

US EPA ARCHIVE DOCUMENT

## INTRODUCTION

## Summary

Hazardous Waste Management laws in the State date back to 1976, with the passage of the Safe Disposal of Designated Hazardous Substances Act (with amendments, now Health-Environmental Article 7-208 thru 7-268). With the Act and subsequent regulations, Maryland became one of the first states to have an effective, operational hazardous waste regulatory program. In a survey conducted in 1979, the League of Women Voters acknowledged this by rating the State program as one of only two nationally to receive a passing grade from an environmental and public health standpoint. This program has grown stronger and more effective in recent years.

Concurrent with the passage of Maryland's Act, was the passage, by Congress, of the Resource Conservation and Recovery Act of 1976. This Act, though originally containing many provisions for non-hazardous wastes, concentrated its greatest powers in the area of hazardous waste management. The Act, or RCRA, (acronym for Resource Conservation and Recovery Act) gave broad authority to the United States Environmental Protection Agency (EPA), to establish a national regulatory program for the control of hazardous waste generation, transportation, disposal, storage, treatment and incineration.

The Department of Health and Mental Hygiene's (DHMH), Office of Environmental Program's (OEP) Waste Management Administration

(WMA) is the sole State Agency charged with administering a hazardous waste regulatory program. Several other State agencies outside of the Office of Environmental Programs deal with hazardous waste issues, though not from a regulatory standpoint. They include:

- the Maryland Environmental Service (MES), which serves, when necessary as a private "waste" utility;
- the Hazardous Waste Facility Siting Board, which is empowered to issue "Certificates of Public Necessity"; to provide for long term need determination; and, to involve itself in site selection (See Chapter VII); and,
- the State Fire Marshall, which on occasion, provides service during spills or other mishaps (See Appendix XIV).

Other units in the Office of Environmental Programs also give assistance to the Waste Management Administration on request.

The two most active include:

- The Air Management Administration (AMA), which provides technical expertise on incinerator permits, and,
- The Science and Health Advisory Group (SHAG) which lends it's advice on matters pertaining to epidemiology, toxicology and other public health related items.

Of particular assistance outside of the office of Environmental Programs, but within the Department of Health and Mental Hygiene, is the Laboratory Administration which provides a complete lab analysis service to the WMA (see Chapter VI, Laboratory Administration).

All of the agencies described above, operate with a single

goal of protecting the public's health and the environment. This goal is implemented by judicious permitting and effective enforcement at all treatment, storage and disposal (TSD) facilities.

It is in the area of permitting and enforcement that the State draws upon its experience and expands upon the current RCRA program, as administered by the EPA. There are three broad differences in concept between the EPA program and the State program. They are:

- The EPA regulates hazardous waste while the State regulates Controlled Hazardous Substances or CHS of which hazardous waste, as defined by 40 CFR Part 261 is but a subset. Also included as CHS are substances that are toxic, lethal or sublethal to plant, animal or aquatic life, injurious to human beings, or persistent in the environment (Health Environmental Article 7-201(k);
- The State-issued permit does not act as a shield for the facility against regulation change. In the Federal System, a permit becomes upon its issuance, the sole enforcement tool. In the State system, at any time during the life of the permit, either the permit or the regulations, may be used for enforcement purposes. This applies even if regulations change during the term of the permit. Under provisions provided for in the regulation change, the new regulations are enforceable upon adoption; and,

- The frequency of inspections at TSD's is mandated by State law. Federal law leaves the frequency of inspection to EPA's discretion. At present, major facilities are to be inspected yearly, minor facility once every two years. State law requires inspections at least monthly, in the case of landfills, weekly.

With these modifications, and others as described in this Program Description, the State will demonstrate that it has the capability to operate its own hazardous waste regulatory program.

In establishing a national regulatory program, EPA established procedures whereby primary authority to run the program can be transferred to each state. With an absence of Indian lands, the State is not seeking authority over that aspect of the Federal RCRA program. This document was prepared in accordance with the procedures prescribed by the U.S. EPA in order to secure Final Authorization for the State's Program.

## ORGANIZATION

The Department of Health and Mental Hygiene, Office of Environmental Programs (OEP) has primary State responsibility for regulating hazardous waste generators, transporters, storers, treaters, incinerator operators and disposers. The organization described only refers to activities regulated under COMAR 10.51., and does not cover activities analagous to the Federal "Superfund" program.

The Waste Management Administration (WMA) of OEP has divided responsibility for regulation into two functions: permitting and enforcement. Permits are developed for all treaters, storers and disposers of hazardous wastes (as defined by RCRA) in the Technical Services Program. The Program is also responsible for maintaining records on the generation of hazardous waste, and for certifying all drivers, haulers and vehicles involved in hazardous waste transportation.

Administrative tasks are handled by the Program Development Division, operating out of the Director's Office.

The Enforcement Program of WMA uses two groups to enforce the requirements of COMAR 10.51.01. - .10, and to enforce permits issued. The inspection of generators and transporters and enforcement of generator and transporter requirements of COMAR 10.51.03-.04 is the responsibility of the enforcement regions of the State (See Table 3). These inspectors make periodic inspections of those generators in their assigned geographic

regions. Inspections and enforcement of facilities that treat, store, incinerate, or dispose of hazardous waste are assigned to the Hazardous Waste Inspection Team. The personnel in this Team inspect, on a monthly or weekly basis, all facilities regulated by COMAR 10.51.

The Attorney General's Hazardous Waste Strike Force is assigned to the Administration, to handle civil, criminal, and administrative actions brought about by the Enforcement Program. This unit consists of Assistant Attorneys General and criminal investigators from the Maryland State Police.

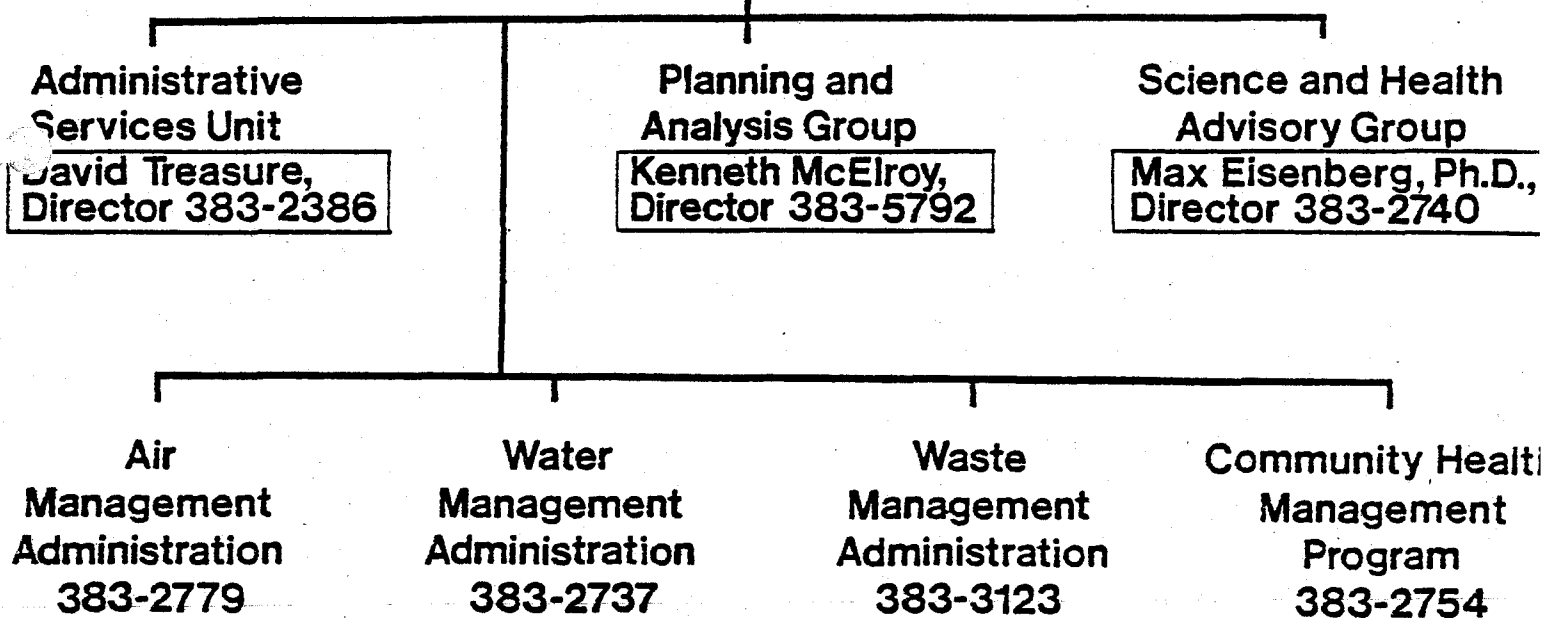


# OFFICE OF ENVIRONMENTAL PROGRAMS



## Organization Charts

**ASSISTANT SECRETARY**  
**William M. Eichbaum**  
**383-7328**



## AIR MANAGEMENT ADMINISTRATION

George P. Ferreri, DIRECTOR

383-2779

### TECHNICAL SERVICES

383-3245

- Air Quality Planning and Data Systems
- Air Monitoring

### ENGINEERING AND ENFORCEMENT

383-3147

- Engineering Services
- Stationary Source Enforcement

## WATER MANAGEMENT ADMINISTRATION

Richard B. Sellars, Jr., DIRECTOR

383-2737

### CONSTRUCTION GRANTS

383-2761

- Permits
- Grants Administration
- Grants Programming and Liaison
- Grants Project Management
- Design Review
- Construction Inspection

### INSPECTION & COMPLIANCE

383-6696

- Water Supplies
- Residential Sanitation
- Sewerage

### PLANNING & EVALUATION

383-4214

- Planning
- Water Quality Monitoring
- Technical Analysis

## WASTE MANAGEMENT ADMINISTRATION

Ronald Nelson, DIRECTOR

383-3123

### TECHNICAL SERVICES

383-5670

- Hazardous Waste
- Industrial Waste
- Municipal Waste
- Program Development

### ENFORCEMENT

383-6650

- Region I
- Region II
- Region III
- Region IV
- Support Services
- Hazardous Inspection Team

## COMMUNITY HEALTH MANAGEMENT PROGRAM

David Resh, ADMINISTRATOR

383-2754

Community Services  
383-2388

Milk Control  
383-2755

Food Control  
383-2751

Radiation Control  
383-2744

**WASTE MANAGEMENT ADMINISTRATION**

Attorney Generals Hazardous  
Waste Strike Force  
383-3532

Director  
(Ronald Nelson)  
383-3123

Program Development Division  
(Douglas H. John)  
383-5740

Technical Services Program  
(William Chicca)  
383-5670

Enforcement Program  
(John Koontz)  
383-6650

- INDUSTRIAL WASTE DIVISION  
(Georgina Havlik)

- Hazardous Waste Inspection Team  
(Arthur Caple)

- NPDES Section  
(John Veil)

- Region I - Garrett, Allegany,  
Washington, Frederick  
(Robert Creter)

- 215 SECTION  
(John Lawther)

- Region II - Baltimore, Harford,  
Baltimore City  
(Paul Thompson)

- HAZARDOUS WASTE DIVISION  
(Vacant)

- Region III - Carroll, Howard  
Montgomery, Charles, Prince  
George's, Calvert, St. Mary's  
Anne Arundel  
(Barry Schmidt)

- Permits Section  
(Lou Martino)

- Data Management Section  
(Thomas Battle)

- Region IV - Cecil, Kent, Talbot,  
Queen Anne's, Caroline, Dorchester,  
Wicomico, Worcester, Somerset  
(John Chlada)

- MUNICIPAL WASTE DIVISION  
(James Pittman)

- Sludge Section  
(Ernie Spencer)

- Support Services

- Public Facility Section  
(Ed Dexter)

NOTE: Legislative action during the 1984 General Assembly session resulted in passage of numerous new statutes, and accompanying appropriations. The new legislative package has required the WMA to seriously consider reorganizing its two Programs (Technical Services and Enforcement) to address, more directly, program specific goals. As of the writing of this document, re-organization has not been finalized. It is anticipated however, from early draft documents, that although the Enforcement Program will be the most radically changed Program, the Hazardous Waste Strike Force will be little affected. In all probability the Enforcement Program will be structured along more "programatic" lines. Once the reorganization has been approved, the WMA will update this Program Description to reflect implemented changes.

## Glossary

Many acronyms used in this Program Description may not have the same meaning in common English usage. The following is a list of those most frequently used:

|         |   |  |
|---------|---|--|
| AMA     | - | State Air Management Administration                                      |
| ASTSWMO | - | Association of State and Territorial Solid<br>Waste Management Officials |
| Board   | - | Hazardous Waste Facility Siting Board                                    |
| CFR     | - | Code of Federal Regulations  |
| CHS     | - | Controlled Hazardous Substances  |
| COMAR   | - | Code of Maryland Regulations   |
| DC      | - | Drivers Certificate  |
| DHMH    | - | State Department of Health and Mental Hygiene                            |
| DNR     | - | State Department of Natural Resources                                    |
| DOT     | - | Federal Department of Transportation                                     |
| HE      | - | Health Environmental Article   |
| HO      | - | Hearing Officer  |
| HWH     | - | Hazardous Waste Hauler   |
| HWI     | - | Hazardous Waste Incinerator  |
| HWIT    | - | State Hazardous Waste Inspection Team                                    |
| LFP     | - | Limited Facility Permit  |
| NPDES   | - | National Pollutant Discharge Elimination<br>System                       |
| OEP     | - | Office of Environmental Programs   |
| PM      | - | Project Manager  |

POTW's - Publicly Owned Treatment Works  
RCRA - Resource Conservation and Recovery Act  
TSD - Treatment Storage and Disposal  
UIC - Underground Injection Control  
U.S. EPA  
or EPA - United States Environmental Protection Agency  
WMA - State Waste Management Administration

## Public Hearing

Pursuant to 40 CFR 271.20 (a), Approval process, the State held a Public Hearing on April 26, 1984 at 7:30 p.m. in Baltimore, Maryland to solicit the public's thoughts and comments concerning its draft application for Final Authorization of RCRA.

In accordance with 40 CFR 270.20 (a) (1), the Administration provided initial public notification of the hearing in the March "OEP Regulatory Calendar". This was sent to the 800 people on the OEP mailing list the first week of March. Copies of the draft application were placed in State Depository Libraries. Notification was also provided via newspaper notices in five local newspapers from March 25, 1984 through March 29, 1984. Lastly, final notification was provided for in the Friday, April 13, 1984 edition (Vol. 11, Issue 8) of the Maryland Register.

In addition to the Hearing Officer, there were, at the public hearing, one representative of the Waste Management Administration, one representative of the Air Management Administration and one representative of Region III EPA. Two citizens attended the Public Hearing. After the State's presentation, there were no comments, questions, or concerns expressed by the public. The hearing record was held open for one week; one comment was received in general support of the State's program. Enclosed in Appendix I are the following:

- Public Hearing Notice
- April OEP Regulatory Calendar
- Comment received

Based on the lack of comments received and on EPA's official comments on the State's draft application, there is no need to hold a second hearing on the State's intent to seek Final Authorization under RCRA.



**TECHNICAL SERVICES PROGRAM**

**HAZARDOUS WASTE DIVISION**

## HAZARDOUS WASTE DIVISION

### I. INTRODUCTION

Purpose - The objective of the Division is to implement and administer those provisions of the law and regulations having to do with the management of hazardous waste.

Scope - Personnel develop permits for facilities, develop and implement regulations, certify Haulers, Vehicles, and Drivers, operate the state's manifest system and provide technical support to the Administration including testifying in support of Departmental actions at Administrative Hearings and in Court.

Role - The Division is responsible for the overall management of all hazardous waste activities (except enforcement) including the permitting of facilities, certification of Haulers, Vehicles and Drivers (Transportation), technical assistance in development of regulations, and operation of a manifest system.

## II. STRUCTURE OF DIVISION

### HAZARDOUS WASTE DIVISION

#### DIVISION CHIEF

Alvin Bowles

#### Permits Section

Head - Lou Martino

#### Public Health Engineer IV

Environmental Specialist IV (50%)

Geologist (vacant)

Public Health Engineer III

Water Resources Engineer III *paton*

Public Health Engineer III *frank*

(on loan from AMA)

Geologist II *Rosette*

Geologist III *Boyer*

Steno-Clerk I

#### Technical Support Section

Head - Thomas Battle

#### Natural Resources Manager III

Environmental Specialist IV (50%)

Environmental Specialist IV

Data Processing Programmer I

Data Device Operator III

Typist-Clerk II

Environmental Health Aide III

## III. LEGISLATIVE AUTHORITY

In 1976, a comprehensive program to control the management of hazardous waste was initiated with the enactment into law of Section 8-1413.2 of the Natural Resources Article "Safe Disposal of Designated Hazardous Substances" (recodified to Health - Environmental Article, Title 7, Subtitle 2). The

legislation is designed for a comprehensive cradle-to-grave approach to control hazardous waste which includes the requirement to obtain a permit for a facility which is storing, treating or disposing of hazardous waste and for the control of the transport of the hazardous waste.

#### **IV. UNIVERSE OF REGULATED WASTE**

The universe of wastes which the State controls includes all the hazardous wastes controlled by the EPA. The State's list, covers all the wastes included in 40 CFR Part 261 Subpart D (See Appendix II.) These are contained in COMAR 10.51.02.

Additionally, the requirements for characteristics of hazardous waste are identical to the requirements for characteristics in 40 CFR Part 261 Subpart C. (see Appendix II).

Other characteristics, which may be considered and which are unique to the State system, includes the substance's persistence in the environment and its lethality.

#### **V. RESPONSIBILITIES**

##### **GENERATORS**

The State's program for tracking generators differs little from the program established by the EPA. As shown by the following regulatory checklist, the State has met the minimum standards established by 40 CFR Part 262. The State, in following the federal program:

- covers a like universe of generators, except where additional State-listed wastes identifies new generators and requires them to contact the State and obtain an EPA I.D. number.
- requires all generators to comply with COMAR 10.51.03.06 (Recordkeeping and Reporting). These records must be kept for at least three years.
- requires that proper accumulation regulations, identical to 40 CFR Part 262.34, are followed.
- requires that 49 CFR, parts 172, 173, 178 and 179 (Federal DOT regulations) are followed. These regulations include requirements for packaging, and labeling consistent with 40 CFR Part 262.30-33.
- International shipments are handled in a manner similar to 40 CFR Part 262.50

#### **MANIFEST SYSTEM**

The State has instituted a manifest system that presently exceeds federal requirements in several areas. The manifest system is a dual tracking system, designed to provide information to the State first, as the waste goes from generator to transporter to treatment or storage facility and/or second, when the waste is finally disposed. The steps for completing a Maryland manifest are as follows:

Step 1 - The generator, usually in the presence of the transporter, fills out his portion, (top green part) and the transporter fills out his portion

(middle part). The generator then takes the second carboned page of the manifest for his records. The hard (green) copy is sent to the State on a pre-stamped post card. Some information contained on this manifest is beyond the requirements of 40 CFR Part 263. This includes the vehicle certification number, the waste description and a manifest document number.

Step 2 - The transporter, upon arrival at the facility, signs his portion of the manifest. His portion is then mailed in to the State, again on a pre-stamped pre-addressed hard copy. The second carbon copy is retained by the transporter for his records. A driver's I.D. number is the only major addition to the manifest.

Step 3 - The facility owner or operator must fill out and sign his manifest in the presence of the transporter. The hard, pre-stamped, pre-addressed, copy is sent back to the State. The third carbon copy is for the facility's records.

Step 4 - The next two carbon copies are then a) sent back to the original generator to verify receipt, and b) sent to the responsible State agency. Copies of the manifest may be found in Appendix IV.

Note:

On September 20, 1984 the State will institute on a manifest system that will be identical to the system required by Federal D.O.T. as promulgated in the March 20, 1984 Federal Register.

## MANIFEST HANDLING PROCEDURES

1. Incoming manifests are received and stamped in by secretarial staff on a daily basis.
2. Manifests are reviewed daily for preliminary screening for administrative and technical accuracy, and completeness. Attempts to resolve manifest discrepancies with appropriate parties are implemented at this time. Such resolutions are documented as to the date, time, nature of discrepancy and resolution, and individuals involved. Documentation is noted on the manifest and signed.
3. Manifest discrepancies requiring written resolutions are corrected by mailing Discrepancy Resolution letters to appropriate party(ies) (See Appendix IV).
4. Manifest discrepancies indicating possible violations of State Statute or regulations are forwarded, via memorandum, to the Enforcement Program.
5. Reviewed manifests are bulk-separated by boxes into generator, hauler and facility portions to facilitate filing.
6. Separated manifest portions are filed numerically by serial number.
7. Manifest files are reviewed to determine completeness. Missing manifest portions are documented, and the appropriate form letter (See Appendix IV) is forwarded to the pertinent parties.



## DATA PROCESSING

After manifests are scanned for discrepancies, they are key-entered on flexible diskettes and sent through the communications line to the Host System at the Annapolis Data Center, where they are stored on magnetic tape for later access.

Through an appropriation included in the Governor's package of "Bay Initiatives", money has been set aside to study the State's long-term data management needs. A minimum of one years time is needed before preliminary results will be available.

## TRANSPORTERS

The State regulates all transporters that would be covered by 40 CFR Part 263. New transporters are required to contact the State and obtain an EPA I.D. Number. Recordkeeping requirements imposed on the transporters requiring mandate a three year retention time. As described earlier, the transporter has very extensive manifest responsibility. Rail and water shipment requirements are identical to those in 40 CFR Part 263.20. Required response to incidents of spills or discharges are consistent with 40 CFR Part 263.30-31. The State has developed a system for assuring that those involved in transporting CHS are trained and qualified. The Maryland State Police assist the Waste Management Administration in tracking vehicles and drivers.

The State has an expanded program for hauler, driver and vehicle certification. This program, explained below, is in addition to the program contained in 40 CFR 263.

### HAULER AND VEHICLE CERTIFICATION PROCEDURES

1. The application is received by a secretary and passed on to the project manager (PM) for review. During review, the PM checks for completeness of the application including required guaranty of financial responsibilities (bond) and proper fees. After the application is approved for processing by the PM, the Secretary logs the fees in the ledger book.

2. The certification process is begun by the secretary who determines whether the applicant has been previously certified. If previously certified, the Hazardous Waste Hauler (HWH) Number is determined from the index of haulers and previous records. If the hauler has not been previously certified, he is assigned an identifying (HWH) Number. A file is created for the hauler and a card for the hauler index.

Should the application be incomplete, the applicant is notified by mail and the application is placed in the Division's "Application Hold" file. After one week in the application hold file, the applicant is telephoned for the additional information. If this information is not received within 2 weeks of telephoning, a second letter is sent to the applicant requesting the information. If, after two attempts, the applicant has not resolved the incomplete application the application is returned.

3. Truck decals are assigned to each truck certified. The numbers assigned to the hauler are logged in the vehicle book, and also recorded on the vehicle certification application forms which are kept in the hauler's file.
4. Vehicle information from the vehicle certification applications are recorded on log sheets which are contained in the "log book." The decal numbers are again recorded along with the vehicle information.
5. A hauler certificate is issued and the hauler certification letter is prepared to inform the hauler of his hauler

certification number, vehicle certification numbers, and acknowledging payment of the necessary fees. Attached to this letter are the vehicle decals, transportation guidelines and spill emergency cards. The secretary gives this packet to the Section Chief or PM for final review. After review, the secretary mails this packet to the hauler by certified mail (return receipt requested), and the receipt is kept in the hauler file. Copies of the letter are kept in the hauler file, sent to the Director's Office, and to the Enforcement Program.

## DRIVER CERTIFICATION PROCEDURES

1. Secretary receives the driver certificates and affidavits.
2. Driver Certification forms are stamped in with:
  - a. Date,
  - b. Time, and
  - c. Office Title
3. The forms are then forwarded to a Conservation Associate (CA)/or Health Aide
4. CA reviews for completeness. If incomplete, the company is called for missing information. If complete, the certificate is placed on top, the affidavit on bottom, and they are stapled together.
5. The CA review check for proper endorsement and amount.
6. Certificates and affidavits are stamped with a corresponding Driver Certificate (D.C.) number.
7. The certificates and affidavits are filed numerically then forwarded to secretary.
8. Checks are logged in by:
  - a. Receipt Number
  - b. Fiscal Year
  - c. Company Name
  - d. Check Number
  - e. Amount of Check
9. Driver Certificates are copied.
10. Applications logged in by:
  - a. D. C. number

- b. Driver's name
  - c. Expiration date
11. Driver's cards are typed with:
- a. Driver's name
  - b. License number
  - c. State of License number issued from
  - d. Expiration date of D. C. card
12. Returned to Conservation Associate for review.
13. Secretary logs in date when cards are mailed out.
14. Driver certification applications are key-entered on flexible diskettes and stored.

#### PERMITTING

It was the State's intent to adopt technical permitting standards equivalent to or exceeding those contained in 40 CFR Part 264. The State adopted in COMAR 10.51.05 the following:

|                     |                      |
|---------------------|----------------------|
| COMAR 10.51.05.09   | Containers           |
| COMAR 10.51.05.10   | Tanks                |
| COMAR 10.51.05.11   | Surface Impoundments |
| COMAR 10.51.05.12   | Waste Piles          |
| COMAR 10.51.05.13   | Land Treatment       |
| COMAR 10.51.05.14   | Landfills            |
| COMAR 10.51.05.15   | Incinerators         |
| COMAR 10.51.05.15-1 | Thermal Destruction  |
| COMAR 10.51.05.16   | Open Burning         |

COMAR 10.51.05.17      Physical, Biological and  
Chemical Treatment

COMAR 10.51.05.18      Underground Injection Control

Maryland has not adopted a program analogous to 40 CFR 265, or "Interim Status". When the 40 CFR 265 standards were made available, the State adopted them as it's permitting standards. (COMAR 10.51.05.09-.18.) As the various components of 40 CFR 264, or "permtting standards" became available the State adopted them. Below is a chart listing the chronology:

COMAR 10.51.05.09 -.12

Proposed: November 26, 1982

Adopted: January 12, 1983

NOTE: For COMAR 10.51.05.11 - Surface Impoundments,  
permitting standards were for storage only.

COMAR 10.51.05.11,.13-.15-1.

Proposed: November 11, 1983

Adopted: January 6, 1984

Financial responsibility regulations have been adopted by reference, thereby insuring compliance with Federal standards. Closure and post-closure, from 40 CFR Part 264 were adopted in its entirety. Also adopted were requirements for response to discharges or leaks, contingency plans, groundwater protection, security, personnel training, inspections, monitoring, recordkeeping and reporting, and manifest compliance.

The State standards are more stringent in the following

areas:

Underground Injection Control - All activities involving hazardous waste are banned.

Surface Impoundments - Double liners are required. Groundwater monitoring and compliance required.

Landfills - In-situ geologic conditions imposed, liners required, groundwater monitoring and compliance required, liquid wastes banned, and containers must be shredded.

Thermal Destruction - In addition to minimum standards, there must be .03 gr/lb grain loading, 0 VE, and requirements for heat recovery facilities to be permitted.

All facilities required to have a permit under the federal system are required to have a permit under the State system. The State system has been in place since 1977. Insofar as many facilities already had permits it was decided that the State would not use the Federal "interim status"; the 40 CFR Part 265 regulations were adopted by the State as permitting standards. Several three year permits were issued using these standards. As the 40 CFR Part 264 elements became available the State modified and adopted them.

Permitting requirements are contained in COMAR 10.51.07. These requirements spell out in detail the method of permitting



and the types of information required. The language was taken directly from 40 CFR Part 270.

Several types of facilities are not required to secure either state or Federal RCRA permits. Ocean disposal facilities and POTW's (Publicly Owned Treatment Works) are two such types of facilities.

Regulations proposed Friday, November 11, 1983, and adopted February 3, 1984 state that the requirements of COMAR 10.51.05 (Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities), do not apply to "(a) A person disposing of hazardous waste by means of ocean disposal subject to a permit issued under the Marine Protection, Research, and Sanctuaries Act and complying with the following regulations:

- (i) .02B (identification number), and
- (ii) .05 B (Use of Manifest System) C, (Manifest Discrepancies), D (1)(2)(a) (Operating Record), and F, (Annual Report) and G (Unmanifested Waste Report).

This adoption change makes the State's requirements for ocean disposal consistent with the EPA's. Previously, certain requirements imposed by COMAR 10.51.05 were not incorporated because ocean disposal was an unused disposal option in the State.

Similarly, POTW's are exempted from regulation under COMAR 10.51.05 (adopted June 26, 1984) if COMAR 10.51.05.02 B and .05 B-C, D (17) (2) (a), F. and G., are compiled with.

## PERMIT STEPS FOR TREATMENT STORAGE & DISPOSAL FACILITIES

The permit applications are assigned by name and number and are filed numerically. The project manager's first step is to review the application for accuracy and completeness. COMAR 10.51 requires a comprehensive application; however, the level of detail for an individual permit application depends upon nature, volume, content, location and method of handling the hazardous waste. A computer printout that summarizes the manifest history of any generator or T S & D facility can be obtained from the Technical Support Section. This printout documents quantities and types of hazardous waste handled and provides good background to aid site inspections and the development of the draft permit.

It is required that a field inspection precede the development of a draft permit. The site inspection will enable the Project Manager to have "first hand" information as to the process, wastes generated and typical operating procedures of the company. The Project Manager must carefully prepare for each inspection so that the time spent at the company provides him with the "total picture". A memo to the file should document each inspection.

## PERMIT PROCEDURES

The following are the steps taken by the Administration to process a permit application. Refer to Table 4 (page 46) for the responsible agency when the application is for either a Hazardous Waste Incinerator or a Limited Facility Permits (See page 50.)

The CHS permit process involves close coordination by the various units within the Administration, with a goal of developing the permit into a comprehensive document which can be enforced. Enforcement personnel are able to provide insight into actual facility operations and potential enforcement problems. Typically, for a storage or treatment facility the permitting process requires several months of effort involving historical file review, frequent site inspection and documentation of operations and waste streams, and sample collection and evaluation to determine compliance needs, prior to development of a draft permit. For facilities that require groundwater monitoring this process extends to well beyond a year.

- 1) The secretary receives the permit application, assigns the number, accounts for any fees received, checks for completeness (preliminary), and sets up the file. Copy of application (if major) sent to EPA.
- 2) The secretary transmits the file to the Section Chief (SC) for the preliminary determination by a Project Manager. Applications pertaining to non-RCRA related and TSD activities are routed to the Industrial Division's NPDES Section Chief.

- 3) The Section Chief (SC) assigns a Project Manager (PM) for the application process and transmits the file to the secretary.
- 4) The secretary sends a letter to the applicant acknowledging receipt and/or asks for documents to be completed.
- 5) Copies of the application are sent to the appropriate local Health Department for review and comment.

6) The application file is transmitted to the P.M. The P.M. conducts a completeness review, inspects the facility, makes a preliminary determination and, if appropriate, develops a draft permit with a fact sheet and permit fee calculation sheet for review by the SC.

7) The SC reviews the draft permit, the fact sheet, and the fee calculation sheet.

8) After the SC approves the draft permit, the PM develops a public notice. The SC sends a copy of the draft permit, fact sheet and public notice to the Hazardous Waste Inspection Team for comments and approval.

9) After concurrence with HWIT the SC transmits the approved drafts to the secretary. The secretary then makes copies of the draft permit and public notice for the applicant, the Chief local executive officer, local Health Department, Hazardous Waste Inspection Team Chief, and EPA.

10) The secretary forwards the notice, fact sheet and draft permit to the Program Development Division to publish a "Notice and Opportunity for Hearing" in the Maryland Register, in two local newspapers and for broadcast over

local radio. The notice includes the name, address, and location of the facility, nature and quantity of CHS to be handled in the facility and a brief description of the special and general conditions of the permit. Provisions are also made for the public to examine the draft permit, the application, and any other information related to the preliminary determination. A request is made for written comments and a statement is included to provide for a public hearing if significant written public comment is received. The notice is printed in the Maryland Register, at least twice in a daily or weekly newspaper of general circulation in the geographical area of the facility, and broadcast over a local radio station. Simultaneously, the secretary forwards the draft permit, fee calculation and notice to the applicant. Concurrently, the draft permit is sent to the local jurisdiction and EPA for their comments.

- 11) The Program Development Division sends the Section Chief copies of transmittal letters to verify public notices.
- 12) Should comments be received, the Division Chief will review and make a recommendation to the Director concerning the need for a public hearing. If the Director determines that significant comment has been received or that a public hearing is warranted, a public notice is prepared and distributed in the manner described above.
- 13) If the agency decides that a hearing is warranted, the SC sends a memo to the Program Development Division requesting that a public hearing be scheduled. If it is decided that a

hearing is not warranted, the SC requests the PM to proceed as in Step 18.

- 14) The Program Development Division secures a hearing officer from the Office of Hearings and Regulations, schedules a hearing, publicizes it in the Maryland Register, local radio and newspaper and sends a copy of the notice to SC.
- 15) The PM prepares DHMH's statement for the hearing and prepares a hearing package.
- 16) The SC reviews and approves the prepared statement and package. The PM and the SC attend the hearing(s) representing the Division.
- 17) At the hearing, persons wishing to present information about the proposed decision are invited to speak and/or they may submit a written statement for the record no later than 5 days after the hearing. Any person who feels adversely affected by the tentative determination, and who wishes to contest the determination, may request adjudication at a subsequent hearing. The OEP will decide if the request presents valid issues for adjudication. If issues are to be adjudicated, the OEP may schedule a prehearing conference. After the Department has considered all testimony and other information presented, the hearing officer will prepare a final written recommendation to the Secretary on the matter in question.
- 18)
  - a. After receiving recommendation from the HO, a final permit is prepared by the PM.
  - b. The PM places the final permit in a special priority

file on the Section Chief's desk.

- 19) The Section Chief places permit in priority order for the secretary to type. The secretary then develops a cover letter to applicant.
- 20) The final permit and cover letter are proofed by the PM, SC, and Division Chief.
- 21) The final permit & cover letter are sent to the Director for signature.
- 22) Upon receipt of the signed permit and letter, the secretary mails the permit to the applicant with copies to the local health department, the appropriate Enforcement Division to the permit file, and to the EPA.
- 23) Permit fee checks are received by the Secretary and deposited in special fund accounts. The SC or assigned member of the staff periodically reviews deposit receipts and solicits account summary sheets from Fiscal Services.

## VARIANCE AND WAIVER PROVISIONS

As with the Federal program, the State has few variance or waiver provisions. The State has not adopted any provisions less stringent than those in the Federal program, although some aspects of the State program are more stringent.

## COMPLIANCE SCHEDULE

The State has a compliance schedule provision in its regulations. As the permit is limited by statute to three years, that would be the maximum length of a compliance schedule (when a condition which requires compliance exists at a facility, however, the policy is not to issue a permit; instead, the facility is given an order to correct the condition within a specified period of time.) In very rare instances, a legal agreement may be signed allowing continued operation of a facility while ongoing monitoring and/or construction is being carried out. This would be for a period of no longer than one year. Additionally, the State has not allowed for a "grandfathering" of regulations at facilities.

## PERMIT CALL-IN STRATEGY

The Administration's procedures for "calling-in" hazardous waste permit applications, that is, for the Facility to send to the Administration the technical data necessary to make a final determination on the Facility's permit status, differs somewhat from the EPA's. The EPA, when assembling information necessary to make a permit determination, allows six months for the



Facility to submit the information. This six month period also allows the Facility to determine it is even required to be in the RCRA system (meaning a high cost to develop a permit application), or wish to ship their waste off-site, and become a hazardous waste generator subject only to COMAR 10.51.03.

Because of the time the State's program has been in existence, many of these "protective filings" have been removed from the Maryland system. A listing of Maryland's Controlled Hazardous Substance Facilities can be found in Appendix V. While initial call-ins were made with an eye towards receiving applications (through the EPA) at periods of up to six months, the State, once authorized, has reduced that time to less than six months. In order to maintain the review schedule, each Project Manager (of which there are six), through the Permit Section Head, makes individual determinations as to call-in frequency for his projects (permit applications).

The individual Project Manager has approximately fourteen facilities for which to prepare permits. When, at the Project Manager's discretion, he has reached the point where six months hence his work load will begin to tail off, he meets with the Section Head to determine which facility will then be called in. A letter of denial is sent to that facility.

By F.Y. 85, the State will have called-in all groundwater monitoring facilities, all incineration facilities, all major treatment and storage facilities and selected minor facilities. Call-ins will be made, through F.Y. 85-86 all other facilities will have their permits called-in based on the expiration date of

their state permit. That is, the minor facilities with the oldest State permits will be called-in first.

The priority order for the permitting of facilities is as follows:

- 1) any new facility
- 2) any facility required to monitor groundwater
- 3) any thermal destruction facility
- 4) major storage facilities
- 5) major treatment facilities
- 6) minor storage facilities
- 7) minor treatment facilities

TABLE 4

Responsible Agency: Hazardous Waste Incinerators and  
Limited Facilities

|                                 |         |
|---------------------------------|---------|
| Application Submittal           | AMA/WMA |
| Completeness Review             | AMA/WMA |
| Public Notice of Receipt        | WMA     |
| Preliminary Determination       | AMA/WMA |
| Draft Prepared                  | AMA/WMA |
| Statement of Basis (Fact Sheet) | WMA     |
| Administrative Record           | WMA     |
| Notification of Other Agencies  | WMA     |
| Schedule Public Hearing         | WMA     |
| Determination                   | AMA/WMA |
| Permit Issued                   | WMA     |
| Response to Comments            | AMA/WMA |
| Inspections                     | AMA/WMA |
| Enforcement Actions             | WMA     |

## PERMIT STRUCTURE

Most of the conditions in the actual permit are standard and written to conform to State and Federal regulation requirements. The Special Condition section of the permit is used by the Project Manager to tailor the permit to a specific facility (See the Model Permit in Appendix VI).

I G. 5

Anticipated Noncompliance  
Brackets on optional conditions  
Model Permit not complete  
appears to be Allied Permit

## THERMAL DESTRUCTION

*who is this  
for  
a section*

### Introduction

On January 23, 1981 and June 24, 1982 (revision), EPA promulgated regulations for the control of hazardous waste incinerators. Generally, this regulation requires that hazardous waste be analyzed, permit applications be submitted, and trial burns be performed or information provided that demonstrates that the selected equipment has the capability of destroying certain selected waste to the extent of 99.99% destruction or removal and HCl removed by 99% if the HCl exceeds 4 lbs/hour. It is the intent of WMA to adopt fully the language and terms of the EPA incinerator regulations within COMAR 10.51, and to also adopt certain additions and modifications to these regulations. The Department's WMA and Air Management Administration (AMA) will handle this program jointly. Both the present WMA CHS regulations and the AMA incinerator regulations have been modified to deal with the destruction of hazardous waste. The general procedures are as follows:

#### (a) Permits

Hazardous waste incinerators are subject to conditions established in a WMA CHS permit. There are no AMA permits for these installations, however, AMA performs the assessments of these installations establishing both conditions for trial burns and conditions for the final permit. Power plants wishing to dispose of certain hazardous waste will be subject to a Limited Facility

Permit, but are not subject to any type of AMA permit. All installations such as industrial boilers, cement kilns, and other combustion equipment that burn hazardous waste are subject to a Limited Facility Permit and must have an AMA Operating Permit.

(b) Inspection and Evaluation

Initially, during the assessment period of a hazardous waste incinerator, the AMA plays the lead role in determining the capability of the equipment and establishing the conditions under which the unit may operate. The normal CHS permit conditions and requirements are also included in any permit. Following issuance of a final permit, the operation is assessed jointly with each agency being alerted as to the requirements and conditions for the operation. The installation will be inspected at the frequency specified by the CHS program.

(c) Enforcement

The basic Maryland Air Quality requirements that would normally apply to an incinerator (i.e., visible emissions and particulate matter requirements) have been injected into COMAR 10.51. These requirements differ from the EPA incinerator requirements. The AMA incinerator regulations have been modified so as to produce State-wide consistency in handling hazardous waste incinerators. Generally, enforcement action is handled by the OEP attorneys. If a violation of a CHS nature occurs, such as the incineration of an unauthorized hazardous waste, enforcement takes place

through WMA with support by AMA personnel that were involved with the establishment of permit conditions. If the violation has an impact on air quality, such as a visible emissions violation, the condition is handled jointly by the two Administrations or two separate notices are issued. Violations of a more serious nature (i.e., criminal offense or court action) are to be handled under a single proceeding.

#### Conceptual Differences Between the EPA and Maryland Incineration Program

(a) Energy Recovery Facilities

The EPA program excludes persons burning waste for fuel value from the incinerator requirements. Because of significant circumvention of RCRA requirements, however the EPA has developed enforcement guidelines that provide an exclusion to incinerator requirements only if the waste has significant BTU value. The cut-off point is about 6,000 BTU/lb., which is representative of the heat value of sub-bituminous coal or wood. Maryland's program also includes a concept that excludes a person from the incinerator requirements only if the material has a significant BTU value. However, the facility must obtain a Limited Facility Permit and an AMA Operating Permit if the fuel is a hazardous waste. Maryland also recognizes the fact that a piece of equipment other than a hazardous waste

incinerator, as defined in COMAR 10.51.01.02 such as a cement kiln, could become a hazardous waste incinerator subject to all of the CHS incinerator requirements.

(b) Small Quantity Exclusions

The EPA regulations provide an exclusion for a facility generating less than 1,000 kg/month of hazardous waste or 1 kg/month of an acute hazardous waste. There are, however, loopholes within the Federal regulation which allow a person to collect over the minimum amount monthly from multiple small sources and never be subject to the incinerator requirements. EPA is moving to correct this condition. Within Maryland's regulations, we have indicated that the small quantity exclusions apply only to the generator. A collector or disposer of quantities greater than the minimum amount could be subject to the thermal destruction requirements. Also, Maryland's regulations maintain the concept that although the small quantity generator disposing of waste onsite is exempt from the thermal destruction requirements, the Limited Facility Permit and an AMA Operating Permit are required. In all cases, in which a hazardous waste is disposed of in a hazardous waste incinerator, the incinerator requirements apply, and a new permit is necessary if the new material is more difficult to burn than the materials under the existing permit.



(c) Exclusion for Ignitable, Corrosive, or Reactive Hazardous Waste

For all practical purposes, the requirements discussed in (b) would apply to a waste which is exempt from the major portions of the incinerator requirements because it is ignitable, corrosive, or reactive. Also, the same concept applies to this material as would apply to any waste that may be exempt from the major portions of the incinerator requirements if the waste is a hazardous waste and has low BTU value. It must still be disposed of in a hazardous waste incinerator subject to all requirements or other combustion equipment which will then become subject to incinerator requirements.

(d) Waste Oil

The AMA has an existing program whereby it permits any source to burn waste combustible fluids. Most materials that are in the form of combustible solvents fall under the CHS program because of their ignitibility. Those materials that would not necessarily fall under this program include waste oil, mostly from the automotive industry. AMA issues a permit to both the user and the supplier of these materials because of the waste oil contamination including PCB's, halogens, and the sulfur and lead content. Other materials in waste oil including volatile metals such as cadmium are also of concern and may be regulated by EPA in the near future. Some waste oil may not be a true hazardous waste under the CHS program. However, the

material nearly always contains undesirable components. Therefore, the CHS regulations treat waste oil as any other hazardous waste with a high BTU value. It may be burned in combustion equipment, normally in conjunction with residual fuel oil. However, the regulations require the equipment to have a Limited Facility Permit and an AMA Operating Permit.

(e) Summary

- (1) Waste that must go in fully permitted hazardous waste incinerator include:
  - (2) Acute hazardous waste;
  - (3) Hazardous waste with heating value less than 6000 BTU/lb.;
  - (4) Hazardous waste with heating value greater than 6000 BTU/lb. and mixed with greater than 1% of hazardous waste with heating value less than 6000 BTU/lb.;
  - (5) Hazardous waste with heating value greater than 6000 BTU/lb., not used as fuel, and containing significant quantities of Appendix 5 materials;
  - (6) Any waste that the Department determines will create a public health or environmental hazard if not destroyed in a fully permitted RCRA incinerator.
- (2) All other hazardous waste may be thermally destroyed in either:
- (1) A fully permitted RCRA incinerator;
  - (2) Electric generating station with a Limited Facility Permit (LFP);

- (3) An Air Management Administration (AMA) installation with both an AMA Permit to Operate and a LFP.

New facilities needing a permit under COMAR 10.51.05.15-1 would be subject to COMAR 10.51.05.15-1 since construction of a facility would be prohibited under HE 7-232(a). Facilities that will need a permit under COMAR 10.51.07.05 (Limited Facilities Permit for Thermal Destruction Facilities other than Hazardous Waste Incinerators) will include many facilities regulated under COMAR 10.18.11.06. In either case an application must be made with WMA.

A facility that needs a LFP will either submit a timely application if an approval is held from AMA, or cease operation until a timely application is submitted. Any new LFP facilities must obtain a permit prior to operation. These facilities must make application with the AMA.

NOTE:

The State particulate emission standard for Hazardous Waste Incinerators is .03 gr/dscf corrected for CO<sub>2</sub> by the formula

$P_c = P_m \frac{12}{(C_{O_2})}$  where  $P_c$  is the corrected concentration of particulate matter,  $P_m$  is the measured concentration of particulate matter, and CO<sub>2</sub> in the Stack gas. The EPA particulate emission standard for Hazardous Waste Incinerators is .08 gr/dscf corrected for O<sub>2</sub> by the formula

$P_c = P_m \frac{14}{(21 - O_2)}$ . An examination of O<sub>2</sub> and CO<sub>2</sub> concentrations from stack test data on incinerators indicates that the State CO<sub>2</sub>

correction factor is at least as stringent in all cases, and in most cases more stringent than the EPA  $O_2$  correction factor.

This, combined with the difference on the standard itself (.03 versus .08) assures that the State will be more stringent than the Federal EPA standard.

## PLAN REVIEWS

A review of a facility's operation entails more than an examination of its previous actions and rate of compliance. In addition to careful scrutiny of its permit and any special conditions that may be placed upon it, a close review must be made periodically of the facility's closure plan, its ground water monitoring plan, and any additional plans that may be required. Reviews of this type provide the reviewer with an opportunity to examine the facility with long range maintenance and operation in mind. These reviews are carried out by the permit writers, in close consultation with the HWIT member responsible for the facility.

### 180 DAY REVIEW OF CLOSURE PLANS

The State found that the 90 day period previously in the regulations for the review of closure plans was unacceptable. It was found, in the case of Solley Road Landfill that the 90 day review period was too short and did not allow enough time for detailed study. During the 180 day this scenario is possible:

|        |   |
|--------|---|
| Day 1  | Closure plan submitted                              |
| Day 15 | Technical review completed                          |
| Day 20 | Technical review letter sent by WMA                 |
| Day 50 | Technical data resubmitted by Facility              |
| Day 60 | Technical staffs meet to discuss outstanding issues |
| Day 90 | Closure Plan resubmitted                            |
| Day 95 | Closure Plan reviewed                               |

Day 100    Technical issues still unresolved, final staff  
             discussions

Day 125    Final Closure plan agreed to, Plan drafted

Day 140    Concurrence by Administration

Day 155    Public meetings held

Day 165    Final Closure Plan typed

Day 180    Signature on Closure Plan

#### OPERATIONS MANUAL

The State no longer utilizes an "Operations Manual". The permit will includes all information, from submittals on the application, that was formerly contained in the Operations Manual.

**ENFORCEMENT PROGRAM**

## ENFORCEMENT PROGRAM

### A. Introduction

Purpose - The goal of the Enforcement Program is to obtain compliance to the regulatory and statutory requirements of the Waste Management Administration. To enforce the Annotated Code of Maryland, regulations, and permits, WMA has a statewide staff of four regional enforcement chiefs, twenty inspectors, a Support Services Division and the Hazardous Waste Investigation Team who perform routine periodic inspections of permitted facilities. The inspectors also respond to complaints/reports regarding unpermitted hazardous waste activities, conduct the initial investigation of such matters, and generate evidence (including laboratory samples) to be used in subsequent administrative or judicial proceedings.

Scope - There are three facets to the Enforcement Program's goal of compliance:

1. To insure continued compliance with existing permits and;
2. To find, educate, assist and permit all facilities which need permits. Emphasis should be noted on the resolution of problems and protection of the health and environment.
3. Civil and criminal penalties, provided by law, will be used as tools to achieve the Program's goal.



Role - Enforcement Program personnel can fulfill the ideals of their goal by fostering a cooperative relationship with those who hold permits, by means of consistent and fair treatment and regularly scheduled inspections. However, all inspections should be conducted with possible legal action in mind.

Structure of Program (As of July 1, 1984)

Enforcement Program

Region I

(Western)

Region II

(Central)

Region III

(Southern)

Region IV

(Eastern)

Support Services

Hazardous Waste

Investigation Team

Staffing: The staffing of the Enforcement Program is comprised of the following types of professional and support classifications:

Program Administrator

Natural Resources Biologist

Sanitarian

Water Resources Engineer

Natural Resources Manager

Public Health Engineer

Conservation Associate

Environmental Health Aide

Office Secretary

Typist Clerk

#### Legislative Authority

The 1982 re-codification of the Health Article resulted in a unified body of law empowering the Secretary to regulate and permit certain activities. This enabling legislation specifically requires that the Department inspect and enforce compliance by those facilities and persons that are regulated. Each section of this statute, whether dealing with Hazardous Substances or solid waste, holds its own enforcement provisions which are administered by the WMA Enforcement Program, and the Inspection and Compliance Program.

#### Coordination With Other Programs

Other WMA Divisions are served by the Enforcement Program through the inspection of sites or facilities pertinent to a given division's purview. Most interaction with agencies outside of the Waste Management Administration is performed by contacting a sister agency. For example, the Air Management Administration or the Water Resources Administration, to ascertain which agency should be the lead agency in the investigation of a complaint. Most of coordination with other agencies is conducted by the Support Services Division.

B. Responsibilities

The major task of the Enforcement Program is to bring about Compliance with State Statutes, regulation or the permit.

The possible administrative and legal actions that can be taken to bring a violator into compliance range from a simple verbal warning by the inspector, to criminal or civil action initiated by the Attorney General's Office.

The usual procedure is to start with verbal warnings (documented on inspection reports), followed by a letter from the Administrator of Enforcement Programs calling for corrective action and advising of possible formal enforcement action. The formal action is an Order for corrective action by a specific date. If these administrative remedies fail, the case is referred to the Attorney General for civil and/or criminal action. Any communication regarding violations we must clearly state the action, or lack of action, that constitutes the violation, the permit condition and section of law or regulation violated, evidence collected (when appropriate), and the corrective action which, if taken, will bring the violator back into compliance.

Since each section of the law enforced has slightly different provisions in case of violation, the following sections address the specifics. The cornerstone of enforcement activity is the complaint and order.

The Enforcement Program is active in the following areas, listed in order of priority:

- 1) Spills/Clean-ups
- 2) CHS Permits
- 3) CHS and Pollution Complaint
- 4) Generator and Transporter Inspections

### **SPILLS AND 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. While members of the HWIT have certain responsibilities at their Facilities for response (See: Hazardous Waste Inspection Team; Additional Enforcement Responsibilities), the specialized nature of most responses requires the expertise available elsewhere in the State. One such alternative in a search for expertise would be the Enforcement Program's Support Services Division. The Division has three persons assigned to spill responses activities. Ideally, each person would have a standard size van which would carry minimum types of monitoring and sampling equipment, personal protective clothing and equipment, a reference library, and a small amount of containment materials. A van of this type would allow for many of the functions as well as provide for a direct response from home during non-working hours.

Additionally, a step van will be required to carry additional sampling and monitoring equipment to provide needs and requirements by this Section to carryout the EPA dump assessment program, as well as illegal dumpsites discovered by Enforcement Personnel and other types of field investigations requiring more equipment than is usually carried in the standard-size vans.

Finally, a large response trunk, fully equipped with quantities of containment materials, neutralization materials, sorbent materials, portable holding tanks, overpacking containers, a full complement of protective clothing and equipment, specialized monitoring equipment and a complete communications system will be required for response to transportation and/or industrial incidents involving hazardous substances. This vehicle and containment materials are tentatively budgeted for beyond F.Y. 84.

Personnel from this Division consists of two man teams as a minimum, so as to utilize the "buddy system" to its fullest extent in any situation. Teams assess each situation and develop a plan of action before any actual on-site work is accomplished. Levels of personnel protection are determined on a case-by-case basis. Many of the procedures of this Division to safely enter and/or work at any site are adopted from EPA training manuals (i.e. "Hazardous Waste Site Investigation", and "Personal Protection and Safety"). Any unknown site will always be preliminarily scanned for radioactivity, explosivity and oxygen levels.

During F.Y. 84, a State Controlled Hazardous Substance Contingency Plan was submitted to Region III EPA and approved. This Plan, funded through a supplemental F.Y. 83 RCRA Grant, identified appropriate responsibilities among the various agencies at all levels of government. This plan may be requested from the Office of Environmental Programs, Waste Management Administration (See Appendix XIV)

## HAZARDOUS WASTE INSPECTION TEAM

### Team Selection and Training

In January, 1982, the need to develop a specialized unit of inspectors responsible for enforcement of State laws and regulations regarding hazardous waste was recognized. It had become apparent that the existing Regional organization of the Waste Management Administration (WMA) Enforcement Division was unable to adequately inspect the existing permitted Controlled Hazardous Substance (CHS) Treatment, Storage and Disposal (TSD). The Regional Enforcement Divisions were understaffed in terms of manpower and expertise to address the required inspection frequencies and complexities regarding treatment, storage and disposal of hazardous waste by industries in Maryland.

The Assistant Secretary, of the Office of Environmental Programs, directed the Waste Management Administration to complete the selection, training and operation of a team of inspectors, whose primary function would be to inspect permitted CHS, TSD Facilities at the frequency and detail required by State law.

The Director of the Waste Management Administration met with the Waste Management Administration Technical Services and Enforcement Division Chiefs and directed that they nominate staff members for the team, and that a Division Chief coordinate the scope and implementation of a comprehensive training program. It is this team that has developed into the Hazardous Waste Inspection Team (HWIT).

Over the first 18 months of the HWIT operations, the primary function of inspecting CHS facilities has expanded to include all aspects of the Waste Management Administration enforcement activities related to these Facilities. This report will present information detailing who the HWIT is, what it does, and what it may do in the future.

In the nomination of staff members for consideration as HWIT member, it was emphasized that they have technical diversity, practical enforcement and field work experience and a history of good work records. A list of potential members from all WMA Divisions was developed, nominees contacted and final selection approved by the Director.

Under the coordination of a Division Chief, the new unit took shape. Members were selected from different WMA Divisions. Two of WMA's experienced and aggressive regional inspectors, were included. Four engineers of varying educational disciplines and work experience were chosen from the Hazardous Waste Division, the Municipal Waste Division and the Support Services Division. The team was provided with an experienced secretary to coordinate office management.

The team members and the Division Chief initially discussed the problems encountered in the regulated hazardous waste community and shortcomings in WMA approach to those problems. Concerns and needs to adequately carry out duties and responsibilities were discussed and plans set forth. Training and equipment presented the next obstacle.



Formal training of the newly formed hazardous waste inspection team began on March 15, 1982. Training was given to the team by a variety of outside professional educators and those cognizant professionals within the Department of Health and Mental Hygiene.

An outline of the training program can be found following this discussion. Training lasted until the beginning of June, 1982, interspersed with actual field work beginning at the end of April. Initially, 2 man teams began inspections at what were considered the 24 largest TSD permitted facilities. Eventually the 6 HWIT members were individually assigned an equal number of the approximately 80 industrial sites with permits or applications for permits as CHS, TSD Facilities throughout the State.

The Team continues to receive training on a routine basis from outside agencies when applicable course material is offered. Many of the training sessions are offered by EPA. If only a few of the team members are able to attend additional training seminars, those members will offer the obtained information to the other team members and hold "in-house seminars" to advance skills to all of the team members and other personnel in the Enforcement Program.

PROGRAM FOR TRAINING

HAZARDOUS WASTE (TSD) INSPECTION TEAM

Practical Industrial Chemistry

Manufacturing Processes

Ground & Surface Water Protection

Sample Collection

Sample Analysis

Sample Interpretation

Toxic Substance Registry

Toxicology

Health Safety

Treatment, Storage & Disposal of Hazardous Waste

Meeting with Chemical Manufacturers Assoc., D.C.

Safety Training - Central Regional Lab - Annapolis

Mid-Atlantic Environmental

Overview of Hazardous Waste Regulations

Hazardous Waste Regulations Permit Writing

NPDES Regulations

Inspections Form Use

DOT Regulations

Legal Seminar

Sediment Control

Specialized Legal Training

T,S,D, File Review

Attitude, Communications, Professional Negotiation

Field Training

Hazardous Evaluation & Environmental Assessment

Dynamic Communications & Public Speaking

Plumbing, Equipment & Cross Connections

## Controlled Hazardous Substance Permitted Facilities

The primary objective of the Hazardous Waste Inspection Team is to assure compliance with State laws, regulations, and permit conditions related to the treatment, storage and disposal of hazardous waste by permitted industrial operations.

Upon issuance of the facility permit, routine inspections by the HWIT begin. The inspection frequency is defined in Health-Environmental Article 7-245 and the permit. The law requires monthly inspections for treatment and storage operations and weekly for disposal sites. The inspections encompass all aspects of treatment, storage and disposal of hazardous waste covered by Code of Maryland Regulations (COMAR 10.51).

The inspector characterizes the Facility as one of, or a combination of the following: Thermal Treatment, Recycling/Recovery, Waste Oil, Chemical Treatment, Physical Treatment, Open Pile, Surface Impoundment, Drums, Above Ground Tanks, Biological Treatment, Land Treatment, Incineration, Landfill Operations, or Below Ground Tanks. If during inspection, other types of practices are found which are unauthorized, the facts are documented, and upon conference with the hazardous waste Project Manager a plan of enforcement action is implemented. Often the Attorney General's office is called upon for assistance. The inspector must evaluate waste streams as to types, quantities, and whether the facility is analyzing this material as specified in the approved permit. Facility personnel who handle the waste are checked by the inspector to ensure that these persons can identify each waste and

they are properly trained to handle the material. The inspector must verify that the Facility's active hazardous waste site is properly monitored, restricted to prevent unauthorized entry and posted with significant warning signs and means to control access.

While the permit requires written documentation of emergency equipment inspection logs, schedules for inspections, security devices, operating and structural equipment, the inspector is responsible to determine whether these items at the Facility are readily available and Facility personnel are educated in their proper use and maintenance. Records of facility personnel are checked to see if they reflect up-to-date training requirements. When a facility generates and handles material that poses an additional hazard due to the potential to ignite or react violently causing fire, explosion or sudden release of toxic materials to land, water or air, the inspector reviews in terms of the more stringent requirements of the regulation.

The regulations require that a facility implement specific plans and procedures to react to on-site emergencies involving hazardous waste. An inspector must continually assess the facility for methods of summoning emergency assistance, adequate fire control equipment, water and suppression chemicals, appropriate records of equipment, and adequate area for emergency movement and excavation if determined necessary. The inspector will assess the Facility's emergency procedure plan to assure the adequacy of the emergency coordinator's availability, phone number and address so that there is an on-call 24-hour responsibility maintained.

In order to account for materials received or transported from a Facility, the inspector reviews manifests that follow CHS from "cradle to grave." He notes any data entry discrepancies and reviews maintenance of historical recordkeeping. The inspector continually utilizes his working knowledge of industrial, chemical, and engineering processes in order to evaluate the facility's methods of treatment, storage and disposal of CHS to ensure that the detailed records and results of waste analysis and treatability tests performed are representative.

The location and quantity of CHS in the Facility are routinely surveyed by the inspector to assure proper accountability with the Facility's CHS permit.

The CHS permits are extremely varied and diverse with respect to methods of treatment, storage and disposal due to the large and sometimes exotic natures of wastes involved. Therefore, the inspector is faced with numerous waste management systems which include container storage, tanks, surface impoundment, waste piles, land treatment systems, hazardous waste landfills, thermal treatment/incineration, chemical, physical and biological treatment, and associated groundwater monitoring. Each of these systems is incorporated within its own regulatory framework. The inspector is required to evaluate each in terms of permit and regulatory compliance as follows:

1. Containers: The inspector determines integrity of containers such that there are no leaks, deterioration, corrosion, deformation and that they are sealed during storage; also, that they are lined or made of compatible

materials such that hazardous waste in them will not result in reaction or corrosion. The inspector assesses if the Facility is inspecting its storage area at the required frequency, maintaining an inspection log, noting deficiencies and actions taken to correct deficiencies, holding ignitable and reactive waste in an area safely away from property lines and assuring the incompatible wastes are not placed in the same containers and are adequately separated from the incompatible materials stored in containers, tanks, piles or surface impoundments by dikes, berms, walls or other devices. Prior to shipment of these containers, the inspector checks to make sure that the containers are properly labeled, marked and packaged in accordance with State requirements and Federal Department of Transportation Regulations (49 CFR).

2. Tanks: The inspector evaluates each tank used for CHS to identify if it is in good condition; i.e. shows no signs of leakage, corrosion or other deterioration. Uncovered tanks are checked to insure proper freeboard height, and whether a proper containment structure, (i.e., dike or trench), a drainage control system, or a diversion structure (e.g. standby tank) with an adequate holding capacity has been installed. Daily maintenance of valves, discharge control equipment, monitoring equipment and the facility's log of these activities are checked by the inspector to determine safe and proper operation of

the tank. Ignitable or reactive wastes must be stored or treated in such a way that they are protected from material or conditions which may cause an ignition or reaction. A facility that treats or stores this material must do so in compliance with National Fire Protection Association's requirements, where applicable.

3. Surface Impoundments: When a Facility utilizes a surface impoundment for treatment or storage of CHS, the inspector checks that the impoundment is operated to maintain proper freeboard heights, protective covers (e.g. grass, shale, or rock) of all earthen dikes to minimize wind and water erosion or maintained and the dikes structural integrity is structured. A check is made to certify that the Facility inspects the impoundment according to the permit and maintains the inspection logs and documentation necessary and that incompatible wastes are prevented from being mixed in the impoundment.
4. Waste Pile: The inspector checks to see that wind dispersal of the pile is controlled, that additions to the pile are analyzed prior to being added, that hazardous waste leachate or runoff are being collected and properly handled, that the pile is protected from materials or conditions that might cause it to ignite or react and that compatible wastes are handled in a proper manner.



5. Land Treatment: The inspector checks the active portions of these operations to assure compliance with treatability recordkeeping, waste analyses plan, run-on and run-off control, food chain crop up-take records, soil and ground water monitoring, closure and post closure plans and the facility site specific operating manual. At present no such Facilities are operating in the State.
6. Landfills: Upon final issuance of a landfill permit, the inspector is required by statute to make weekly site inspections to review the facility's active portions for run-on and run-off control, hazardous waste determination on run-off, wind dispersal control, maintenance of a detailed operating record and cell containment map, prohibiting liquid disposal, operation of leachate collection system, crushing of containers before burial, assurance that only authorized waste is being accepted, proper maintenance of manifest recordkeeping, and all details as contained in the facility permit.
7. Thermal Destruction/Limited Facilities: The inspector checks operating records at the facility to ensure that waste analyses are conducted prior to incineration or thermal treatment. He must identify the instruments used to monitor combustion and emissions control and ensure that these are in proper working order and are being properly maintained. The hazardous waste incinerator or thermal process and associated equipment are checked for

leaks, spills and fugitive emissions at time of inspection and operator's log is checked to see if compliance with daily inspections is being maintained.

8. Chemical, Physical and Biological Treatment: The inspector determines if all treatment processes or equipment are in good condition, i.e., no signs of leakage, corrosion or any other deterioration. He must check the facility's operating records to identify that daily inspections are performed, data are gathered from monitoring equipment and that waste analyses are performed before materials are placed in the treatment processes or equipment.

In addition to the duties as summarized above, "special conditions" as determined by the facility permit are checked by the inspector to determine compliance.

#### Special Conditions

The special conditions of CHS Facility Permits historically often contained a detailed schedule of compliance involving site construction. The HWIT inspector is responsible to monitor compliance with deadlines and approved construction specifications and plans. The inspector needs a working knowledge of surveying, earth work, piping systems, concrete structures, structural steel tanks, corrosion protection, drilling and well construction. In addition, the inspector must be familiar with a wide variation of technical codes, standards, specifications and recommended practices such as American Society for Testing and Materials,

Americal Petroleum Institute, National Fire Protection Association and the National Association of Corrosion Engineers which may be specified in plans or regulations.

### Additional Enforcement Responsibilities

Although the HWIT was formed to primarily inspect facilities with State/RCRA permits, the need for consistency requires that the personnel assigned to the team be the sole waste inspector at a particular facility. A review of the time sheets for F.Y. 83 indicates that in excess of 90% of staff time is expended in RCRA related items, including spill response. Seven percent of available staff time is spent on NPDES related items and two percent or less spent on TSCA, FIFRA or subtitle D of RCRA.

### National Pollutant Discharge Elimination System (NPDES)

The HWIT inspectors are responsible for compliance enforcement of the NPDES program at TSD facilities. This responsibility consists of inspections of the wastewater treatment systems at the Facility and coordination with the Industrial Waste Division. The inspector evaluates the engineering processes to determine source of materials in the wastewater and the treatment and discharge of wastewater as required by the NPDES permit issued to the Facility. The Inspector reviews permits to evaluate deficiencies and needs for further restrictive measures. The construction of approved wastewater systems is checked by the inspector.

Part of the responsibility under the NPDES Program involves the evaluation of quarterly Discharge Monitoring Reports (DMR's) required to be submitted by Facilities with wastewater discharge. Failure to submit results in enforcement action taken by the inspector. The DMR's are checked to ensure that the discharge

parameters of the permit are not being exceeded. Patterns of violations and reports identifying problems are recorded by the inspector and summaries submitted to EPA.

When the Industrial Waste Division personnel go to a Facility for a compliance monitoring review and sampling exercise, the HWIT inspector accompanies the NPDES representative to offer support and identify engineering peculiarities in Facility operation. In addition, inspectors frequently take grab samples of the discharge for spot checks on a routine inspection.

The HWIT is responsible for major and minor NPDES Facilities throughout the State of Maryland. These include: Bethlehem Steel Corporation at Sparrows Point, SCM Corporation at Hawkins Point and the American Recovery Company in Curtis Bay.

#### Toxic Substance Control Act (TSCA)

TSCA Enforcement PCB Program: The HWIT inspector is responsible for determining compliance with polychlorinated biphenyl (PCB) requirements of the Toxic Substance Control Act (TSCA) at those Facilities in the State that store PCB's for disposal. Unlike most states, PCB's are a controlled Hazardous Substance in Maryland. PCB inspections are conducted in conjunction with CHS inspections, however, the PCB requirements involve other compliance items in addition to those storage requirements of the CHS Program. The HWIT inspectors provide assistance in compiling the TSCA annual report as required by EPA. Copies of all inspection reports are submitted to EPA and records are kept by the HWIT as part of the State's PCB grant.

### Spill Response Duties

The HWIT inspectors are on 24-hour call to respond to CHS spills, NPDES non-compliance and emergency situations involving hazardous materials. Where a TSD facility reports a non-compliance or spill of CHS on its property, the Facility inspector will respond to identify the problem, the action needed to be taken to reduce or eliminate threat to public health or environment, and the follow-up activities necessary, such as additional monitoring of ground water, surface waters, etc. The HWIT inspector also responds to highway spills to offer assistance and expertise to emergency personnel such as fire department and police and to all additional support agencies as necessary. The inspector responds to emergencies anywhere and anytime in the State of Maryland.

### Other Waste Management Administration Programs

The HWIT inspector may be involved with sanitary landfills, non-hazardous industrial waste landfills, and sewage sludge operations if the Facility manages these wastes. A CHS permitted facility may have a major NPDES discharge and separate sanitary sewage treatment plant and sludge disposal operation and a non-hazardous industrial waste landfill. Federal facilities such as military installations are also subject to the sanitary landfill permitting regulations. Each of these Waste Management Administration Programs involves a permit to operate with associated law and regulations. The HWIT inspector is required to coordinate with the necessary WMA unit in developing and enforcing a permit.

## Special Programs and Assignments

The HWIT is involved in special programs being coordinated between the Waste Management Administration, the Environmental Protection Agency (EPA) and the Department of Transportation (DOT).

### DOT Programs

The HWIT is administering a Department of Transportation Grant to develop data on the management of hazardous waste. HWIT members are making open and covert inspections of CHS transportation activities. The scope of the program will include road side inspections, CHS Facility transportation related inspections and compiling data of observations made. The grant provided \$20,000 for the purchase of photographic equipment, organic vapor meters, other equipment, and manpower salaries.

The HWIT also makes joint inspections with Federal DOT inspectors within CHS permitted Facilities. These joint inspections have involved record audits and vehicle inspections. The State CHS regulations require generators and transporters of hazardous waste to conform to Federal DOT regulations.

### EPA Dump Site Inventory

HWIT inspectors make joint inspections with EPA contractors of closed dumps sites that are located on CHS permitted Facilities or Facilities which have made application for permits. The EPA contractor interviews the HWIT inspector to review Facility operations and to evaluate sampling points. The HWIT inspector

US EPA ARCHIVE DOCUMENT

makes contact with Facility representatives and coordinates time of inspection. The HWIT inspector accompanies the EPA contractor team to the Facility, assists in the investigation, and writes a report detailing actions.

#### Ground Water Investigations

HWIT inspectors have participated in investigations of ground water pollution in communities surrounding CHS permitted Facilities. Team members work with the EPA, the local health departments and the Water Management Administration in collecting samples and evaluating hydrogeologic and water quality data. A HWIT inspector assisted in the development of recommendations as it related to the State acquisition of a closed CHS Facility with known ground water contamination.

#### Special Assignments

The HWIT has been involved in several special assignments and investigations regarding hazardous waste.

- Dioxin Survey: The Dioxin survey involved assessment of potential contamination of several Facilities in the State due to past handling precursors. HWIT was involved in the general coordination of the program in Maryland in conjunction with Region III, EPA personnel. Sites were identified and a plan of actions was implemented through the cooperative effort between HWIT, EPA and their contractor. Further activities are now in the planning stage for an even more comprehensive review of this



potential contaminant in Maryland.

- Investigation of alleged CHS disposal at a sanitary landfill. Activities have involved interviews with generators and landfill employees, consultations with the Science and Health Advisory Group (SHAG) and the county representatives, recommendations for remedial action, and referrals for police investigation.
- Complaint investigating. Cases have included the transportation and use of "nerve gas" at a private laboratory, the unpermitted disposal of waste at a company landfill site and problem of industrial odors in a private home.
- Correspondence Referrals. HWIT inspectors regularly draft correspondence related to CHS facilities in answer to the inquiries by legislators, environmental organizations, companies, and private citizens.
- Development of New Regulations. Input from the HWIT has resulted in changes to the law and regulations such as the adoption of an Administrative Search Warrant. HWIT experiences have given insight into regulations loop holes and regulatory permitting problems.

## Enforcement Actions

The primary objective for the Hazardous Waste Inspection Team being involved with all of the above projects is to ensure enforcement of State Statutes, Regulations and/or Permits regarding protection of the public health and environment. Once an inspector identifies a violation, he must be able to document evidence which can be used with administrative and/or criminal procedures in order to affect compliance.

Collection of physical evidence involves sampling of waste, photographing, interviewing and report writing. In some cases, an inspector may be able to prepare a plan prior to a site inspection, but generally problems are observed and the inspector must take immediate action.

Each inspector has had training in proper sampling procedures, preservation, documentation and equipment use. The inspector must make quick decisions as to safety, type of container, volume of sample, type of preservation and the representativeness of sample. He may be faced with liquids, solids, or sludges from drums, tanks, spills to soil, surface water or ground waters. He will need to know whether the sample must be collected in glass or plastic containers, what chemical to preserve the sample with, and the volume the lab requires for proper analyses. It is beyond the scope of this document to go into the complexity of all the factors involved in the safe, accurate and legal aspects of hazardous waste sampling. The HWIT is faced daily with sampling corrosive waste such as acid or caustic soda, reactive cyanide waste, PCB's, toxic

metal sludges, various organic chemical waste and, in most cases, unknown materials.

Once a violation has been identified, there are several informal and formal administrative procedures the inspector utilizes to obtain compliance. The inspector first documents all of his actions and observations in the Facility inspection form or Report of Observations. These documents must be accurately written, signed by a representative of the Facility, and a copy provided to the Facility before the inspector leaves the site. These initial documents are of prime importance, as they serve as the foundation of future legal actions.

The inspector must assess the seriousness of the violations or potential violations, and structure his action accordingly. He may elect to document with a report, issue a site complaint requiring specific remedial action within a specified time frame, or recommend the case be referred to the Attorney General's office for criminal investigation.

When repeated attempts to resolve problems by negotiation are unsuccessful, the Administration may elect to issue a formal Complaint and Order and/or Civil Penalty Assessment. The HWIT is continually developing summaries (chronologies) of historic enforcement actions, writing litigation packages for referrals to the Attorney General, and drafting Complaint and Orders, Civil Penalties, Consent Agreements and Stipulated Corrective Orders. (Samples of this work have been provided in Appendix VII).

The HWIT inspector maintains close contact with the Attorney General's Office during the preparation and issuance phase of

enforcement documents, and enforcement compliance. If the Order is appealed to Administrative Hearing or trial, the inspector may be called upon to testify or serve as an expert witness. It is the inspector who will report on the Facilities status regarding compliance with the Order. The inspector serves as the Administration's primary contact with the Facility.

In the case of possible criminal violations, the HWIT inspector may consult with the Attorney General's Office and State Police Hazardous Waste Strike Force. This consultation may take the form of providing information on facility records review.

It is likely that the HWIT will be developing documentation for the issuance of Administrative Search Warrants in the future. It was HWIT experience in being refused entry into CHS facilities that was instrumental in the passage of legislation with respect to Administrative Search Warrants for Waste Management personnel.

#### Reports and Recorkeeping

The HWIT inspector must submit inspection reports, monthly activity summary reports, and EPA activity summary reports for the various programs as required.

Each inspector is responsible for forwarding copies of inspection forms and reports of observations to Enforcement Division supervisors and the Hazardous Waste Division, Industrial Waste Division, and the Municipal Waste Division project managers. Monthly, the inspector must prepare a summary of all CHS facility compliance status and provide copies of this summary to the EPA under the RCRA Grant.

NPDES permits compliance are summarized in Quarterly Non-Compliance Reports (QNCR). The QNCR is based on review of Discharge Monitoring Reports (DMR's), notifications of non-compliance, Facility compliance reports and site inspections. The inspector must maintain records on patterns of non-compliance in order to initiate enforcement.

### Future Activities

On the national level, it is likely the Congress will be overhauling RCRA in the near future. The EPA is continuing to increase its commitment of resources to the regulation of hazardous waste.

The State of Maryland, Waste Management Administration has been recognized as a leader in the effective implementation of a balanced hazardous waste program. It is well known that the citizens of this State support strong environmental regulation enforcement. It is, therefore, likely that the Hazardous Waste Inspection Team activities will expand as needs develop.

It has become apparent by the HWIT activities that some immediate needs must be addressed in the near future.

### Data Management

The volume of information generated by Facility reporting, correspondence inspections and enforcement actions of the various programs pose a tremendous problem in recordkeeping and compliance monitoring. This problem is complicated by the constant review of this information by inspectors, lawyers, environmental groups and private citizens.

The efficiency of enforcement effort will be greatly increased when a comprehensive data management system is available. The entry of inspection form data by regulation coding to a computer could produce a history of compliance within minutes.

### Legal Assistance

The amount of inspection time that is consumed in the preparation of litigation packages and draft Civil Penalties and Orders means less time for site inspections.

With two Assistant Attorney General assigned to the entire Waste Management Administration for civil enforcement action, the inspector is faced with coordinating many issues normally delegated to legal professionals. This condition is a contributing factor in long delays associated in issuing enforcement documents.

It will be helpful to the field enforcement staff when a paralegal position is established between the inspector and the attorney. This intermediate will compile evidence into a standardized document, calculate penalty assessment, and follow the document as it moves through the approval process.

### New CHS Permit Programs

The HWIT will soon be involved in two new permitting programs associated with the Waste Management Administration.

Regulations have been adopted to issue a "Limited Facility Permit for Thermal Destruction Facilities other than Hazardous Waste Incinerators." This new permit allows the thermal destruction of specific types of CHS. The permits are prepared by coordination between the Hazardous Waste Division and the Air Management Administration. Enforcement of the permit requires extensive interaction with the Air Management Administration.

The Maryland Statute with respect to CHS includes regulation of low level nuclear waste. It is likely that permits will be prepared by coordination between the Hazardous Waste Division and the Radiation Division. Enforcement of the permit will require involvement of the Hazardous Waste Inspection Team members.

### Federal and State Facilities

HWIT experiences with the regulation of Federal and State management of CHS has indicated that we have only begun to address these types of facilities.

The HWIT is currently reviewing all Federal facilities located in Maryland. As of now, it is estimated that there are 200 Federal facilities which will require investigation as to past, current and future management practices related to hazardous waste. These include: Army, Navy, and Air Force bases, General Services Administration material management facilities, abandoned Nike bases, research laboratories and others.



State agencies of concern include: colleges, hospitals, highways, port facilities and general services, all of which manage various hazardous wastes. A complete listing and plan for investigation is still to be developed.

Inspections at permitted TSD facilities by personnel other than those from the HWIT

Several facilities which have CHS permits are not inspected by the HWIT. These facilities are:

- Celanese (Allegany)
- Westvaco (Garrett)
- Kelly Springfield (Allegany)

Due to their geographic isolation and status as storage facilities, one regional inspector, specially trained to inspect storage facilities, was assigned to inspect them. The criteria during inspection and procedures, following consultation with his Regional Chief remains identical to that of the HWIT. Following are the procedures used:

Monthly Schedule of Routine Inspections for Region I

- a. The inspector is assigned to his facilities by the Regional Chief.
- b. The inspector is responsible for developing a list of all ongoing permitted activities. A copy of each permit is kept in a book for reference in the field.
- c. The inspector, during a conference with his Regional Chief, assigns an inspection frequency for each permit, based on Statutory requirements.

- d. Using his list of permitted facilities and inspection frequencies, the inspector develops and submits a monthly schedule of routine inspections.
- e. The monthly schedule of routine inspection does not address complaints received from the public or other government agencies, but should list follow-up on issued orders. The inspector's schedule must allow time for these important activities.
- f. Each inspection is documented in a report submitted to the Regional Chief. A copy of the report is to be left with the permittee.
- g. Report is then sent to Division Chief of the HWIT.

## CITIZEN COMPLAINTS

In responding to complaints, the following procedures are followed:

1. The complaint is received by the HWIT Chief. His decision concerning appropriate response action depends upon whether it is:
  - a. A flowing problem (spill, dumping trucks present, etc.) or "Drum Dump"
  - b. Stationary problem (unauthorized dump)
2. Should it be a flowing problem or "Drum Dump", the inspector will respond immediately.
  - a. If a spill, the inspector follows the spill procedures manual.
  - b. If mishap is other type of violation, the inspector must follow guidelines on inspector/violator relations, and instructions on collecting samples and other physical evidence.
3. Should there be a stationary problem, the response is on an "as can" basis within the next 72 hours. However, calls from the Police or Fire Department, should be responded to immediately.
4. Follow-up on complaints, procedure:
  - a. Contact complainant
  - b. Contact local Health Department
  - c. Refer to other state agency, if appropriate
  - d. Expedite the paperwork.

OPTION TO BE PURSUED IN THE EVENT OF A VIOLATION AT A COMPLAINT  
SITE

A. If the violation is noted, the inspector must make a determination whether formal or informal action should be pursued.

1. Should formal on-the-scene correction be deemed appropriate, a warning may be incorporated into the field inspection report and given to the facility representative. This warning, in effect, could require specific short term correction action; e.g. cleaning of a bar screen to prevent intake of excessive solids.
2. Should formal action be taken, a decision must be made whether (a) immediate and/or (b) long term corrective measures are necessary.

a. Immediate Corrective Action

i. Examples of circumstances

- aa. CHS accidents
- bb. Accidental bypass of treatment facility
- cc. Malfunction in part of treatment apparatus, such as a chlorinator or clarifier
- dd. Second occurrence of a situation for which formal warning has been given

ii. Enforcement method to be followed:

- aa. Field Site-Complaint - used to "order formally", obtain corrective action on site - may be followed by formal Complaint & Order.

- bb. Civil Penalty Assessment - if cause was deliberate
- cc. Spill Report - to be left at scene with instructions for filling it out.

b. Long Term Corrective Measures

i. Example Circumstances

- aa. One or more parameters seems to be recurrently out of compliance and requires major modifications for correction
- bb. Schedules of compliance or other required documentation are chronically tardy.
- cc. Major modifications are required, documentation is chronically tardy.
- dd. Violator refuses to obey a Site-Complaint

ii. Enforcement method to be followed

- aa. Formal order is drafted by inspector for review by Chief and forwarded to Administrator for further review and signature
- bb. This Order has a cover letter which outlines specifics of the violation and sections of law or regulations which have been violated.
- cc. Deadlines for compliance in this Order must be carefully chosen with a realistic timetable discussed at length between the permittee and enforcement personnel.
- dd. This Order is reviewed for legal sufficiency so that subsequent legal enforcement remedies may be applied.

## GENERATOR AND TRANSPORTOR INSPECTIONS

Inspections are made at facilities that comply with the ninety day storage requirements and generate greater than 1000 kilograms of combined hazardous waste. The Administration attempts to inspect all such facilities yearly. Present Federal inspection frequency calls for all facilities to be inspected once during a ten-year period.

By statute, any facility that generates in excess of 100 kilograms of combined hazardous waste after July 1, 1985 will be a generator subject to regulation under COMAR 10.51.03 and, if transported, under COMAR 10.51.04.

There is a great dissimilarity between the number of generators identified with a 1000 kilogram cut-off as compared to the 100 kilogram cut-off. With a maximum of three man-years dedicated to the inspection of generators and transporters throughout the State, only the largest and/or potentially the more hazardous of the facilities are being inspected at present. One objective of a re-organization would be to upgrade the resources dedicated to this task. At present all inspections are being done by regional inspectors. Both regions I and IV dedicate .5 work years each to this effort. Regions II and III dedicate 1.0 work years each, for a Statewide total of 3.0 work years. When violations are noted or compliance is slow in coming, procedures identical to those described in the HWIT discussion are utilized to bring about compliance.

Potential generators (100 Kilograms)

A detailed study was made of potential CHS generators. As is readily discernable from the following table this number may represent the high end of potentials. Nonetheless, they must be inspected at least initially to have their status determined.



| <u>County</u>    | Computer    | Manufacturers | <u>Duplicates</u> | Potential    |
|------------------|-------------|---------------|-------------------|--------------|
|                  | <u>List</u> | <u>Guide</u>  |                   | <u>Total</u> |
| Allegany         | 23          | 31            | 8                 | 46           |
| Anne Arundel     | 85          | 81            | 10                | 156          |
| Balto City       | 323         | 528           | 106               | 745          |
| Balto County     | 242         | 179           | 56                | 365          |
| Calvert          | 2           | 5             | 0                 | 7            |
| Caroline         | 9           | 18            | 4                 | 23           |
| Carroll          | 25          | 47            | 8                 | 64           |
| Cecil            | 30          | 24            | 9                 | 45           |
| Charles          | 12          | 14            | 0                 | 26           |
| Dorchester       | 14          | 17            | 4                 | 27           |
| Frederick        | 38          | 32            | 9                 | 61           |
| Garrett          | 5           | 12            | 3                 | 14           |
| Harford          | 29          | 37            | 8                 | 82           |
| Howard           | 49          | 37            | 4                 | 82           |
| Kent             | 7           | 5             | 3                 | 9            |
| Montgomery       | 136         | 147           | 26                | 257          |
| Prince George's  | 93          | 133           | 11                | 215          |
| Queen Anne's     | 2           | 7             | 1                 | 8            |
| Somerset         | 5           | 9             | 1                 | 13           |
| St. Mary's       | 7           | 9             | 1                 | 15           |
| Talbot           | 15          | 24            | 4                 | 35           |
| Washington       | 53          | 56            | 21                | 88           |
| Wicomico         | 43          | 39            | 9                 | 73           |
| Worcester        | <u>7</u>    | <u>17</u>     | <u>1</u>          | <u>23</u>    |
| Total            | 1,254       | 1,508         | 307               | 2,455        |
| Govt Facilities  |             |               |                   | 366          |
| Comptroller Info |             |               |                   | <u>5,290</u> |
|                  |             |               | Total             | 8,111        |

### Civil Penalty Policy

The State is developing a final civil penalty policy for the imposition of fines. This policy is still in draft form but is being patterned after the "Final RCRA Civil Penalty Policy, May 8, 1984" (See Appendix VIII.) Penalties, under State law can reach:

- \$10,000 per day, per violation in a civil action, or
- if administrative up to \$1,000 for each violation, not exceeding \$50,000 total, with consideration given to:
  - 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 clean up and the cost of restoration of natural resources;
  - 4) The nature and degree of injury to or interference with general welfare, health, and property;
  - 5) 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.

#### Classes of Violations

The State will be utilizing guidance provided by EPA determining levels of priority for enforcement response (See Appendix IX.) Basically, this policy is as follows:

- Two levels of violations:
  - 1) Class I, (violations of requirements that are central to the protection of public health and the environment, and
  - 2) Violations that play a less of direct role in the protection of public health and the environment.
- Three levels of priority

Priority 1 - facilities with one or more Class I violations that:

- pose a substantial likelihood of exposure to hazardous waste or have resulted in exposure
- have realized a substantial economic benefit as a result of non-compliance, or
- are chronic or recalcitrant violators, or
- have committed knowing violations.

Priority 2 - facilities with one or more Class I violations that do not meet any of the criteria listed in the Priority 1 description.

Priority 3 - facilities whose violations are all categorized as  
Class III.

**PROGRAM DEVELOPMENT DIVISION**

## PROGRAM DEVELOPMENT DIVISION

### I. Introduction

Purpose - The primary purpose of the Program Development Division is to provide administrative support for the other units of the Waste Management Administration.

Scope - The activities of the Program Development Division are related to, and interspersed throughout the areas of responsibility assigned to other WMA units. Its activities both affect, and are affected by, the efforts of these units.

Role - Except for its oversight of County planning activities, the Division's responsibilities are administrative, not regulatory. Its role is to provide planning, coordinating etc. for the Administration.

### II. Structure of Division

The Program Development Division is not divided into sections.

#### Staffing

The Staff of the Program Development Division is comprised of classifications in the following professional and support categories:

Sanitarian

Natural Resources Planner

Administrator

Administrative Specialist

Office Secretary

III. Legislative Authority - The legislative authority for each of the Program Development Division's activities is given below.

IV. Coordination with Other Programs - OEP units, State Departments of Planning, Natural Resources and Agriculture and appropriate regional planning agencies, local government, industry, public at large, divisions of Waste Management Administration as appropriate, advisory groups and EPA as described below.

V. Responsibilities

A. Regulation Development

Legislative Authority: Health Environmental Article 9/2 and 7/2 of the Annotated Code of Maryland, Federal Water Pollution Control Act of 1972 as amended by the Clean Water Act of 1977, Resource Conservation and Recovery Act as amended, and Regulations 08.05.04.01 - .13 and COMAR 10.51.01-.09.

Activity Description: The Program Development Division, in conjunction with the Director of WMA and other Divisions of WMA, determines the need for new regulations, or revisions to existing regulations. The Division is responsible for ensuring that regulations and revisions are properly structured, legally sufficient and promulgated in accordance with State requirements (including public hearings and all necessary provisions for input from the public, local governments and State agencies).

The Division initiates regulation development in the RCRA program.

Regulatory changes in the State are made using the following steps:

- Step 1) - Proposal is made in-house by the Administration or as a result of a petition.
- Step 2) - Draft regulation is circulated in-house. Affected regulated community is contacted.
- Step 3) - Final Draft submitted for review to EPA, the States Attorney General's Office and the Director.
- Step 4) - Economic Impact Assesment calculated, the proposal in narrative form is developed and these, along with the proposed regulations are okayed by the Secretary of the Department.
- Step 5) - Notice of Proposed Action appears in the Maryland Register. As script of the proposed regulation along with scheduled hearing date, are printed.
- Step 6) - Hearing is held and comments are received.
- Step 7) - Response to comments prepared.
- Step 8) - Notice of adoption, modification or repeal appears in the Maryland Register.



This process takes from three months to more than two years. WMA has had experience at both ends of this time frame.

The State has the capability to revise its Statutes annually. The Maryland General Assembly meets from mid-January to mid-April. It is only during the first month of the session that legislation can be introduced, and then only by a willing Delegate (lower house) or Senator (upper house). Otherwise, Departmental legislative initiatives must be brought forward prior to the start of the Legislative Session.

B. Public Hearing Coordination

Controlled Hazardous Substances (CHS) - Upon request from the Hazardous Waste Division, the Program Development Division will prepare and submit to the Maryland Register a notice of a preliminary determination which OEP has made concerning a CHS permit application. The purpose of the notice will either be to provide notice with an opportunity for public hearing, or to advise that a public hearing has been scheduled and adjudication of the hearing may be requested. The Division coordinates all requests for adjudication with the Office of Hearings and Regulations.

C. Grants Preparation

Legislative Authority: Health Environmental Article 7/207 (A) (1).

Activity Description: Each year Maryland must negotiate

and prepare work plans and grant applications for federal funding under Subtitle C of RCRA.

The Program Development Division is responsible for preparing the draft grant application and work plan, coordinating the review of the draft, preparing letters for transmitting of the final document to EPA, and preparing responses to any questions or comments which EPA might have. The Division is also responsible for the preparation of supplementary grant requests as necessary.

D. RCRA Administration

Legislative Authority: Health Environmental Article 7-208, 9-204, 9-315 and 9-325, 9-404- 10-103; Article 76A, Section 1 et seq, Article 41, Section 244 et seq and COMAR 10.51.01.

Activity Description: The Program Development Division is responsible for the following RCRA Administration:

1. Authorization Responsibility.
2. Grant preparation - discussed above.
3. Quarterly Enforcement Reports - to EPA (includes generators inspected; treatment, storage and disposal inspections; enforcement actions; permits issued; and sampling.)
4. EPA Liaison - including staff assistance to the Director for all matters of funding and national regulation development.
5. Association of State and Territorial Solid Waste

Management Officials - Division provides staff for Director's participation in the ASTSWMO Director's Caucus. Assistance given to the ASTSWMO National Office on national policy questions.

6. Central Atlantic States Solid Waste Director's Caucus CASSWDC - Division provides staff (Secretary) for the Directors of Region III States.

E. Public Participation

Legislative Authority: For RCRA programs, Section 7004 (b) of the Act and subsequent guidelines (Federal Register, February 16, 1979 40 CFR Part 25, also Health Environmental Article Title 7, Section 2 of the Annotated Code of Maryland).

Activity Description: The Program Development Division is responsible for providing appropriate channels for public input into the conduct of the Administration's programs. The channels provided are: public information materials and advisory groups (including the Controlled Hazardous Substances Advisory Council.)

The Division is responsible for scheduling, advertising and conducting public meetings, developing information materials, arranging meetings of the advisory groups and providing any necessary support for the advisory bodies. The formation and composition of the Controlled Hazardous Substance Advisory Council is mandated by Health Environmental Article 7/2 of the Annotated Code of Maryland. This Council advises OEP on matters pertaining

to hazardous and low-level radioactive waste management. The Program Development Division provides staff support for the Council. The Division also provides speakers upon request from the public.

The division also staffs the Governor's Task Force on Hazardous Waste Initiatives.

1. Background

The Task Force on Hazardous Waste Initiatives was established in May, 1983 by the Governor to develop new programs and policies aimed at reducing the reliance on landfills for the disposal of hazardous wastes in Maryland. The Task Force will also determine what further innovations may be needed in Maryland's hazardous waste regulatory and siting programs, and will attempt to increase public and industry participation in the State's efforts.

Specifically, these tasks are as follows:

- a) To develop an overall plan consisting of those policies and programs such as financial incentives, research programs, technical assistance programs to industry, fast-track permit programs, and regulatory prohibitions concerning the land burial of treatable or recoverable wastes designed to stimulate a systematic increase in the use of reduction, recycling, recovery and treatment as alternatives to the land burial of our hazardous

wastes;

- b) To assess the State's current regulatory and siting programs with the view of developing needed improvements and innovations in such areas as cleanup of abandoned sites, host community compensation plans, and regulatory restraints on the land burial of particular types of organic wastes; and
- c) To develop policies and programs designed to foster improved communication and mutual understanding among government, industry and the public over the basic questions of hazardous waste generation and disposal in society, and to increase the level of involvement and participation by industry and citizens in our hazardous waste management programs. Examples would be such programmatic initiatives as citizen advisory committees for operating facilities, industry recognition program, a one-stop information and referral office, the establishment of a government, citizen, industry, media editorial board to develop publications for mass distribution, and community outreach programs, including a speakers' bureau and seminars for community civic groups.

## 2. Contractor's Task and Schedule

The contractor's function is to provide technical

staff support to the Task Force in the search for alternative schemes and new initiatives for Maryland in the management of hazardous wastes. The contractor's analysis and recommendations will be based upon its multidisciplinary expertise and necessary reviews of reports from the best management practices gleaned from both the national and international search of the literature. This effort will require an examination of economic, technical, scientific and legal data and issues on hazardous waste control. The contractor is normally available at every general Task Force meeting. In addition, the contractor works with sub-committees of the Task Force when needed. The contractor is also required to conduct other tasks as defined by State and Task Force representatives.

Task 1. Review of Literature and Analysis of Data

Review technical data, policy documents and prepare working papers in the area of:

- 1) policies and programs both in-state and nationwide, governing financial incentives, research programs, technical assistance programs to industry, fast-track permit programs, and regulatory prohibitions concerning the land burial of treatable or recoverable wastes designed to stimulate a systematic increase in the use of reduction, recycling, recovery and

treatment as alternatives to the land burial of our hazardous waste; and

- 2) Assessments of State regulatory and siting programs with the view of developing needed improvements and innovations in such areas as clean-up of abandoned sites, host community compensation plans, and regulatory restraints on the land burial of particular types of organic waste.

#### Schedule

Task 1 A & B are to be performed over a 12 month period following a notice to proceed. All other work will be performed as assigned by the Task Force or by its subcommittees.

#### Task 2. Reports

The contractor will aid in the preparation of final reports which will consist of substantive information on the areas of study by the Task Force.

#### 4. Professional Disciplines and Organization

Research and evaluation are to be done by a multidisciplinary team. The following groups of disciplines may be applicable, depending on the focus of the Task Force.

- \* earth sciences (geology, hydrogeology, soil science)
- \* biology, ecology (science dealing with the natural

environment)

- \* health sciences (public health, industrial hygiene, toxicology, other health-oriented sciences)
- \* engineering
- \* land planning
- \* finance and economics
- \* hazardous waste and toxic chemical control
- \* law
- \* Oral and written communication

E. Special Studies and Resource Development

The Program Development Division is responsible for coordinating the Administration's review of any reports, studies, etc., which are not included previously.

The Division solicits input from other WMA and OEP units as needed, consolidates these comments and prepares the necessary correspondence from the Director of WMA.

The Program Development Division is also responsible for the development of resources and information for staff development of resources and public information.

Examples would be workshops, seminars, training guides and information materials.



**STAFFING AND BUDGETS**

A major area of concern for the State is the viability of its several funding sources. There are three sources of funds that support the activities of the State's hazardous waste regulatory program. These sources are:

- 1) Federal grant administered through the EPA under authority of the Resource Conservation and Recovery Act,
- 2) The State's Hazardous Substances Control Fund, consisting of monies from permit and certification fees, and penalties; and
- 3) Funds appropriated directly from the State's general operating budget.

The future of these three sources of monies is varied. While State appropriations can be considered, a constant for now, no assurances can be given beyond the State fiscal year 1985 (July 1, 1984 thru June 30, 1985). Barring a general collapse in the Nation's and the State's economies (in which event hazardous waste management may no longer remain a priority program), it can be assumed that the positions and operating expenses will remain constant, in 1984 dollars for the next several years, due to the high level of interest expressed by the Governor and the General Assembly. The Tables that follow reflect the State's budget in terms of non-inflationary 1984 Dollars.

The Hazardous Substances Control Fund, authorized by State Statute (Health-Environmental Article 7-318), financed through permit application fees, permit fees, renewal fees and any civil or administrative penalties or fines (Health-Environmental Article 7-219), is to be used for, among other uses, support of program

activities (Health-Environmental Article 7-200). This fund can expect to be diminished substantially for F.Y. 85 now that the State no longer has a large, commercially available CHS disposal site.

Federal funding can not be counted on for total program support. Even partial program support becomes risky when dealing in the realm of Congress and the Administration. All that is known, tentatively, for now, is that projected EPA State funds for F.Y. 85 is targeted for \$705,800 (second draft, F.Y. 85 RCRA Implementation Plan). Projections beyond F.Y. 85 can only be provided by the EPA.

The following text describes by Divisional Unit or sub-unit, as appropriate, the personnel used by the Administration in the implementation of the State CHS/RCRA program.

## Staffing

| Position  | Job Description  |
|---|--|
| <u>Hazardous Waste Division</u>   |  |
| Public Health Engineer<br>(vacant)<br>(50% permits, 50% data)                                   | Division Chief, responsible for<br>conduct and product of the<br>Hazardous Waste Division                  |
| <u>Permits Section</u>  |  |
| Water Resources Engineer<br>(100% permits)  | Section Chief of the Permits<br>Section, responsible for timely<br>preparation of quality draft<br>permits |
| Public Health Engineer<br>(75% storage,<br>25% treatment)                                       | Permit writer and technical<br>consultant for storage<br>and treatment facilities                          |
| Public Health Engineer<br>(75% treatment,<br>25% incineration)                                  | Permit writer and technical<br>consultant for treatment and<br>incineration facilities                     |
| Public Health Engineer<br>(loan from AMA)<br>(100% incineration)                                | Permit writer and technical<br>consultant for incineration<br>facilities                                   |
| Environmental Specialist (1/2)<br>(50% storage)   | permit writer and technical<br>consultant for storage facilities   |
| 3-Geologists (2 positions<br>filled, 1 vacancy)<br>(67% groundwater<br>facilities, 33% storage) | permit writer and technical<br>consultant for groundwater<br>monitoring facilities                         |

### Resources Available for Permit Section

|                        |   |                 |
|------------------------|---|-----------------|
| Storage                | - | 2.25 work years |
| Treatment              | - | 1.0 work years  |
| Incineration           | - | 1.25 work years |
| Groundwater facilities | - | 2.0 work years  |

total work years for permit writers - 6.5 \*

\* Note: Does not reflect

Supervision - 1.5 work years (Section Chief, Division Chief)

Clerical - 2.0 work years (1 Office Secretary, 1 Clerk typist)

Total work years available - 10.0

#### Data Management Section

|  |   |
|--|---|
| Chemist  | Section Chief, responsible for over-all conduct & quality of section                            |
| Environmental Specialist                           | Reviews manifest for proper information prior to data system input & for transportation program |
| Environmental Specialist (1/2)                     | Responsible for submittals of generators annual reports   |
| Data Processing Clerk (2)                          | responsible for inputting information into system   |
| Computer Programmer                                | Designs and operates State informaton system  |
| Clerk Typist (2)                                   | Clerical support  |
| Total work years available (including supervision) | <u>7.0</u> *  |

\* Includes 50% of Division Chief

#### Hazardous Waste Inspection Team

|                                       |   |
|---------------------------------------|---|
| Sanitarian                            | Division Chief, responsible for overall conduct and quality of work by Division |
| Public Health Engineer (3)            | TSD Inspector   |
| Sanitarian                            | TSD Inspector   |
| Conservation Associate                | TSD Inspector   |
| Water Resource Engineer               | TSD Inspector   |
| Total inspection work years available | <u>6.0</u>  |

Does not reflect

Supervision 1.0

Clerical 1.0  
2.0

Total HWIT Work Years 8.0

Note: While the HWIT does do other ancillary environment tasks, the budget for the HWIT is, due to the large budget of enforcement as a whole, accurate for planning purposes.

#### Generator Inspection Staff

Regions I and IV provides one half of one work year of inspection time for generator and transporter inspections. Regions II and III provide one work year each for same. This time comes from any of a number of positions and classifications within the Program.

Work years available 3.0

#### Support Services Division

(The major RCRA-related activity carried out by this unit is in spill-response. In addition to the activities of the HWIT, this unit provides the following personnel for spill response.)

Environmental Specialist on-scene coordinator  
(50%)

Natural Resources Biologist on-scene coordinator  
(50%)

Conservation Associate on-scene coordinator  
(50%)

Sanitarian on-scene coordinator  
(25%)

Public Health Engineer on-scene coordinator  
(25%)

man-years available 2.0

#### Attorney General Strike Force

Assistant Attorney General (3) Prosecutes criminal cases involving CHS cases referred from WMA

Assistant Attorney General (1<sup>1</sup>/<sub>2</sub>) Advises Administration on civil cases and on Administrative Law

MD State police - Sergeant

investigates and prepares cases  
for referral to Assistant  
Attorney General's

MD State Police (4)  
(Corporals)

criminal investigations

Legal Clerk

provides paralegal service to  
Assistant Attorney Generals

Conservation Associate

assists in investigations of CHS  
related felonies

Legal Secretary (2<sup>1</sup>/<sub>2</sub>)

provides clerical support

Staff available for  
investigation

6.0 work years

paralegal & clerical

3.5 work years

Attorney General

4.5 work years

Total Staff on Strike Force

14.0 work years

#### Program Development Division

Sanitarian (50%)

Division Chief, conducts overall  
planning and administrative  
effort

Administrative Specialist (25%)

Hearing officer and regulations  
coordinator

Natural Resources Planner

Staffs CHS advisory council and  
Governor's Task Force on  
Hazardous Waste Initiatives

Natural Resources Planner

Long range planner for RCRA.  
Develops necessary Administrative  
efforts

Fiscal Administrator (25%)

Oversees fiscal affairs of WMA's  
budgets and expenditures

Office Secretary

provides clerical support and  
office management

Total available staff 4.0 work years

#### Administration

Director of Waste Management  
Administration

25%

Administrator of Enforcement Program 25%

Administrator of Technical Services Program 25%

Office Secretary for Director 25%

Office Secretary for Administrator of Enforcement Programs 25%

Office Secretary for Administrator of Technical Services Program 25%

Total staff available 1.5 man years

Staffing Summary

Administration 1.5 work years

Hazardous Waste Division 17.0 work years

HWIT and Generator Inspections 11.0 work years

Support Services Division 2.0 work years

Attorney General's Strike Force 14.0 work years

Program Development Division 4.0 work years

Total CHS Staff 50.5 work years



F.Y. 85 Budget

| Project #                    | <u>604</u> | <u>616</u> | <u>617</u> | <u>TOTAL</u> |
|------------------------------|------------|------------|------------|--------------|
| Personnel                    | 204,363    | 528,557    | 535,672    | 1,268,592    |
| Tech. & Special Fees         | 0          | 0          | 0          | 0            |
| Communications               | 4,556      | 4,815      | 2,842      | 12,213       |
| Travel                       | 5,634      | 4,322      | 4,106      | 14,062       |
| Vehicle O & M                | 5,388      | 2,516      | 24,600     | 32,504       |
| Contractual Services         | 152,697    | 13,000     | 6,505      | 172,202      |
| Supplies & Materials         | 7,862      | 7,238      | 11,999     | 27,099       |
| Equipment - replacement      | 0          | 0          | 0          | 0            |
| Equipment - additional       | 0          | 0          | 0          | 0            |
| Grants, subsidies & contrib. | 2,709      | 1,822      | 8,360      | 12,891       |

## BUDGET SUMMARY

| <u>Object</u>           |         | <u>FY 1985</u> | <u>FY 1986</u> | <u>FY 1987</u> |
|-------------------------|---------|----------------|----------------|----------------|
| .01 Salaries            | general | 685,736        | 731,554        | 786,316        |
|                         | special | 100,503        | 110,458        | 121,505        |
|                         | federal | <u>365,488</u> | <u>418,574</u> | <u>474,658</u> |
|                         | TOTAL   | 1,151,727      | 1,260,586      | 1,382,479      |
|                         | Fringes |                |                |                |
|                         | general | 123,997        | 129,631        | 140,307        |
|                         | special | 28,141         | 30,954         | 34,050         |
|                         | federal | <u>252,693</u> | <u>284,750</u> | <u>315,510</u> |
|                         | TOTAL   | 404,831        | 445,335        | 489,867        |
| .02 Tech. & Sp.<br>Fees | general | 0              | 0              | 0              |
|                         | special | 20,994         | 21,254         | 21,534         |
|                         | federal | <u>2,660</u>   | <u>2,820</u>   | <u>2,985</u>   |
|                         | TOTAL   | 23,654         | 24,074         | 24,519         |
| .03 Communications      | general | 845            | 895            | 948            |
|                         | special | 190            | 200            | 210            |
|                         | federal | <u>26,848</u>  | <u>28,431</u>  | <u>30,096</u>  |
|                         | TOTAL   | 27,873         | 29,526         | 31,254         |
| .04 Travel              | general | 1,400          | 1,484          | 1,576          |
|                         | special | 1,000          | 1,060          | 1,125          |
|                         | federal | <u>7,030</u>   | <u>7,445</u>   | <u>7,894</u>   |
|                         | TOTAL   | 9,430          | 9,989          | 10,595         |
| .07 Vehicle O & M       | general | 18,025         | 28,510         | 76,516         |
|                         | special | 3,575          | 3,795          | 26,520         |
|                         | federal | <u>27,100</u>  | <u>36,245</u>  | <u>31,465</u>  |
|                         | TOTAL   | 48,700         | 68,550         | 134,501        |

# BUDGET SUMMARY

| <u>Object</u>      |         | <u>FY 1985</u> | <u>FY 1986</u> | <u>FY 1987</u> |
|--------------------|---------|----------------|----------------|----------------|
| .08 Contractual    | general | 1,399          | 1,487          | 1,579          |
|                    | special | 152,150        | 161,275        | 170,955        |
|                    | federal | <u>25,460</u>  | <u>26,981</u>  | <u>28,593</u>  |
|                    | TOTAL   | 179,009        | 189,743        | 201,127        |
| .09 Supplies       | general | 360            | 385            | 404            |
|                    | special | 1,080          | 1,150          | 1,215          |
|                    | federal | <u>6,200</u>   | <u>6,572</u>   | <u>6,985</u>   |
|                    | TOTAL   | 7,640          | 8,107          | 8,604          |
| .10 Equipment      | general | 3,000          | 2,200          | 2,400          |
|                    | special | 11,200         | 1,230          | 1,260          |
|                    | federal | <u>46,875</u>  | <u>4,380</u>   | <u>4,410</u>   |
|                    | TOTAL   | 61,075         | 7,810          | 8,070          |
| TOTAL DIRECT       | general | 834,762        | 896,146        | 1,010,046      |
|                    | special | 318,833        | 331,376        | 378,374        |
|                    | federal | <u>760,354</u> | <u>816,198</u> | <u>902,596</u> |
|                    | TOTAL   | 1,913,949      | 2,043,720      | 2,291,016      |
| INDIRECT (federal) |         | <u>124,744</u> | <u>141,067</u> | <u>159,226</u> |
| TOTAL COSTS        |         | 2,038,693      | 2,184,787      | 2,450,242      |
| PERCENT            | general | 40.95%         | 41.02          | 41.22          |
|                    | special | 15.64          | 15.17          | 15.44          |
|                    | federal | 43.41          | 43.81          | 43.34          |

# GENERATOR INSPECTIONS

| <u>Object</u>           |         | <u>FY 1985</u> | <u>FY 1986</u> | <u>FY 1987</u> |
|-------------------------|---------|----------------|----------------|----------------|
| .01 Salaries            | general | 26,507         | 27,832         | 29,244         |
|                         | special | 0              | 0              | 0              |
|                         | federal | 26,506         | 30,481         | 34,920         |
| Fringes                 | general | 0              | 0              | 0              |
|                         | special | 0              | 0              | 0              |
|                         | federal | 14,583         | 16,041         | 17,645         |
| .02 Tech. & Sp.<br>Fees | general | 0              | 0              | 0              |
|                         | special | 200            | 205            | 210            |
|                         | federal | 0              | 0              | 0              |
| .03 Communications      | general | 0              | 0              | 0              |
|                         | special | 0              | 0              | 0              |
|                         | federal | 1,375          | 1,460          | 1,545          |
| .04 Travel              | general | 0              | 0              | 0              |
|                         | special | 0              | 0              | 0              |
|                         | federal | 3,700          | 3,922          | 4,157          |
| .07 Vehicle O & M       | general | 0              | 0              | 0              |
|                         | special | 0              | 0              | 0              |
|                         | federal | 11,400         | 11,604         | 3,820          |
| .08 Contractual         | general | 0              | 0              | 0              |
|                         | special | 0              | 0              | 0              |
|                         | federal | 250            | 265            | 280            |
| .09 Supplies            | general | 0              | 0              | 0              |
|                         | special | 0              | 0              | 0              |
|                         | federal | 240            | 255            | 270            |
| .10 Equipment           | general | 0              | 0              | 0              |
|                         | special | 0              | 0              | 0              |
|                         | federal | 0              | 0              | 0              |
| Indirect (federal)      |         | 16,752         | 18,427         | 20,270         |
| TOTAL                   |         | <u>101,513</u> | <u>110,492</u> | <u>112,341</u> |
|                         | general | 26,507         | 27,832         | 29,224         |
|                         | special | 200            | 205            | 210            |
|                         | federal | 74,806         | 82,455         | 82,907         |

## PROGRAM DEVELOPMENT

| <u>Object</u>           | <u>Source</u> | <u>FY 1985</u> | <u>FY 1986</u> | <u>FY 1987</u> |
|-------------------------|---------------|----------------|----------------|----------------|
| .01 Salaries            | general       | 24,062         | 26,469         | 29,116         |
|                         | special       | 0              | 0              | 0              |
|                         | federal       | 75,630         | 83,193         | 91,512         |
| Fringes                 | general       | 6,737          | 7,432          | 8,176          |
|                         | special       | 0              | 0              | 0              |
|                         | federal       | 21,176         | 23,294         | 25,622         |
| .02 Tech. & Sp.<br>Fees | general       | 0              | 0              | 0              |
|                         | special       | 0              | 0              | 0              |
|                         | federal       | 0              | 0              | 0              |
| .03 Communications      | general       | 281            | 298            | 316            |
|                         | special       | 0              | 0              | 0              |
|                         | federal       | 1,719          | 1,822          | 1,931          |
| .04 Travel              | general       | 0              | 0              | 0              |
|                         | special       | 0              | 0              | 0              |
|                         | federal       | 380            | 403            | 427            |
| .07 Vehicle O & M       | general       | 0              | 0              | 0              |
|                         | special       | 0              | 0              | 0              |
|                         | federal       | 850            | 901            | 955            |
| .08 Contractual         | general       | 0              | 0              | 0              |
|                         | special       | 0              | 0              | 0              |
|                         | federal       | 200            | 205            | 210            |
| .09 Supplies            | general       | 60             | 64             | 67             |
|                         | special       | 0              | 0              | 0              |
|                         | federal       | 260            | 276            | 292            |
| Indirect (federal)      | general       | 0              | 0              | 0              |
|                         | special       | 0              | 0              | 0              |
|                         | federal       | 23,899         | 26,289         | 28,918         |
|                         |               | <u>155,254</u> | <u>170,646</u> | <u>187,542</u> |
| Total                   | general       | 31,140         | 34,263         | 37,675         |
|                         | special       | 0              | 0              | 0              |
|                         | federal       | 124,114        | 136,383        | 149,867        |

# ADMINISTRATION

| <u>Object</u>           |         | <u>FY 1985</u> | <u>FY 1986</u> | <u>FY 1987</u> |
|-------------------------|---------|----------------|----------------|----------------|
| .01 Salaries            | general | 37,287         | 39,959         | 42,898         |
|                         | special | 0              | 0              | 0              |
|                         | federal | 3,346          | 3,519          | 3,871          |
| Fringes                 | general | 10,440         | 11,484         | 12,632         |
|                         | special | 0              | 0              | 0              |
|                         | federal | 937            | 1,031          | 1,134          |
| .02 Tech. & Sp.<br>Fees | general | 0              | 0              | 0              |
|                         | special | 0              | 0              | 0              |
|                         | federal | 100            | 105            | 110            |
| .03 Communications      | general | 469            | 497            | 527            |
|                         | special | 0              | 0              | 0              |
|                         | federal | 94             | 99             | 105            |
| .04 Travel              | general | 900            | 954            | 1,011          |
|                         | special | 0              | 0              | 0              |
|                         | federal | 0              | 0              | 0              |
| .07 Vehicle O & M       | general | 250            | 265            | 281            |
|                         | special | 0              | 0              | 0              |
|                         | federal | 0              | 0              | 0              |
| .08 Contractual         | general | 1,299          | 1,377          | 1,459          |
|                         | special | 0              | 0              | 0              |
|                         | federal | 260            | 276            | 293            |
| .09 Supplies            | general | 100            | 106            | 112            |
|                         | special | 0              | 0              | 0              |
|                         | federal | 20             | 21             | 23             |
| INDIRECT (federal)      |         | 1,057          | 1,112          | 1,223          |
|                         |         | <u>56,559</u>  | <u>60,805</u>  | <u>65,679</u>  |
| Total                   | general | 50,745         | 54,642         | 58,920         |
|                         | special | 0              | 0              | 0              |
|                         | federal | 5,814          | 6,163          | 6,759          |

## HAZARDOUS WASTE DIVISION

| <u>Object</u>           |         | <u>FY 1985</u> | <u>FY 1986</u> | <u>FY 1987</u> |
|-------------------------|---------|----------------|----------------|----------------|
| .01 Salaries            | general | 138,509        | 145,434        | 152,706        |
|                         | special | 30,161         | 33,177         | 36,495         |
|                         | federal | 71,283         | 85,338         | 101,143        |
| Fringes                 | general | 0              | 0              | 0              |
|                         | special | 8,445          | 9,289          | 10,218         |
|                         | federal | 44,371         | 48,808         | 53,689         |
| .02 Tech. & Sp.<br>Fees | general | 0              | 0              | 0              |
|                         | special | 0              | 0              | 0              |
|                         | federal | 2,310          | 2,450          | 2,595          |
| Communications          | general | 0              | 0              | 0              |
|                         | special | 0              | 0              | 0              |
|                         | federal | 4,600          | 4,875          | 5,170          |
| .04 Travel              | general | 0              | 0              | 0              |
|                         | special | 0              | 0              | 0              |
|                         | federal | 250            | 260            | 275            |
| .07 Vehicle O & M       | general | 0              | 0              | 0              |
|                         | special | 0              | 0              | 0              |
|                         | federal | 1,650          | 9,750          | 1,855          |
| .08 Contractual         | general | 0              | 0              | 0              |
|                         | special | 0              | 0              | 0              |
|                         | federal | 2,500          | 2,650          | 2,810          |
| .09 Supplies            | general | 0              | 0              | 0              |
|                         | special | 0              | 0              | 0              |
|                         | federal | 840            | 890            | 950            |
| Equipment               | federal | 1,000          | 0              | 0              |
| Indirect (federal)      |         | 22,525         | 26,967         | 31,961         |
| TOTAL                   |         | <u>328,444</u> | <u>369,888</u> | <u>399,867</u> |
|                         | general | 138,509        | 145,434        | 152,706        |
|                         | special | 38,606         | 42,466         | 46,713         |
|                         | federal | 151,329        | 181,988        | 200,448        |

## STRIKE FORCE

| <u>Object</u>           |         | <u>FY 1985</u> | <u>FY 1986</u> | <u>FY 1987</u> |
|-------------------------|---------|----------------|----------------|----------------|
| .01 Salaries            | general | 286,700        | 306,922        | 331,586        |
|                         | special | 12,834         | 14,118         | 15,530         |
|                         | federal | 40,753         | 53,276         | 64,169         |
| Fringes                 | general | 49,797         | 54,777         | 60,254         |
|                         | special | 3,594          | 3,953          | 4,349          |
|                         | federal | 41,890         | 46,079         | 50,687         |
| .02 Tech. & Sp.<br>Fees | general | 0              | 0              | 0              |
|                         | special | 8,500          | 8,740          | 9,000          |
|                         | federal | 0              | 0              | 0              |
| .03 Communications      | general | 0              | 0              | 0              |
|                         | special | 0              | 0              | 0              |
|                         | federal | 4,975          | 5,275          | 5,590          |
| .04 Travel              | general | 0              | 0              | 0              |
|                         | special | 1,000          | 1,060          | 1,125          |
|                         | federal | 1,500          | 1,590          | 1,685          |
| .07 Vehicle O & M       | general | 17,500         | 17,950         | 18,425         |
|                         | special | 0              | 0              | 0              |
|                         | federal | 0              | 0              | 0              |
| .08 Contractual         | general | 0              | 0              | 0              |
|                         | special | 1,000          | 1,060          | 1,125          |
|                         | federal | 1,000          | 1,060          | 1,125          |
| .09 Supplies            | general | 0              | 0              | 0              |
|                         | special | 0              | 0              | 0              |
|                         | federal | 1,040          | 1,100          | 1,175          |
| .10 Equipment           | general | 0              | 0              | 0              |
|                         | special | 500            | 530            | 560            |
|                         | federal | 500            | 530            | 560            |
| Indirect (federal)      |         | 13,782         | 16,835         | 20,277         |
| TOTAL                   |         | <u>486,865</u> | <u>534,855</u> | <u>587,222</u> |
|                         | general | 351,135        | 379,649        | 410,265        |
|                         | special | 27,428         | 29,461         | 31,689         |
|                         | federal | 108,302        | 125,745        | 145,268        |



## HAZARDOUS WASTE INSPECTION TEAM

| <u>Object</u>           |         | <u>FY 1985</u> | <u>FY 1986</u> | <u>FY 1987</u> |
|-------------------------|---------|----------------|----------------|----------------|
| .01 Salaries            | general | 153,007        | 168,308        | 176,993        |
|                         | special | 29,949         | 32,849         | 36,134         |
|                         | federal | 17,671         | 19,438         | 21,381         |
| Fringes                 | general | 42,842         | 40,339         | 42,086         |
|                         | special | 8,386          | 9,224          | 10,147         |
|                         | federal | 4,948          | 12,230         | 15,739         |
| .02 Tech. & Sp.<br>Fees | general | 0              | 0              | 0              |
|                         | special | 250            | 265            | 280            |
|                         | federal | 250            | 265            | 280            |
| .03 Communications      | general | 0              | 0              | 0              |
|                         | special | 0              | 0              | 0              |
|                         | federal | 3,200          | 3,400          | 3,600          |
| .04 Travel              | general | 0              | 0              | 0              |
|                         | special | 0              | 0              | 0              |
|                         | federal | 1,000          | 1,060          | 1,125          |
| .07 Vehicle O & M       | general | 0              | 0              | 55,000         |
|                         | special | 2,200          | 2,335          | 12,475         |
|                         | federal | 12,100         | 12,825         | 13,600         |
| .08 Contractual         | general | 0              | 0              | 0              |
|                         | special | 950            | 1,000          | 1,065          |
|                         | federal | 7,050          | 7,475          | 7,920          |
| .09 Supplies            | general | 0              | 0              | 0              |
|                         | special | 480            | 510            | 540            |
|                         | federal | 2,800          | 2,970          | 3,150          |
| .10 Equipment           | general | 0              | 0              | 0              |
|                         | special | 700            | 700            | 700            |
|                         | federal | 3,850          | 3,850          | 3,850          |
| Indirect (federal)      |         | 5,584          | 6,142          | 6,756          |
| TOTAL                   |         | <u>297,217</u> | <u>325,185</u> | <u>412,821</u> |
|                         | general | 195,849        | 208,647        | 274,079        |
|                         | special | 42,915         | 46,883         | 61,341         |
|                         | federal | 58,453         | 69,655         | 77,401         |

## SUPPORT SERVICES DIVISION

| Object                  |         | <u>FY 1985</u> | <u>FY 1986</u> | <u>FY 1987</u> |
|-------------------------|---------|----------------|----------------|----------------|
| .01 Salaries            | general | 7,615          | 8,376          | 9,214          |
|                         | special | 27,559         | 30,314         | 33,346         |
|                         | federal | 7,654          | 8,419          | 9,261          |
| Fringes                 | general | 2,132          | 2,345          | 2,580          |
|                         | special | 7,716          | 8,488          | 9,336          |
|                         | federal | 2,143          | 2,357          | 2,593          |
| .02 Tech. & Sp.<br>Fees | general | 0              | 0              | 0              |
|                         | special | 0              | 0              | 0              |
|                         | federal | 12,044         | 12,044         | 12,044         |
| .03 Communications      | general | 95             | 100            | 105            |
|                         | special | 190            | 200            | 210            |
|                         | federal | 375            | 400            | 425            |
| .04 Travel              | general | 500            | 530            | 565            |
|                         | special | 0              | 0              | 0              |
|                         | federal | 0              | 0              | 0              |
| .07 Vehicle O & M       | general | 275            | 10,295         | 2,810          |
|                         | special | 1,375          | 1,460          | 14,045         |
|                         | federal | 1,100          | 1,165          | 11,235         |
| .08 Contractual         | general | 100            | 110            | 120            |
|                         | special | 150,200        | 159,215        | 168,765        |
|                         | federal | 200            | 210            | 255            |
| .09 Supplies            | general | 120            | 130            | 135            |
|                         | special | 600            | 640            | 675            |
|                         | federal | 480            | 510            | 540            |
| .10 Equipment           | general | 2,000          | 2,200          | 2,400          |
|                         | special | 0              | 0              | 0              |
|                         | federal | 0              | 0              | 0              |
| Indirect (federal)      |         | 2,419          | 2,660          | 2,926          |
| TOTAL                   |         | <u>226,892</u> | <u>252,168</u> | <u>283,555</u> |
|                         | general | 12,837         | 24,086         | 17,929         |
|                         | special | 187,640        | 200,317        | 226,377        |
|                         | federal | 26,415         | 27,765         | 39,249         |

## DATA MANAGEMENT

| <u>Object</u>           |         | <u>FY 1985</u> | <u>FY 1986</u> | <u>FY 1987</u> |
|-------------------------|---------|----------------|----------------|----------------|
| .01 Salaries            | general | 12,049         | 13,254         | 14,579         |
|                         | special | 0              | 0              | 0              |
|                         | federal | 122,645        | 134,910        | 148,401        |
| Fringes                 | general | 3,374          | 3,711          | 4,083          |
|                         | special | 0              | 0              | 0              |
|                         | federal | 34,341         | 37,775         | 41,553         |
| .02 Tech. & Sp.<br>Fees | general | 0              | 0              | 0              |
|                         | special | 0              | 0              | 0              |
|                         | federal | 0              | 0              | 0              |
| .03 Communications      | general | 0              | 0              | 0              |
|                         | special | 0              | 0              | 0              |
|                         | federal | 10,500         | 11,100         | 11,730         |
| .04 Travel              | general | 0              | 0              | 0              |
|                         | special | 0              | 0              | 0              |
|                         | federal | 200            | 210            | 225            |
| .07 Vehicle O & M       | general | 0              | 0              | 0              |
|                         | special | 0              | 0              | 0              |
|                         | federal | 0              | 0              | 0              |
| .08 Contractual         | general | 0              | 0              | 0              |
|                         | special | 0              | 0              | 0              |
|                         | federal | 14,000         | 14,840         | 15,730         |
| .09 Supplies            | general | 80             | 85             | 90             |
|                         | special | 0              | 0              | 0              |
|                         | federal | 520            | 550            | 585            |
| .10 Equipment           | general | 0              | 0              | 0              |
|                         | special | 10,000         | 0              | 0              |
|                         | federal | 20,000         | 0              | 0              |
| Indirect (federal)      |         | 38,756         | 42,632         | 46,895         |
| TOTAL                   |         | <u>266,465</u> | <u>259,067</u> | <u>283,871</u> |
|                         | general | 15,503         | 17,050         | 18,752         |
|                         | special | 10,000         | 0              | 0              |
|                         | federal | 240,962        | 242,017        | 265,119        |

**LABORATORY ADMINISTRATION**

The Laboratories Administration, Assistant Secretariat for Health, Department of Health and Mental Hygiene, is a service-oriented branch, designed to support program goals of the Department. Article 43, Section 35a of the Annotated Code below, details the basic mission of the Administration:

"The State Board of Health and Mental Hygiene shall conduct inquiries into the nature, source, and vehicles of infectious diseases, and into the nature and character of sewage, trades wastes, and into nuisances. It shall examine and analyze, free of cost, public and private water supplies, milk and such other foods, drinks, confectionery, drugs, spices and condiments as the Board shall direct. In order to perform these and related Functions, the board shall establish and maintain properly equipped public health and Clinical Laboratoires in Cambridge, Easton, Annapolis, Cheverly, Frederick, Rockville, and Salisbury; and the Board may establish and maintain properly equipped public health and Clinical Laboratories in other areas as it deems necessary. The services of said Laboratories shall be free to all local board of health and to all practicing physicians of the State for inquiries concerning infectious and contagious diseases and such other matters as the said Board may from time to time direct."

The environmental health laboratory aspects of the mandate are interpreted to be all inclusive. While the organization of the Laboratories Administration is mission oriented, there is a marked degree of cohesive integration and interdependence so as to provide flexibility to meet the constantly changing and often emergency

situations requiring expertise in several technical specialities. This flexibility is necessary because the environmental, infectious disease, and clinical laboratory aspects of health problem are often interrelated.

Central Laboratory Divisions (4.2.1, 4.2.2., 4.2.3., 4.2.4, and 4.2.5) are staffed to provide all the mandated functions and to support the limited staff branch laboratories 4.2.6. (see following page). The branch laboratories are equipped to perform only the more basic types of testing which require less sophisticated instrumentation, and those tests needed immediately for patient care and examinations on specimens which are not transportable due to lability. The eight branch laboratories are not self sufficient and their limited capabilities often necessitate that part of a specimen or sample be forwarded to the Central Laboratory for completion.

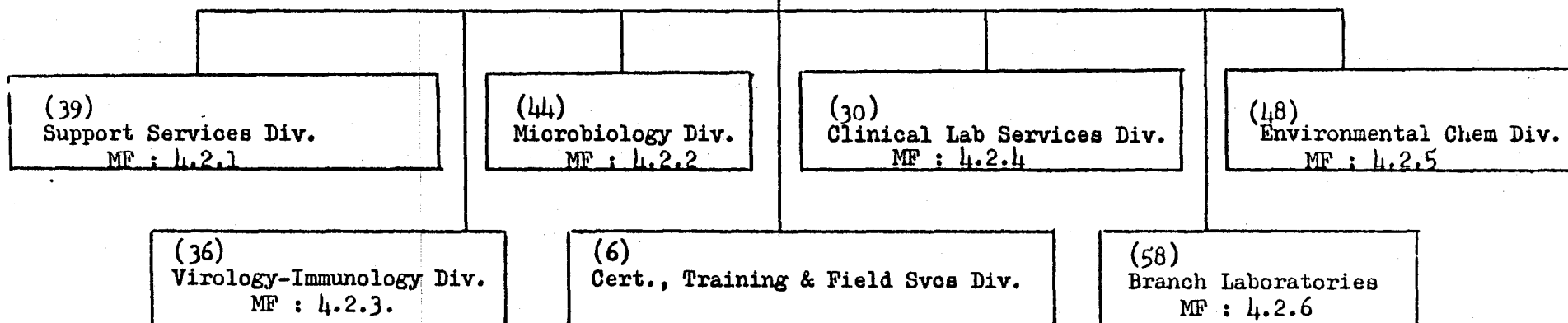
ORGANIZATION OF LABORATORIES ADMINISTRATION, DEPARTMENT OF HEALTH AND MENTAL HYGIENE

CHART I

SECRETARY  
DEPARTMENT OF HEALTH AND MENTAL HYGIENE

ASSISTANT SECRETARY FOR HEALTH

(2)\*  
Director, Laboratories Administration  
(1)\*\*  
Deputy Director  
(1)  
Administrative Officer



\* The Director serves as Chief of the Virology-Immunology Division

\*\* The Deputy Director serves as Chief of the Certification, Training, and Field Services Division

The Laboratories Administration provides a broad spectrum of laboratory services to the Waste Management Administration for the surveillance of the environmental factors affecting the health of Maryland residents. Environmental samples are collected by State, City, or County sanitarians and inspectors. Reports of analyses are returned to the submitters who are responsible for taking whatever actions are indicated based upon the results of the laboratory testing. The current laboratory impact of toxic and hazardous waste, the asbestos problem, kepone, and PCB problems could not have been anticipated in the long or short range plans. In spite of the markedly fluctuating demands for services, often in unexplored fields, there is an average annual increase of 7.5% in the total Maryland public health laboratory workload for the past five years. While there is increased emphasis on the environmental programs, especially for water and sewage, solid waste, and toxic and hazardous substances, there has been only token federal funding for the laboratory impact of these programs. Thus, from a State level, obtaining adequate funding for F.Y. 85 and 86 for maintenance, expansion and equipment replacement remains a major priority of the Administration.

The following is a listing of the types of analysis and/or constituent specific tests routinely administered by the Laboratory Administration. This list is not intended to be complete, but representative.



Hazardous Waste Characteristics

Ignitability

Corrosivity

Reactivity

E P Toxicity

Hazardous Waste Organic Analysis

Purgeable Halocarbons

Purgeable Aromatics

Acrolein and Acrylonitrile

Phenols

Phthalate Esters

Organochlorine Pesticides & PCB

Nitroaromatics

P A H

Haloethers

Chlorinated Hydrocarbons

Solvents

Oil and Grease

Herbicides

Gasoline

ID by IR

ID by GO

Gases, Vapors and Mists

Gases (formaldehyde, vinyl chloride acrolein,  $\text{NO}_2$ ,

$\text{NH}_3$ ,  $\text{O}_3$ ,  $\text{SO}_2$ , etc.)

Organic Solvents

Acid and Alkali Mists ( $\text{H}_2\text{SO}_4$ ,  $\text{HCl}$ ,  $\text{CrO}_3$ ,  $\text{COOH}$ ,

$\text{HCOOH}$ ,  $\text{HF}$ ,  $\text{NaOH}$ , Oxalic,  $\text{HCN}$ , etc.)

Oil Mist

Pesticides

TDI, MDI

Phenol, Crotonaldehyde, Furfural

Particulates

Asbestos

Free Silica

Metals (Ag, As, Cd, Co, Cr, Cu, Fe, Mn, Ni, Pb,  
Sb, Sn, V, Zn)

Total and Respirable Dust

Coal Tar Pitch Volatiles (Benzene-Soluble  
Fraction)

Amines

Asphalt Fume

PCB

Bulk

Organic Solvents

Physic (Solubility, Bp, etc.)

Chemical Identification

Asbestos

Silicia

Metals

Test

Priority Pollutants

Purgeable Halocarbons (EPA 601)

Purgeable Aromatics (EPA 602)

Phenols (EPA 604)

Polynuclear Aromatics (EPA 610)

Volatile Organics GC/MS (EPA 624)

Phenols GC/MS (EPA 625)

Ethylene Glycol (GC)

Alcohols (GC)

Fuel Oil (GC)

Polychlorinated Biphenyls (EPA 608)

Bale-Neutrals GC/MS (EPA 625)

\* (See also Appendix X, Laboratory Forms)

**HAZARDOUS WASTE FACILITIES SITING BOARD**

An exhaustive study has been made of the annual quantities of hazardous wastes generated within the State; transported into and out of the State; treated, or disposed of within the State; on-site; and off-site. This was done by the staff of the Hazardous Waste Facilities Siting Board mainly utilizing the information provided through a study of the State's manifests received by the Department of Health and Mental Hygiene for the period of August 1, 1981 through July 31, 1982, by Arthur D. Little, Inc. of Cambridge Massachusetts. This information is also available in the draft State Solid Waste Management Plan (Section IV-2).

The Board is required by its own regulations to re-assess the needs of the State on a periodic basis. The end product of this re-assessment is a regulation, which specifically spells out State need. Appearing in Appendix XI are the following:

- Generation and Disposition of Hazardous Wastes Manifested in Maryland 1981/1982, Report to the Maryland Hazardous Waste Facilities Siting Board. Prepared by Arthur D. Little, Inc. April 1983
- Hazardous Waste Treatment and Disposal Needs for Maryland. Staff Report to the Hazardous Waste Facilities Siting Board April 29, 1983
- Code of Maryland Regulations (COMAR) Title 14, Subtitle 14, Chapter .05.