B. Data Management Systems

Two main Data Management Systems are used by the Department in implementing the State's hazardous waste regulatory program: the federal government's Resource Conservation and Recovery Act Information System (RCRAInfo), and TEMPO, a Department-wide information management system.

The EPA developed RCRIS as a replacement for the Hazardous Waste Data Management System (HWDMS) and the Corrective Action Reporting System (CARS). Its purpose was to promote more effective tracking and reporting of hazardous waste activities. RCRIS was subsequently migrated to RCRAInfo, an Oracle based architecture delivering information, reports and permit data entry via a web interface.

RCRAInfo stores information related to regulated entities, identifying various actions taken. The Department is the implementer of record for RCRAInfo's Handler Module, Permitting Module, Financial Assurance Module, and Compliance Monitoring and Enforcement (CM&E) Module. Since the State is not authorized for the Corrective Action program, EPA remains implementer of record for the RCRAInfo Corrective Action Module.

EPA and the State previously had entered into a Memorandum of Understanding (MOU) regarding RCRAInfo to clearly define each agency's responsibilities with respect to RCRAInfo. Currently, the responsibilities of the State regarding RCRAInfo are specified in the annual grant work plan negotiated between MDE and EPA.

Staff members of the Solid Waste Program's Compliance Division are responsible for RCRAInfo data management for the CM&E, Financial Assurance, and Permitting modules. Staff in the Technical Services and Operations Program are responsible for issuing EPA identification numbers to hazardous waste handlers (generators, transporters, treatment storage and disposal facilities), and others required to obtain an EPA ID number. Technical Services and Operations Program staff members are also responsible for data management for the Handler module.

Currently, reports are generated monthly from the CM&E module for use in assessing program goals. Data from RCRA facility inspections pertaining to evaluations, violations, and enforcement actions are entered weekly into the RCRAInfo database and kept current.

The Department identifies and reports to EPA on significant non-compliers (SNCs). Significant non-compliers (SNCs) are those facilities that have caused actual exposure or a substantial likelihood of exposure to hazardous waste constituents; are chronic or recalcitrant violators; or that deviate substantially from the terms of a permit, order, agreement, or from RCRA statutory or regulatory requirements. Environmental impact alone is sufficient to cause a facility to be a SNC, particularly when the environmental media affected require special protection (e.g. wetlands or sources of underground drinking water).

Data for the RCRAInfo handler module and CM&E module are entered into the Department's TEMPO data base. The information is then uploaded into RCRAInfo through EPA's Central Data Exchange (CDX) node. Permitting information and financial assurance information are entered directly into RCRAInfo by the Department.

C. Inspections and Compliance Monitoring

1. Overview

The main difference between inspecting TSDs and inspecting generators and transporters is that generators and transporters are inspected only for compliance with applicable laws and regulations, while a TSD is inspected for compliance with a permit as well as compliance with applicable laws and regulations. Staff in the Hazardous Waste Enforcement Section of the Solid Waste Program's Compliance Division currently perform RCRA Compliance Evaluation Inspections (CEI) of both generators and TSD facilities. The State uses EPA's "RCRA Inspection Manual" (OSWER Directive 9938.02b, October 1993, as revised November, 1998) as guidance for performing inspections. Priorities for inspections are set according to the RCRA Work Plan.

As an integral part of compliance monitoring, enforcement personnel inspect the various CHS permitted facilities, and the generators and transporters of CHS. If the inspector finds a violation, the facility or generator is either verbally notified or issued a site complaint and the inspector conducts a follow up inspection.

For facilities with groundwater monitoring systems, the State performs Comprehensive Groundwater Monitoring Evaluations (CMEs), as well as Operation and Maintenance Inspections (O&M). When performing inspections of groundwater monitoring systems, the State follows the procedures outlined in the EPA manual "Final RCRA Comprehensive Ground-Water Monitoring Evaluation (CME) Guidance Document" (OSWER Directive 9950.2, December, 1986).

The State does not currently perform Case Development Inspections (CDI). Under EPA procedures, a CDI is performed to gather data in support of a specific enforcement action.

Enforcement personnel also engage in various compliance assistance activities. This is viewed as being both a valuable customer service and an efficient, effective way to improve the implementation of environmental safeguards.

The remainder of this subsection is organized into four parts. The first discusses the different types of inspections and how management determines who will be inspected. The second section discusses the inspection itself and how it is conducted. Next, there is a discussion of compliance assistance activities. The final section discusses the level and mix of resources the State has to carry out compliance monitoring and how the addition of elements beyond the base program has affected the State's program in this area.

2. Types of Inspections

Inspections of Hazardous Waste Permitted Facilities—A listing of the universe of permitted hazardous waste facilities is provided in Appendix D. There are currently 22 permitted facilities (including operating facilities and facilities under post-closure care, and facilities required to have a permit under State requirements but not the federal program). Each of these facilities gets inspected on a frequency established in the annual grant work plan. The work plan is developed so that it is consistent with inspection frequencies required by statute under RCRA. In addition, the following criteria are used in setting inspection frequency, as outlined in Environment Article §7-245, Annotated Code of Maryland:

- The size of the facility;
- · The amount of hazardous waste handled by the facility;
- The nature of the waste handled by the facility; and
- The record of compliance of the facility.

Inspections are also performed on an as-needed basis to determine if construction was performed in accordance with permit conditions. Inspections are also conducted to determine if a facility has been closed in accordance with an approved closure plan.

Hazardous Waste Generator Inspections—All generators of CHS are prioritized for inspection scheduling in-house. The amount of waste the generator produces is among the criteria used to determine inspection priority. The EPA's Office of Enforcement and Compliance Assistance (OECA) MOA provides the State with a percentage of the generators identified in the RCRAInfo database as generating more than 1000 kilograms per month of hazardous waste that are to be inspected every year. The number of federally-defined large quantity generators (LQGs) totaled 613 in July 2015, based on information obtained from RCRAInfo. (This figure represents the 1240 LQGs tabulated in RCRAInfo minus 627 bridge painting projects for the Maryland State Highway Administration, Maryland Transportation Authority, and others that were episodic LQGs.) If a generator has been inspected within the preceding three years, the generator is not targeted for inspection unless failure to meet other criteria indicates an inspection is needed.

<u>Hazardous Waste Transporters</u> – Transporter inspections are generally performed as part of the Department's program of inspections of vehicles for compliance with federal motor carrier safety regulations. Hazardous waste transporters may also be targeted for inspection as a result of violations determined through manifest review, in response to a pattern of safety violations, or to investigate complaints. The State's regulations governing the transportation of CHS are found in COMAR 26.13.04.

Other Routine Inspections—A newly constructed or modified permitted facility is required to notify the Secretary prior to beginning operations in the new portion of the facility. Within 15 days of this notification, an inspector and the permit writer for the facility perform an inspection to determine whether the construction was conducted in compliance with the conditions of the permit. For facilities that are closing, an inspector and the permit writer perform the final inspection to determine if the facility has been closed in accordance with the approved closure plan.

<u>Special Case Inspections</u>—The Enforcement Program performs various special case inspections, as circumstances require. These include:

- Responding to citizen complaints regarding suspected violations of hazardous waste laws and regulations;
- Responding to reports from other government agencies with information on possible hazardous waste problems at a site;
- Conducting follow-up inspections to determine compliance on previous State-lead hazardous waste enforcement actions; and
- Responding to reported spills or discharges of hazardous materials.

<u>CHS and Pollution Complaints</u>—As soon as a citizen complaint is received, relevant details are recorded in an Incident Report Form. Based on the provided facts, a decision is made regarding the validity of the information received and, if necessary, it is assigned to an inspector or referred to another agency. Based on data collected, the case is either closed or another follow-up is performed.

Spills/Clean-ups--Response to incidents involving Controlled Hazardous Substances has top priority in the Administration, due to its imminent and direct threat to both the public's health and to the environment. During a spill response, inspectors from the Hazardous Section of the Solid Waste Program's Compliance Division have responsibilities concerning enforcement of the State's hazardous waste regulations. Assistance in mitigating the effects of a spill or release is provided by the Department's Emergency Response personnel.

3. Inspection Procedures

Enforcement personnel routinely inspect hazardous waste generators, transporters, and permitted facilities for compliance with the State's hazardous waste regulations. These inspections involve pre-inspection preparation, the actual inspection, and any post-inspection activities necessary in response to non-compliance with regulatory requirements. Table VI-1 summarizes the activities an inspector performs in conducting an inspection. The paragraphs following Table VI-1 provide a detailed description of these activities.

TABLE VI-1 - SUMMARY OF INSPECTION PROCEDURES

The inspector determines if the inspection will be announced or unannounced.

If the inspection is to be announced, relevant checklists may be provided to the facility for completion.

The inspector reviews biennial reports, files from previous inspections, and the facility permit (if applicable). The inspector may also discuss the facility with other Department staff familiar with it.

The inspector conducts the inspection, collecting pertinent data and making notes.

The appropriate checklists are completed.

If violations are noted during the inspection, the process summarized in the Enforcement Process Flow Chart in Appendix F is followed.

The formal report, describing the inspection and the results of the inspection, is submitted to the Division Chief.

Follow-up inspections are scheduled to insure compliance with all actions the inspector requires of the facility.

Failure to comply could result in more formal action and/ or other enforcement actions.

Pre-inspection Preparation

Inspections may be announced or unannounced. In some cases, the facility is informed of the impending inspection. An example is when special security arrangements need to be made to obtain access to a secure area at a federal facility. The inspector may provide relevant checklists to the facility before the inspection for informational purposes. In other cases, the inspection is not announced.

Prior to the inspection, the inspector reviews biennial reports for information on the type and quantity of CHS managed by the waste handlers. The inspector also reviews files from previous inspections. For permitted facilities, the inspector reviews the facility permit and meets with the permit writer to determine if the permit writer has any particular concerns about the facility. The inspector may also discuss the facility with other Department personnel who are familiar with operations at the facility.

Inspection

The first step in determining a course of action is to conduct a site inspection, audit, record review, or spot check. The purpose of such activity is to determine whether a facility is in compliance with all applicable permits, regulations, and statutes. During an inspection, an inspector may conduct a visual observation of a facility's operation, review records, take samples for analysis, or any combination of these. At the conclusion of an inspection, a written record of these findings is prepared.

During the on-site inspection a broad range of actions may be performed. These include:

- Pre-inspection conference with the facility representative;
- · Inspection of the facility perimeter prior to entry;
- · Physical inspection of the facility;
- Collection of evidence of violations, including samples and photographs;
- Vehicle inspections;
- · Facility records review;
- · Closing conference with the facility representative; and
- · Writing of inspection reports.

While conducting site inspections, the enforcement officials use different checklists including TSD facilities checklist, generator facilities checklist and Land Disposal Restrictions checklist. Along with the checklist, the inspectors complete a Report of Observations, a Pollution Reduction Compliance report and a Site Complaint form if any violation is observed. A written inspection report will also be prepared to summarize inspection findings.

Post-Inspections Activities

The inspector reviews his or her findings, either while the inspector is on site or at a later time, to determine whether the facility is in compliance with all applicable hazardous waste requirements. The need to review inspection findings may also arise through non-inspection activities, such as periodic submittals of self-monitoring reports by permittees. If a facility is found to be in compliance, no further action is necessary. If, however, a post inspection review turns up a violation of a regulation or permit condition, the Department determines the seriousness of that violation. Different administrative responses are warranted for different levels of significance. In most violation situations the facility is served with a violation report, which can be a written inspection report or a separate document.

4. Violation Types (Minor, Major) and Enforcement Options

The Department identifies two categories of violation: Minor violations and Significant (Major) violations.

<u>Minor Violations.</u> A violation that is not serious in nature and does not have the potential to affect human health or the environment is considered to be minor. Such violations were previously known as Class II violations. Examples include:

- Minor excursions from prescribed numerical standards;
- Minor record keeping violations or lack of adherence to deadlines
- First-time offences that do not present potential or imminent harm to public health or the environment;
- Minor violations that can be corrected immediately or in short order.

Technical violations are not necessarily minor. Repeat violations or recalcitrant management behavior can be elevated to significant (major) status, causing an appropriate enforcement response. Intentional falsification of self-monitoring reports is considered significant. Technical violations involving mixed-waste could be considered significant.

Minor violations become significant if they are part of a recurring pattern. Such a violation could become serious if it remains uncorrected or is only partially corrected at the time of the follow-up inspection. Whether this occurs is left to the judgment of the inspector and/or his supervisor, considering factors such as, past compliance history, willfulness of the violation, the degree of harm or potential harm, the ability of the facility to make timely corrections, and any other appropriate factors.

If a facility's management is cooperative about a minor violation, the inspector may set a deadline for correction of the violation. The inspector can request that certain corrections be carried out before he leaves the site, in which case no follow-up inspection is necessary. Follow-up inspections or other measures are taken to ensure corrective action was completed.

For certain technical matters, MDE may provide assistance to help the facility achieve compliance. The inspector may provide the assistance in correcting a minor violation directly, or may help arrange for assistance to be provided later.

If a minor violation results in a Report of Observation, it is not counted as a violation for the purposes of the Department's enforcement statistics. Many documented minor violations are tracked under the category of Compliance Assistance.

Significant (Major) Violations. A violation is considered to be "significant" or "major" if there is an actual or potential threat to public health or the environment that is immediate or imminent, and that threatens to cause serious, chronic or irreversible damage. Examples are leaking or swollen drums or excessive pressure build-up in vessels. The inspector encountering such a situation will order immediate action to address the situation. Additional criteria for classifying a violation as "significant" or "major" are discussed below.

In order to classify a violation as a major violation, various factors are considered. These include whether violations of requirements that are central to the protection of public health and the environment have occurred. Examples of these violations include: actions that result in a release or serious threat of release of hazardous waste to the environment; or involve a failure to assure that groundwater will be protected; that proper closure and post closure activities will be undertaken; or that hazardous waste will be destined for and delivered to permitted facilities.

Certain violations are by their nature considered significant:

- Major excursions from prescribed standards.
- Offences that present a potential or imminent threat to public health or the environment.
- Violations that require a significant amount of time or capital to correct.
- Offences that are part of a pattern of chronic noncompliance.
- A violation deemed significant under federal criteria.

As discussed above under "minor violations", minor violations may be re-categorized as significant if they are recognized as part of a recurring pattern of events.

<u>Evaluation of Enforcement Options</u>—Once a violation has been classified as significant, appropriate enforcement action is usually initiated. An evaluation of the available enforcement options is conducted to determine the most appropriate course of conduct given the particulars of the situation. Determinations on an appropriate enforcement option are made in consultation with the Office of the Attorney General.

Generally, the options for enforcement are:

- Issue a directive:
- Issue a show-cause order;
- Issue a corrective order;
- Enter into a consent order;
- Seek judicial relief;
- Make a criminal referral;
- Assess a penalty (can be done in conjunction with any of the other options shown above),

The enforcement option that is pursued depends on a variety of factors and circumstances. They include:

- Whether certain actions are prescribed by state/federal delegation or enforcement agreements;
- The severity of the violation;
- The degree of harm or potential harm to public health or the environment;
- The willingness of the facility to correct the violation
- Past compliance history; and,
- Willfulness of the act.

If a penalty is thought to be warranted, there are statutory factors that must be considered as part of the decision-making process. These factors are discussed in §7-266 of the Environment Article, Annotated Code of Maryland.

There are rare occasions where circumstances require the Department to decline to take further action. It may be that upon a review of the available evidence, the Department's case is found to be too weak, or is precluded by statute of limitations or other legal defense. It is also possible that the case is more appropriately pursued by a federal oversight agency, such as EPA.

5. Compliance Assistance

One specific form of contact between businesses and MDE's enforcement and compliance inspectors is counted in the program's performance measures charts under the category "compliance assistance". As an element of MDE's enforcement process, an inspector renders an identifiable and countable act of compliance assistance when he or she:

- (a) Documents a specific past or present violation that the regulated entity corrects in the absence of a formal enforcement action; or
 - (b) Documents a specific action (or actions) that the entity has the option of undertaking:
 - · to prevent the likelihood of future violations or potential future violations, and
 - voluntarily, in a manner and within a time period as deemed acceptable by MDE in the absence of a formal enforcement action.

In either (a) or (b), the MDE inspector must document the manner in which the regulated entity voluntarily achieved compliance. This definition of "compliance" has the advantages of being measurable and being objectively verifiable by a third party. (Note that if a facility is allowed to correct a minor violation during an inspection without initiating an enforcement action, it is considered "enforcement discretion" rather than "compliance assistance.")

Although compliance assistance may be offered by an inspector during a routine inspection, the principal focus of such visits is the determination of compliance status. "Compliance assistance visits" are separate visits conducted on an ad hoc basis by personnel of the Department. Such visits may be made by staff of the Solid Waste Program's Compliance Division, or staff of the Resource Management Program.

Beyond the enforcement process, the concept of compliance assistance also involves MDE's public outreach and assistance activity which helps the regulated community understand the law, and assists the regulated community in complying with the law's requirements. Examples of these activities include:

- Assistance on interpretation of the State's hazardous waste regulations that is provided by the Resource Management Program. This takes the form of handling telephone inquiries or responding to written inquiries. Depending on the nature of the question, the assistance could range from an immediate verbal response up to a complex written response involving considerable research. In some cases, the issue that is the basis of the inquiry comes to light through inspectors' routine activities, when an inspector encounters an unusual situation for which it is not immediately obvious how the regulations apply.
- The Sustainability Coordinator in the Office of the Secretary provides several assistance
 programs, including: facilitating confidential facility evaluations by the University of
 Maryland Manufacturing Assistance Program; assisting businesses in implementing
 Environmental Management Systems through workshops, on-site assistance, and audits; and
 assisting with the placement of engineering students in internships that focus on reducing

waste through materials management and energy conservation at Maryland manufacturing facilities.

 The Department maintains a permitting web page that provides a systematic process through which persons can determine what, if any, environmental permits they will need from the Department in order to engage in a particular activity.

6. Inspection Resources and Workload

The Solid Waste Program's Compliance Division is committed to RCRA violation discovery and compliance activities. Under this program, violations are classified as described in the Enforcement Response Policy.

The Compliance Division has continually revised its inspection procedures to incorporate new regulations as they have been adopted. In addition, MDE has received compliance training from EPA on elements beyond the Base Program through seminars and joint inspection efforts. While workload has increased since the Base Program was authorized, the increase is difficult to measure. Nevertheless, the State has been able to meet its inspection commitments.

The Solid Waste Program makes provisions for its inspectors to receive EPA training as the opportunity arises. The State takes advantage of training offered by such sources as EPA's National Enforcement Training Institute (NETI), EPA's Contaminated Site Clean Up Information website (www.clu-in.org), and the Association of State and Territorial Solid Waste Management Officials (ASTSWMO). The State also sends staff to training courses offered by universities and by private organizations.

New inspectors receive the following courses as a matter of routine:

- Basic Inspector Training (Fundamentals of Environmental Compliance Monitoring Inspections);
- · OSHA 40-Hour Hazardous Waste Operation Course.

New inspectors also visit various facilities with experienced inspectors to conduct inspections, for the purpose of providing on-the-job training

Analyses of CHS waste samples are conducted for the Department of the Environment by the Maryland Department of Health and Mental Hygiene (DHMH) and by private, sub-contracted laboratories. The labs conduct analysis of CHS wastes (such as: metals, organics and other inorganic wastes) according to analytical procedures outlined in the EPA document "Test Methods for Evaluating Solid Waste (SW-846)". The turnaround time for analysis of CHS wastes samples varies, depending on the number of samples, type of waste, the test procedure, and the priority of the project that the analysis is supporting.

The Solid Waste Program's Compliance Division is the organization within State government that is solely responsible for civil enforcement of the State hazardous waste statutes and regulations. (This is not intended to imply a restriction of EPA's authority.) All violations are pursued according to the procedures listed in Table VI-2. Any violations determined to be potentially criminal in nature are referred to the Attorney General's Environmental Crimes Unit (ECU) for further investigation and prosecution. Within the MDE organizational structure, ECU is assigned to the Office of the Secretary.

D. Enforcement Process

This subsection is organized into five parts examining the following topics: the State's enforcement procedures, enforcement of corrective conditions, penalties and violations, time frames for enforcement actions, and the resources needed to operate the enforcement program. The various steps in the enforcement process are shown in the flow chart in Appendix F and State forms relating to the enforcement program are found in Appendix G. The forms include Inspection Checklists, the Site Complaint Form and the Incident Report Form.

1. Enforcement Procedures

<u>Enforcement Activities</u> – Maryland will comply with the 2003 Revision of EPA's Hazardous Waste Civil Enforcement Response Policy (ERP) by:

- Appropriately classifying all facilities meeting the definition of a Significant Non-complier (SNC);
- Taking timely and appropriate enforcement actions (all enforcement actions are taken in accordance with "timely and appropriate" criteria established in EPA's Enforcement Response Policy);
- Entering all appropriate data into RCRAInfo in a timely and appropriate manner;
- Implementing the enforcement process (as well as permitting and closures) in accordance with the performance expectations set forth in EPA's "National Criteria for a Quality Hazardous Waste Management Program Under RCRA (EPA / 530 / SW86-021, July 1986).

<u>Inspections</u> – The first step in determining a course of action is to conduct a site inspection, audit, record review, or spot check. The purpose of such activity is to determine whether a facility is in compliance with all permits, regulations and statutes applicable to hazardous waste management. During an inspection, an inspector may conduct a visual observation of a facility, review records, or take samples for analysis. The results of these activities constitute the Department's findings. At the conclusion of an inspection, a written record of these findings is prepared, either at the time of the inspection or at a later date. A copy of the written record of findings is either provided to the facility before the inspector leaves, or at a later date.

Response Time--Failure to comply with the requirements can result in a formal enforcement action, such as a Site Complaint, if the minor violation has not been corrected within a reasonable time period that ranges between immediate compliance to sixty days. In some situations, extra time is provided to come into compliance.

Post-Inspection Evaluation—While the inspector is on the site or at a later date, the Department reviews the inspector's findings to determine whether the facility is in compliance with applicable requirements. The need to review the findings may also arise from other activities, such as the periodic submittal of self-monitoring reports by permittees. If the review determines that the facility is in compliance, no further action is warranted. If the review reveals that a violation of an applicable requirement has occurred, a determination is made of the seriousness of the violation. Different courses of action are recommended for significant violations versus those that are determined to be insignificant.

In most situations where a violation has occurred, a report of the violation is served on the facility. This report may be either the written record of the inspection, or a separate document.

<u>Civil and Criminal Enforcement Procedures</u>--The State of Maryland has the capacity to pursue both civil and criminal enforcement actions against non-complying handlers of Controlled Hazardous Substances. Legal authorities for the pursuit of civil and criminal violations are found, respectively, in Section 7-266 (Civil Penalty) and Section 7-267 (Criminal Penalty) of the Environment Article, Annotated Code of Maryland.

Informal Enforcement Process. Informal enforcement actions are those actions, other than formal enforcement actions, that notify the facility of its non-compliance and establish a date by which the non-compliance is to be corrected. Once a Site Complaint is prepared, a Notice of Violation (NOV) can be issued. If the violator fails to comply within the time period specified in the Site Complaint, the Administration may pursue other enforcement actions including Administrative Orders, and civil and criminal actions including injunctions and closure. For example, if a particular activity at a TSD facility results in a violation, the enforcement staff may issue an NOV for the facility to cease engaging in the activity that caused the violation, mitigate any effects of the noncompliance, and demonstrate a return to compliance by a certain deadline.

Formal Enforcement Process (or Civil Enforcement Process)

A formal enforcement action is an action that mandates compliance and initiates a civil, criminal, or administrative process that results in an enforceable agreement or order. An order requiring the CHS facility or CHS handler to implement corrective action by a specific date is a formal action. The inspector documents all of his or her evidence (including waste samples, photographs of observations, interviews and written reports) of each violation in the Facility Inspection Form or a Report of Observations. The Facility Inspection Form or Report of Observations is checked for accuracy and signed by a representative of the facility and a copy is left at the site. The Facility Inspection Form or Report of Observations is kept on file for possible use in future legal actions.

When repeated attempts to resolve problems by negotiation are unsuccessful, the Administration issues a formal Complaint and Order or issues a Civil Penalty Assessment. After an enforcement action document is prepared, it goes to the Attorney General's (AG) office for review. The AG's office reviews the document for legal sufficiency, signs it, and then it is issued to the CHS violator. If the violator contests the enforcement action, a hearing procedure is followed, as described in the Enforcement Process Flow Chart (Appendix F). If the Administrative remedies fail to achieve compliance, the case is referred to the Attorney General for civil or criminal action. A communication regarding a violation describes the nature of the violation, the permit condition being violated, the law or regulation section being violated, the evidence being submitted (when appropriate), and the corrective action being required for the violator to obtain compliance.

Criminal Enforcement Process.

In identifying a case to be potentially appropriate for enforcement as a criminal case, several criteria are taken into consideration. These criteria are outlined below in decreasing order of priority.

- The case is identified as being criminal in nature based on willfulness of the violation or other legal criteria;
- The case involves a repeat offender;
- The case involves a substantial degree of environmental harm and there is evidence of criminal negligence or intent; and

• The case is particularly important in providing overall deterrence - if there is a particular practice that the State is trying to deter; there is evidence that the violation(s) are criminal in nature; and the perpetrator has a prominent public profile.

If intent is marginal, then the case is checked for a pattern of repeated offenses. If none of the above four criteria can be proved, then the case is referred for civil investigation.

There are three separate State agencies that develop cases for prosecution as environmental crimes within the State of Maryland. In order to prosecute environmental crimes, all three agencies with their combined resources are involved. These agencies and t-he relevant staff members are:

- Maryland Department of the Environment (MDE) Inspectors have the technical background to evaluate the suspect's operations
- Maryland State Police Police Officials have the powers necessary to investigate the alleged crime
- Environmental Crimes Unit (ECU) ECU utilizes the prosecutorial authority of the Attorney
 General, the investigative and law enforcement authority of the Maryland State Troopers and
 other staff assigned to the unit, and the environmental expertise of MDE. The ECU is
 currently comprised of a criminal prosecutor, two investigators, and a supervising attorney.
 The unit is currently attempting to add another prosecutor position. The ECU is a unit of the
 Office of the Attorney General.

Once a case is identified as being potentially criminal in nature, the ECU is notified. Complaints can be received from members of the public or from other agencies, as well as from MDE staff.

The various steps involved in a criminal case are as follows:

- A call is received by ECU with information on a case that is potentially criminal in nature.
- The ECU staff fills out a form with a new referral number assigned to the case.
- · A prosecutor and an investigator are assigned to the case.
- A 60-day target date is set up for the preliminary investigation.
- The investigator makes observations and collects evidence (such as samples and photographs) at the complaint site.
- The prosecutor and investigator discuss the case and make decisions.

Based on the criteria previously discussed, the case is categorized as being criminal or not criminal in nature. If the case is determined to be criminal in nature and there is enough evidence, the case may be pursued as a criminal matter. If the case is determined to be non-criminal in nature, the State can pursue a civil suit. A civil suit can proceed at the same time a case is being assessed for criminal intent. Investigation is carried out simultaneously by both the civil and criminal investigators.

In a particular case, if there is enough evidence that a crime was committed, the prosecutors apply the criminal laws of Maryland in the prosecution procedure. There are four steps involved in the prosecution: formal investigation, filing criminal charges, criminal litigation, and sentencing. Both MDE and ECU are jointly involved in the prosecution, with work assignments clearly delineated between the two agencies.

The steps involved in the formal investigation are:

- Grand jury issues subpoenas;
- · Investigators interview witnesses;
- · Investigators collect information; and
- · Search warrants are served.

The steps involved filing criminal charges are:

- Indictment from grand jury;
- · Filing of criminal information; and
- District court statement of charges.

Based on proceedings of the case, litigation can take the form of either a plea bargain or a trial resulting in a verdict of guilty or not guilty. The case would come to rest if the verdict is not guilty. Otherwise, sentencing follows. The judge sentences those found guilty. The sentence can be a jail term and/or a fine. Probation is also an option. The defendant can appeal the sentence.

An important enforcement tool is the Administrative Search Warrant. Section 7-256.1 of the Environment Article, Annotated Code of Maryland, provides the statutory authority for issuing Administrative Search Warrants. The statute provides the authorized official the legal authority to enter any facility that deals with CHS waste to determine compliance with applicable requirements concerning hazardous waste management. A judge or court may issue a warrant if the inspector requires access to the property for making an inspection and is unable to do so. This usually occurs in the following two instances:

- An inspector has been denied access by the owner, tenant or other person in charge of the property after requesting access at a reasonable time; or
- After making a reasonable effort, the inspector has been unable to locate the owner, tenant, or other person in charge of the property.

The Administrative search warrant authorizes the inspector(s) of the Department to enter the specified property to perform the inspection, sampling, and other functions authorized by law to determine compliance with the State's statutory and regulatory provisions relating to CHS.

An administrative search warrant is to be executed and returned to the judge by the inspector to whom it was issued within the time specified in the warrant. The time within which the warrant can be used is not to exceed 30 days, or if no date is specified, 15 days from the date of its issuance.

2. Enforcement of Corrective Action Conditions Outlined in Operating and Post-Closure Permits

The State is not authorized for the federal corrective action program under the Hazardous and Solid Waste Amendments of 1984 (HSWA). Therefore, this is not applicable to the State. However, the State does have corrective actions on-going under State authorities, and performs inspections to assess compliance with consent agreements or orders under which the corrective actions are being conducted. In some instances, the State has added conditions to its permits at the request of EPA to address site-wide

corrective action obligations the facility has under federal law. Such conditions, being part of a State-issued permit, are then enforceable under State law. (EPA retains its independent enforcement authority for corrective action .)

As a prerequisite for receiving a permit for a land disposal unit, the facility owner/operator has to submit a post-closure plan that outlines specific requirements as required by COMAR 26.13.07.02D(29). The inspectors overseeing the closure and post-closure operations must make sure that all steps outlined in the permit are satisfied.

3. Penalties and Violations

Appropriate Enforcement Response

The selection of an appropriate enforcement response is an integral component of the State's enforcement and compliance enforcement program. An appropriate response will achieve a timely return to compliance and serve as a deterrent to future non-compliance by eliminating any economic advantage received by the violator.

Formal Enforcement Response

The designation of Significant Non-Complier (SNC) is intended to identify non-compliant facilities for which formal enforcement is appropriate. Facilities are evaluated on a multi-media basis to determine whether they are chronic violators or recalcitrant. However, facilities may also be found to be chronic violators or recalcitrant violators based solely on prior RCRA violations and behavior.

Due to the nature of their violations, SNCs are addressed through a formal enforcement response. This response mandates compliance and initiates a civil, criminal, or administrative process which results in an enforceable agreement or order. The formal enforcement response also seeks injunctive relief if necessary to ensure that the non-compliant facility expeditiously returns to full physical compliance.

The Department's policy is that an enforcement response against a SNC by the Division shall incorporate economic sanctions in the form of penalties or alternative punitive mechanisms in the formal enforcement response. In deciding on appropriate monetary penalties or alternate mechanisms, consideration is given to recovering the economic benefit the violator gained through non-compliance plus some appreciable amount reflecting the gravity of the violation. The portion of the penalty which does not account for the economic benefit of non-compliance may be addressed through the use of Supplemental Environmental Projects or Pollution Prevention Projects as deemed appropriate.

The recouping of the full amount of the economic benefit of non-compliance plus some amount based on the gravity of the violation may not be possible in every case. A lesser penalty amount may be appropriate where, for example, the violator demonstrates an inability to pay the full penalty. In addition, there may be circumstances where the nature of the violation and the manner of correction advance important policy objectives, such that substantial mitigation is warranted (e.g., where the violation was discovered by the violator during an audit or self-evaluation, and thereafter promptly and voluntarily disclosed to the Department and corrected, or, where the violation by a small business was disclosed and corrected pursuant to a Department-approved compliance assistance program).

The Division may impose other measures against a non-compliant facility in lieu of monetary penalties. Examples of non-penalty measures include Supplemental Environmental Projects (SEPs),

permit decisions, suspension and debarment proceedings, receivership or special masters.

Informal Enforcement Response

If a facility is found to be in violation but is not designated a SNC, it is designated a Secondary Violator (SV). An informal enforcement response is the minimally appropriate enforcement response for all SVs. An informal enforcement response consists of a recitation of the violations and a schedule for returning the facility to full compliance with all substantive and procedural requirements of applicable regulations, permits, and statutes. Violations which are corrected during the course of an inspection will be documented in the inspection report and the national data system.

A facility that fails to return to compliance within the deadline established as part of the informal enforcement response is reclassified as a SNC. The appropriate enforcement response for a reclassified facility is an immediate escalation to formal enforcement.

If the violator does not respond to the inspector's immediate order, an injunction may be used to force termination of the practice that is causing the major violation. Additional enforcement action may be pursued, including issuance of Complaint and Orders with penalties or criminal referrals. These steps are carried out until relief or compliance is achieved along with the assurance of safety to public health and the environment. The various steps of the enforcement process are outlined in the flow chart shown in Appendix F.

A Site Complaint is usually initially issued after collaboration between the inspector and the enforcement supervisor. If the supervisor cannot be immediately consulted, the inspector will act independently to evaluate the situation and begin enforcement proceedings, or compel mitigation activities to reduce threats to human health or the environment.

Following the issuance of the Site Complaint by an inspector, preparation of a Complaint and Order may begin. Preparation of a Complaint and Order is begun if there is a failure to comply. A criminal referral may also be made to the AG's office. Depending on the sensitivity and urgency of the situation, the Secretary of the Department and the EPA may collaborate in order to solve the problem.

Once a Site Complaint is issued against a facility, depending upon the severity of the violation and the time period needed for a violator to return to compliance, the owner or operator may request a conference with the Department's enforcement personnel. The purpose of the conference is to clarify the nature of the violation or the owner/operator's understanding of the applicable RCRA regulations. If a conference is requested, it can be noted in the Site Complaint and specified through correspondence between the Administration and the facility representatives.

The Site Complaint identifies the violation and advises the violator that he or she may be subject to prosecution and penalty. The violator is advised that certain corrective actions must be undertaken to remedy the violation. The violator is also advised that the Department may seek legal sanctions, including the imposition of civil and/or criminal penalties. Sanctions include penalties as well as other tangible obligations, beyond returning to compliance, that are imposed upon the owner/operator. Usually, the violator is requested in the Report of Observations to provide a follow-up report or letter describing the actions taken by the facility operator to correct or reduce the violation. A follow-up inspection must be made by the inspector to determine if the facility returned to compliance as specified in the Site Complaint. Facilities will be deemed to have returned to compliance when they are in full compliance with a compliance with regulatory and/or statutory requirements or when they are in full compliance with a compliance schedule established in a formal enforcement action. A formal enforcement action is either

an order or an agreement. If a certain timetable for a series of corrective actions is required, a Consent Order can be written that includes a timetable of compliance actions or milestones, which the violator must meet.

Methods used by the Department to document a facility's continued noncompliance may include:

- · field inspections,
- · violator self-report,
- · violator admission at conference, and
- · surveillance activities.

If the violator fails to comply with the Site Complaint, the Department may pursue additional enforcement actions including Administrative Orders, and other civil or criminal actions, such as injunctions. For example, if a facility holds a TSD permit, and a particular handling practice is in violation, the enforcement staff may issue a Complaint and Order for that violation. Part of the facility may also be ordered closed under the closure requirements of COMAR 26.13 (COMAR 26.13.05.07, and regulations referenced therein), or injunctive relief may be pursued.

During a facility inspection, the inspector will make decisions for any enforcement or compliance action under the constraints of the laws and regulations for the State of Maryland. The inspector's site observations will dictate the nature of compliance actions that are deemed necessary. In reality, the severity of any violation is situation specific. A field inspector must rely on a variety of factors, such as number of offenses, chronic violations, magnitude of violations and attitude of the offender, and act on those factors. Suggestions are made to the operator for correcting violations that the inspector notes in the Report of Observations.

If the condition or violation is such that it cannot be immediately remedied during the inspection, the inspector will describe these violations in the inspection report. A written corrective action is included with a timetable that is to be met by the facility owner/operator. Often, the owner/operator will be required to submit a report detailing the steps taken by the operator to bring the facility operation into compliance and assurances made by the operator for continued compliance.

If necessary, a letter from the Administration to the facility owner/operator is written summarizing the inspection and those actions that must be pursued by the owner/operator to reach and maintain compliance. The letter may request that the facility meet with enforcement personnel to discuss the problems and solutions. If these minor violations continue or are not corrected by the time a follow-up inspection is conducted or within a time frame as required by correspondence or any agreements, then further action may be taken against the facility, including additional Site Complaints and/or a formal enforcement action.

The first step is to assign to the violation a Site Complaint number that is logged in the Compliance Division's log book and to issue a Site Complaint against the facility owner/operator. Compliance actions calling for issuance of a Complaint and Order will involve the inspectors conferring with the immediate supervisor/Chief of the Compliance Division and on occasion with the Administrator of the Solid Waste Program or the Director of the LMA.

The decision on a course of action is dictated by the gravity of the noncompliance and the violated rule or regulation. If, in fact, the facility or the site operator is in violation of any aspect of the regulation or law, the facility inspector will note that deficiency and make a decision regarding further enforcement action. As always, the important criteria for an appropriate response are the effects of the violation on public health and the environment.

In a situation where an inspector must consult with his immediate supervisor or chief, the establishment of facts of the case decides a course of action. However, the inspector carries out immediate action on a violation in the absence of supervisor availability when there is a serious threat to public health or the environment.

Penalty Policy

When the Department assesses penalties in administrative cases, it must consider certain factors specified by Maryland statute. The factors that are to be used in determining civil penalties in cases involving Controlled Hazardous Substances are given in §7-266(b)(2)(ii) of the Environment Article, Annotated Code of Maryland. The Department is required to use these factors to determine the appropriate penalty amount. The factors are:

- 1. The willfulness of the violation, the extent to which the existence of the violation was known to but uncorrected by the violator, and the extent to which the violator exercised reasonable care;
- 2. Any actual harm to the environment or to human health, including injury to or impairment of the use of the waters of this State or the natural resources of this State;
- 3. The cost of cleanup and the cost of restoration of natural resources;
- 4. The nature and degree of injury to or interference with general welfare, health, and property;
- The extent to which the location of the violation, including location near waters of this State or areas of human population, creates the potential for harm to the environment or to human health or safety;
- 6. The available technology and economic reasonableness of controlling, reducing, or eliminating the violation;
- 7. The degree of hazard posed by the particular waste material or materials involved; and
- 8. The extent to which the current violation is part of a recurrent pattern of the same or similar type of violation committed by the violator.

The Department will consider each of the specific factors on a case-by-case basis. While all of the factors in the statute will be considered, it is not necessary for all factors to be applicable before a maximum penalty may be assessed. Additionally, it is the Department's policy not to reward those who can afford to remediate the harm they caused by assessing a lesser penalty or no penalty.

4. Environmental Audit Policy

MDE recognizes the benefits that result from companies regularly evaluating their internal work processes for compliance with State environmental requirements. Equally as important as identifying violations is the reporting of such violations to MDE so that MDE can verify that proper and complete remediation and abatement has been implemented. The Department encourages self-auditing as an effective environmental management technique. The Department's Environmental Audit Policy is presented in Appendix I.

MDE may reduce a civil or administrative penalty if a self-disclosing entity meets specific conditions outlined in MDE's Audit Policy. Although not specifically discussed in the Audit Policy, MDE believes it retains the option to recapture economic benefit derived from the period of noncompliance.

5. Timeframes for Enforcement Actions

Response Time Guidelines

This section presents response time guidelines for formal and informal enforcement actions. These guidelines are in accordance with EPA's 2003 Hazardous Waste Civil Enforcement Response Policy, supplemented by the Maryland Department of the Environment Enforcement Procedure (October 28, 2008) (provided in Appendix J). (EPA's Hazardous Waste Civil Enforcement Policy is available at: http://www2.epa.gov/enforcement/hazardous-waste-civil-enforcement-response-policy.)

The response time guidelines are designed to expeditiously return non-compliant facilities to compliance with all applicable requirements of the federal RCRA program or the authorized State equivalent. Response times are divided into two categories; formal enforcement actions and informal actions.

Evaluation Date

The evaluation date ("Day Zero" under the EPA Policy) will be defined as the first day of any inspection or record review. The designation of the evaluation date does not depend on the duration of the inspection, or the stage in the inspection at which the violation is identified.

For violations detected through some method other than record reviews or inspection, the evaluation date will be the date upon which the information (e.g., a notification provided by a self-reporting violator) becomes available to the implementing agency. In the case of a State referral to EPA, the evaluation date will be considered the date of referral to EPA. In the case of secondary violator (SV) facilities which are reclassified for failure to return to full compliance, the evaluation date will be considered the first day of discovery of non-compliance with the compliance schedule established through the informal enforcement response. (Secondary Violators are violators that do not meet the criteria defining Significant Non-Compliers.)

Formal Response Time

There are target response times for enforcement pursuant to RCRA. Target response times for formal enforcement are summarized in the following table:

TABLE VI-2 – FORMAL ENFORCEMENT ACTIONS – RESPONSE TIME TARGETS

<u>EVENT</u>	RESPONSE TIME TARGET	BASIS
Send litigation referral package for SNC to Attorney General's Office for action.	No later than 90 days from the date the violation is identified as a Significant Non-Compliance	MDE Enforcement Procedure
Issue warning letter or other appropriate notification of violations to SNC putting violator on notice of violation(s).	No later than 150 days after evaluation date (EPA "day zero").	EPA Hazardous Waste Civil Enforcement Response Policy
Verify that facility has returned to compliance, or issue unilateral or initial order to designated SNC.	No later than 240 days after evaluation date (EPA "day zero").	EPA Hazardous Waste Civil Enforcement Response Policy
Make a referral to the Department of Justice or the Attorney General's Office, or enter into a final order with the violator.	No later than 360 days after evaluation date (EPA "day zero").	EPA Hazardous Waste Civil Enforcement Response Policy

Final or consent orders are those documents for which no appeal remains before the trier of fact. These orders represent the agreement of the parties involved or the decision of a trier of fact.

Unilateral or initial orders are issued by the implementing agency and assert the agency's position that violations have occurred. However, the respondent/defendant is afforded the opportunity to appeal the agency's determination of violations to an administrative law judge through a formal hearing.

For the purposes of EPA's Enforcement Response Policy, a referral to the Attorney General's Office occurs when the matter is officially transmitted to that office for action. The MDE has established a formal process for requesting that the Attorney General's Office initiate enforcement proceedings on behalf of the State. Completion of that process would constitute referral to the Attorney General's Office.

Exceeding the Formal Enforcement Response Time

Response times are adhered to, to the greatest extent possible. There are recognized circumstances which may dictate exceeding the standard response time. In EPA's Hazardous Waste Civil Enforcement Response Policy, a ceiling of 20% per year has been established for consideration of cases involving unique factors which may preclude the State from meeting the standard response times of the Policy. The 20% exceedance figure is calculated on the total number of civil cases existing in the State at any given time.

In cases where the Enforcement Response Policy response times may be exceeded due to case-specific circumstances, the State will discuss with EPA Region 3 the circumstances that require additional time as soon as possible after the State determines that additional time may be needed. In such

situations, the State will develop an alternative schedule for case resolution. In the event the Region does not find adequate basis for the State's delay in enforcement, the State recognizes the EPA's right to initiate federal action. The Department agrees the EPA may conduct periodic evaluations of State enforcement response times for the purpose of determining appropriate ceiling levels. The State's Authorized State Program will have response time reviews performed during evaluations conducted by the Region.

The Department will strive to comply with the standard response times contained in EPA's Enforcement Response Policy. However, when the following circumstances exist, the Department and EPA accept that up to 20% of the State enforcement cases may exceed the standard response times:

- Cases involving violations that affect two or more media (e.g., where multiple statutes are being violated);
- Cases involving more than one facility;
- Cases involving potential criminal conduct that is under investigation;
- Cases involving national enforcement initiatives;
- · Cases involving nationally significant issues;
- · Cases involving novel legal issues or defenses;
- Cases involving site abandonment;
- Cases for which additional sampling or information requests are required to confirm the violation(s);
- Cases involving a need for outside technical expertise.

Circumstances may arise where the enforcement response times may be insufficient to prepare and initiate the appropriate enforcement response as set forth in the federal policy. Instances may occur where immediate action is appropriate. The Department will take priority enforcement action in the following situations:

- A release or other violation poses an immediate threat to human health or the environment;
- Activities of the owner/operator must be stopped or redirected, such as in cases in which the State seeks to immediately halt improper construction or installation of a regulated unit;
- The threat of a dissipation of assets would undermine closure, post-closure, or corrective action activities.
- There is an imminent statute of limitations or bankruptcy deadline.

E. Informal Enforcement Response Time

The objective of an informal enforcement response is to compel the violator to cease its non-compliant activity and ensure that full physical compliance is achieved in the shortest time possible. Once a determination is made to utilize an informal enforcement mechanism, a violator is given a notice of the non-compliance. As part of this notification, the violator is given a compliance date establishing a deadline for the violator to correct all known violations. The correction period is less than 90 days.

Informal enforcement is only appropriate for violations that are of a nature that will allow a prompt return to compliance with all rules and regulations. Violators should not have a history of recalcitrant or non-compliant conduct in order for the violation to be addressed through an informal response.

Violations that will require an extended compliance schedule in order to achieve full physical compliance are addressed through a formal enforcement response. The compliance date reflects the minimum period of time necessary for the violator to return to full physical compliance. A violator that has corrected its violations on or before the assigned compliance date is officially recognized as having returned to full compliance.

If a violator is unable to meet the assigned compliance deadline, it must notify the Department immediately. The violator must also provide the Department with documentation explaining the violator's inability to correct violations by the prescribed compliance date. The Department will only make a decision to extend the prescribed compliance date if doing so is supported by sufficient documentation.

Failure of the violator to achieve full physical compliance by the compliance date, or failure of the violator to notify the Department of the violator's inability to correct violations shall result in escalation to formal enforcement. The first day after the compliance date is considered the evaluation date for the purpose of escalating the action to a formal response. However, for liability and penalty purposes, nothing in this policy should be taken to imply precluding the assessment of penalties for any violations that occur in the correction period.

Target response times for informal enforcement are summarized in the following table:

TABLE VI-3 - INFORMAL ENFORCEMENT ACTIONS - RESPONSE TIME TARGETS

<u>EVENT</u>	RESPONSE TIME TARGET	BASIS		
Issue NOV, Site Complaint or Inspection Report to violator.	Ideally, concurrent with or shortly after the inspection or other event which lead to identification of the violation, but no later than 30 days following identification of the violation. (May be extended to 45days if an NOV or Site Complaint extends an offer to resolve the Department's claims.)	MDE Enforcement Procedure		
Determine compliance status of the facility following issuance of NOV or Site Complaint.	No later than 60 days after issuance of the NOV or Site Complaint.	MDE Enforcement Procedure		

EVENT	RESPONSE TIME TARGET	BASIS
Recharacterize as SNC if the facility has not returned to compliance, and begin formal enforcement process.	60 days after issuance of the NOV or Site Complaint. (Note – EPA Enforcement Response Policy allows 240 days for the Department to determine whether the recharacterization of the violation is appropriate, and, if it is appropriate, to complete the recharacterization of the violation as SNC.)	MDE Enforcement Procedure

LE VI-4 - ENFORCEMENT PROCESS

Step	Action	Time Required ¹	
Inspections to determine compliance with applicable laws or regulations.	Inspection Checklist – copy of this is left at the site	Immediately	
Minor/Secondary Violation Detected	Report of Observations	Immediately	
	OR		
	Site Complaint (uses a tracking	Immediately	
	number, follow-up is performed, and a Return to Compliance letter is issued when appropriate.)	(with follow-up conducted after appropriate amount of time.)	
Failure to correct a Minor Violation	Notice of Violation is issued.		
	(Considered informal enforcement action. Fine or penalty usually associated. Negotiated settlement.)		
Major Violation/ Chronic Violator/ Repeated Failure to Correct a Minor Violation	Complaint and Order issued. (May be preceded by a Site complaint, and/or a NOV)		
Failure to Comply - Dispute Resolution, appeals	 Issue goes before a hearing officer. Judicial Decision sought. 		
	Goes before the Secretary of the Environment for a final decision.		
	 Goes to a circuit court for an injunction 		
8 4	 Failure to comply with a circuit court's decision may result in contempt charges being filed. 		

F. Enforcement Resources

Please refer to section IV.D.3 for a discussion of Enforcement Resources.

¹ Timeframes for the State enforcement functions match those in the EPA Hazardous Waste Civil Enforcement Response Policy (Dated December 2003), or, if more stringent, timeframes in the Maryland Department of the Environment Enforcement Procedure (Dated 10/28/2008)..

SECTION VII. ESTIMATED REGULATED ACTIVITIES

A. Regulated Waste Activities

Table VII-1 compares the number of regulated waste activities and the quantity of CHS wastes, in Maryland, in 1985 (the time of base program authorization) to 2008.

TABLE VII-1 - REGULATED WASTE ACTIVITIES

Type of Activity	(1985-Base Program)	(2000)	(2004)	(2008)	(2012) (June)	(2015) (July)
Generators Note 1:	(3)					
Large (#):	5750 Note 2	2206	226	544	316 Note 3	613 Note 4
Small (#):	5	3582	1955	4951	5256	4996
Conditionally Exempt (#):	Data not available	3614	7053	4732	5073	5483
Treatment, Storage, Disposal (TSD) Facilities (#) ^{Note 5}	58	24	21	19	20	22
Transporters (#):	203	162	120	104	111	122
RCRA Waste Generated (tons)	93,570 ^{Note 6}	66,290 Note 7	39,715 ^{Note 8}	33,684 ^{Note 9}	44,250 Note 10	47,987 ^{Note 11}

Note 1: These are categories as defined in federal RCRA regulations. Under the State's regulations federally-defined "large quantity" and "small quantity" generators are treated identically. The Maryland-defined "small quantity generator" category is analogous to the federal "conditionally exempt small quantity" generator category.

Note 2: This is an estimate of the number of federally defined large quantity and federally defined small quantity generators. It is derived from the FY 1986 grant work plan in which the State committed to inspect 2% of generators and transporters, which was stated to equal 120 in the 1986 work plan. Since the number of transporters at the time of base program authorization was 203, the number of generators can be estimated as $(120 - (0.02 \times 203)/0.02 = 5750.$

Note 3: This number represents the number of LQGs reported in RCRAInfo minus 367 bridge painting projects that temporarily qualified as LQGs.

Note 4: This number represents the number of LQGs reported in RCRAInfo minus 627 bridge painting projects that temporarily qualified as LQGs.

Note 5: These numbers reflect federally regulated and State-only regulated facilities.

Note 6: This figure is based on 1987 biennial report data, as corrected in connection with the Capacity Assurance Planning (CAP) process, and reported in the State's CAP report.

Note 7: This figure is the number reported in EPA's State Summary Analysis based on 1995 biennial report data, corrected by substituting data for Bethlehem Steel Corporation's Sparrows Point plant from 1997 for its

1995 data reported in the EPA summary.

Note 8: This figure is 2005 waste generation as reported in the National Biennial RCRA Hazardous Waste Report – State Detail Analysis (available at

http://www.epa.gov/epawaste/inforesources/data/br05/state05.pdf).

Note 9: This figure is 2009 waste generation as reported in the National Biennial RCRA Hazardous Waste Report – State Detail Analysis (available at

http://www.epa.gov/epawaste/inforesources/data/br09/state09.pdf).

Note 10: This figure is 2011 waste generation as reported in the National Biennial RCRA Hazardous Waste Report – State Detail Analysis (available at

http://www.epa.gov/epawaste/inforesources/data/br11/state11.pdf.

Note 11: Figure obtained from EPA's RCRAInfo Web reporting function based on 2013 biennial report data at:

http://rcrainfo.epa.gov/rcrainfoweb/action/modules/br/national?_fp=oKkrv7T9VsavCnt2Bg0oWZTC8zeTawTcD8UAOc2eWA3C0CwyXBfiQBQj6N-8Qkwz8Q0Jw7R-

XwgYFicsDU2 gw%3D%3D&searchCriteria.stateCode=MD&d-4711493-

o=2&search=Submit&searchCriteria.reportCycle=2013&d-4711493-p=1&d-4711493-

 $\underline{s=5\&_sourcePage=yfY-wP8bIggu-LLUmCegNauS4NM8WbfxRU6MccX2Sqv81wFq2KEPXA\%3D\%3D}>. Data accessed on August 11, 2015.}$

B. Permits

There are different categories of permits. Table VII-2 compares the current number of permits with the number of permits at the time of base program authorization. These numbers include some facilities that are required to have hazardous waste facility permits under Maryland regulations, but not federal regulations (such as transfer facilities, PCB-only facilities, and closed pre-RCRA land disposal units.)

TABLE VII-2
NUMBER & TYPE OF PERMITS

Type of Permit	Total (1985- Base Program)	Total (2000)	Total (2004)	Total (2008)	Total (2012)
Operating Permit	58	21	17	15	16
Post Closure	0	7	7	7	7
Total Permits*	58	24	21	19	22

^{*} Note: "Total Permits" is less than "Operating Permits" plus "Post Closure" because some facility permits include both operating requirements and post-closure requirements. A comprehensive list of permitted facilities appears in Appendix D.

SECTION VIII. COPIES OF STATE FORMS AND COORDINATION WITH OTHER AGENCIES

Copies of applicable state forms may be found in the Appendices, as listed below:

- Appendix B contains the Tracking/Certification Section's Standard Operating Procedures (SOP) on the following subjects,.
 - The Notification of Hazardous Waste Activity
 - CHS Hauler/Vehicle Certification Applications
 - Processing of Annual/Biennial Hazardous Waste Reports
- The forms utilized by the Tracking/Certification Section are found in Appendix C. These include:
 - Application for CHS Hauler Certification
 - Application for CHS Vehicle Certification
 - Hazardous Waste Manifest
 - Notification of Regulated Waste Activity
- The permit application form used by the Permitting Division is found in Appendix E. (This is the federal "Part A" form. There is not a standard form for the other information that applicants must submit the so-called "Part B" application.)
- Copies of State Forms relating to the Enforcement Program are found in Appendix G. These include:
 - Inspection Checklists
 - Site Complaint Form
 - Incident Report Form
 - Hazardous Waste Laboratory Organic Waste Analysis form

A Memorandum of Agreement that specifies how the State of Maryland and EPA will coordinate activities to implement Subtitle C of RCRA is a separate element of the State's application for Program Authorization. The Memorandum of Agreement remains unchanged from the most recent, approved authorization application.

The Memorandum of Agreement that specifies how MDE and MDOT will coordinate inspection activities for hazardous materials transporters (including hazardous waste transporters) may be found in Appendix H.

APPENDIX A

CONSOLIDATED CHECKLISTS AND REVISION CHECKLISTS

(Note: The Consolidated Checklists and Revision Checklists that show the correspondence between Maryland regulations and federal regulations are found in the Attorney General's statements that are part of the various applications for program authorization that the State has submitted to EPA.)

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APPENDIX B

Standard Operating Procedures

Notification of Hazardous Waste Activity
CHS Hauler/Vehicle Certification
Manifest System
Biennial Reports of Hazardous Waste Activity

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Notification of Hazardous Waste Activity - Standard Operating Procedure

Function: Assignment of EPA ID numbers to regulated entities, and maintenance of RCRAInfo Handler Module data.

Responsible parties: Staff of the Technical Services and Operations Program, Hazardous Waste Certifications/Manifests Section

Procedures:

1. Assignment of a new, permanent number:

Staff member determines if applicant actually needs a permanent number. This is determined through discussing the situation with the applicant, either prospectively if a potential applicant makes contact with the Program to inquire about obtaining an id number, or after an application is received by contacting an applicant if review of the application raises questions about whether a number is actually needed.

Persons applying for an EPA ID number are required to submit a completed Notification of Regulated Waste Activity form (EPA Form 8700-12). Prospective applicants are referred to EPA's web site to obtain the form. The Department will provide a copy by mail if the prospective applicant does not have internet access.

Upon receipt of the form, Program staff date stamp it, and enter it into a log of applications received. Program staff then search the RCRAInfo and TEMPO databases to verify that an EPA ID number has not previously been assigned to the location associated with the application. If a number has previously been assigned, the applicant is contacted and advised to submit a subsequent notification for the previously assigned id number, with the notification reflecting current activities at the site. If a number has not previously been assigned, staff reviews the application for completeness and accuracy.

The applicant is contacted to resolve any discrepancies in the application. Once the application has been determined to be complete and accurate, the next available number is assigned to the handler. The Program sends a copy of the Acknowledgement of Notification of Regulated Waste Activity form (which includes the assigned id number) to the applicant, and enters data associated with the newly assigned number into RCRAInfo via the State's TEMPO data base, using the EPA's Central Data Exchange (CDX) node. A paper file is created for the handler, and a copy of the Acknowledgement form and the Notification of Regulated Waste Activity are placed in the file. (This file will also be used to archive biennial reports of hazardous waste activity submitted for the site associated with the id number.) A notation is made in the log of applications received of the date that the number was assigned.

On a monthly basis, random checks are made to verify that information has been accurately entered into RCRAInfo.

- 2. Subsequent notifications. Subsequent notifications are filed when information associated with a given EPA ID number changes. Common examples of situations requiring a subsequent notification are a change in generator status, changes in site contact information, and site closure and/or cessation of waste generation, requiring deactivation of the id number. The same general procedures are followed for subsequent notifications as for the initial notification. The handler is required to use EPA Form 8700-12 to indicate the changes in information associated with the id number for the handler's site.
- 3. Temporary ID numbers. The State can issue a one-time, temporary site identification number in instances when the point of waste generation is not expected to generate waste again. Examples include sites of roadside spills or illegal dumping, and one-time cleanouts of sites that are not expected to generate hazardous waste in regulated quantities in the future.

The State's policy is to only issue a temporary number to a particular location once. If there is a subsequent need for the site to have an id number, the responsible party is instructed to obtain a permanent ID number for the site.

Temporary ID numbers are issued following submission of information by the applicant on a standard form. If circumstances require rapid issuance of a number, a number can be issued over the telephone. Upon receiving an inquiry from a person seeking a temporary ID number, Technical Services and Operations Program staff first checks the Department's databases (CWMIS and TEMPO) and archival information to verify that the location has not previously been issued a temporary number. TEMPO and RCRAInfo are also checked to verify that the site does not have a permanent ID number. If the site is eligible for a temporary ID number, the person seeking the number is told to make arrangements for the waste pickup. The responsible person (generator or offeror of the hazardous waste at the location) is instructed to file the application for the number once the responsible person has made arrangements to retain the services of a certified hazardous waste hauler. When the responsible person has provided all the relevant information concerning the waste pickup, the Technical Services and Operations Program issues the temporary number, enters it into the TEMPO data base, and enters information concerning the temporary number into a log book.

CHS Hauler/Vehicle Certification - SOP

Function: Certify companies that pick up hazardous waste from one or more locations in Maryland and/or deliver hazardous waste to one or more locations in Maryland, and approve vehicles for use in transporting hazardous waste by certified haulers.

Responsible parties: Staff of the Technical Services and Operations Program, Hazardous Waste Certifications/Manifests Section

Procedures:

1. New hauler.

When a person contacts the program and indicates an interest in being certified as a hazardous waste hauler, Program staff direct the person to the application forms that are posted on the Department's web site. If the applicant does not have internet access, forms are sent to the prospective applicant. A checklist that identifies the elements of a complete application is made available to prospective applicants. Applications must be accompanied by a fee of \$50 per vehicle for which certification is sought.

The applicant submits the application via email and mails the fee with a payment form to a bank post office box, where the fee is deposited into a State account.

Program staff logs in the application, and date stamps it. Staff then reviews the application, identifying any missing, incomplete or incorrect information. The applicant is contacted if the application is deficient, and revised information for the application is obtained.

A search in RCRAInfo is completed to determine if the the applicant has any compliance issues. A search is made of a data base maintained by the Comptroller of Maryland to determine if the applicant has any outstanding tax liabilities with the State.

Once the application is complete, a certification package is prepared, consisting of a Hauler's Certificate and a listing of vehicles certified. Once the Director of the LMA signs the certification, the Program sends to the applicant the certificate, the vehicle listing, a copy of guidelines for transportation of hazardous waste, and an appropriate number of certification documents that are to be carried in the certified vehicles.

Staff enters relevant information concerning the issued certification into a log, and enters information regarding the hauler into the Department's TEMPO data base. The application and a copy of the issued certification are filed with the Program's files.

2. Renewing hauler:

The same general procedures for review and issuance of the certification are followed for renewals as for new applications. The only difference is that currently certified haulers are contacted 60 days before their certification expires to remind them of the impending expiration, and request that they contact the Program if they intend to renew so that the process may be started.

HAZARDOUS WASTE MANIFEST PROCESSING – STANDARD OPERATING PROCEDURE

TASK/FUNCTION: Hazardous Waste Manifests

REQUIRED BY: COMAR 26.13.03.04 / 40 CFR Part 262 Subpart B

COMAR 26.13.05.05

COMAR 26.13.04.02 / 49 CFR Parts 171-180

RESPONSIBLE PARTIES: Staff of the Technical Services and Operations Program, Hazardous Waste Certifications/Manifests Section

DESCRIPTION: A generator who transports, or offers for transportation, hazardous waste for off-site treatment, storage, or disposal shall prepare an approved manifest on EPA Form 8700-22, and if necessary, EPA Form 8700-22A, according to the instructions included in the appendix to 40 CFR Part 262 before transporting the waste off-site.

FORMAT: Generators of hazardous waste are required to obtain manifest forms provided by an EPA-approved registrant.

PURPOSE: To ensure documentation of movements of Hazardous Waste from cradle to grave; that is, from point of generation to disposal destination.

RECEIPT: The manifests are received by the secretarial staff and date stamped and forwarded to a staff person.

PROCESSING:

General procedures:

Upon receipt by the staff person, the manifests are reviewed for completeness and sorted by the alpha-suffix of the manifest tracking number (MTN). A manifest tracking number is an alphanumeric identification number (i.e., a unique three-letter suffix preceded by nine numerical digits), which is preprinted on the manifest by an EPA-approved registrant (registered printer). In reviewing the documents, instances of missing or illegible information may be detected that would require the staff person to contact the generator or some other responsible party to obtain the information.

Data Entry by MDE staff: MDE staff members record key information from the manifests in a rudimentary data base. This data base is used in identifying generators who are active, and generators who are required to file biennial reports of hazardous waste activity.

After errors have been corrected and data has been entered into the data base, the documents are filed by year in filing cabinets, in alphanumeric order. Manifest for the preceding three years are stored at Montgomery Park.

Biennial Reports of Hazardous Waste Activity - Standard Operating Procedure

Function: Collection and processing of Biennial Reports of Hazardous Waste Activity

Responsible parties: Staff of the Technical Services and Operations Program, Hazardous Waste Certifications/Manifests Section

Procedures:

1. Mailing List Development

Biennial reports of hazardous waste activity are required to be filed in even-numbered years. The reports are required to contain information on the hazardous waste activity by a generator in the preceding calendar year (the odd-numbered year).

The first step for the Department is to develop a mailing list of entities to whom information concerning the reporting requirement will be mailed. At one time, forms were mailed to all holders of an EPA ID number in Maryland. However, this resulted in a high percentage of forms being returned by the U.S. Postal Service as undeliverable (from entities that had gone out of business, but had not filed a subsequent notification.)

Currently, the mailing list is based on information from hazardous waste manifests on who is actually shipping waste. Beginning with manifests from January 1 of the odd-numbered year, staff members examine the records of manifests the Department has received to determine which generators have shipped hazardous waste during the reporting period. Manifest records continue to be examined through February of the year the report is due to assure that persons shipping waste late in the year are not missed.

The Department's mailing of information concerning the biennial reporting requirement is done both as a courtesy to the regulated community, and as a way of encouraging compliance. A person required to file a report cannot use the failure to be included on the Department's mailing list as a defense in an enforcement action brought by the Department for failing to file.

2. Development of Supplemental Information

Concurrently with the development of the mailing list, the Technical Services and Operations Program develops State-specific information that supplements the federal biennial report forms and instructions. The State-specific information addresses areas where the State reporting requirement is more stringent or broader in scope than the federal requirement (such as the threshold on waste generation or accumulation that triggers the reporting requirement, and the identity of additional State hazardous wastes that must be reported). In addition, staff members prepare a cover letter for the report form package, a "frequently asked questions" document, a "key points" document highlighting potential pitfalls in filling out the report, and information on electronic filing of the reports. This supplemental information is included as part of the report form package that is mailed to persons on the mailing list. The supplemental information is also posted on the Department's website.

3. Distribution of Forms and Instructions

At some point after EPA has made the report forms and instructions available on the EPA web site, Department staff members assemble the report packages for mailing (including the State cover letter and other State-specific supplementary material), and send the packages to those on the Department's biennial report mailing list.

At one time, the State included copies of the biennial report forms and instructions with the package mailed to generators. Currently, the package only includes the internet address of the EPA web page where the forms and instructions are available for download. If a generator does not have internet access, the generator can contact the Technical Services and Operations Program to obtain the forms and instructions.

The goal is to distribute the mailing by late November or early December of the reporting year (the odd-numbered year). (The actual timing is contingent on the availability of the forms and instructions from EPA.)

Staff members maintain a data base that tracks entities to whom the report packages were mailed (including name, address, and EPA ID number.)

4. Assistance with Report Completion

Staff are available to answer questions from those completing the report. Questions may be asked by phone or by email.

5. Processing of Reports

Upon receipt of a completed report, the staff date stamps the report and enters the date of receipt into the report tracking data base data base.

Staff segregates reports from federally-defined large quantity generators for priority processing.

Reports are reviewed for completeness and accuracy, and any errors, inconsistencies, or missing items of information are noted. The person who filled out the report is contacted, and the issues are resolved.

Reports from federally-defined large quantity generators that are deemed complete and accurate are forwarded to staff for data entry into data base software that will allow the data to be transmitted to EPA's biennial report data management system.

The main priority is on processing reports from federally-defined large quantity generators. As time permits, reports submitted by other categories of generators are also reviewed. Data from these other categories of generator are not currently entered into an electronic data base.

Following processing, submitted reports are filed and retained as a permanent record of

hazardous waste activity at a given site.

6. Uploading of Data

After data from federally-defined large quantity generators successfully pass quality control checks, data is uploaded into EPA's national BRS data base. The following EPA-specified process is followed:

- a. Preliminary data is loaded the State's data is loaded as a full submission
- b. BR Data Quality Reports are run the State runs the data quality reports developed and maintained by EPA. The State compares the current report cycle's submission to that from the previous report cycle.
- c. Data corrections are made, as needed, and the entire data set with corrections is submitted to EPA as a full submission.
- d. State Summary Report once the State is comfortable with the quality of the preliminary data, a State Summary Report is requested from EPA. The State reviews the State Summary Report and addresses all errors as indicated, indicating whether items flagged as potential errors were, in fact, errors, and specifying how each error was corrected.
- e. Submission of final, corrected data if corrections have been made to the data after reviewing the State Summary Report, the entire (corrected) data set is resubmitted before the deadline established by EPA.
- f. After the State has submitted the corrected data, a completed State Summary Report is submitted to appropriate contacts at EPA Region 3 and EPA Headquarters.
- g. Any final issues raised by EPA regarding the State Summary Report are resolved, and the data are formally declared "final" in an email message to EPA headquarters.
- h. If any corrections are needed to the data after the biennial report cycle has closed (i.e., after EPA has published the national Report, the State submits corrected data on a transactional basis to EPA. Only the data being corrected is submitted, in accordance with EPA directions.