R.P. Schmidt _____ Date: _____
Print Name Signature

APPROVALS:

Quality Team Chair:

Tom Getz _____ Date: _____
Print Name Signature

Assistant Director of Water Resources

Alicia Good _____ Date: _____
Print Name Signature

Assistant Director of Air, Waste and Compliance

Terry Gray _____ Date: _____
Print Name Signature

Associate Director of Natural Resources

Larry Mouradjian _____ Date: _____
Print Name Signature

DISTRIBUTION:

- (x) Office of Air Resources By: _____ Date: _____
- (x) Division of Agriculture By: _____ Date: _____
- (x) Office of Waste Management..... By: _____ Date: _____
- (x) Office of Compliance and Inspection By: _____ Date: _____
- (x) Office of Technical and Customer Assistance By: _____ Date: _____
- (x) Groundwater and Wetlands Protection By: _____ Date: _____
- (x) Surface Water Protection By: _____ Date: _____
- (x) Water Quality and Standards By: _____ Date: _____
- (x) Office of the Director By: _____ Date: _____
- (x) Quality Management Team By: _____ Date: _____
- (X) DOA MIS Liaison By: _____ Date: _____



Appendix G- SOP Summary for Sampling and Other Related Environmental Field Activities

Standard Operating Procedures

SOP #	Description
2009 (EPA)**	Drum Sampling
2010 (EPA)**	Tank Sampling
2012 (EPA)*	Soil Sampling
2017 (EPA)**	Waste Pile Sampling

Notes:

Electronic versions of the SOPs can be found on the following two websites:

*(EPA): EPA SOP -

<http://www.ert.org/mainContent.asp?section=Products&subsection=List>

** (RIDEM): RIDEM SOP -

<http://www.dem.ri.gov/pubs/data.htm#sops>

Appendix H

Guidelines for Minimum QA/QC Samples for Field Sampling Programs¹

Matrix	Duplicates ³	Field Blanks ²	Trip Blanks ⁴	Rinsate Blanks ³	Background Samples
Aqueous	one in twenty	one per sampling area	one per shipping container with VOC samples	one per 20 decontamination procedures	minimum of one per sampling event per medium
Soil, Sediment	one in twenty	one per sampling area	one per shipping container with VOC samples	one per 20 decontamination procedures	minimum of one per sampling event per medium
Source Material	one in twenty	one per sampling area		one per 20 decontamination procedures	

Notes:

- 1.) QA/QC requirements on a site-specific basis may dictate a more stringent frequency. Laboratory blanks and spikes are method-specific and are not included in this table. However, as a minimum, 10% of laboratory analyses must be QC samples.
- 2.) Field Blanks are required when background contamination of the breathing zone is detected. One should be collected from each different industrial or functional area sampled during the most active time of day.
- 3.) Replicate and rinsate samples are collected at the minimum rate of 1 per 20 samples/decontamination procedures. If fewer than 20 samples are collected, one replicate and one rinsate sample must be collected.
- 4.) Trip blanks are prepared in the laboratory or at another off-site location from de-ionized water. They are never prepared on-site, or from soils or other solid material.

Appendix I - Data Assessment

QC Requirement	QC Limits	Corrective Action ¹	Corrective Action Applied To:
Chain of Custody	COC required for legally defensible data. The COC tracks sample from collection in the field to completion of laboratory analysis.	Results will be evaluated by the Project Manager	All analytes in the sample.
Sample Preservation / Collection	Preservation / collection requirements not met	Results will be evaluated by the Project Manager	All analytes in the sample.
Sample Storage ²	< 2 °C or > 6 °C	Results will be evaluated by the Project Manager	All analytes in the sample.
Holding Time	Time between sample collection to analysis exceeds holding time for a set analyses, as specified in 40 CFR Part 136 or SW-846 (as updated)	J all positive results UJ all non-detects R non-detects if holding times are grossly exceeded for water samples. Use best professional judgment for soil samples.	All analytes in the sample
Reporting Limit	Analytes detected and reported below lowest standard (i.e. IDL, MDL)	If result concentration detected below the lowest standard that the laboratory can confidently report, the laboratory will qualify the results (i.e. J'd values)	All affected results.
	Reporting Limit above the PAL	If Reporting Limit is above the PAL, the Project Manager will evaluate results.	
Field duplicates (Precision)	Field duplicates > Reporting Limit and RPD > 30% (water) or > 50% (soil)	J for the positive results	The specific analyte(s) in all samples with the sampling date.
Split Samples (Comparability)	As determined in a site specific QAPP and/or SAP.	Results evaluated by the Project Manager. In general, acceptance criteria of a split sample will include verifying that the analytical parameters identified are the same and quantitatively within the same order of magnitude.	All analytes in the sample.
Laboratory Control Sample (Accuracy)	% R > UCL % R < LCL	Specified in the Laboratory's QA Manual. If not specified, J all positive results	Specified in the Laboratory's QA Manual. i.e. All analytes in all samples for associated analytical batch (of 20 or less) per matrix.

QC Requirement	QC Limits	Corrective Action ¹	Corrective Action Applied To:
Equipment Blank	For Common Lab Contaminants: Result < Equipment Blank × 10 For all other constituents: Result < Equipment Blank × 5	Results will be reported as qualified. All other results will be reported as unqualified.	The specific analyte(s) in all samples with the sampling date. Common lab contaminants include methylene chloride, acetone, 2-butanone, and bis (2-ethylhexyl) phthalate.
Method Blank	Specified in the Laboratory's Quality Manual or analytical method's SOP	Corrective action is recorded in the lab's sample run log. When necessary, samples are flagged with appropriate data qualifiers and explanation included in the Narrative Summary that is submitted to the Project Manager.	The specific analyte(s) in all samples in the associated analytical batch. ¹ Exempted target analytes can include common lab contaminants of methylene chloride, acetone, 2-butanone, and bis (2-ethylhexyl) phthalate.
MS/MSD (Accuracy)	Specified in the Laboratory's Quality Manual & measured in %Recovery. %R > UCL %R < LCL	Specified in the Laboratory's Quality Manual and explanation included in the Narrative Summary that is submitted to the Project Manager.	The specific analyte(s) in the sample.
Lab Sample Duplicates, MS/MSD (Precision)	Specified in the Laboratory's Quality Manual & measured in Relative Percent Difference (RPD) RPD > 20%.	If duplicate fails quality control requirements, the failure must be included in the Narrative Summary that is submitted to the Project Manager.	The specific analyte(s) in the sample.

¹ Corrective action may be required, as noted in the table and in some cases, resampling may be requested (i.e. the deviation significantly impacts the stated Data Quality Objectives as noted in Section 7.0, Assessment & Oversight.

² For sample storage, a temperature blank may be used (one per cooler) to monitor cooler temperature.

UCL= upper control limit	UJ= estimate below detection limit	IDL= Instrument Detection Limit	%R = % Recovery	COC= Chain of Custody
LCL= lower control limit	J= estimate	MDL= Method Detection Limit	RPD= Relative Percent Difference	SOP= Standard Operating Procedure
	R= Reject	PAL= Project Action Limit	MS/MSD= Matrix Spike/MS Duplicate	QA=Quality Assurance

Appendix J -Transporter and Manifest Data SOP

Transporter Quarterly Reports

OWM received and processes manifest data from licensed hazardous waste transporters on a quarterly basis (although some choose to report on a monthly basis). Data is sent in one of 3 standard format, 1 spreadsheet formats (RI Trakman), 1 Comma Separated Value (CSV) text format (MAEMOR) and 1 ascii text format (RI). Formerly MAEMOR data was sent in a plain text format but in 2008, MADEP changed to a .csv format.

Data is sent from transporters as either media (disk or cds) or by email. If they are sent by email they are saved on cds or floppy disks. In the case of spreadsheet or .CSV files, the files are copied into pre-existing excel files and imported into a database called transporter reporting database.mdb. Plain text files are imported directly into that same database. The data are imported into the appropriate table as “raw data”. On a regular basis (biannually) the data is imported using a macro command called “import data from all sources” is run. This imports all data into 1 table “transporter_reports” and does basic quality checks (to make sure critical fields are present and that data from the same line with the same manifest number is not repeated). Data that cannot be imported in flagged. After importing, any data not flagged is deleted from the “raw data” tables.

Other information from quarterly reports (payments of hazardous waste generator fee) are recorded in a database called “current fee reporting.mdb”. The data in this database is current for each calendar year, after the end of the calendar year, the data is archive in the format 2007 fee reporting.mdb. Companies reporting no waste was transported in the quarter are recorded as a fee of 0 to distinguish them from companies that did not report.

Hazardous Waste TSDF Manifest Data

OWM also receives and processes manifest data from licensed TSDFs. Hazardous Waste TSDFs are required to report all incoming and outgoing data unless they are duplicated by the Transporter Reports. These data are imported into a database called “facility reporting database.mdb”. A process similar to that above is followed to quality check raw data.

Combined Hazardous Waste Data

OWM also maintains a database of all manifest data available. Data from both the Transporter and Facility Reports is transferred into a database called “Manifest combined data.mdb”. This is done by running a macro command called “update data” in that database. This database also includes historic manifest data and is usually the source for manifest data queries for individual companies.

Transporter Data

OWM maintains a database of all companies licensed to transport Hazardous Waste (as well Medical and Septage Waste). Companies are required to renew their permits yearly as permits expire on June 30 of each year. When the application is processed, basic information on the company and what they

transport are copied into the database using the appropriate form (Medical, Hazardous or Septage) in a database called "Current Transporter.mdb". The database also records if the application was approved or rejected and the dates of approval or the reason and date of the rejection. Within the form to enter company data is a sub form to enter data for each vehicle. Basic vehicle data is entered along with the number of the decal assigned to the vehicle. Transporter approvals and Vehicle Permits are printed out from this database. A copy of the transporter approval letter (but not the vehicle permits) is retained for the file. After the permitting year has expired the data is archived in the format Transporter2008.mdb with 2008 designating the 2007-2008 permitting year.

Vehicle inspections are also tracked with this database. To ease repermitting, company and vehicle data for previous years is used to generate pre-populated applications that are sent out in the February prior to the expiration of the existing permit.

Hazardous Waste Report Data

Biennial data regarding Large Quantity Generators (LQG) and TSDF is compiled by the OWM. This is done by mailing out the appropriate information and forms to LQG and TSDF based on data in the RCRA/Info database. When the information is collected it is imported or entered by hand into a Biennial Report Database kept in the Department (currently Florida BRS State program). After data is compiled and checked it is sent to USEPA for inclusion in the RCRA/Info Database.

Appendix K - Administrative Inspection Guidelines

**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**



ADMINISTRATIVE INSPECTION GUIDELINES

Filed: January 3, 2003

Effective: January 23, 2003

AUTHORITY: These guidelines are adopted in accordance with Chapter 42-35 pursuant to Chapter 42-17.1-2 (t)(2)(A) of the Rhode Island General Laws of 1956, as amended.

**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

ADMINISTRATIVE INSPECTION GUIDELINES

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ADMINISTRATIVE INSPECTION GUIDELINES

I. PURPOSE

The purpose of these guidelines is to describe the general procedures for administrative inspections undertaken by employees of the Rhode Island Department of Environmental Management (herein after referred to as “DEM” or “the Department”). These guidelines are promulgated to balance the State’s interests in protecting the environment and enforcing environmental laws and regulations with reasonable private property interests guaranteed by the Federal and State Constitutions and to promote awareness of DEM regulations involving private property. More specifically, these guidelines:

- explain expectations of privacy recognized and protected by law;
- explain the reasons for and degree of urgency associated with different types of inspections;
- explain how inspections of private property must be conducted to ensure that the rights and legitimate privacy expectations of the owners and occupants are protected;
- promote public awareness of DEM programs; and
- explain some of DEM's duties and responsibilities under state law and regulations.

II. AUTHORITY

These guidelines are promulgated pursuant to Chapter 42-17.1-2(t)(2)(A), Environmental Management in accordance with Chapter 42-35, Administrative Procedures, of the Rhode Island General Laws of 1956, as amended.

III. ADMINISTRATIVE FINDINGS

The Department is charged by law to protect, preserve and restore Rhode Island's natural resources and environment. The Department implements this Legislative mandate through a wide variety of regulatory programs. As a public regulatory agency, the Department has a responsibility to carry out its statutory and regulatory functions in the spirit of public service. This means that the Department’s interactions with members of the public, including regulated persons and entities, should be courteous, respectful and responsive and minimize unnecessary confrontation.

To the extent that the law authorizes the Department to conduct inspections on private property, such inspections should be conducted with respect for the rights and privacy of property owners, consistent with the protections afforded by the United States and Rhode Island Constitutions, as interpreted and applied by the courts. Inspections are the primary method available to DEM to enforce and determine compliance with environmental statutes and regulations administered by DEM. Both announced and unannounced inspections are vital compliance assurance tools in the Department’s ongoing effort to protect the environment. Because some parties may not fully understand the need for such inspections and may perceive such inspections as an unreasonable interference with their rights as property owners and as operators of various business activities, DEM will use best efforts to explain the reasons for the inspection and to conduct its inspections within the scope of these Guidelines.

DEM is authorized to conduct both consensual and non-consensual administrative inspections. Non-consensual administrative inspections may be lawfully performed with or without an administrative inspection warrant. Whether an administrative inspection warrant is required in order to perform a lawful, non-consensual administrative inspection will depend on the facts and circumstances surrounding the site, facility or activity to be inspected. It is the intent of these Guidelines to educate DEM personnel regarding the proper procedures for performing lawful administrative inspections via consent, administrative inspection warrants and established methods for warrant-less, non-consensual inspections.

IV. APPLICATION

The terms and provisions of these guidelines shall be liberally construed to allow DEM to fulfill the requirements of state law, regulations, and policies. DEM reserves the right to modify these Guidelines at any time. All modifications to these Guidelines shall be consistent with applicable state and federal law. These guidelines:

- A. apply to all administrative inspections completed by DEM after the effective date under the authority of the environmental statutes and regulations that DEM administers;
- B. do not create any rights, duties, or obligations, implied or otherwise, in any third parties;
- C. are not to be interpreted as changing existing laws and regulations and do not limit or expand DEM's existing legal authority to conduct regulatory inspections;
- D. are not intended to limit or expand the rights or privacy expectations of property owners already specified by law or declared by the courts;
- E. do not address, or propose that a criminal search warrant shall be required for regulatory inspections; and
- F. shall not limit or restrict the legal methods or procedures by which DEM may seek to secure access to private property for the purpose of conducting inspections.

V. DEFINITIONS

For the purposes of these guidelines, the following terms shall have the following meanings:

"Administrative inspection" shall mean any inspection, independent of a criminal investigation, that is conducted for the purpose of determining compliance with applicable federal or state laws and regulations. Administrative inspections may involve the examination of real or personal property, equipment, buildings, records, products, by-products, wastes, processes, activities, environmental conditions (i.e. air, soil and water quality), personnel or other property or activities. Administrative inspections may include, but are not limited to, the following activities: observation, sampling, measuring, photographing, coring, drilling and excavating; reviewing and copying records; and seizing equipment, products, materials or records. Administrative inspections may be performed by Department personnel or by private agents or consultants acting on the Department's behalf. The scope of an administrative inspection may be limited by consent, the terms of an administrative inspection warrant or other court order, or by circumstances surrounding a warrant-less inspection.

“Administrative inspection warrant” shall mean an order issued by a justice of the Rhode Island District or Superior Court, or such other magistrate as may be allowed by law, authorizing the Department to enter an otherwise constitutionally protected area to inspect, search and/or seize property or evidence of a possible violation of a law or regulation administered by the Department as may be described therein. An administrative inspection warrant may issue where:

- A. Sufficient evidence of a possible violation of a law or regulation administered by DEM or a potential threat to public health, safety, welfare or the environment exists to establish administrative probable cause; or
- B. The Department proposes to conduct the inspection in accordance with a neutral inspection scheme.

“Administrative probable cause” shall mean the standard used by the Courts to determine whether a proposed administrative inspection meets the constitutional mandate of reasonableness necessary for the issuance of an administrative inspection warrant. Administrative probable cause is not a standard that DEM must use to determine if it may or should conduct an inspection in situations where an administrative inspection warrant is not required (e.g. consensual inspections or inspections of areas that are not constitutionally protected). The standard for administrative probable cause is a more lenient standard than that which is required to establish criminal probable cause. Whether an administrative inspection is reasonable is determined by weighing the government’s interest in regulatory compliance against constitutionally protected privacy interests. Where an inspection: (i) is a reasonable method under the circumstances to evaluate compliance with laws or regulations designed to protect public health, safety, welfare or the environment; (ii) serves a valid public interest/reasonable governmental interest; and (iii) satisfies reasonable legislative or administrative standards for conducting inspections, then administrative probable cause exists for the issuance of an administrative inspection warrant.

"Closely regulated industry" means a business or business-related activity, facility, structure or property for which a permit, license or other approval has been issued by DEM, or a business or business-related activity, facility, structure or property that is otherwise subject to pervasive governmental supervision such that any person who chooses to engage in that business or activity is deemed to have voluntarily subjected him/herself to full regulation.

“Consent” means authorization given to conduct an administrative inspection that is:

- A. Informed as to the location, nature, scope or objective of the proposed administrative inspection;
- B. Voluntary;
- C. Given by an owner, operator or other person of suitable age, discretion and apparent authority to give consent to the inspection;
- D. Subject to any specified limitations of scope;
- E. Revocable at any time with or without justification, unless given as a part of an application for a permit, license or other approval issued by DEM.

“Criminal search warrant,” means an order issued in accordance with R.I. Gen. Laws ch. 12-5 or §8-3-6 to investigate criminal conduct.

“Curtilage” means that area of land and/or buildings, regardless of vegetative characteristics, fencing or signage, surrounding a home that is so intimately tied to the home and its domestic activities that it should be treated as part of the home itself.

“Department,” “Director” or “DEM” means the Rhode Island Department of Environmental Management.

“Inventory,” means the process of identifying and listing property, items or samples that are seized or removed from a site during the course of an administrative inspection and/or the list that results from that process.

“Neutral inspection scheme,” shall refer to a plan for inspecting a group of similarly situated sites, facilities or activities that have been identified for inspection based on a set of neutral criteria. The inspection scheme will include objectives for the inspections that are rationally related to assuring compliance with laws or regulations and that do not target a specific individual, facility or property.

“Person,” means any individual, corporation, limited partnership, partnership, trust, joint stock company, syndicate, governmental entity, quasi-governmental corporation or other incorporated or unincorporated association or any subdivision thereof.

“Plain view,” refers to any object, condition, activity or other evidence of a violation of law, regulation, permit, license or order (civil or criminal) that is visible by an inspector who is lawfully in position to make his/her observation.

“Sample,” means the process of taking a portion of a larger quantity of material for analysis.

“Split sample,” means taking multiple samples of the same material or dividing a sample for independent analysis by two or more parties involved in an administrative inspection.

“Warrant application,” means the formal written petition and supporting affidavit presented to a neutral magistrate or judge to request the issuance of an administrative inspection warrant.

VI. REASONS FOR NEEDING ACCESS TO PRIVATE PROPERTY

Apart from criminal investigations, inspections by the Department can be categorized as follows:

- A. Emergency Situations include those situations where there is reasonable evidence indicating that an imminent or serious threat to the environment or public health, safety, or welfare exists so as to warrant investigation, remediation or other immediate response by the Department. Examples include response to complaints of significant odors, oil spills, chemical releases or alterations to the environment that have or are likely to result in detrimental impacts or irreparable harm to the resource.
- B. Compliance Monitoring includes situations where a structure or activity on the property is subject to statutory or regulatory authority by the Department, and the Department, in response to a complaint or in the course of a regular compliance inspection program, needs to ensure compliance, but such need is not of an emergency situation. This will include facilities or activities where the Department has permitting or licensing authority (e.g., discharges, emissions, waste management/disposal, alterations of freshwater wetlands, or construction or repair of individual sewage disposal systems (“ISDS”)) as well as activities for which no individual permit is required but which are subject to environmental statutes and Department regulations (e.g., management of hazardous wastes or air emission controls).
- C. Field Activities such as sampling, monitoring and surveying for reasons other than responding to an emergency situation or ensuring compliance with regulatory requirements but that support the Department’s statutory mandate to evaluate and protect the natural resources of the State of Rhode Island. Examples include environmental assessments of hazardous contamination, water quality assessments, restoration projects, fish and wildlife surveys, forestry surveys, pollution prevention projects, freshwater wetland assessments, ISDS and educational activities.

VII. GENERAL INSPECTION PROTOCOL

The following inspection protocols should be followed to the maximum extent practicable for all inspections whether conducted after obtaining consent, under an administrative inspection warrant or other court order, or pursuant to a legal, warrant-less inspection as described in these Guidelines.

- A. Prior to entering the site an inspector should prepare for the inspection by: establishing the scope and objectives of the inspection; coordinating inspection activities with other regulatory or enforcement personnel as necessary; developing an understanding of the technical, regulatory, and enforcement aspects of the site or facility; developing a plan or strategy for conducting an inspection consistent with inspection objectives; and determining the health and safety requirements and equipment necessary for the inspection.

- B. Inspectors should only enter private property (including driveways) in compliance with these Guidelines and applicable law.
- C. When in the field, the inspector should make a reasonable effort to locate an owner, operator or other person having apparent authority or control of the property in order to identify himself/herself, explain the purpose, scope and legal authority for the inspection. "Reasonable efforts" shall be construed to mean those efforts that can be reasonably made at the time of the inspection such as knocking on doors at the site or approaching workers or people around the site. Reasonable efforts shall not include off-site research such as reviewing land evidence, tax or court records or entering a dwelling.
- D. An inspector should never agree to any conditions limiting an inspection or sign any documents without first obtaining prior authorization from a supervisor.
- E. While on-site inspectors should be constantly vigilant and observant. All observations made while lawfully on site (e.g. while accessing the property, requesting permission to inspect, conducting an unrelated site visit or inspection, or while leaving the property after permission to inspect has been denied), are entirely legal and should be carefully noted for the file in the event that they are needed to support the issuance of an administrative inspection warrant or other legal action to gain access to the site. (*See Section X. E. regarding plain view violations.*)
- F. If the person exercising control over the property denies access to the property, then the inspector should not attempt to continue the inspection without first contacting the office for further instructions and/or assistance. If a situation arises on-site that threatens the safety of an inspector, then all inspectors should leave the site and immediately contact the office. If access is denied in an emergency situation (*see Section X. B.*) and the inspector believes that an imminent or serious threat exists to public health, welfare or the environment, then the inspector should contact fire and/or police authorities for their assistance in stabilizing the situation. If access is denied in a non-emergency situation, then the inspector may only continue with an on-site inspection if an alternative basis for a warrant-less inspection exists. (*See Sections X. A. and C.*) Where an inspector is unable to obtain lawful access to a site, the inspector may make observations from adjacent public areas, open fields) or from abutting private property, provided the inspector has permission from the owner, operator or person having apparent authority or control of the abutting property. (*See Section X. D.*) Under some environmental statutes denying access for inspections is a criminal offense. In situations involving those statutes, the DEM Office of Criminal Investigation will be advised of the situation.
- G. If no owner, operator or other person having apparent authority or control over the property is present, the inspector should leave a calling card identifying the inspector and, when possible, should provide other information explaining the purpose and scope of the investigation.

VIII. PROTOCOL FOR CONSENSUAL INSPECTIONS

- A. When seeking consent to perform an administrative inspection the inspector must locate an owner, operator or other person having apparent authority or control of the property in order to identify himself/herself, explain the purpose, scope and legal authority for the inspection and request consent for the inspection. An inspector may enter onto private property and use reasonable efforts to locate a person from whom to obtain consent for the inspections. Consent need not be sought where other lawful means for access to the property in question exist under these Guidelines (*see Sections IX and X, herein*).
- B. Consent for inspections relating to an activity requiring a permit, license or other approval from the Department may be required and obtained by the Department in writing as part of the application process. Consent that is given as part of an application process may not be revoked on-site at the time of the inspection and may only be revoked by the applicant in writing by withdrawing the underlying application. The presence or absence of consent relating to an application shall not impair the Department's ability to perform inspections in accordance with any other section of these Guidelines. (*E.g. Section IX, administrative inspection warrants or Section X.B. closely regulated industries*).
- C. On occasion, person(s) may agree to consent to an administrative inspection if the inspector will agree to conditions or limitations on the nature and extent of the proposed inspection. In the past, inspectors have been asked to sign liability waivers and other legal documents as a precondition to consent to perform an inspection. An inspector should never agree to any conditions or sign any documents without first obtaining prior authorization from a supervisor. The Department may, on a case-by-case basis, accommodate reasonable requests for conditions or limitations in order to secure consent for an inspection provided that the requests will in no way jeopardize the quality or effectiveness of the inspection.
- D. The scope of a consensual inspection may not exceed the scope of the consent that was given. Consent may be revoked at any time during the inspection without justification, unless the consent was given as part of an application process (*see Paragraph B., above*). Absent discovery of evidence or conditions during the consented to inspection that give rise to a lawful warrant-less inspection pursuant to Section X of these Guidelines, an inspector may not exceed the scope of the consent given or continue with any inspection after consent has been revoked.
- E. If consent to perform an administrative inspection is denied, the inspector may make observations from adjacent public areas, open fields (*see Section X, herein*) or from abutting private property, provided the inspector has permission from the owner, operator or other person having apparent authority or control over such property.
- F. Unless the inspector requires additional time for research or consultation, prior to leaving the premises the inspector should advise the person that gave consent for the inspection of the inspector's preliminary findings and of potential follow-up actions by DEM. If violations

are discovered, then the inspector should explain the applicable legal requirements and inform the consenting party that the violations must be corrected. Upon request, the inspector may provide general guidance regarding the correction of violations; however, inspectors should not require or recommend specific methods, procedures or corrective actions. In the event that additional assistance, advice or information is requested, the inspector should direct that person to the appropriate compliance assistance or permitting office. Any preliminary findings, recommendations or other assistance offered by the inspector should be recorded in his/her inspection report.

- G. If no owner, operator or other person having apparent authority or control over the property is present, the inspector should leave a calling card identifying the inspector and, when possible, should provide other information explaining the purpose and scope of the investigation.

IX. PROTOCOL FOR WARRANT INSPECTIONS

Absent consent to conduct an inspection, all other administrative inspections shall require the issuance of an administrative inspection warrant or other legal process such as an injunction for access *unless* the inspection falls within one of the established exceptions for permissible, warrant-less searches described in Section X of these Guidelines. Conducting an inspection pursuant to a valid administrative inspection warrant will help insure that evidence gathered during the inspection is admissible in subsequent legal proceedings. Inspections conducted pursuant to a court-issued administrative inspection warrant should be conducted in accordance with the general protocol for administrative inspections to the extent practicable and consistent with the nature and terms of the administrative inspection warrant.

- A. Administrative inspection warrants can be used to obtain access to properties for a variety of reasons, including but not limited to situations where:
1. Consent for the inspection has been requested and either denied or granted subject to unacceptable conditions;
 2. The Department seeks to maintain the element of surprise;
 3. The Department wants to avoid the delay associated with a refusal to allow a consensual inspection;
 4. Multiple site visits would be inconvenient (i.e. the site is distant or difficult to reach);
 5. Past experience indicates that consent for the inspection is likely to be denied;
 6. The timing of the inspection is important to insure that certain conditions will exist or remain unaltered prior to the inspection; or
 7. The Department is unable to identify, locate or get a response from a party to consent to an administrative inspection.
- B. The requirement to obtain an administrative inspection warrant does not prohibit the Department from:

1. Applying for an administrative inspection warrant under circumstances where a warrant may not actually be required;
 2. Using alternative means to gain access to property or records, such as injunctive relief, or other court process; or
 3. Seeking an administrative warrant to inspect a property that may also be the target of a criminal investigation, *provided that* the Department has a valid and independent administrative basis for the issuance of an administrative inspection warrant.
- C. Preparing an Application for an Administrative Inspection Warrant - An application for an administrative inspection warrant includes two components: the application describing the basis for and scope of the intended search and one or more sworn affidavits detailing the evidence, observations or other basis (the administrative probable cause) justifying the issuance of the warrant.
1. The Warrant Application - The application for an administrative inspection warrant must be in writing and signed by the applicant. Because many Rhode Island judges or justices may be unfamiliar with DEM's authority to conduct inspections and the programs that the inspections are intended to support, it will be important for the application to educate the court on some of the fundamental aspects of the program. (*See "Appendix A," Warrant Application Form.*) The application should include the following:
 - a) The statutes or regulations authorizing the inspection;
 - b) A brief description of the neutral inspection program or regulatory scheme under which the inspection will be performed;
 - c) The name and affiliation of the owner, operator or occupant of the place to be inspected, if known to the affiant;
 - d) A description, set forth with particularity, detailing:
 - (1) the address, place, property, facility or structures to be inspected;
 - (2) the nature, scope, and purpose of the inspection to be performed;
 - (3) the conditions, items, materials, processes, property, records, information or equipment to be inspected;
 - (4) the type and kind of samples, records or other items to be taken or seized;
 - e) The hours of the day during which the administrative inspection warrant may be executed and the need, if any, for forcible entry. In general, a warrant must be executed during the daytime unless good cause is shown for execution at any time of the day or night;
 - f) The timeframe within which the administrative inspection warrant will be executed and/or returned to the issuing authority. The default timeframe is ten days, unless good cause is shown for a longer period;
- D. The Supporting Affidavit - The warrant application must be accompanied by one or more sworn affidavits detailing the observations, evidence or other circumstances describing the

administrative probable cause for the issuance of the administrative inspection warrant. (See “Appendix B,” *Form Affidavit*.) The affidavit must identify:

1. The name, address, title and affiliation of the inspector-affiant;
2. A description of the affiant’s duties, experience and familiarity with the area to be inspected and/or with the subject matter of the proposed inspection;
3. A description of the affiant’s relevant education, professional certifications and/or job training relating to the subject matter of the proposed inspection;
4. A description of the observations, analytical results or other evidence or facts within the affiant’s own personal knowledge that support the need for the inspection;
5. A description of any statements, observations or other information not within the affiant’s own personal knowledge that support the need for the inspection accompanied by sufficient information to establish the reliability of the source of that information;

E. The Warrant - The administrative inspection warrant shall be prepared by the applicant and submitted to the judge or justice along with the application and supporting affidavit(s). (See “Appendix C,” *Warrant Form*.) The warrant should include:

1. The place to be searched or inspected;
2. The items, materials, records, information or other property or articles to be searched for and the conditions, processes, equipment to be inspected;
3. The name and affiliation of the owner, operator or occupant of the place to be inspected, if known to the affiant;
4. The time within which the warrant will be executed and returned and the time of day during which the warrant may be executed;
5. A return of service.

F. Presenting the Warrant Application

1. In order to secure an administrative inspection warrant, the inspector must present the judge or magistrate with sufficient evidence to satisfy the standard of administrative probable cause as defined herein.
2. In evaluating an application for an administrative inspection warrant, the magistrate or judge will apply an objective legal balancing test weighing the privacy interest of the person in question against the public interest justifying the intrusion and need for the search. The magistrate or judge will issue an administrative inspection warrant if he/she believes that a valid public interest or a reasonable administrative interest justifies the intrusion contemplated by the inspection. This balancing test generally requires the issuing magistrate to take judicial notice of the state’s environmental laws and goals of the legislature in protecting the public health, safety and the environment.
3. An administrative inspection warrant, as defined herein, may be issued based on evidence of a condition or possible violation, or based on the existence of a neutral inspection

scheme. However, individualized suspicion of violation of a rule, regulation or permit condition or specific knowledge of a condition at a particular location is not required.

- G. Executing the Administrative Inspection Warrant - The administrative inspection warrant must be executed or served in accordance with the requirements set forth in the warrant as to time, place, manner and scope. When required by the Court, a copy of the warrant and all affidavits supporting the warrant application must be served on the owner, operator or occupant of the place being inspected. If samples are taken, split samples shall be provided when practicable to do so if they are requested by the owner, operator or occupant. (*See Section XI on Sampling.*) The person(s) executing the administrative inspection warrant must keep a detailed, written inventory of all samples taken, split samples provided, records taken or duplicated and other property or items seized during the inspection.
1. The administrative inspection warrant shall be executed by an authorized DEM inspector who shall state his purpose and present his/her credentials to the owner, operator or occupant of the premises to be inspected. The inspector executing the warrant may be assisted by other DEM personnel, agents or contractors;
 2. Unless otherwise specifically provided in the administrative inspection warrant, no warrant shall be executed by forcible entry, before dawn or after dark, or outside of DEM's regular business hours. In those situations where the execution of the administrative inspection warrant becomes, or is anticipated to become hostile or confrontational, the inspector should discuss the situation with his/her supervisor. In some cases it may be necessary to request the assistance of DEM's Office of Criminal Investigation or State or local police;
 3. The administrative inspection warrant shall be executed as soon as is practicable after the issuance of the warrant and shall be completed with reasonable promptness and in a reasonable manner;
- H. Return of the Administrative Inspection Warrant - The original administrative inspection warrant, affidavit and application must be returned to the clerk of the issuing court within ten (10) days (unless a longer or shorter time is specified in the warrant). The administrative inspection warrant itself must be signed and dated by the person who executed the warrant and accompanied by an inventory of all property, records, samples ... etc. taken during the execution of the warrant. When required by the Court, the return should identify the name and affiliation of the person upon whom the warrant and supporting affidavits were served when known.
- I. Alternatives to Administrative Inspection Warrants - DEM reserves the right to petition the Courts for access to property by any method that is the functional equivalent to the process to obtain an administrative inspection warrant. Such court ordered access is usually sought in connection with matters that are in litigation and is generally subject to a full hearing before the Court on the merits of the Department's request for access. Such alternative, court-

ordered access may be pursued at the discretion of the Director as circumstances may require.

X. PROTOCOL FOR WARRANT-LESS INSPECTIONS

In addition to those situations where consent to inspect is properly obtained from an appropriate party, there are certain other limited circumstances where an inspection may be conducted without seeking an administrative inspection warrant or other court ordered access. These circumstances include inspections of closely regulated industries, emergencies, open fields, and conditions that are in plain view. In some instances the scope of the inspection that is allowed under these circumstances will be more limited than that which might be agreed to by consent or approved through an administrative inspection warrant. Warrant-less inspections should be conducted in accordance with Section VII of these Guidelines to the extent practicable and consistent with the circumstances under which the inspection is conducted. *Note:* Inspectors must be aware that performing an unlawful warrant-less inspection could prevent any evidence gathered during the inspection or any evidence that is later gathered as a result of information learned during the unlawful inspection from being used in any legal proceedings.

A. Closely Regulated Industries - Closely regulated industries are subject to warrant-less administrative inspections without consent, court order or prior notification. Inspections of closely regulated industries should be limited in scope to those areas, structures, activities, conditions, items, materials, processes, property, records, information or equipment covered by DEM's license, permit or controlling environmental regulations. Industries, businesses or activities that are not closely regulated may still be subject to warrant-less inspections under one of the other categories of warrant-less inspections discussed in this Section (*e.g. the Open Fields Doctrine, below*). Some examples of closely regulated industries include, but are not limited to:

1. Businesses or other activities that have obtained or are required to obtain a permit, license, or other approval from DEM that is necessary for them to conduct their activity, such as a wastewater discharge permit; air permit; hazardous waste treatment, storage or disposal permit; or solid waste license.
2. Businesses that are authorized to operate without a permit, license, or other approval from DEM provided that their operations comply with applicable DEM rules and regulations, such as hazardous waste generators or facilities with equipment that produces air pollutants.

B. Emergency Situations - An inspector may enter and inspect private property without prior notification, an administrative inspection warrant or consent when there is reason to believe that there are emergency conditions that warrant an immediate and reasonable administrative inspection. Where practicable, warrant-less inspections in emergency situations should be coordinated with other local, state or federal emergency response professionals that are on-scene (*e.g. police, fire, and rescue personnel; U.S. Coast Guard; U.S. Environmental*

Protection Agency (“EPA”) or Federal Emergency Management Agency (“FEMA”), or on-scene incident command personnel). These emergency conditions take two basic forms. In either case, the inspector’s right to conduct a warrant-less inspection in association with an emergency terminates when the emergency nature of the situation is resolved insofar as DEM’s legislative mandates and regulatory requirements are concerned.

1. Environmental Emergencies - environmental emergencies arise when there is an imminent or serious threat to the environment, public health, safety, or welfare. In determining whether an environmental emergency exists, the inspector should consider:
 - a) the degree of urgency or immediacy involved;
 - b) the severity of the threat to public health, welfare, safety or the environment;
 - c) the time that would be required to contact the office for further instruction or to obtain an administrative inspection warrant or criminal search warrant;
 - d) whether the possibility of danger exists at the site;

2. Investigational Emergencies - investigational emergencies arise when two conditions exist: (i) there is administrative probable cause that a violation exists; and (ii) the circumstances are such that if the inspector does not act immediately evidence of the violation will be lost (also known as “exigent circumstances”). In determining whether an investigational emergency exists, the inspector should consider:
 - a) whether evidence is about to be removed, destroyed or lost;
 - b) the ready mobility, destructibility or perishability of the evidence;
 - c) whether information exists indicating the persons responsible for the alleged violation know the Department is aware of their activities; and
 - d) the time that would be required to contact the office for further instruction or to obtain an administrative inspection warrant or criminal search warrant.

- C. Open Fields Doctrine - The open fields doctrine permits the examination of property that is not within the curtilage of a home. The open fields doctrine extends not only to open, wooded and undeveloped areas of property, but also extends to other areas of developed property (residential and commercial) where there are no manifest expectations of privacy that society would consider to be reasonable. The open fields doctrine can even apply to the interiors of buildings where no expectations of privacy are evident (e.g. an unsecured garage, barn, shed or abandoned commercial facility).
 1. In evaluating whether a property falls within the curtilage of a home or in an open field, factors to be considered include, but are not limited to:

- a) the proximity of the area to the home;
- b) whether the area is included within an enclosure surrounding the home;
- c) the nature of the use(s) to which the area is reasonably subject;
- d) the steps taken by the resident to protect the area from observation by other persons (e.g. neighbors or passers-by;
- e) other conditions appurtenant to the home that evidence reasonable expectations of privacy.

These factors represent subjective considerations, not objective black-and-white rules. For example, the mere presence of a fenced enclosure around a dwelling does not mean that everything within the enclosure constitutes curtilage. On the other hand, the absence of an enclosure, especially on a small urban-suburban residential lot, does not automatically mean that all or even part of the lot can be examined under this exception. If an inspector is in doubt about the application of the open fields doctrine to a specific property, the inspector should carefully record information relevant to the above-referenced factors and contact his/her supervisor for further instructions.

2. Although the open fields doctrine allows for on-site examination of areas outside the curtilage of a home, the open fields doctrine does not open the property to the full array of administrative inspection activities as that term is defined in these Guidelines. Rather, open field examinations are limited to non-invasive, on-site “sensory” observations.

D. **Plain View Doctrine** - The plain view doctrine permits an inspector to observe property, conditions or activities that are visible to the inspector from any place that he or she has a legal right to be. The plain view doctrine further allows an inspector to seize objects that are in plain view if the inspector has lawful access to the area where the objects are located and the objects are immediately recognizable to the inspector as evidence of an administrative violation. Observations made or evidence seized under the plain view doctrine may be used:

1. To obtain an administrative inspection warrant to enter the property;
2. As evidence in an administrative or civil proceeding;
3. As administrative probable cause for an emergency inspection (*see Subsection E., above*);
4. As administrative probable cause to exceed the stated scope of an inspection being conducted under a warrant or by consent for the limited purpose of inspecting the condition or activity observed.

E. **No Other Constitutional Warrant Requirement** - Non-consensual, administrative warrant-less inspections are also allowable at any other time that a warrant is not otherwise required under the United States or Rhode Island Constitutions for criminal or administrative searches.

XI. PROTOCOL FOR COLLECTING SAMPLES

Samples of air, water, soils or other materials may be taken for analysis if within the scope of the consent given for the administrative inspection, the terms of the administrative inspection warrant or the terms of a court order. Samples may also be taken as part of a lawful warrant-less inspection of a closely regulated industry or as part of an emergency situation where sampling is reasonably related to abating the emergency. The ability to take samples as part of an open fields or plain view warrant-less inspection will be dependant on the circumstances surrounding the inspection and inspectors should consult with a supervisor before taking samples during these types of inspections. When sampling is performed as part of an administrative inspection, DEM shall, upon request, provide split samples to the party or entity that is the subject of the search, provided that the conditions at the time of the sampling, the amount of material available to be sampled and the safety of DEM employees, are conducive to the request. If split samples are provided they will be turned over to the requesting party at the time that the sample is taken. DEM may require the party receiving the split samples to sign a release acknowledging their receipt of the samples and their responsibility to properly handle, store, and dispose of the sample materials. DEM may refuse to provide split samples if the inspector reasonably believes that: (1) the samples will not be properly, handled, stored or disposed of, (2) splitting the sample will not allow DEM to obtain the required amount of material for analysis, or (3) the time required to collect the split samples or the conditions under which the samples are being collected pose a threat to his/her safety and well being.

XII. SEIZURE & DISPOSAL OF SEIZED PROPERTY

Any property seized as part of an administrative inspection conducted pursuant to these Guidelines shall be logged into custody, and safely kept by the person effecting the seizure. The Department may retain seized evidence for that time which is reasonably necessary to prosecute any administrative actions or hearings. In the case of records, including computerized or other electronic records, the Department may retain the records or records storage and retrieval devices for a time reasonably necessary for the Department to inventory and duplicate the records. Property will be returned to the owner, if possible, once the use by the Department has been completed. Seized property such as wastes or other materials that present an environmental hazard may be confiscated and disposed of by the Department.

XIII. ADMINISTRATIVE INSPECTIONS & CRIMINAL CONDUCT

It is unlawful and unconstitutional to employ an administrative inspection warrant as a means of conducting investigation into criminal conduct. However, as long as there is an independent and objective need for an administrative inspection (e.g. to enforce administrative regulations), the existence of or potential for a criminal investigation should not prohibit the issuance of an administrative inspection warrant or the performance of a lawful consensual or warrant-less administrative inspection. The discovery or existence of incriminating evidence during a lawfully conducted administrative inspection is subject to the following conditions:

- A. If an administrative inspection warrant was validly issued and the subsequent inspection discloses evidence of criminal activity, then the evidence may be seized and used in a criminal prosecution;
- B. If an inspector discovers evidence of criminal activity during an administrative inspection, he or she may complete the inspection and report the discovery to the appropriate authorities for further investigation under a criminal search warrant.

If the inspector develops suspicion of criminal conduct during the course of the inspection, the inspector should complete his/her administrative inspection and immediately notify a supervisor of his/her concerns. All information of suspected criminal conduct should be forwarded to the Department's Office of Criminal Investigation. The DEM Office of Criminal Investigation in coordination with the Department of the Attorney General will determine if a criminal violation of the law has taken place.

XIV. PENALTIES

Any willful, and unjustified refusal of right of entry and inspection to Department personnel acting pursuant to an administrative inspection warrant, shall constitute a contempt of court and shall subject the refusing party to sanctions, which in the issuing court's discretion may result in up to six (6) months imprisonment and/or a monetary fine up to ten thousand dollars (\$10,000), per refusal pursuant to R.I. Gen. Laws § 42-17.1-2(t)(2)(D). In the event that a person attempts to prevent or obstruct the performance of an inspection authorized pursuant to a court-issued administrative inspection warrant or threatens the safety of the inspector, the inspector should immediately contact a supervisor and/or DEM's Office of Criminal Investigations, state or local police for assistance in executing the warrant. An inspector should not attempt to forcibly compel a person to submit to execution of an administrative inspection warrant without the assistance of law enforcement personnel.

XV. SEVERABILITY

If any provision of these Guidelines or application thereof to any person, place, or circumstance is held invalid by a court of competent jurisdiction, the validity of the remainder of the Guidelines shall not be affected thereby.

XVI. NO PRIVATE CAUSE OF ACTION

This document constitutes internal guidance for DEM staff engaged in the performance of administrative inspections. Any failure to comply with these Guidelines by DEM personnel shall be handled as an internal personnel matter. Nothing in this document shall be construed to create a private cause of action against the State of Rhode Island, DEM or its management or employees as a result of any failure to comply with these Guidelines.

XVII. EFFECTIVE DATE

The foregoing "Guidelines for Administrative Inspections", after due notice, are hereby adopted and filed with the Secretary of State this ____ day of January, 2003 to become effective twenty (20) days thereafter, in accordance with the provisions of Chapters 42-35 and 42-17.1-2 (t) of the General Laws of Rhode Island of 1956, as amended.

Jan Reitsma, Director
Department of Environmental Management

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