

# ANNUAL ENFORCEMENT AND COMPLIANCE REPORT









Fiscal Year 2011

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Governor

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### FY 2011 Enforcement and Compliance Report Errata

#### Correction:

On page 54 the Purpose section for the Land Restoration Program should be corrected to read as follows.

### **PURPOSE**

The Land Restoration Program (LRP) protects public health and the environment by identifying sites that are, or potentially are, contaminated by controlled hazardous substances. Until 1997, Maryland placed sites where hazardous substances were released or possibly released on the State Master List (see Appendix I) and in the Disposal Site Registry. The sites were prioritized for remedial activities. Since 1997, newly identified sites are recorded on the State Non-Master List. The Non-Master List sites can be found on the Department's web site at <a href="http://www.mde.state.md.us/programs/Land/MarylandBrownfieldVCP/LRPSites/Pages/LRP.aspx">http://www.mde.state.md.us/programs/Land/MarylandBrownfieldVCP/LRPSites/Pages/LRP.aspx</a>, checking the box for Non-Master List and clicking on the submit button.

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## **SECTION ONE**

# REPORT BASIS AND SUMMARY INFORMATION

# ANNUAL ENFORCEMENT AND COMPLIANCE REPORT FISCAL YEAR 2011

### **Statutory Authority and Scope**

Environment Article §1-301(d) enacted in 1997 (see Appendix C for full text) requires the Maryland Department of the Environment (MDE) to report annual performance results for specific regulatory programs and the penalty dollars collected and deposited into several funds. This report is intended to fulfill that statutory requirement. In addition to the required information, this report also includes MDE's other enforcement programs, additional information about each of MDE's regulatory compliance programs, and additional data about the activities and facilities that are subject to regulation under the Environment Article.

### **Organization of the Report**

Section One includes an overall, Department-wide summary of the FY 2011 results. A table in Section One compares the historical annual Department-wide performance measures from FY 1998 – 2011. Two graphs also illustrate trends for enforcement actions and penalties obtained for these years.

Section Two presents program-specific information concerning enforcement and compliance activities for the reported programs. Related materials appear as appendices in Section Three.

### **EXECUTIVE SUMMARY**

The Maryland Department of the Environment's (MDE's) fifteenth Enforcement and Compliance Report, for Fiscal Year 2011 (July 2010-June 2011), reports data from MDE's enforcement and compliance programs and from the Environmental Crimes Unit of the Office of the Attorney General. This document has been prepared in accordance with the requirements of §1-301(d) of the Environment Article.

Maintaining a consistent baseline of enforcement is necessary to ensure compliance with state laws, regulations, and permits that protect public health and the environment. MDE is committed to taking timely actions for violations, and the "MDEStat" data-driven management oversight process tracks enforcement activity. MDE routinely shares information with the public about enforcement activities to maximize the deterrence value of each enforcement action.

During FY 2011, MDE provided regulatory oversight for 158,058 regulated entities. This is essentially unchanged from last year's 158,112. MDE inspected 16% more sites in FY 2011 than it did in FY 2010 and performed 4% more inspections, audits, and spot checks. The number of enforcement actions decreased by 17% over FY 2010. Most of this decrease is due to fewer actions in the radiation machines division as a result of legislation restricting enforcement activities related to dental x-ray machines.

This year, penalties collected from environmental violators totaled \$3,478,200. This is a decrease from last year's total of \$5,099,340. Thirteen programs had decreased collections this year mostly due to normal variability in collections. The largest decreases were Surface Discharges (\$788,183), Radioactive Materials Licensing and Compliance (\$335,115), and Radiation Machines (\$277,245).

MDE's inspector workforce decreased almost 6% this year. MDE has reduced staff levels in all areas due to budget constraints. In addition to continued budget issues that have eliminated positions, the State had a Voluntary Separation Program in FY 2011 that resulted in additional loss of positions. Filling vacant positions remains difficult due to the hiring freeze.

MDE's increased enforcement activity has created a larger workload for attorneys assigned to MDE by the Office of the Attorney General. In calendar year 2007, MDE referred approximately 340 enforcement cases for legal action, compared to 816 cases in CY 2009 and 633 cases in CY 2010. Because the number of legal positions has not increased, MDE prioritizes cases for action by MDE attorneys. As of September 1, 2011, 282 lower priority cases awaited active legal action.

Please refer to MDE's website (<a href="http://www.mde.state.md.us">http://www.mde.state.md.us</a>) for the latest information on enforcement actions and other compliance activities.

# MDE PERFORMANCE MEASURES EXECUTIVE SUMMARY

	2010 Totals	2011 Totals
PERMITTED SITES/FACILITIES  Number of Permits/Licenses Issued  Number of Permits/Licenses in Effect at Fiscal Year End	8,982 93,323	9,089 92,195
OTHER REGULATED SITES/FACILITIES Total Sites	158,112	158,058
INSPECTIONS Number of Sites Inspected Number of Sites Audited But Not Inspected Number of Inspections, Audits, Spot Checks	45,332 8,844 124,045	52,561 13,918 129,213
ENFORCEMENT ACTIONS  Number of Compliance Assistance Rendered  Number of Enforcement Actions Taken	21,352 3,099	21,323 2,564
<u>PENALTIES</u> Amount of Administrative or Civil Penalties Obtained	\$5,099,340	\$3,486,141
Supplemental Environmental Projects	7 (\$116,000)	8 (\$669,000)

### **ENFORCEMENT WORKFORCE**

Workforce Compensation\* FTE Inspectors\*\* Vacancies\*\*\* FY 2010 FY 2011 FY FΥ FY FY 2010 2011 2010 2011 Air/Radiation \$3,847,985 \$3,674,815 49 2.5 48 1.2 Land \$4,375,890 \$4,818,721 70 65.5 3.8 1.75 Water \$3,728,232 \$3,291,171 53 47.96 2.5 3.54 \$8,822,647 \$11,952,107 172 Total 161.46 7.5 7.99

<sup>\* &</sup>quot;Compensation" includes wages plus fringe benefits. The numbers do not include any operating expenses such as vehicles, travel, gasoline, supplies, or other related employment expenses.

<sup>\*\* &</sup>quot;Inspectors" represent the number of enforcement field inspectors budgeted for the fiscal year. These numbers do not include any administrative, management, or clerical staff associated with enforcement and compliance programs. This represents total budgeted positions, not the actual number of inspectors currently on staff.

<sup>\*\*\* &</sup>quot;FTE (full-time equivalent) vacancies" represent the number of full-time-equivalent positions that were vacant during the fiscal year.

## SECTION 1-301(d) PENALTY SUMMARY

TOTAL AMOUNT OF MONEY DEPOSITED AS A RESULT OF ENFORCEMENT ACTIONS AS REQUIRED BY SECTION 1-301(d)*	FY 2010	FY 2011
Clean Air Fund (includes Air Quality and Asbestos)	\$770,850	\$576,193
Clean Water Fund (includes Water and Land Management)	\$1,920,083	\$1,254,513
Hazardous Substance Control Fund	\$251,950	\$154,800
Non-tidal Wetland Compensation Fund	\$9,750	\$24,429
Oil Disaster Containment Clean Up and Contingency Fund	\$349,074	\$72,281
Recovered from Responsible Parties (under §7-221)**	\$93,522	\$375,705
Sewage Sludge Utilization Fund	\$9,500	0 (now part of clean water)
Total	\$3,404,729	\$2,457,921

<sup>\*</sup> Includes **only** those funds **required** to be reported by the Environment Article, Section 1-301(d). Other penalties are reported by individual programs that total a higher amount since they are deposited into funds not required to be reported by 1-301(d). The Department total is \$3,478,200.

Please note this reflects penalties collected during the fiscal year, not penalties assessed.

<sup>\*\*</sup> The number reported is strictly the total amount of money, as a result of enforcement, recovered by the Department from responsible parties in accordance with §7-221 of the Environment Article as called for in the statute.

### MDE PERFORMANCE MEASURES ANNUAL SUMMARY FY 1998 - 2004

MDE Performance Measure	1998	1999	2000	2001	2002	2003	2004
PERMITTED SITES/FACILITIES							
Number of Permits/Licenses Issued	8,972	8,350	9,710	9,573	9,671	11,988	11,264
Number of Permits/Licenses in Effect							
at Fiscal Year End	54,668	56,024	57,253	62,679	62,882	69,831	75,729
OTHER REGULATED							
SITES/FACILITIES							
Other Sites	89,863	95,892	100,244	105,085	191,177	197,529	204,873
INSPECTIONS *							
Number of Sites Inspected	31,026	30,352	28,626	39,050	37,850	33,048	43,434
Number of Inspections, Audits, Spot							
Checks	81,372	83,899	90,488	103,782	108,043	98,550	106,845
ENFORCEMENT ACTIONS							
Number of Compliance Assistance Actions Rendered	15,837	14,709	15,831	15,032	16,523	14,120	18,646
Number of Enforcement Actions	10,001	,	. 0,00 :	.0,002	. 0,020	,	10,010
Taken	1,134	1,391	977	1,542	1,541	2,311	1,856
PENALTIES							
Amount of Penalties Obtained (\$)**	1,145,731	1,206,629	2,093,526	1,334,499	1,523,890	2,321,563	1,781,526

### \* Inspections:

Number of Sites Inspected: The number of individual sites physically visited and inspected for compliance.

Number of Inspections, Audits, Spot Checks: The total numbers of sites evaluated for compliance, including on-site inspections, record reviews, audits, and spot-check activities.

Each individual site can be inspected by several programs or by one program more than once, so the former is always less than the latter.

<sup>\*\*</sup> Amount of Penalties Obtained: The total dollar amount of penalty revenue collected during the fiscal year. Note that penalties can be collected in the fiscal year after the violation for which they are assessed. This reflects the amount of revenue obtained ("collected") in the fiscal year as a result of all enforcement actions regardless of which fund they are deposited into.

### MDE PERFORMANCE MEASURES ANNUAL SUMMARY FY 2005 - 2011

MDE Performance Measure	2005	2006	2007	2008	2009	2010	2011
MDL Felloffiance Weasure	2003	2000	2001	2000	2009	2010	2011
PERMITTED SITES/FACILITIES							
Number of Permits/Licenses Issued	10,799	10,737	10,455	11,463	10,043	8,982	9,089
Number of Permits/Licenses in							
Effect at Fiscal Year End	73,155	77,721	77,041	100,206	92,960	93,323	92,195
OTHER REGULATED SITES/FACILITIES							
Other Sites	222,673	239,612	253,715	257,744	117,421	158,112	158,058
INSPECTIONS *							
Number of Sites Inspected	43,722	55,294	47,723	44,161	44,587	45,332	52,561
Number of Inspections, Audits, Spot Checks	103,586	115,977	107,496	122,389	122,079	124,045	129,213
			•	·	•	,	,
ENFORCEMENT ACTIONS							
Number of Compliance Assistance							
Actions Rendered	10,953	11,067	10,158	11,443	14,412	21,352	21,323
Number of Enforcement Actions							
Taken	1,395	1,946	2,004**	2,704**	2,901	3,099	2,564
PENALTIES							
Amount of Penalties Obtained (\$)***	1,631,054	2,803,685	2,248,131	3,970,275	6,516,601	5,099,340	3,478,200

### \* Inspections:

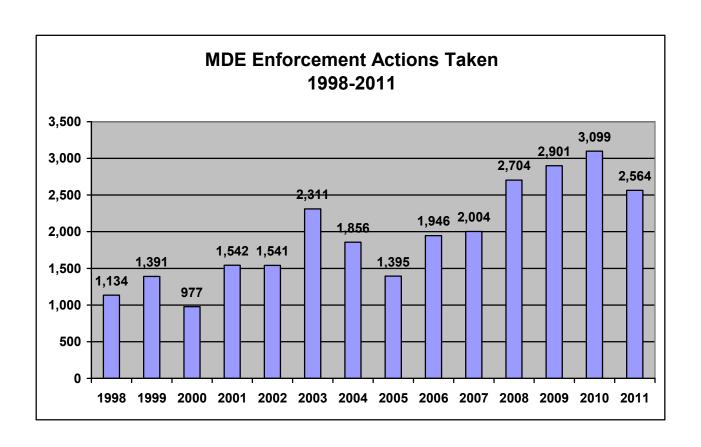
Number of Sites Inspected: The number of individual sites physically visited and inspected for compliance.

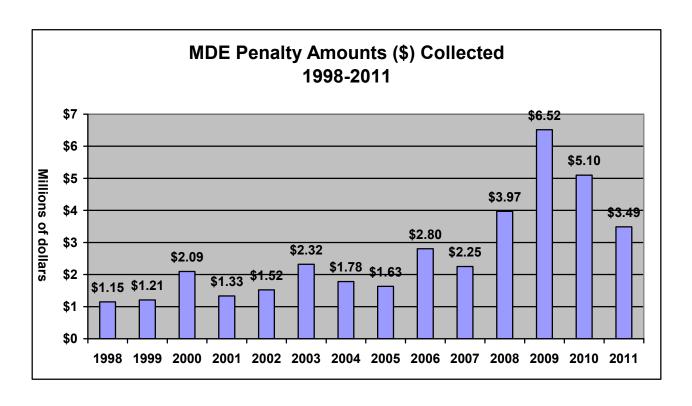
Number of Inspections, Audits, Spot Checks: The total numbers of sites evaluated for compliance, including on-site inspections, record reviews, audits, and spot-check activities.

Each individual site can be inspected by several programs or by one program more than once, so the former is always less than the latter.

<sup>\*\*</sup> These two numbers were corrected; they were previously reported as 2,011 and 2,699 respectively.

<sup>\*\*\*</sup> Amount of Penalties Obtained: The total dollar amount of penalty revenue collected during the fiscal year. Note that penalties can be collected in the fiscal year after the violation for which they are assessed. This reflects the amount of revenue obtained ("collected") in the fiscal year as a result of all enforcement actions regardless of which fund they are deposited into.





# MDE'S ENFORCEMENT AND COMPLIANCE PROCESS and SERVICES TO PERMITTEES AND BUSINESSES

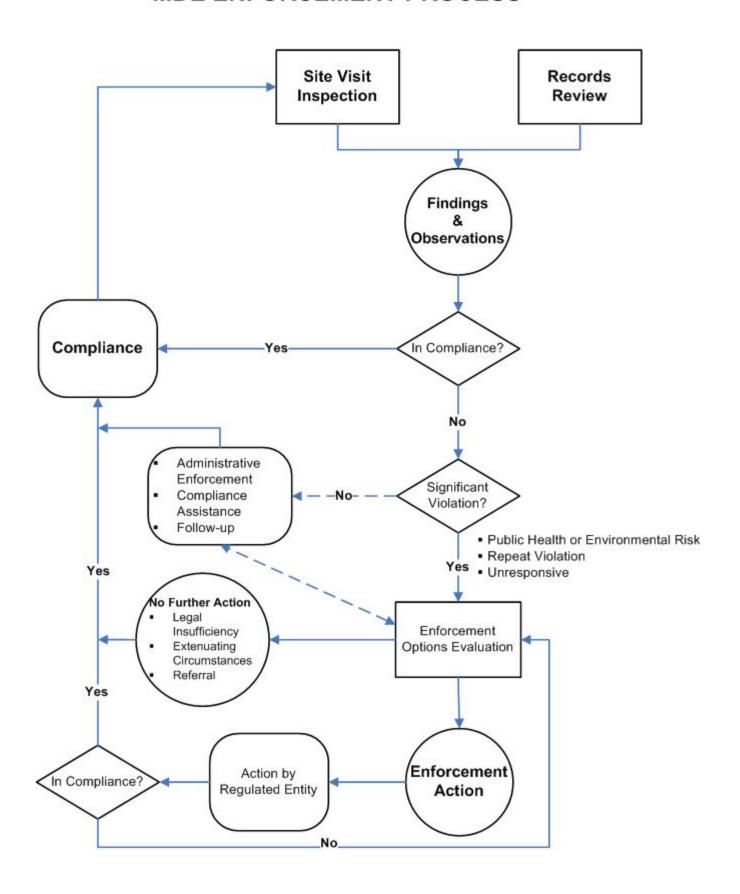
### **The Enforcement and Compliance Process**

MDE's air, water and land enforcement and compliance processes are authorized in different parts of the law and were established separately over a period of years. As a result, similar terminology may have technically different meanings for different programs. Despite technical differences, most enforcement programs share certain common functions that allow a year-to-year comparison. Most programs have inspection, monitoring, evaluation, and enforcement components.

Many programs also implement federal rules and regulations in addition to State requirements. In addition, the same individual, company, or facility may fall under the jurisdiction of several different environmental enforcement programs at the federal, state or local level.

If a minor violation such as a record-keeping or reporting error is discovered, a program may use discretion to allow a company to correct the problem without imposing a penalty. In such cases, compliance assistance may be the most efficient method to achieve compliance with such requirements. Compliance assistance is a process that does not involve the use of a formal enforcement action and is explained in more detail on page 14. If an inspection reveals a significant violation, or if minor violations continue to recur and become a significant problem, then more serious legal actions are warranted. Such action may take the form of penalties, corrective orders, the filing of injunctions, and in some cases, criminal sanctions.

### MDE ENFORCEMENT PROCESS



### Supplemental Environmental Projects (SEPs)

MDE's approach to enforcement includes the use of Supplemental Environmental Projects (SEPs). SEPs are projects specifically undertaken to improve the environment by parties who are subject to penalty actions. Under certain limited circumstances, the value of the SEP is allowed by MDE to offset a portion of the penalty.

The federal Environmental Protection Agency encourages the use of SEPs for several reasons. First, SEPs add value to enforcement settlements because SEP dollars are spent directly on environmental projects. Second, SEPs require violators to go above and beyond technical compliance with minimum legal standards and thereby reach a higher level of environmental stewardship. Finally, and probably most importantly, SEPs are intended to achieve improvements to the environment that could not be accomplished with traditional penalties. Traditional penalties serve to punish current violations and deter future violations. SEPs accomplish those traditional purposes and provide a form of community service that improves the environment where the violation occurred.

MDE entered into eight SEPs during FY 2011 with a total value of \$699,000. These SEPs involved equipment upgrades to reduce air emissions and the replacement of lead-contaminated windows in 17 rental properties.

Administration	Number of SEPs		Total Value of SEPs	
	2010	2011	2010	2011
Air and Radiation Management Administration	0	2	\$0	\$175,000
Land Management Administration	7	6	\$116,000	\$494,000
Water Management Administration	0	0	\$0	\$0
TOTALS	7	8	\$116,000	\$669,000

Details about these SEPs can be found in Appendix G.

### **Contacts or Consultations with Businesses**

Environment Article section 1-301(d) requires this report to "include information on the type and number of contacts or consultations with businesses concerning compliance with State environmental laws." This section identifies the two types of contacts MDE has with businesses to help them come into compliance: compliance assistance and other consultations.

### **Compliance Assistance**

One specific form of contact between businesses and MDE's enforcement and compliance inspectors is counted in the programs' performance measures tables under the category of "compliance assistance." As an element of MDE's enforcement process, an inspector renders a tangible act of compliance assistance when the inspector:

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

For either (a) or (b), the MDE inspector must document the manner in which the regulated entity voluntarily achieved compliance. This definition of "compliance assistance" requires the action to be measurable, and objectively verifiable by a third party. This documents MDE's activities to keep facilities in compliance without the use of formal enforcement actions.

### **Consultations with Businesses**

MDE provides other forms of compliance information to businesses and other regulated entities. These include making guidance documents available, providing forms, and publishing information about new or updated requirements on MDE's website. MDE also works with businesses before they apply for permits to explain what permits will be required for a proposed activity and the application process for the required permits. Possible compliance requirements such as sampling, reporting, and record-keeping may also be explained.

The Department's website (<a href="http://www.mde.state.md.us">http://www.mde.state.md.us</a>) provides additional information that businesses may use to determine compliance with environmental requirements:

 The Guide to Environmental Permits and Approvals provides detailed information about each of MDE's permit programs.

- MDE has made a number of permit applications and instructions for completion available online. MDE is also working to enable businesses to submit their permit applications via the Internet.
- MDE has created an Enforcement Webpage where you can find information concerning enforcement programs and current enforcement actions

 $\frac{http://www.mde.state.md.us/AboutMDE/DepartmentalReports/Pages/Abou}{tMDE/enfcomp.aspx}$ 

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# SECTION TWO ADMINISTRATION DETAILS

# MEASURING ENFORCEMENT AND COMPLIANCE

MDE has been measuring, in a consistent fashion, the performance of its enforcement and compliance activities since 1998. This report standardizes the accomplishments of enforcement and compliance programs using metrics for the 33 enforcement areas within the 16 programs that are the subject of this report. Enforcement actions are taken by MDE's three media administrations:

Air: This includes air pollution and radiation programs.

Land: This includes oil control, solid and hazardous waste management,

sewage sludge utilization, animal feeding operations, scrap tire recycling, lead poisoning prevention, natural wood waste recycling, coal and mineral mining, oil and gas exploration and production,

and hazardous substance clean-up programs.

Water: This includes drinking water, tidal and non-tidal wetlands,

wastewater discharges, water appropriation, waterway and floodplain construction, dam safety, stormwater management and

sediment and erosion control programs.

### **Organization of Section Two**

This section is divided by administration and by enforcement area/program. First, an overall administration executive summary describes the enforcement and compliance efforts during this fiscal year, followed by key performance measures for that administration. Next, the sections for each enforcement area/program include the purpose of the program, its underlying authority, its enforcement process, summary of the program's successes/challenges, the performance measures table, and three charts comparing the past three fiscal years' data on inspection coverage; number of inspections, audits, and spot checks; and number of enforcement actions.

### PERFORMANCE MEASURES TABLE

This key table presents an accounting of each program's activity. Definitions of each measure appear below. An example of the table with the lines numbered to correspond to the following definitions follows this list of definitions.

- 1. Permitted Sites/Facilities and Other Regulated Sites/Facilities: These are measures of the MDE or Program workload.
  - Lines 2, 3, and 5-8: Identify the total universe of facilities over which the program has regulatory responsibility.
  - Line 2: Shows the number of new permits or permit renewals issued during the year.
  - Line 3: Shows the total number of permits that were in effect at fiscal year end.
  - Lines 5-8: Used by those programs that have regulatory responsibility for sites, facilities, and other entities that are not required to obtain a formal permit, but still fall under MDE's regulatory oversight.
- 9. Inspections and Audits: This is a measure of output.
  - Lines 10-12: Present numbers of sites evaluated for compliance. Inspections are defined as physical visits to the site to determine compliance, whether the visit involves walking around the site or a record review at the site. An audit is a review of records or self-monitoring reports performed off- site at MDE offices. These measures are reported separately to illustrate that many important regulatory oversight activities occur off-site.
  - Lines 13-15: Present numbers of inspections, audits and spot checks performed. The number of inspections is often substantially higher than the number of sites (comparing lines 12 and 15) because some sites are inspected more than one time during the year, depending on the degree of risk that regulated entity poses to the public. Also, some individual sites are sufficiently large or diverse to warrant having different portions of the site, or different pieces of equipment, inspected separately.
- 16. Compliance Profile: This is a measure of the results accomplished.
  - Lines 17-19: The Compliance Profile is a snapshot of the overall compliance status of the facilities inspected during the fiscal year.
  - Line 17: Identifies how many of the inspected sites were found with significant violations, providing a key element used to determine the inspection compliance rate (percentage) shown on line 18. If a site was found

to have a significant violation, it was counted as being out of compliance, even if the site was brought back into compliance later in the year.

Line 18: The percentage of inspected sites with significant violations. Line 17 divided by Line 10 times 100.

Line 19: The enforcement "inspection coverage rate" measure. The "inspection coverage rate" is defined as the ratio of sites inspected divided by the total number of sites or regulated entities in that program's universe. "Sites" may include other than a single physical location since many programs have regulatory oversight responsibility for things other than facilities.

### 20. Significant Violations: This is a measure of what was found.

Lines 21 – 24 record the total number and nature of the significant violations the program identified during the fiscal year. The specific definition of what constitutes a **significant** violation is determined by individual programs that have unique statutory and regulatory threshold requirements. MDE's general definition of a significant violation is any violation that requires MDE to take some form of remedial or enforcement action to bring the facility into compliance. MDE's Penalty Policy further clarifies this definition and can be found in Appendix E.

Line 21: Indicates how many significant violations resulted in an environmental or health impact.

Line 22: Counts how many significant violations were technical/preventative in nature. The distinction here is based on evidence or proof that MDE must present to establish the violation in a contested case.

- Cases which require evidence of actual physical damage to the environment or to a human being such, as samples, photographs, or direct observations are counted as having an environmental or health impact.
- Cases in which documentary evidence such as falsified discharge monitoring reports, lack of permits or failure to maintain records are counted as technical/preventative on line 22.
- The distinction between physical and technical violations is made to avoid the misperception that all violations involve pollution.
- It is a mistake to infer that only environmental/health violations are significant and technical/preventative violations are not significant. Either can be considered significant or non-significant depending on the circumstances of the violations.

Line 23: Accounts for the number of significant violations carried over from last year.

Line 24: The sum of lines 21 through 23, the total number of significant violations the program attempted to resolve during the fiscal year.

### 25. Disposition of Significant Violations: What is the status?

Lines 26 and 27: Answer the question of how many enforcement responses were concluded for significant violations in the fiscal year and how many are going to be carried over to next year.

- Resolved means that (1) an enforcement action or compliance assistance
  has been taken, and (2) the violator either has completed any required
  corrective action or has an executed agreement to take the corrective
  action and has begun bringing the site back into compliance.
- An ongoing enforcement response is one that is still in process and the site or violator has not taken adequate steps to correct the violation. Cases remain ongoing if the violator does not respond to MDE's initial violation notification; hearings have been scheduled and not yet held; or the hearing is complete and the violator has chosen to appeal the order. "Ongoing" enforcement responses are those not yet finished.

# 28. Enforcement Actions and Penalties: What are the tools MDE uses to bring about compliance?

Lines 29 – 36: MDE has a number of different enforcement tools that can be used to achieve compliance.

Line 29: Captures how often the program used **compliance assistance**.

- Compliance assistance is rendered when written documentation states that the correction
  has been made or commenced. This number does not necessarily correspond to the
  number of significant violations found because potential problems, which have not yet
  become violations, when corrected and documented, are counted as compliance
  assistance.
- This tool allows MDE to bring facilities into compliance without the necessity of resorting to formal enforcement actions. It is often implemented in less time and may reduce the environmental consequences of the violation.

Lines 30 through 32: Cover specific types of enforcement actions required to be reported under Environment Article Section 1-301(d). These are broken down into administrative and civil/judicial.

Line 33: The number of penalty actions and other enforcement actions not specifically designated above. These actions are primarily penalty actions, but they also include various forms of remedial requirements that do not fit the descriptions of the actions named in the statute.

Line 34: How often the program referred a matter to the Environmental Crimes Unit of the Attorney General's Office for possible criminal prosecution. These are not counted as resolved until there is a completed criminal case or the Crimes Unit has declined to take a criminal action, returned the case to the program and the program has taken an alternative form of enforcement.

Line 36: Discloses the amount of administrative or civil penalties obtained. This means monies collected during the fiscal year. The penalties recorded here may have been imposed in prior years, but are collected in whole or in part during the reporting year.

### **SAMPLE FY 2011 PERFORMANCE MEASURES CHART**

Performance Meas	ure		TOTAL	
1. PERMITTED SITES/FACILITIES				
2. Number of permits/licenses issued				
3. Number of permits/licenses in effect at fiscal year e	nd			
4. OTHER REGULATED SITES/FACILITIES				
5. (other sites)				
6. (other sites)				
7. (other sites)				
8. (other sites)				
9. INSPECTIONS				
10. Number of sites inspected ("inspected" defined as	at the site)			
11. Number of sites audited but not inspected (places	where MDE revie	wed submittals		
but did not go to the site)				
12. Number of sites evaluated for compliance (sum of	the two measure	es above, same		
as #11 on the prior charts)				
13. Number of inspections, spot checks (captures num	nber of compliand	ce activities at		
sites)				
14. Number of audits (captures number of reviews of	ile/submittals for	compliance)		
15. Number of inspections, audits, spot checks (sum of				
same as #12 on the prior charts)				
16. COMPLIANCE PROFILE				
17. Number of inspected sites/facilities with significant	violations			
18. Percentage of inspected sites/facilities with signific	ant violations			
19. Inspection coverage rate (number of sites inspecte	d/coverage univ	erse)		
20. SIGNIFICANT VIOLATIONS				
21. Number of significant violations involving environn				
22. Number of significant violations based on technical	l/preventative de	ficiencies		
23. Number of significant violations carried over await	ing disposition fro	om previous		
fiscal year				
24. Total number of significant violations (sum of the t		bove)		
25. DISPOSITION OF SIGNIFICANT VIOLATION	<b>IS</b>			
26. Resolved				
27. Ongoing				
28. ENFORCEMENT ACTIONS				
29. Number of compliance assistance rendered				
	Administrative	Civil/Judicial	TOTAL	
30. Number of show cause, remedial, corrective				
actions issued				
31. Number of stop work orders				
32. Number of injunctions obtained				
33. Number of penalty and other enforcement				
actions	<u> </u>			
34. Number of referrals to Attorney General for possible criminal action				
35. PENALTIES				
36. Amount of administrative or civil penalties obtained (\$ collected in FY)				

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# AIR AND RADIATION MANAGEMENT ADMINISTRATION

### Air and Radiation Management Administration Executive Summary

The Air and Radiation Management Administration (ARMA) conducts enforcement and compliance activities in three programmatic areas: air quality, asbestos, and radiation.

The Air Quality Compliance Program continues to devote a significant portion of its capacity to ensuring compliance at approximately 600 high-impact sources. In addition to on-site inspections, the Program reviews report submittals, stack test results, sampling results, and continuous monitoring summaries to assess compliance at regulated facilities.

Low-impact facilities continue to be an area where only a small percentage of sources are inspected. This is due to the large numbers of these sources. In this arena, the Air Program continues to focus on vapor recovery systems at gas stations, as well as dry cleaners and other small sources. There are approximately 1,600 gas stations subject to vapor recovery requirements to limit emissions of volatile organic compounds, a ground-level ozone precursor. The Air Quality Compliance Program also continues to focus on ensuring compliance with federal air toxics requirements at dry cleaners and other small sources.

The Air Quality Compliance Program continues to receive a large number of air quality complaints, receiving about 500 in FY 2011. The Program responds to all complaints by telephone, prioritizing those that require a field inspection. Some complaint situations may need multiple follow-up inspections to address the concerns of the complainants and to ensure compliance with air quality requirements.

In the Asbestos Division, contractors intending to abate asbestos are required to notify MDE. MDE inspects as many of these projects as possible, generally focusing on the more substantial projects. The number of asbestos notifications received in FY 2011 was 2,917.

The Radiological Health Program (RHP) regulates both electronic sources of radiation and materials that are radioactive to prevent the general public from receiving any unnecessary exposure to radiation. Also, RHP is the primary State responder to public hazards involving radioactive materials, such as transportation incidents or a nuclear utility accident. Successes in FY 2011 include the continued implementation, through the licensing and inspection process, of additional increased security controls for those licensees with sufficient quantities and types of radioactive materials, that if stolen would pose a national threat; the evaluation of the radiation safety and engineering, and the device registration, of a complex sealed source medical device prior to allowing the use and sale of the device across the country; Maryland's implementation of the National Source Tracking System; and training of state and local personnel to assure statewide preparedness for a nuclear utility accident.

The Radiation Machine Division's procedure to assess fines for violations at the time of an inspection has increased overall compliance with the greatest increase being observed in the medical facilities. The number of enforcement actions against dental facilities has decreased significantly in FY 2011 due to a change in state law that took effect on June 1,

2010. The change provides that if dental facilities correct violations of regulatory requirements within twenty working days of an inspection the Department is prevented from assessing a financial penalty for those violations, unless they are deemed to present a serious and probable danger to the patients or employees of a dental facility. Even though the dental community has been given leeway on the amount of time to correct their violation(s), and the inspection is announced 30 days in advance, their initial compliance rate is still averaging less than 50 percent.

# Air and Radiation Management Administration Performance Measures Executive Summary

	2010 Totals	2011 Totals
PERMITTED SITES/FACILITIES		
Number of Permits/Licenses Issued	1,720	1,479
Number of Permits/Licenses in Effect at Fiscal Year End	29,318	29,956
OTHER REGULATED SITES/FACILITIES		
Other Regulated Sites	3,555	3,776
INSPECTIONS		
Number of Sites Inspected	3,961	3,936
Number of Sites Audited but Not Inspected	761	988
Number of Inspections, Audits, Spot Checks	10,113	10,713
ENFORCEMENT ACTIONS		
Number of Compliance Assistance Rendered	292	222
Number of Enforcement Actions Taken *	764	264
<u>PENALTIES</u>		
Amount of Administrative or Civil Penalties Obtained	\$1,736,651	\$928,634

<sup>\*</sup> The total of enforcement actions for each program as listed in the chart for each.

### **Ambient Air Quality Control**

#### **PURPOSE**

There are approximately 12,000 stationary sources of air emissions registered in Maryland. The Air Quality Compliance Program is responsible for ensuring that these sources comply with applicable air pollution control requirements. Approximately 200 of these sources emit more than 95% of all the pollutants emitted from stationary sources. These 200 highemitting sources and an additional 400 or so priority sources receive a high level of scrutiny. The additional priority sources are selected due to concerns regarding potential emissions, toxic air pollutant emissions, potential for nuisance impact, impact on the general welfare, or the potential for significant risk to public health or the environment. Combined, this group of approximately 600 sources includes facilities such as large industrial operations, paper mills, asphalt plants, and incinerators. This group varies slightly in number from year to year due to start-up of new sources, shut-down of existing sources, or sources reducing emissions or using less toxic materials to the point where they are no longer considered priority sources and thus do not demand close scrutiny. The remainder of the 12,000 sources are generally smaller in terms of their emissions or their impacts and are considered to be of lesser risk to public health or the environment. Examples of these smaller sources include dry cleaning operations, gas stations, charbroilers, small boilers, paint spray booths, and degreasing machines. For this reason, performance measures information is presented in two categories, High-Impact Air Emission Facilities and Low-Impact Air Emission Facilities.

### **AUTHORITY**

FEDERAL: Clean Air Act, Title I, Section 110

STATE: Environment Article, Title 2; COMAR 26.11

#### **PROCESS**

In inspecting facilities, a major focus is given to those approximately 600 sources described above that are considered a potential significant risk to public health or the environment. Often, multiple inspections are performed at these sources over the course of a year. Inspections are both announced and unannounced, depending on the nature and purpose of the inspection. Attention is given to smaller, lower-risk sources through special initiatives that may focus on inspecting all sources within a particular source category, spot checks of a percentage of sources in a category where the category contains a large number of small sources, and the education of trade groups and equipment operators and owners.

#### SUCCESSES/CHALLENGES

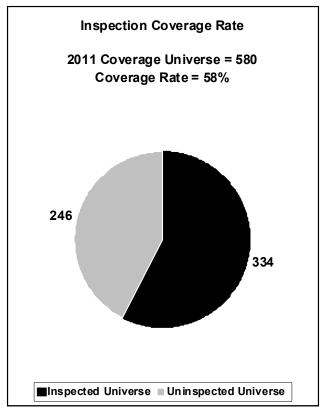
Ensuring compliance at high-impact sources continues to consume a large portion of the Air Quality Compliance Program's resources, and this focused attention contributes to the high compliance rate for this category. In addition to on-site inspections, the Program reviews compliance certifications, report submittals, stack test results, sampling results, and continuous monitoring summaries to assess compliance at regulated facilities. Challenges include addressing the growing list of air quality requirements at these large facilities with existing staff. Success has been achieved by identifying non-compliant facilities and ensuring a return to compliance.

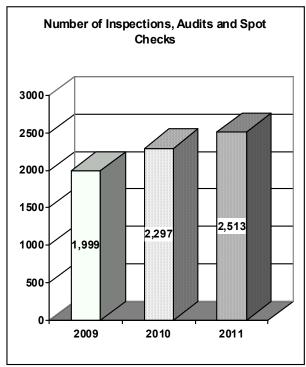
Due to the large number of sources, low-impact facilities continue to be an area where only a small percentage of sources are inspected. In this arena the Air Program continues to focus on Stage II vapor recovery systems at gas stations, as well as dry cleaners and other small sources. There are approximately 1,600 gas stations subject to Stage II requirements to limit emissions of volatile organic compounds, a ground-level ozone precursor. The Air Program is also focusing on ensuring compliance with federal air toxics requirements at dry cleaners and other smaller sources.

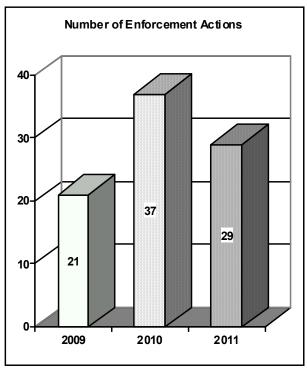
# Ambient Air Quality Control High-Impact Facilities

Performance Measure				
PERMITTED SITES/FACILITIES				
Number of sites/facilities			580	
Number of permits/licenses issued			180	
Number of permits/licenses in effect at fiscal year end				
INSPECTIONS				
Number of sites inspected ("inspected" defined as at the	e site)		334	
Number of sites audited but not inspected	•		187	
Number of sites evaluated for compliance			521	
Number of inspections, spot checks (captures number	of compliance ac	ctivities at sites)	866	
Number of audits (captures number of reviews of file/s			1,647	
Number of inspections, audits, spot checks		,	2,513	
COMPLIANCE PROFILE				
Number of inspected sites/facilities with significant viol-	ations		13	
Percentage of inspected sites/facilities with significant			3%	
Inspection coverage rate (number of sites inspected/co	verage universe	)	58%	
SIGNIFICANT VIOLATIONS		,		
Number of significant violations involving environmenta	al or health impac	ot .	14	
Number of significant violations based on technical/preventative deficiencies				
Number of significant violations carried over awaiting disposition from previous fiscal				
year			24	
Total number of significant violations			44	
DISPOSITION OF SIGNIFICANT VIOLATIONS				
Resolved			17	
Ongoing			27	
ENFORCEMENT ACTIONS				
Number of compliance assistance rendered			40	
•	Administrative	Civil/Judicial	Total	
Number of show cause, remedial, corrective actions				
issued	2	0	2	
Number of stop work orders	0	0	0	
Number of injunctions obtained	0	0	0	
Number of penalty and other enforcement actions 1 26				
Number of referrals to Attorney General for possible criminal action				
PENALTIES				
Amount of administrative or civil penalties obtained (\$ collected in FY)				

# Ambient Air Quality Control High-Impact Facilities



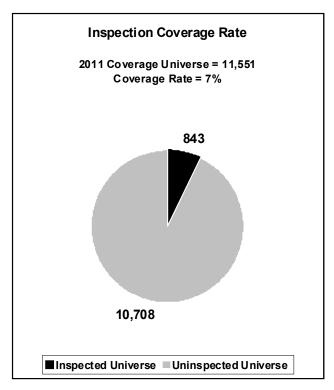


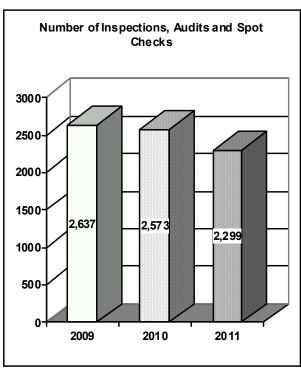


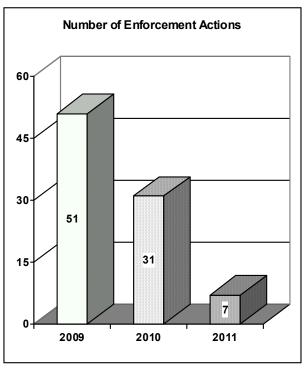
# Ambient Air Quality Control Low-Impact Facilities

Performance Measure				
PERMITTED SITES/FACILITIES				
Number of sites/facilities				
Number of permits/licenses issued				
Number of permits/licenses in effect at fiscal year end				
INSPECTIONS				
Number of sites inspected ("inspected" defined as at the	ne site)		843	
Number of sites audited but not inspected			661	
Number of sites evaluated for compliance			1,504	
Number of inspections, spot checks (captures number	of compliance ac	ctivities at sites)	1,003	
Number of audits (captures number of reviews of file/s			1,296	
Number of inspections, audits, spot checks		•	2,299	
COMPLIANCE PROFILE				
Number of inspected sites/facilities with significant violation	ations		6	
Percentage of inspected sites/facilities with significant	violations		0.4%	
Inspection coverage rate (number of sites inspected/co	verage universe	)	7%	
SIGNIFICANT VIOLATIONS				
Number of significant violations involving environmenta	al or health impac	ct	0	
Number of significant violations based on technical/preventative deficiencies				
Number of significant violations carried over awaiting disposition from previous fiscal				
year				
Total number of significant violations (sum of the three	measures above	<del>)</del>	7	
DISPOSITION OF SIGNIFICANT VIOLATIONS				
Resolved			3	
Ongoing			4	
ENFORCEMENT ACTIONS				
Number of compliance assistance rendered			50	
Administrative Civil/Judicial				
Number of show cause, remedial, corrective actions				
issued	0	0	0	
Number of stop work orders	0	0	0	
Number of injunctions obtained	0	0	0	
Number of penalty and other enforcement actions 7 0				
Number of referrals to Attorney General for possible criminal action				
PENALTIES				
Amount of administrative or civil penalties obtained (\$ collected in FY)				

# Ambient Air Quality Control Low-Impact Facilities







### **Air Quality Complaints**

#### **PURPOSE**

In addition to the almost 12,000 registered or permitted sources of air emissions in Maryland, there are numerous potential sources of air pollution that are not required to be registered or permitted by the Department. Examples include some composting operations, construction sites, open burning activities, hot-tar roofing operations, material storage piles, welding and burning activities, and certain portable operations of short duration. These sites or activities can create nuisance conditions such as odors or fugitive dust. The Air Quality Compliance Program responds to complaints regarding nuisance odors and dust from both permitted and non-permitted operations. After investigation, some complaints reveal no basis for potential harm to the environment or public health, but will be addressed to reduce nuisance conditions to neighbors or communities.

#### **AUTHORITY**

STATE: Environment Article, Title 2; COMAR 26.11

#### **PROCESS**

Complaints are addressed in a number of ways. A complaint situation may be of sufficient severity to warrant an immediate site visit. Complaints arising from severe nuisance situations generally result in the Department receiving multiple and separate complaints for a single situation. A complaint situation can also be a sporadic occurrence, which may lead to increased surveillance of a site in an attempt to verify the existence of a problem, which may lead to a formal inspection. Some complaints, particularly where only an explanation of what is allowed is needed, can be resolved through phone contact or letters. If the complaint investigation reveals a violation at a permitted site, the violation and subsequent enforcement action is counted under the ambient air quality control program's performance measures chart.

Only those violations that occur at non-permitted sites are counted here. Most violations in this category are related to open burning activities or the creation of off-site nuisances caused by odors or dust from sites. Violations such as these rarely result in actual harm, but have the potential to cause harm to the environment or public health, and on this basis are included in this report. Nearly all violations in this program are resolved without the need to take enforcement action, as they generally relate to short-lived activities, are quickly corrected (often at the time of inspection), do not reoccur, and result in no actual harm to public health or the environment.

#### SUCCESSES /CHALLENGES

The Air Quality Compliance Program received about 500 complaints in FY 2011. The Program responds to all complaints by telephone, prioritizing those that merit a field inspection. Some complaint situations needed multiple follow-up inspections to ensure compliance with air quality requirements. Based on their nature, some complaints at non-permitted sites need follow-up enforcement action to achieve compliance.

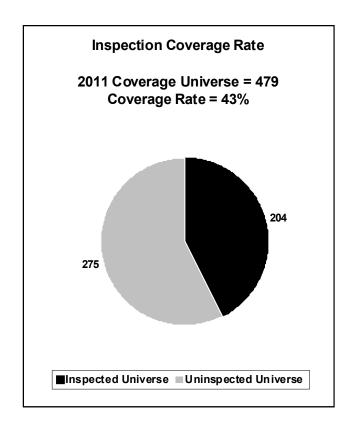
Many complaints are successfully resolved by the Program leading to improved quality of life for Maryland citizens. However some complaint situations can be quite challenging due to the sporadic nature of the problem, leading to difficulty in locating the source.

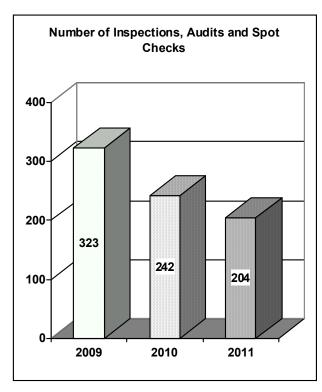
## **Air Quality Complaints**

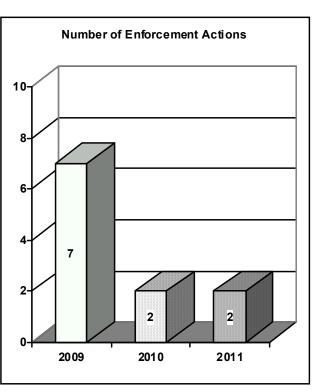
Performance Measure			TOTAL		
PERMITTED SITES/FACILITIES					
Number of sites/facilities			N/A		
Number of permits/licenses issued			N/A		
Number of permits/licenses in effect at fiscal year end			N/A		
OTHER REGULATED SITES/FACILITIES					
Complaints received at all sites			479		
Complaints received at unregistered/unpermitted sites	i		371		
INSPECTIONS					
Number of unregistered/unpermitted sites inspected ("i	nspected" define	d as at the site)	164		
Number of inspections, spot checks at unregistered/un	permitted sites (d	captures			
number of compliance activities at sites)			236		
Number of initial complaint inspections at all sites*			204		
COMPLIANCE PROFILE					
Number of inspected sites/facilities with significant violations	ations		3		
Percentage of inspected sites/facilities with significant			2%		
Inspection coverage rate (number of sites inspected/co	verage universe	)	43%		
SIGNIFICANT VIOLATIONS					
Number of significant violations involving environmental or health impact					
Number of significant violations based on technical/preventative deficiencies			1		
Number of significant violations carried over awaiting disposition from previous fiscal					
year			9		
Total number of significant violations (sum of the three measures above)			12		
	DISPOSITION OF SIGNIFICANT VIOLATIONS				
Resolved			5		
Ongoing			7		
ENFORCEMENT ACTIONS			18		
Number of compliance assistance rendered					
	Administrative	Civil/Judicial	Total		
Number of show cause, remedial, corrective actions					
issued	0	0	0		
Number of stop work orders	0	0	0		
Number of injunctions obtained 0 0			0		
Number of penalty and other enforcement actions 1 1			2		
Number of referrals to Attorney General for possible criminal action			1		
PENALTIES					
Amount of administrative or civil penalties obtained (\$ collected in FY)			\$943		

<sup>\*</sup>This line includes responses to complaints at permitted sites and unregistered/unpermitted sites and is used to calculate the coverage rate for complaints. The inspections and any enforcement actions at any permitted sites are captured in the sections for registered sources.

## **Air Quality Complaints**







### **Asbestos**

#### **PURPOSE**

The Air Quality Compliance Program's Asbestos Division manages the licensing of asbestos removal contractors and oversees their efforts when removing or encapsulating asbestos to ensure that asbestos is handled in a manner that is protective of human health. Any project that involves demolition or the removal of more than 240 linear feet or more than 160 square feet of asbestos-containing material is subject to federal standards under EPA's National Emission Standards for Hazardous Air Pollutants (NESHAP) program. All projects are subject to additional requirements under state laws and regulations. Projects can range from something as small as a single pipe wrapping to a major removal project at a power plant or other large facility.

#### **AUTHORITY**

FEDERAL: Clean Air Act, Title 1, Section 112

STATE: Environment Article, Title 6, Subtitle 4; COMAR 26.11.21

#### **PROCESS**

Removing or encapsulating asbestos is required to be done by a contractor licensed by MDE. The contractor is required to notify the Department of the location of the activity and the approximate amount of asbestos-containing material to be removed or encapsulated prior to undertaking the work. From the information contained in the notification, the Department will determine whether the project is required to meet federal safety standards. Approximately 25% to 30% of all asbestos projects undertaken are subject to federal program requirements. Projects subject to such requirements are considered a priority and an inspection will generally take place. Priority is also given to inspecting contractors with poor performance records, projects in close proximity to other priority projects (for inspection efficiency) and projects for which complaints have been lodged. The focus of an inspection is on determining whether a contractor is adhering to the standards designed to protect workers and the public from exposure to asbestos.

#### INSPECTION COVERAGE RATE

The inspection coverage rate is computed as the number of sites inspected divided by the number of notifications received. Note that the Program receives notifications for any amount of asbestos that is disturbed. This will include notifications for one to two feet of removal in which the project will last for maybe two hours, to notification for thousands of linear and square feet, in which the project may last up to twelve months. State law governs the notification process for small projects, and requires only that the contractor notify the Department before the project begins. The larger projects are governed by federal requirements, and the contractor is required to notify at least ten days prior to beginning the project. It is more likely that an inspection will take place at a site where removal will last a day or more. The Program is required by state law to annually inspect at

least one asbestos removal project by each contractor. The Program meets this requirement.

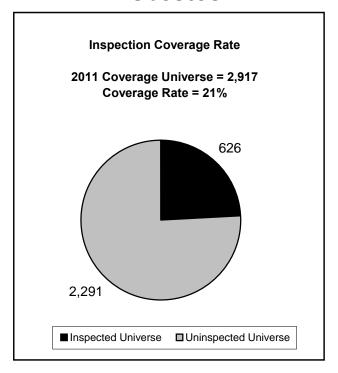
#### SUCCESSES/CHALLENGES

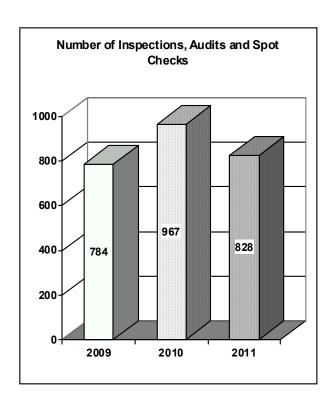
Contractors intending to abate asbestos are required to notify MDE. MDE inspects as many of these projects as possible, generally focusing on the more substantial projects. In FY 2011, the Division inspected about 21% of sites that provided notification to MDE. The number of notifications received in FY 2011 was 2,917 compared to 2,851 in FY 2010.

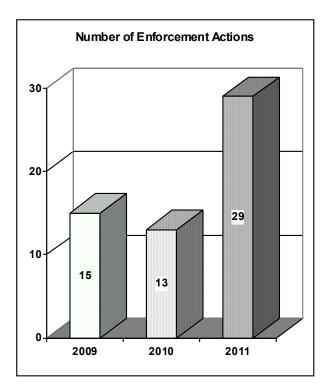
### **Asbestos**

Performance Measure			TOTAL
PERMITTED SITES/FACILITIES			
Number of permits/licenses issued (Asbestos Contractor Licenses)			
Number of permits/licenses in effect at fiscal year en	d		138
OTHER REGULATED SITES/FACILITIES			
Number of Asbestos Notifications Received			2,917
INSPECTIONS			
Number of sites inspected ("inspected" defined as at	the site)		626
Number of sites audited but not inspected (places wi		ed submittals	
but did not go to the site)			0
Number of sites evaluated for compliance (sum of th	e two measures	above, same	
as #11 on the prior charts)			626
Number of inspections, spot checks (captures number	er of compliance	activities at	
sites)			828
Number of audits (captures number of reviews of file	/submittals for co	ompliance)	0
Number of inspections, audits, spot checks (sum of t	he two measures	s above)	828
COMPLIANCE PROFILE			
Number of inspected sites/facilities with significant vi	olations		24
Percentage of inspected sites/facilities with significant violations			4%
Inspection coverage rate (number of sites inspected/coverage universe)			21%
SIGNIFICANT VIOLATIONS			
Number of significant violations involving environmental or health impact			29
Number of significant violations based on technical/preventative deficiencies			0
Number of significant violations carried over awaiting disposition from previous fiscal			
year			34
Total number of significant violations (sum of the three measures above)			63
DISPOSITION OF SIGNIFICANT VIOLATIONS			
Resolved			48
Ongoing			15
ENFORCEMENT ACTIONS			
Number of compliance assistance rendered			10
	Administrative	Civil/Judicial	Total
Number of show cause, remedial, corrective			
actions issued	0	0	0
Number of stop work orders	0	0	0
Number of injunctions obtained	0	0	0
Number of penalty and other enforcement actions	29	0	29
Number of referrals to Attorney General for possible criminal action			0
PENALTIES			
Amount of administrative or civil penalties obtained (\$ collected in FY)			\$115,250

### **Asbestos**







### **Radiation Machines Division**

#### **PURPOSE**

The Radiation Machines Division (RMD) regulates manufactured electronic sources of radiation to minimize the amount of unnecessary radiation exposure received by the general public. These electronic radiation sources include dental and veterinary x-ray machines, mammography (breast imaging) machines, diagnostic and therapeutic radiation machines, and other electronic radiation devices such as security screening devices used in research or industry.

State regulations, which derive in part from U. S. Food and Drug Administration (FDA) statutory and regulatory directives and guidelines, require that all radiation exposures be "As Low As Reasonably Achievable" (ALARA). Radiation exposure can cause adverse health effects, with risk that varies depending upon the amount of radiation received, frequency of radiation exposures, and radio-sensitivity of body parts. Although the medical benefits of diagnostic and therapeutic treatment procedures far outweigh potential risks of sustained biological damage, evidence suggests that cells in the human body can be damaged by numerous small exposures over time, and that these multiples exposures have a cumulative health effect that may be as detrimental as receiving a single large exposure. There is growing awareness in the health community that human health impacts from radiation machine procedures, such as computed tomography (CT), are on the rise due to the increased use of this radiation machine. To some degree, x-ray imaging has replaced procedures that do not require radiation, such as ultrasound or magnetic resonance, causing the general public to increase their level of radiation exposure.

#### **AUTHORITY**

FEDERAL: Radiation Control for Health and Safety Act of 1968, 21CFR1000;

Mammography Quality Standards Act; 21CFR900

STATE: Environment Article, Title 8 "Radiation";

COMAR 26.12. Radiation Management

#### **PROCESS**

The RMD ensures all radiation machine facilities are inspected on cycles required by statute, regulation, administrative policy, or contract. Note that while mammography inspection reports are provided to the FDA for follow-up enforcement actions, the FDA's response actions are not included in this report.

Dental, veterinary, and mammography facilities are required to renew the radiation machine facility registration of the x-ray equipment every two years. Facilities with x-ray machines subject to certification are required to renew the radiation machine facility registration on the same schedule as the certification inspection frequency presented in the chart below.

#### SUCCESSES/CHALLENGES

The RMD's procedure to assess fines for violations at the time of an inspection has increased overall compliance with the greatest increase being observed in the medical facilities. Also a contributing factor to the increased compliance is that all radiation

machines are required to maintain their machines according to manufacturer specifications. The RMD continues to work with the regulated community regarding health issues.

The number of enforcement actions against dental facilities has decreased significantly in FY 2011 due to a change in state law that took effect on June 1, 2010. The change provides that if dental facilities correct violations of regulatory requirements within twenty working days of an inspection the Department is prevented from assessing a financial penalty for those violations, unless they are deemed to present a serious and probable danger to the patients or employees of a dental facility. Even though the dental community has been given leeway on the amount of time to correct their violation(s), and the inspection is announced 30 days in advance, their initial compliance rate is still averaging less than 50 percent. One of the challenges of this law is the impact that it may have on other regulated entities since they are not afforded 20 working days to correct a violation.

Whenever a misadministration or an overexposure at a registered facility occurs, the RMD continues to attend all radiation safety meetings held by the facility. These meetings are mandated by a Departmental Order and provide a forum to address public health concerns and improve radiation safety procedures.

The chart below shows the types of facilities regulated and the frequency at which they are inspected. For clarity, please note that the words machine and tube are used interchangeably. (See below).

Facility Type	Registered X-ray Tubes*	Inspection Frequency
High Energy & Particle Accelerators	2 facilities, 2 Certified Tubes	Annual
Medical (Therapy) Accelerators	43 facilities, 72 Certified Tubes	Annual
Hospitals	62 facilities, 1,188 Certified Tubes	Biennial
Physicians: Chiropractic, MD, GP, Podiatric	1,230 facilities, 1,810 Certified Tubes	Biennial
Industrial	266 facilities, 555 Certified Tubes	Triennial
Dental	2,739 facilites, 9,513 Tubes	Triennial
Veterinary	436 facilities, 582 Tubes	Triennial
Mammography	140 facilities, 186 tubes	Annual

<sup>\*</sup>Code of Maryland Regulations (COMAR) 26.12.03 states that "Radiation Machine" means a device that is capable of producing radiation. On any radiation-producing equipment with more than one x-ray tube, or other single point from which radiation may be emitted, each x-ray tube or radiation emission point is considered a separate radiation machine. "Tube" is defined in COMAR 26.12.01.01 as an x-ray tube or other single point from which radiation may be emitted.

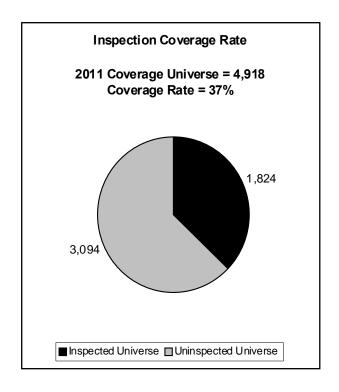
### **Radiation Machines**

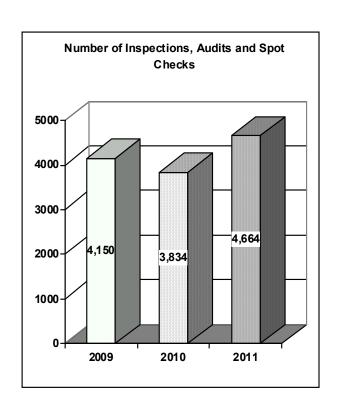
Performance Measure			
PERMITTED SITES/FACILITIES			
Number of new facility registrations issued			207
Number of facility registrations in effect at fiscal year e	nd		4,918
OTHER REGULATED SITES/FACILITIES			
Number of service companies registered at fiscal year	end *		213
Number of licensed private inspectors at fiscal year en	d *		77
Number of plan review or area surveys reviewed at fisc	cal year end *		140
INSPECTIONS			
Number of sites inspected ("inspected" defined as at the	ne site)		1,824
Number of sites audited but not inspected (places whe	re MDE reviewed	d submittals but	
did not go to the site)			0
Number of sites evaluated for compliance (sum of the	two measures ab	ove, same as	
#11 on the prior charts)			1,824
Number of inspections, spot checks (captures number	of compliance ac	ctivities at sites)	4,664
Number of audits (captures number of reviews of file/s			0
Number of inspections, audits, spot checks (sum of the	two measures a	ibove,)	4,664
COMPLIANCE PROFILE		·	
Number of inspected sites/facilities with significant violations			
Percentage of inspected sites/facilities with significant violations			26%
Inspection coverage rate (number of sites inspected/coverage universe) **			37%
SIGNIFICANT VIOLATIONS			
Number of significant violations involving environmental or health impact			0
Number of significant violations based on technical/preventative deficiencies			949
Number of significant violations carried over awaiting disposition from previous fiscal			171
year			
Total number of significant violations (sum of the three measures above)			1120
DISPOSITION OF SIGNIFICANT VIOLATIONS			
Resolved			939
Ongoing			181
ENFORCEMENT ACTIONS			
Number of compliance assistance rendered			14
	Administrative	Civil/Judicial	Total
Number of show cause, remedial, corrective actions			
issued	18	3	21
Number of stop work orders	0	0	0
Number of injunctions obtained	0	0	0
Number of penalty and other enforcement actions	130	0	130
Number of referrals to Attorney General for possible criminal action			0
PENALTIES (Control of the control of			
Amount of administrative or civil penalties obtained (\$ collected in FY)  * Measure added in EY 2002			\$207,151

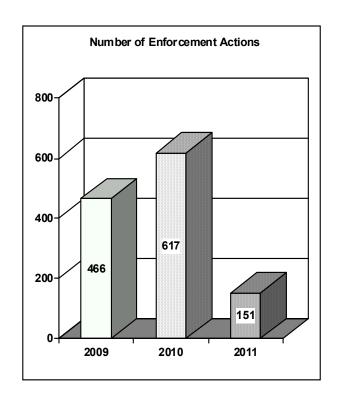
<sup>\*</sup> Measure added in FY 2002

<sup>\*\*</sup> Coverage is computed as the number of sites inspected divided by the sum of the number of facility registrations, the number of registered service providers, and the number of licensed private inspectors. Plan reviews were not considered since each of those should be at sites that would be included as permitted sites.

### **Radiation Machines Division**







### **Radioactive Materials Licensing and Compliance**

#### **PURPOSE**

The Radioactive Materials Licensing and Compliance Division (RAMLCD) issues licenses to, and inspects, hospitals, cancer treatment and diagnostic imaging centers, private medical practices, construction, research and development firms, academic institutions, nuclear pharmacies, and manufacturers and distributors of sealed sources and devices (SS&D). RAMLCD regulation of the use, handling, and control of both generally and specifically licensed radioisotopes is mandated to protect the health and safety of radiation workers and the general public as well as minimize environmental contamination. Facility radiation safety programs are carefully evaluated during the licensing and inspection process to establish compliance with Maryland radiation regulations in such areas as security of radioactive material; training of personnel; possession of adequate protective devices; and control of radiation hazards. RHP is also the primary State responder to public hazards involving radioactive material, such as transportation incidents or other incidents involving loss of control of radioactive material. RHP is also one of the primary State responders should there be a radiation incident at a fixed nuclear facility. The RAMLCD also evaluates new and modified devices containing sealed radiation sources submitted by Maryland companies for radiation safety and engineering reliability prior to the issuance of SS&D Certifications.

#### **AUTHORITY**

FEDERAL: Atomic Energy Act of 1954, as amended;

10 CFR (Nuclear Regulatory Commission) Parts 1-171

STATE: Environment Article, Title 8; "Radiation";

COMAR 26.12. Radiation Management

#### **PROCESS**

The RAMLCD inspects facilities for compliance with radiation regulations and adherence to license conditions and radiation safety procedures and practices. Inspections are performed over a one-to-four-day period by one inspector or a team of inspectors at a frequency based on the quantity, activity and toxicity of the radioisotope(s), the potential hazard resulting from its use, and the nature of the operation. Inspection frequency ranges from annual to every five years, with possible modification for licensees with a poor compliance history. Corrective actions are required immediately and are verified by formal licensee responses and possible follow-up inspections. RAMLCD also conducts investigations throughout Maryland in response to radioactive materials (RAM) incident reports, complaints, suspected violations, or unauthorized RAM use. The Division also oversees the decommissioning of previously licensed RAM facilities, conducts safety evaluations on RAM sources and devices, and performs pre-licensing visits to all applicants prior to the issuance of a license. Additionally, the RAMLCD performs inspections on at least 25% of the most hazardous radiation operations conducted in Maryland by out-of-State licensees under reciprocal recognition of their licenses.

#### SUCCESSES/CHALLENGES

Successes in FY 2011 include the continued implementation, through the licensing and inspection process, of additional increased security controls for those licensees with sufficient quantities and types of radioactive materials, that if stolen would pose a national security threat; the evaluation of the radiation safety and engineering, and the device registration, of a complex sealed source medical device prior to allowing the use and sale of the device across the country; Maryland's implementation of the National Source Tracking System; and training of state and local personnel to assure statewide preparedness for a nuclear utility accident. Challenges include the further evaluation and implementation of increased security for radioactive material in Maryland and continued outreach and education of Maryland citizens regarding the actual hazards of ionizing radiation.

#### **INSPECTION COVERAGE RATE**

The following chart shows the inspection frequency, the number of licenses that are inspected at that frequency, and an example of the type of licenses:

Inspection Frequency	Number of Licenses	Examples of License Types
		Academic & Medical Research
		Nuclear Pharmacies
Annual 9		Gamma Knife (cancer therapy)
Ailiuai	3	Remote Afterloader (cancer
		therapy)
		Industrial Radiography
2 Years	47	Mobile Medical Vans
		Hospitals
3 Years	123	Brachytherapy (cancer therapy)
		Medical Offices
		Fill/Density Gauges
5 Years	419	Nuclear Pacemakers
		Diagnostic Nuclear Medicine

#### Notes for above table:

Licenses inspected in the annual, two-year and three-year inspection frequencies are the most complex and represent those types of radioactive material activities with the greatest radiation hazard to users and members of the general public.

Facility radioactive material inspections are resource-intensive. Onsite facility inspection times vary from half a day with one inspector for the five-year inspection frequency, to a four-day inspection with three inspectors for certain extremely complex annual inspections.

### **Radioactive Materials**

Performance Measure			TOTAL	
PERMITTED SITES/FACILITIES				
Number of permits/licenses issued			534	
Number of permits/licenses in effect at fiscal year end			599	
OTHER REGULATED SITES/FACILITIES				
Sources from other jurisdictions			58	
INSPECTIONS				
Number of sites inspected ("inspected" defined as at the	ne site)*		145	
Number of sites audited but not inspected (places whe	re MDE reviewed	d submittals but	0	
did not go to the site)				
Number of sites evaluated for compliance (sum of the	two measures ab	ove, same as	226 ***	
#11 on the prior charts)		·		
Number of inspections, spot checks (captures number	of compliance ac	ctivities at sites)	173	
Number of audits (captures number of reviews of file/s			0	
Number of inspections, audits, spot checks (sum of the	two measures a	ibove)	173	
COMPLIANCE PROFILE		,		
Number of inspected sites/facilities with significant viol	ations		5	
Percentage of inspected sites/facilities with significant	violations		3%	
Inspection coverage rate (number of sites inspected/co		)**	22%	
SIGNIFICANT VIOLATIONS				
Number of significant violations involving environmental or health impact				
Number of significant violations based on technical/preventative deficiencies			15	
Number of significant violations carried over awaiting of	lisposition from p	revious fiscal	3	
year				
Total number of significant violations (sum of the three	measures above	<del>)</del>	18	
DISPOSITION OF SIGNIFICANT VIOLATIONS		•		
Resolved			10	
Ongoing			12	
ENFORCEMENT ACTIONS				
Number of compliance assistance rendered			90	
	Administrative	Civil/Judicial	Total	
Number of show cause, remedial, corrective actions	0	0	0	
issued				
Number of stop work orders	0	0	0	
Number of injunctions obtained	0	0	0	
Number of penalty and other enforcement actions	43****	3	46	
Number of referrals to Attorney General for possible criminal action			0	
PENALTIES				
Amount of administrative or civil penalties obtained (\$	collected in FY)		\$146,290	

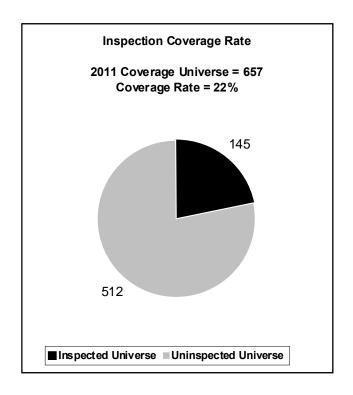
<sup>\*</sup> Number of licensees inspected at least once

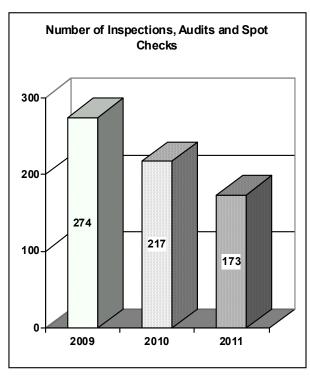
<sup>\*\*</sup> Coverage is computed as the number of licenses inspected divided by the sum of the number of permits/licenses in effect plus the number of sources from other jurisdictions since each could be cause for inspection.

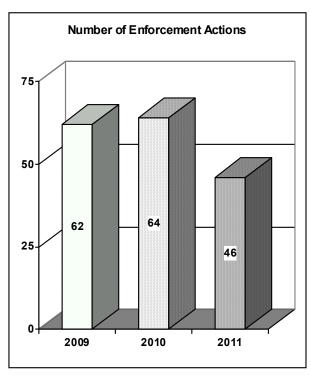
<sup>\*\*\*</sup>This value exceeds the sum of the two rows above due to radioactive material inspections sometimes being conducted at more than one site for a given source.

<sup>\*\*\*\*</sup>This number includes notices of violation issued for non-significant violations.

### **Radioactive Materials**







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# LAND MANAGEMENT ADMINISTRATION

### Land Management Administration Executive Summary

The Land Management Administration (LMA) is responsible for enforcing requirements related to underground storage tanks, lead paint, and solid and hazardous waste management. In addition, as part of the agency reorganization in July of 2009, the Mining Program that oversees coal and non-coal mining, as well as oil and gas drilling, is now under LMA management. Also, the newly-created Concentrated Animal Feeding Operations Section, initially housed within MDE's Water Management Administration, is now within the LMA Solid Waste Program – Nutrient Resources Division.

In FY 2011, the number of sites inspected and the number of site inspections conducted increased as compared to FY 2010. The total number of inspections, spot checks, and audits increased by 10% in FY 2011 as compared to FY 2010. Compliance assistance actions were essentially unchanged from FY 2010. The number of enforcement actions increased by 33% in FY 2011 as compared to FY 2010. There was a slight increase in number of permits and licenses in effect during FY 2011 as compared to FY 2010 and the number of other regulated sites/facilities slightly decreased in FY 2011.

The Hazardous Waste Program ensures protection of public health and the environment from releases of hazardous waste. In FY 2011, there were 20 permitted Treatment, Storage, and Disposal (TSD) facilities in Maryland. Waste minimization activities by generators of hazardous waste continue to reduce the need for treatment, storage and disposal of hazardous waste. The number of inspections, audits, and spot checks in the Hazardous Waste Program decreased in FY 2011 to 426 from 455 in FY 2010. While all the TSD facilities were inspected in FY 2011, only 1.48% of the total facilities that generate hazardous waste were inspected in FY 2011.

In the Lead Poisoning Prevention Program, the percentage of children statewide with blood lead levels equal to or greater than 10 micrograms per deciliter remain unchanged from the previous year for the first time Statewide. The total number of inspections, audits and spot checks increased to 36,750 in FY 2011 from 29,869 in FY 2010. In FY 2011, the number of enforcement actions increased to 884 from 660 in FY 2010. Many of the enforcement actions continue to result in multiple-property or global settlements.

During this reporting period, there was a decrease in identified oil-contaminated subsurface sites in the Oil Control Program (OCP) from 1,205 in FY 2010 to 990 in FY 2011, the sixth consecutive year of decrease. The number of above-ground oil storage facilities inspected decreased to 390 in FY 2011 from 561 in FY 2010, and the number of inspections, audits, and spot checks decreased to 638 in FY 2011 from 953 in FY 2010. Spill response activities reduced to 121 in FY 2011. The number of underground storage tank sites inspected increased to 2,392 in FY 2011 from 1,648 in FY 2010. However, due to OCP's private third-party inspection program and the filling of staff vacancies, the number of inspections, audits, and spot checks increased rapidly in recent years from just 399 in FY 2006 to 5,236 in FY 2011. Concurrently, the enforcement activities increased to 132 in FY 2011 from 56 in FY 2010.

The Solid Waste Program is responsible for overseeing Refuse Disposal, Scrap Tires Enforcement, Sewage Sludge Utilization, Concentrated Animal Feeding Operations, and Natural Wood Waste Recycling activities. In the refuse disposal function, the inspection coverage rate for permitted facilities was maintained during FY 2011 at 100%. The Solid Waste Program's number of refuse disposal site inspections increased during FY 2011 to 1,064 from 961 in FY 2010 with visits to 247 sites. The enforcement actions increased to 59 from 49 in FY 2010. A total of 34 significant violations were resolved and 24 compliance assistance actions rendered in FY 2011. During FY 2011, 565 operators submitted Notices of Intent to be covered by either CAFO or a MAFO permit and 76 operations were fully registered under the General Discharge Permit. A total of 365 inspections were conducted at CAFO/MAFO Sites and 9 enforcement actions were issued.

The Program continued the cleanup of scrap tire stockpiles, with 64 stockpiles and approximately two million scrap tires remaining to be cleaned up. New stockpiles are still discovered every year, and during FY 2011 a total of 22 new sites were discovered. A total of 35 stockpiles were cleaned up in FY 2011, resulting in removal of 484,060 scrap tires. There was a slight decrease in the numbers of scrap tire site inspections conducted in FY 2011 to 801 from 840 in FY 2010. In addition, there were 2,980 audits of semi-annual scrap tire reports, which resulted in the increased cumulative count of 3,781 inspections and audits. The number of scrap tire enforcement actions decreased to 12 in FY 2011 from 19 in FY 2010, and 52 significant violations were resolved in FY 2011.

There were no enforcement actions related to unpermitted land application of sewage sludge during FY 2011. The Program's number of inspections decreased to 453 during this reporting period compared to 549 in FY 2010. Enforcement actions in FY 2011 decreased to 2 from 11 in FY 2010.

# Land Management Administration Performance Measures Executive Summary

	2010 Totals	<u>2011 Totals</u>
PERMITTED SITES/FACILITIES		
Number of Permits/licenses Issued	2,998	3,025
Number of Permits/Licenses in Effect at Fiscal Year End	9,817	9,772
OTHER REGULATED SITES/FACILITIES		
Other Sites	150,355	150,213
INSPECTIONS		
Number of Sites Inspected	33,720	41,499
Number of Sites Audited but Not Inspected*	4,605	9,617
Number of Inspections, Audits, Spot Checks	55,511	61,035
ENFORCEMENT ACTIONS		
Number of Compliance Assistance Rendered	14,253	14,301
Number of Enforcement Actions Taken	921	1,223
<u>PENALTIES</u>		
Amount of Administrative or Civil Penalties Obtained	\$896,206	\$1,077,067

### **Land Restoration Program**

#### **PURPOSE**

The Land Restoration Program (LRP) protects public health and the environment by identifying sites that are, or potentially are, contaminated by controlled hazardous substances. Once identified, the sites are prioritized for remedial activities. The sites are then listed on the State Master List (see Appendix I) and in the Disposal Site Registry.

#### **AUTHORITY**

FEDERAL: Comprehensive Environmental Response, Compensation and Liability Act

(CERCLA)

STATE: Environment Article, Title 7, Subtitle 2; COMAR 26.14

#### **PROCESS**

LRP conducts and/or oversees environmental assessment and cleanup projects in Maryland. The assessment activities include investigating and sampling sites to determine whether cleanup is necessary. If the identified contamination is determined to represent a risk to public health or the environment, remedial activities are conducted to address the sites contaminated by controlled hazardous substances. Assessments and cleanups are conducted based on available resources. The Disposal Site Registry ranks those sites that are the highest priority for investigation and remedial action based on the federal Hazard Ranking System score.

#### SUCCESSES/CHALLENGES

The number of sites on the State Master List at the end of FY 2011 was 248. During the year, an additional 3 sites were moved to the Formerly-Investigated Sites category (see Appendix J) for a total of 190 sites given this designation. The Disposal Site Registry included 19 National Priority List (NPL) sites, which are addressed by USEPA under the federal Superfund law. The Program conducted one Preliminary Assessment (PA), four Site Investigations (SI), three combined PA/SIs during FY 2011.

The LRP is continuing to work with EPA on five active private NPL sites and one site proposed for the NPL. The five NPL sites are in the process of Remedial Design: Central Chemical, Maryland Sand, Gravel and Stone; Spectron; Ordnance Products; and Kane and Lombard. One site proposed for the NPL, the 68<sup>th</sup> Street Dump, is being managed under the EPA's Superfund Alternative Site Initiative, which allows the Responsible Party to implement a NPL-caliber remediation without NPL listing. Discussions to determine the remedial action at the 68<sup>th</sup> Street Dump are underway between EPA, MDE and the Responsible Parties.

### **Hazardous Waste Program**

#### PURPOSE

The Resource Conservation and Recovery Act (RCRA) established a system for controlling the disposition of hazardous waste from generation to disposal. Responsibility for implementing Maryland's hazardous waste regulatory program has been assigned to the Land Management Administration's Technical Services and Operations Program (TSOP) and to its Hazardous Waste Program (HWP). The Technical Services and Operations Program is responsible for the review and issuance of hazardous waste treatment, storage, or disposal (TSD) facility permits. TSOP also partners with the U.S. Environmental Protection Agency in the review, issuance, and monitoring of Corrective Action Permits. The HWP's Hazardous Waste Enforcement Division enforces all permits and regulated activities involving hazardous waste generators, transporters, and TSD facilities through a program of inspections, monitoring, and enforcement actions, including the issuance of site complaints, Notices of Violation, Consent Orders and Complaint and Orders.

#### AUTHORITY

FEDERAL: Resource Conservation and Recovery Act (RCRA) - Subtitle C

STATE: Environment Article, Title 7, Subtitle 2; COMAR 26.13

#### **PROCESS**

HWP's Hazardous Waste Enforcement Division is responsible for violation discovery and compliance activities. The focus of the enforcement program is on permitted hazardous waste TSD facilities and hazardous waste generators that pose the greatest threat to public health and the environment, have been previously cited for violations, or continue to be out of compliance. Enforcement and compliance is accomplished by scheduled inspections of permitted TSD facilities, unannounced inspections of large quantity generators of hazardous waste, and investigations of complaints. All federal and State permitted TSD facilities, as well as those that receive off-site waste, are inspected at least once a year.

The program targets federally-defined large quantity generators (LQGs are defined in Federal regulations as generating greater than or equal to 1000 kilograms/2200 pounds of hazardous waste in any calendar month) as a priority. These large quantity generators are also routinely inspected. Those that have never been inspected are the first priority along with those that have not been inspected in the last three years. There were approximately 375 Large Quantity Generators (LQGs) in FY 2011. In addition to TSDs and LQGs, Maryland also has almost 10,000 facilities that are federally registered as generating smaller quantities of hazardous waste. Resources do not allow routine inspection of these generators, so they are generally inspected only when complaints are received.

#### SUCCESSES/CHALLENGES

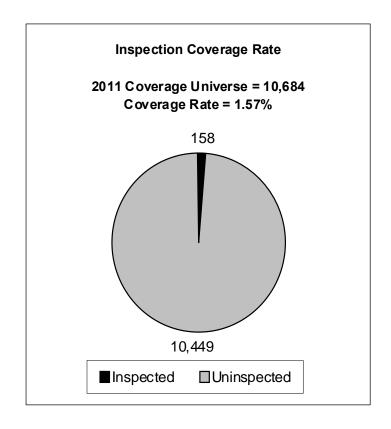
HWP's enforcement and compliance program found fewer significant violations in FY 2011. During FY 2011, the inspection coverage rate decreased from 2.2% in FY 2010 to 1.57% in FY 2011. A total of 235 sites were evaluated for compliance and 158 of these sites received on site inspections.

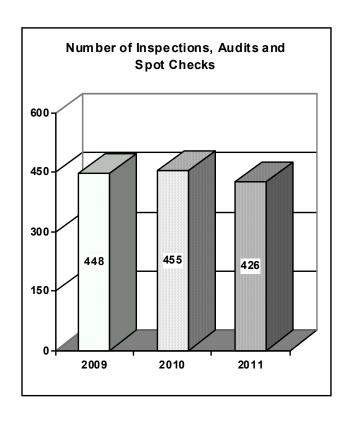
### **Hazardous Waste**

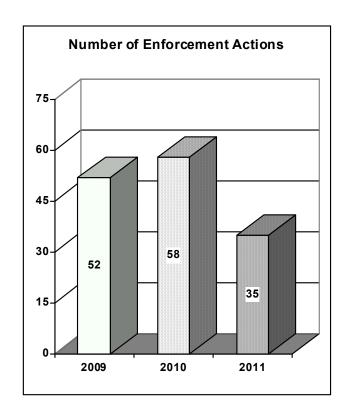
Performance Measure			
PERMITTED SITES/FACILITIES			
Number of permits/registrations issued			
Number of permits/registrations in effect at fiscal year	end		20
OTHER REGULATED SITES/FACILITIES			
Hazardous waste generators			10,684
New EPA ID numbers Issued			214
INSPECTIONS			
Number of sites inspected ("inspected" defined as at the	ne site)*		158
Number of sites receiving Off-Site Audits & Record Re	views, but not ins	spected	77
Number of sites evaluated for compliance (sum of the	two measures ab	ove, same as	235
#11 on the prior charts)			
Number of inspections, spot checks (captures number	of compliance ac	ctivities at sites)	337
Number of off-site audits (captures number of reviews			
Total number of inspections, audits and spot checks		•	426
COMPLIANCE PROFILE			
Number of inspected sites/facilities with significant viol	ations		11
Percentage of inspected sites/facilities with significant violations			7%
Inspection coverage rate (number of sites inspected/coverage universe)			1.57 %
SIGNIFICANT VIOLATIONS			
Number of significant violations involving environmental or health impact			32
Number of significant violations based on technical/preventative deficiencies			11
Number of significant violations carried over awaiting disposition from previous fiscal			38
year			
Total number of significant violations (sum of the three measures above)			81
DISPOSITION OF SIGNIFICANT VIOLATIONS			
Resolved			58
Ongoing			23
ENFORCEMENT ACTIONS			
Number of compliance assistance rendered			33
·	Administrative	Civil/Judicial	Total
Number of show cause, remedial, corrective actions			
issued	1	0	1
Number of stop work orders	0	0	0
Number of injunctions obtained 0 0			
Number of penalty and other enforcement actions 34 0			0 34
Number of referrals to Attorney General for possible criminal action			1
PENALTIES			
Amount of administrative or civil penalties obtained (\$ collected in FY)			\$154,800
, (			,

<sup>\*</sup>All 20 permitted TSD facilities were inspected..

### **Hazardous Waste**







### **Lead Poisoning Prevention Program**

#### **PURPOSE**

The Lead Poisoning Prevention Program (LPPP) oversees activities designed to reduce the incidence of childhood lead poisoning. These activities involve accreditation and oversight of lead abatement services contractors, maintenance of a registry of rental properties, maintenance of a registry of children with elevated blood lead levels (greater than or equal to 10 micrograms per deciliter), and enforcement of the statute and regulations.

#### **AUTHORITY**

FEDERAL: Toxic Substances Control Act

STATE: Environment Article, Title 6, Subtitles 3, 8 & 10; COMAR 26.16.01-.04 and

Environment Article, Title 7, Subtitle 2; COMAR 26.02.07

#### **PROCESS**

All affected properties (pre-1950 rental dwelling properties) must meet specified standards of care: risk reduction standards, registration of the rental property, and distribution to tenants of two documents explaining tenant rights and the hazards of lead paint. Maryland law requires that all blood lead level test results be reported to MDE, which in turn reports all results for children at risk to the local Health Departments for case management.

#### SUCCESSES/CHALLENGES

The percentage of children with blood lead levels equal to or greater than 10 micrograms per deciliter ( $\geq$ 10 µg/dl) remain unchanged from the previous year for the first time Statewide. This information is compiled on a calendar-year basis from the blood test reports prepared by various laboratories. The number of children tested with elevated blood lead levels decreased from 553 in 2009 to 539 in 2010, but the percentage of children tested who had elevated blood lead levels also remained at 0.5%. More children were tested in 2010 (114,835) than in 2009 (107,416).

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**Lead Poisoning Prevention** 

Performance Measure	ing i rovom		TOTAL	
PERMITTED SITES/FACILITIES				
Number of permits/registrations issued (Accreditations)				
Number of permits/registrations (Accreditations) in effect	t at fiscal vear end	<u> </u>	1,478 3,130	
OTHER REGULATED SITES/FACILITIES	· · · · · · · · · · · · · · · · · · ·			
Rental dwelling units registered this year*			5,860	
Total rental dwelling units in registered properties**			67,674	
Affected properties as of end FY			134,530	
INSPECTIONS			, , , , , , ,	
Number of sites inspected ("inspected" defined as at the	site)			
By accredited lead paint service providers	,		32,617	
By MDE			3,664	
Number of sites audited but not inspected (places where	MDF reviewed s	uhmittals hut	0,001	
did not go to the site)	WIDE TOVIOWOU O	abilittaio bat	23	
Number of sites evaluated for compliance (sum of the th	ree measures abo	ove, same as	20	
#11 on the prior charts)	roo mododroo do	ovo, camo ac	36,304	
Number of inspections, spot checks (captures number of	f compliance activ	vities at sites)	30,00	
By Accredited Lead Paint Service Providers			32,617	
By MDE			4,110	
	mittals for compli	ance)	23	
Number of audits (captures number of reviews of file/submittals for compliance)  Number of inspections, audits, spot checks (sum of the three measures above)			36,750	
COMPLIANCE PROFILE				
Number of inspected sites/facilities with significant violations				
Percentage of inspected sites/facilities with significant violations ***				
Inspection coverage rate (number of sites inspected/coverage universe)			6% 27%	
SIGNIFICANT VIOLATIONS				
Number of significant violations involving environmental or health impact				
Number of significant violations based on technical/preventative deficiencies				
Number of significant violations carried over awaiting disposition from previous fiscal year				
Total number of significant violations (sum of the three measures above)			657 1,377	
DISPOSITION OF SIGNIFICANT VIOLATIONS	iododico abovo)		1,077	
Resolved			587	
Ongoing			790	
ENFORCEMENT ACTIONS				
Number of compliance assistance rendered			148	
	Administrative	Civil/Judicial	Total	
Number of show cause, remedial, corrective actions			2 22	
issued	607	0	607	
Number of stop work orders	0	0	0	
Number of injunctions obtained	0			
Number of penalty and other enforcement actions	277	0	277	
Number of referrals to Attorney General for possible criminal action			0	
Number of SEPs entered into / units affected			5/62	
PENALTIES		<u> </u>		
Amount of administrative or civil penalties obtained (\$ co	ollected in FY)		\$693,539	

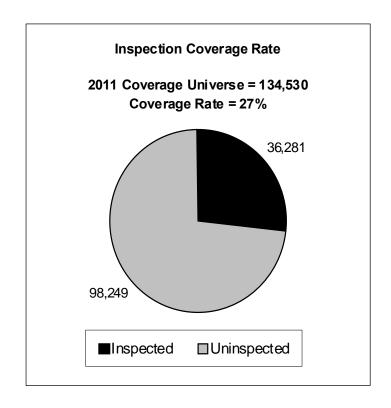
<sup>\*</sup>New registrations

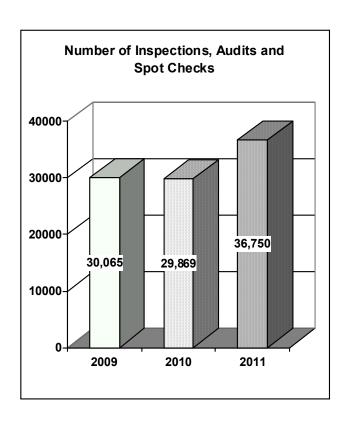
\*\* Registrations through 12/31/10 (new and renewal).

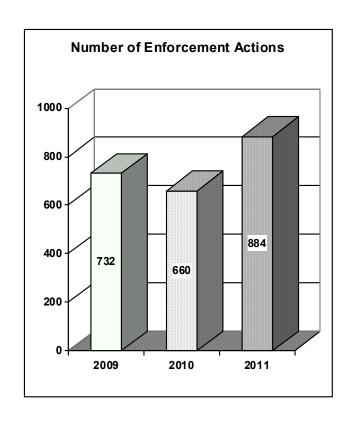
\*\*\* Significant violation percentage is based on MDE inspections only.

\*\*\*\*Inspection coverage rate includes MDE and third-party inspections.

## **Lead Poisoning Prevention**







### Oil Control Program - Aboveground Facilities

#### **PURPOSE**

The Oil Control Program (OCP) performs a broad range of activities related to the safe handling, storage, and remediation of petroleum products. OCP issues permits and performs oversight for aboveground storage facilities, oil-contaminated soil, and the transportation of oil products, including ethanol and biodiesel, in Maryland. OCP also issues permits related to discharge activities and awards and audits licenses for the import of petroleum products into Maryland.

#### **AUTHORITY**

STATE: Environment Article, Title 4, Subtitle 4; COMAR 26.10

#### **PROCESS**

Regional environmental compliance specialists (ECSs) schedule routine inspections of the facilities. During the inspection, facility conditions are documented and the permittee is advised of the status of compliance. If corrective action is warranted, the facility is directed in accordance with MDE's guidelines and procedures. The inspection frequency can be adjusted as conditions warrant. In addition, two staff engineers tasked with writing permits for these facilities visit facilities prior to issuing new or renewal permits. These site visits may also lead to the discovery of violations. Staff engineers provide support to the ECS staff upon request. The ECS also responds to oil spills throughout the State at facilities that do not require a permit.

#### SUCCESSES/CHALLENGES

The combination of compliance assistance, regular permit application and review, and enforcement continues to result in improved management of aboveground storage tanks containing petroleum. Inspection of aboveground oil storage facilities decreased from 561 in FY 2010 to 390 in FY 2011. Spill response activities decreased from 152 in 2010 to 121 in FY 2011. Permit application reviews, permit renewal site visits, and random inspections continue to reveal violations that, if left unaddressed, would result in releases to the environment or catastrophic tank failure during a fire or other emergency at a facility.

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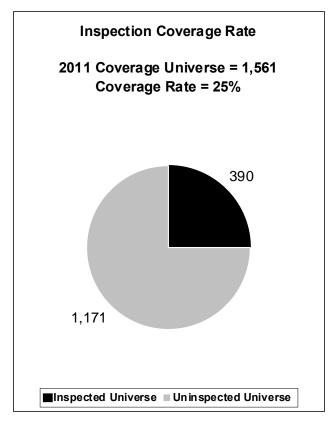
### **OCP - Aboveground Facilities**

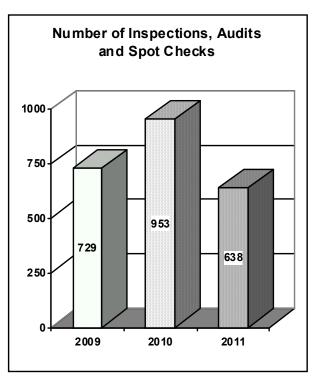
Performance Measure	TOTAL		
PERMITTED SITES/FACILITIES			
Number of permits/licenses issued			539
Number of permits/licenses in effect at fiscal year end*			1,561
OTHER REGULATED SITES/FACILITIES			
Initial spill response			121
INSPECTIONS			
Number of sites inspected ("inspected" defined as at the			390
Number of sites receiving off-site audits and record rev			55
Number of sites evaluated for compliance (sum of the tall 11 on the prior charts)	two measures ab	ove, same as	445
Number of inspections, spot checks (captures number	of compliance ad	ctivities at sites)	583
Number of audits (captures number of reviews of file/si			55
Number of inspections, audits, spot checks (sum of the			638
COMPLIANCE PROFILE		,	
Number of inspected sites/facilities with significant violations	ations		13
Percentage of inspected sites/facilities with significant	violations		3%
Inspection coverage rate (number of sites inspected/co	25%		
SIGNIFICANT VIOLATIONS			
Number of significant violations involving environmenta	0		
Number of significant violations based on technical/pre	13		
Number of significant violations carried over awaiting d			
year	10		
Total number of significant violations (sum of the three	23		
DISPOSITION OF SIGNIFICANT VIOLATIONS			
Resolved			17
Ongoing			6
ENFORCEMENT ACTIONS			T
Number of compliance assistance rendered			626
	Administrative	Civil/Judicial	Total
Number of show cause, remedial, corrective actions			
issued	2	11	13
Number of stop work orders	0	0	0
Number of injunctions obtained	0	0	0
Number of penalty and other enforcement actions	25	0	25
Number of referrals to Attorney General for possible cr	0		
PENALTIES			
Amount of administrative or civil penalties obtained (\$ collected in FY)			\$26,450

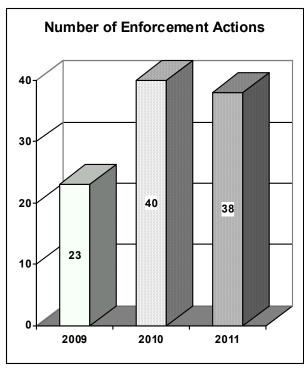
<sup>\*</sup> Permits/licenses. This includes aboveground storage tanks and oil-contaminated soil operations. The Oil (Contaminated Soil) Operations Permit is issued to facilities that store and/or treat soil contaminated with petroleum product from underground storage tank leaks or surface spills. Due to the small number of facilities involved, these numbers were incorporated into the Oil Aboveground Facilities numbers beginning in FY 1999.

<sup>\*\*</sup> Coverage rate above is computed as the total number of permitted sites inspected and dividing that by the sum of the total number of permits/licenses in effect. Spill response to aboveground storage tank sites less than permitted capacity is part of the Program's universe. However, this number is not included in the inspection coverage rate in order to not bias the evaluation of the Program's goal to visit each permitted site on an annual basis.

## **OCP - Aboveground Facilities**







### Oil Control Program - Pollution Remediation Activities

#### **PURPOSE**

The Oil Control Program (OCP) oversees remediation activities at sites where petroleum products have been discharged and are impacting soil or groundwater. The oversight ensures that responsible parties remediate the site in a timely manner, protecting the public's health and the environment. The majority of sites are gasoline service stations, both operating and closed. Sites also include businesses that have their own petroleum distribution systems for use in vehicle fleets and commercial and residential heating oil systems.

#### AUTHORITY

FEDERAL: Resource Conservation and Recovery Act - Subtitle I STATE: Environment Article, Title 4, Subtitle 4; COMAR 26.10

#### **PROCESS**

Groundwater and soil cleanups are highly technical in nature, usually requiring numerous site visits, meetings, and staff time. When a release of petroleum product is reported to OCP, a team of specialists is assigned to investigate. The team prioritizes the response effort to the release, based on product type, amount released, and potential impacts from the release. Each site is in violation by virtue of the fact that a release has occurred. Inspection frequency is also determined as site conditions warrant. During the inspection of remedial sites, conditions are documented and the responsible party is given direction and advised of the status of compliance. There are cases where the responsible party fails to perform the necessary steps to remediate the discharge. If enforcement action is warranted, the action will be performed in accordance with MDE's guidelines and procedures.

#### SUCCESSES/CHALLENGES

The field activity performed by OCP staff continues to reflect the commitment in time and resources needed to adequately oversee the cleanups performed by responsible parties. Multiple site visits are needed to ensure compliance with approved corrective action plans, especially at release sites that could impact drinking-water wells. OCP has found that a strong field presence and frequent communication with the responsible party increases compliance. This approach has more often than not resulted in the containment of releases to the property where they occurred and for those that had already migrated off the site, the implementation of a remedial response that prevents further migration.

This reporting period, OCP has been able to reduce the number of active remediation sites from 1,205 in FY 2010 to 990 in FY 2011. This is the seventh year a decline has been noted. This may be attributable to OCP case managers' prioritization of workload and sustained effort to move cases toward closure.

During FY 2011 the program received \$3,712,000 in American Reinvestment and Recovery Act (ARRA) funds to address remediation of sites where no responsible party has been identified. These funds will be expended over the next few years to assess and oversee cleanup of over 50 sites.

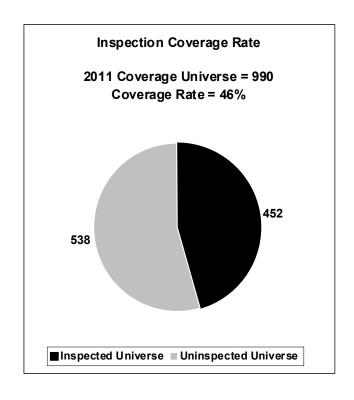
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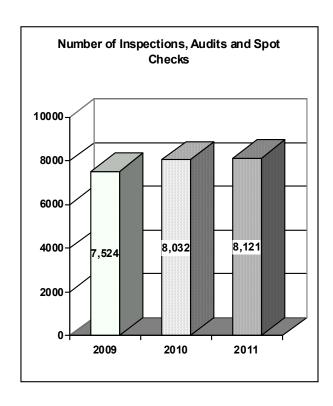
### **Oil Pollution Remediation Activities**

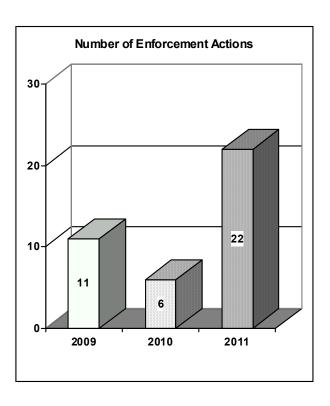
Performance Measure TOTAL			
PERMITTED SITES/FACILITIES			
Number of permits/licenses issued	0		
Number of permits/licenses in effect at fiscal year end			0
OTHER REGULATED SITES/FACILITIES			
Groundwater remediation sites*			990
INSPECTIONS			
Number of sites inspected ("inspected" defined as at the	ne site)		452
Number of sites audited but not inspected (places whe	re MDE reviewed	submittals but	
did not go to the site)			538
Number of sites evaluated for compliance (sum of the	two measures ab	ove, same as	
#11 on the prior charts)		•	990
Number of inspections, spot checks (captures number	of compliance ac	ctivities at sites)	1,810
Number of audits (captures number of reviews of file/s	ubmittals for com	pliance)	6,311
Number of inspections, audits, spot checks (sum of the	two measures a	bove)	8,121
COMPLIANCE PROFILE		,	
Number of inspected sites/facilities with significant viol	ations		12
Percentage of inspected sites/facilities with significant violations			
Inspection coverage rate (number of sites inspected/coverage universe)			46%
SIGNIFICANT VIOLATIONS			·
Number of significant violations involving environmental or health impact			
Number of significant violations based on technical/preventative deficiencies			
Number of significant violations carried over awaiting disposition from previous fiscal			
year			11 23
Total number of significant violations (sum of the three measures above)			
DISPOSITION OF SIGNIFICANT VIOLATIONS			
Resolved			11
Ongoing			12
ENFORCEMENT ACTIONS			
Number of compliance assistance rendered			8,109
	Administrative	Civil/Judicial	Total
Number of show cause, remedial, corrective actions			
issued	4	8	12
Number of stop work orders	0	0	0
Number of injunctions obtained	0	0	0
Number of penalty and other enforcement actions 10 0			10 0
Number of referrals to Attorney General for possible criminal action			
PENALTIES		T	
Amount of administrative or civil penalties obtained (\$ collected in FY)  * Prior to FY 1999, this number only included releases from federally-regulated UST motor fuel. After FY 1999 the number only included releases from federally-regulated UST motor fuel. After FY 1999 the number only included releases from federally-regulated UST motor fuel.			

<sup>\*</sup> Prior to FY 1999, this number only included releases from federally-regulated UST motor fuel. After FY 1999 the number reflects all oil releases that have impacted the subsurface environment from any oil storage tank or transport facility.

### **Oil Pollution Remediation Activities**







## Oil Control Program – Underground Storage Tank Systems

#### **PURPOSE**

The underground storage tank function of the Oil Control Program (OCP) is a prevention program that seeks to reduce the incidence and severity of releases associated with the storage of regulated substances in underground storage tank (UST) systems. This is accomplished by ensuring compliance with operational requirements at sites that include service stations, oil terminals, hospitals, schools, military facilities, marinas and similar facilities. These requirements relate to release detection, corrosion and overfill prevention, insurance, and construction standards.

#### **AUTHORITY**

FEDERAL: Resource Conservation and Recovery Act - Subtitle I STATE: Environment Article, Title 4, Subtitle 4; COMAR 26.10

#### **PROCESS**

All regulated UST systems in Maryland must be registered with the Department. All tank technicians and inspectors must pass a MDE test and maintain a certification with the Program. Beginning in 2006, to increase the coverage rate for UST inspections, MDE established a new EPA-authorized program using certified, highly-trained private UST inspectors. When a tank owner receives notice for inspection from MDE, they must hire one of these private inspectors. When these certified private inspectors find violations, MDE inspectors conduct followup inspection and enforcement activities.

#### SUCCESSES/CHALLENGES

The number of sites inspected increased in FY 2011 to 2,392 from 1,648 reported in FY 2010, and there was an increase in enforcement actions this year. The facilities inspected continue to show a high compliance rate that is above the national average, due at least in part to the continuing education of OCP-certified private inspectors, and to followup activities performed by MDE inspectors.

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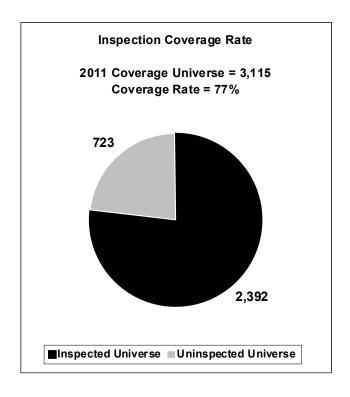
### Oil Underground Storage Tank Systems

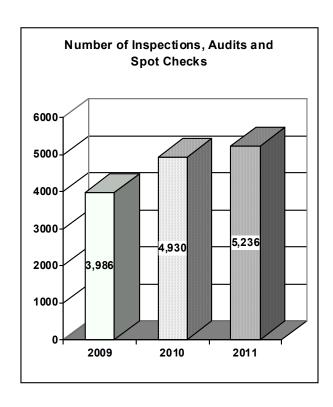
Performance Measure TO				
PERMITTED SITES/FACILITIES				
Number of permits/licenses issued	186			
Number of permits/licenses in effect at fiscal year end	*		420	
OTHER REGULATED SITES/FACILITIES				
Registered UST facilities			3,115	
INSPECTIONS				
Number of sites inspected ("inspected" defined as at the			2,392	
Number of sites receiving off-site audits and record rev	views, but not ins	pected.	723	
Number of sites evaluated for compliance (sum of the	two measures ab	ove, same as		
#11 on the prior charts)			3,115	
Number of inspections, spot checks (captures number	of compliance ac	ctivities at sites)	4,177	
Number of audits (captures number of reviews of file/s			1,059	
Number of inspections, audits, spot checks (sum of the	two measures a	ibove)	5,236	
COMPLIANCE PROFILE				
Number of inspected sites/facilities with significant violations	ations		62	
Percentage of inspected sites/facilities with significant	violations		3%	
Inspection coverage rate (number of sites inspected/co	verage universe	**	77%	
SIGNIFICANT VIOLATIONS				
Number of significant violations involving environmenta			62	
Number of significant violations based on technical/pre	0			
Number of significant violations carried over awaiting d	lisposition from p	revious fiscal		
year	56			
Total number of significant violations (sum of the three	9)	118		
DISPOSITION OF SIGNIFICANT VIOLATIONS				
Resolved			46	
Ongoing			72	
ENFORCEMENT ACTIONS				
Number of compliance assistance rendered	1		5,174	
	Administrative	Civil/Judicial	Total	
Number of show cause, remedial, corrective actions	4-			
issued	47	15	62	
Number of stop work orders	0	0	0	
Number of injunctions obtained	0	0	0	
Number of penalty and other enforcement actions 70 0			70 0	
Number of referrals to Attorney General for possible criminal action				
PENALTIES		ı	\$48,478	
Amount of administrative or civil penalties obtained (\$ collected in FY)				

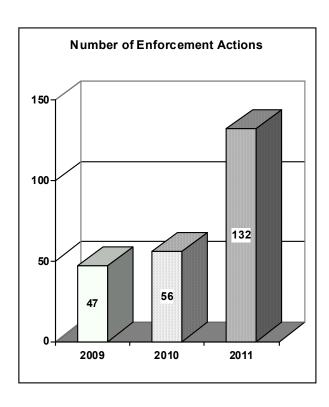
<sup>\*</sup> Certified UST technicians and removers are part of the regulated community and, therefore, the inspection universe, and were included in this report starting in FY 2000.

<sup>\*\*</sup> Coverage rate is computed as the total number of sites inspected divided by the total number of registered UST sites. Technician and Remover Certifications are part of the Program's universe. However, this number is not included in coverage rate in order not to bias the evaluation of the Program's goal to visit each underground storage tank system on a routine basis.

## Oil Underground Storage Tank Systems







### **Refuse Disposal**

#### **PURPOSE**

Improper handling of society's byproducts in the form of domestic, commercial, and industrial wastes can pose direct threats to both the public health and the quality of Maryland's water resources. The Solid Waste Program is responsible for two important elements of environmental regulation: the review of the technical information needed to support application for new solid waste disposal facilities, and the inspection and enforcement of regulations at permitted and unpermitted disposal facilities. Regulated solid waste acceptance facilities include municipal landfills, rubble landfills, and land-clearing debris landfills, non-hazardous industrial waste landfills, municipal incinerators, solid waste processing facilities, and transfer stations.

#### AUTHORITY

FEDERAL: Resource Conservation and Recovery Act - Subtitle D; 40 CFR 257 and 258

STATE: Environment Article, Title 9, Subtitle 2; COMAR 26.04.07, 26.04.10

#### **PROCESS**

Permits are required for the construction and operation of solid waste acceptance facilities. The permits ensure that facilities are designed and operated in a manner protective of public health and the environment. Permit review activities cover a broad range of environmental and engineering elements to ensure state-of-the-art techniques protect the State's surface water, groundwater, air, and other natural resources. Routine unannounced inspections are performed at the facilities to ensure compliance. Inspectors also spend a large percentage of their time investigating complaints regarding unpermitted facilities and open dumps. The compliance staff performs inspections and investigations to find, stop, and clean up illegal dumps and reduce the problems they cause, including odor, soil erosion, discharges of pollutants to surface water, and groundwater pollution. Corrective orders and penalties may be issued for violations in accordance with Department guidelines and procedures. Compliance activities also include environmental monitoring and remediation. Geologists and engineers review groundwater monitoring and soil gas data to detect aqueous or gaseous pollutants, which may be migrating through the ground from landfills and dumpsites. When releases are detected, plans for landfill caps, groundwater and gas extraction, and treatment systems are required, subject to review and approval by MDE prior to implementation.

#### SUCCESSES/CHALLENGES

The Solid Waste Program's refuse disposal inspection coverage rate was 100% in FY 2011 as it was in FY 2010, with every permitted site (82) inspected. In addition, thirty-three inspected sites were discovered in significant violation and overall, a total of 34 of 84 significant violations were resolved. Further, there were 177 audits performed during FY 2011.

The Solid Waste Programs number of inspections increased during FY 2011 to 1,064 from 961 in FY 2010 with visits to 247 sites. The enforcement actions slightly increased from 4 in FY 2010 to 59 in FY 2011. The increase number of inspections and enforcement actions are due to an increased enforcement presence, due to the addition of compliance staff resources during the last two years. Also, the numbers of groundwater monitoring reviews/audits at landfills have increased, with the increased surveillance of groundwater conditions meaning a greater level of protection for users of groundwater supplies near solid waste facilities.

New challenges for the Solid Waste Program in FY 2012 will be additional responsibility for the development and implementation of the Department's new regulations governing coal combustion byproducts, and the responsibility for hazardous waste activities that include enforcement all permits and regulated activities involving hazardous waste generators, transporters, and TSD facilities through a program of inspections, monitoring and enforcement actions.

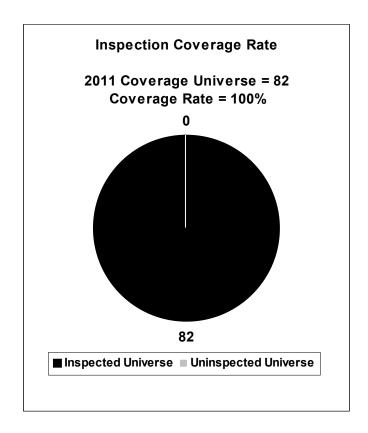
## **Refuse Disposal**

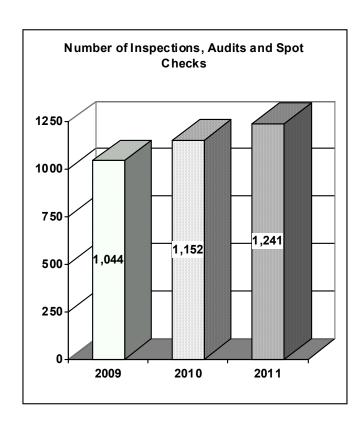
Performance Measure			TOTAL
PERMITTED SITES/FACILITIES			
Number of permits/licenses issued			28
Number of permits/licenses in effect at fiscal year end*			82
OTHER REGULATED SITES/FACILITIES			
Unpermitted sites			165
INSPECTIONS			
Number of sites inspected ("inspected" defined as at the	ne site)**		247
Number of sites receiving off-site audits and record rev	riews, but not ins	pected.	0
Number of sites evaluated for compliance (sum of the			247
Number of inspections, spot checks (captures number	of compliance ac	ctivities at sites)	1,064
Number of audits (captures number of reviews of file/s	ubmittals for com	pliance)	177
Number of inspections, audits, spot checks (sum of the	two measures a	ibove)	1,241
COMPLIANCE PROFILE			
Number of inspected sites/facilities with significant violations			33
Percentage of inspected sites/facilities with significant			13%
Inspection coverage rate (number of sites inspected/co	verage universe	)	100%
SIGNIFICANT VIOLATIONS			
Number of significant violations involving environmental or health impact			
Number of significant violations based on technical/preventative deficiencies			40
Number of significant violations carried over awaiting disposition from previous fiscal			
year			
Total number of significant violations (sum of the three measures above)			84
DISPOSITION OF SIGNIFICANT VIOLATIONS			
Resolved			34
Ongoing			50
ENFORCEMENT ACTIONS			
Number of compliance assistance rendered	1		24
	Administrative	Civil/Judicial	Total
Number of show cause, remedial, corrective actions			
issued	5	0	5
Number of stop work orders	0	0	
Number of injunctions obtained	0	1	1
Number of penalty and other enforcement actions 53 0			53 7
Number of referrals to Attorney General for possible criminal action			
PENALTIES			
Amount of administrative or civil penalties obtained (\$ collected in FY)			\$19,500

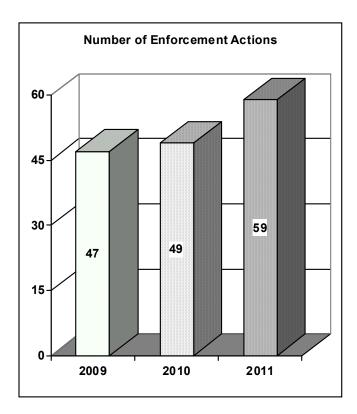
<sup>\*</sup> There were 18 active groundwater discharge permits during FY 2011.

\*\* 82 of the 247 sites inspected were permitted facilities. The remaining sites included unpermitted dumpings, citizen complaints, other similar solid waste issues, and groundwater discharge permits at closed rubble landfills.

## **Refuse Disposal**







### **Scrap Tires**

#### **PURPOSE**

Licenses are required for the hauling, collection, storage, processing, recycling, and burning (tire-derived fuel) of scrap tires. These licenses ensure that scrap tires are managed in a manner protective of public health and the environment.

#### **AUTHORITY**

STATE: Environment Article, Title 9, Subtitle 2;

Environment Article, Title 10, Nuisance Abatement;

COMAR 26.04.08

#### **PROCESS**

The licensing system is intended to regulate the management of scrap tires and prevent illegal dumping. Depending on available revenue, a State special fund can be used when a landowner fails to clean up a scrap tire dump. Cost recovery from the landowner or other identifiable responsible party for all costs associated with the cleanup is required, unless the owner qualifies for an inheritance exemption. In general, larger scrap tire facilities are inspected more frequently than smaller ones through routine unannounced inspections. Inspectors also investigate citizen complaints about illegal dumping or handling of scrap tires. Corrective orders and penalties may be issued for violations in accordance with Department guidelines and procedures.

#### SUCCESSES/CHALLENGES

The Program continued the cleanup of scrap tire from illegal stockpiles. New stockpiles are still discovered every year and during FY 2011 a total of 22 new sites were discovered. A total of 35 stockpiles were cleaned up in FY 2011 resulting in removal of 484,060 scrap tires. At the end of FY 2011, there were 64 stockpiles and over two million scrap tires remaining to be cleaned up.

There was a decrease in the number of scrap tire site inspections conducted in FY 2011 to 801 from 840 in FY 2010. The inspection coverage rate in FY 2011 remained at 17%, the same as the percentage reported in FY 2010. There were 2,980 audits of scrap tire semi-annual reports performed during the first half of FY 2010. Due to staff shortages, during FY 2011 the Scrap Tire Unit only reviewed semi-annual reports for one six-month reporting period and late reports received from previous reporting periods. This has resulted in the decreased cumulative count of 3,781 inspections and audits. Significant violations decreased from 13 in FY 2010 to 11 in FY 2011. A total of 52 significant violations were resolved. The number of compliance assistance actions rendered increased to 30 in FY 2011 from 5 in FY 2010.

The Program issued a total of 12 enforcement actions during FY 2011. In FY 2011, administrative means were used more frequently to obtain compliance with reporting requirements, rather than enforcement actions. During FY 2011, the rate of compliance of scrap tire reporting was maintained at 87%. 2,301 out of 2,650 licensed facilities submitted reports for the January-June 2010 reporting period, the most recent reporting period with complete data, a small decrease from the 90% compliance rate in FY 2010.

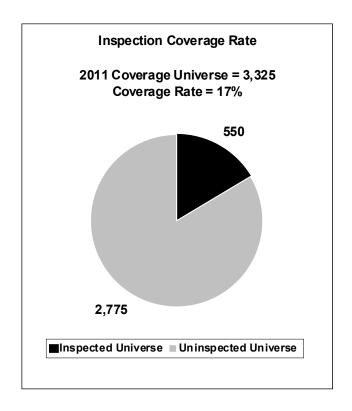
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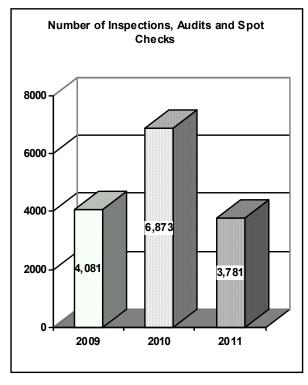
## **Scrap Tires**

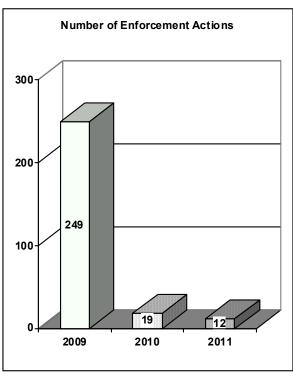
Performance Measure			TOTAL
PERMITTED SITES/FACILITIES			
Number of permits/registrations issued			415
Number of permits/registrations in effect at fiscal year	end		3,261
OTHER REGULATED SITES/FACILITIES			
Stockpiles to be cleaned up			64
INSPECTIONS			
Number of sites inspected ("inspected" defined as at the			550
Number of sites audited but not inspected (places whe	re MDE reviewed	submittals but	
did not go to the site)			1,575
Number of sites evaluated for compliance (sum of the	two measures ab	ove, same as	
#11 on the prior charts)			2,125
Number of inspections, spot checks (captures number	of compliance ac	ctivities at sites)	801
Number of audits (captures number of reviews of file/s	ubmittals for com	pliance)	2,980
Number of inspections, audits, spot checks (sum of the	two measures a	ibove)	3,781
COMPLIANCE PROFILE		·	
Number of inspected sites/facilities with significant violation	ations		7
Percentage of inspected sites/facilities with significant	violations		1%
Inspection coverage rate (number of sites inspected/co	overage universe	)*	17%
SIGNIFICANT VIOLATIONS			
Number of significant violations involving environmental or health impact			0
Number of significant violations based on technical/preventative deficiencies			11
Number of significant violations carried over awaiting disposition from previous fiscal			
year			193
Total number of significant violations (sum of the three measures above)			204
DISPOSITION OF SIGNIFICANT VIOLATIONS			
Resolved			52
Ongoing			152
ENFORCEMENT ACTIONS			
Number of compliance assistance rendered			30
	Administrative	Civil/Judicial	Total
Number of show cause, remedial, corrective actions			
issued	0	0	0
Number of stop work orders	0	0	0
Number of injunctions obtained	0	0	0 12
Number of penalty and other enforcement actions 12 0			
Number of referrals to Attorney General for possible criminal action			
PENALTIES			
Amount of administrative or civil penalties obtained (\$ collected in FY)			\$2,750

<sup>\*</sup> Coverage rate above is computed as the total number of sites inspected divided by the total number of permits/licenses in effect plus the number of stockpiles to be cleaned up.

## **Scrap Tires**







### **Sewage Sludge Utilization**

#### **PURPOSE**

Permits are required for the transportation, collection, handling, storage, treatment, land application, and disposal of sewage sludge in the State. The purpose of the permits is to ensure that sewage sludge is managed in a manner that is protective of public health and the environment. Sewage sludge utilized in Maryland is applied mostly for agricultural uses, composted, pelletized, landfilled, or incinerated. Permit requirements include preparation of applicable nutrient management plans and other necessary documents.

#### **AUTHORITY**

STATE: Environment Article, Title 9, Subtitle 2; COMAR 26.04

#### **PROCESS**

Composting facilities, pelletizers, and storage facilities are inspected several times per year. Landfill disposal operations are inspected during the course of routine landfill inspections. Land application sites are inspected when the workload allows or when complaints are received. The inspector may recommend corrective actions to take, if any are required. If a significant violation is found, site complaints are issued. Corrective orders and penalties may be issued for violations in accordance with Department guidelines and procedures. Inspectors also investigate citizens' complaints about sewage sludge utilization.

#### SUCCESSES/CHALLENGES

The Program's number of inspections slightly decreased during FY 2011 to 545 from 549 in FY 2010. There were no known instances of unpermitted land application of sewage sludge or of environmental or health impact.

The inspection coverage rate increased to 33% in FY 2011 from 30% during FY 2010; staff inspected 249 unique sites. Further, there were 1,310 audits performed during FY 2011, which resulted in raising the cumulative count for inspections and audits to 1,763. In addition, 2 enforcement actions were taken and a total of 6 compliance assistance actions were rendered. Most violations are not significant violations and are the result of accidental occurrences or misunderstandings, which are quickly resolved through compliance assistance efforts.

When considering the coverage rate for sewage sludge utilization sites, it should be noted that many of these sites are farm fields that may only receive sewage sludge once or twice during a five-year permit life. Inspection efforts are concentrated toward those sites that are active during the year. The Program will continue reporting the total coverage value for consistency with past values, and for comparison to other programs.

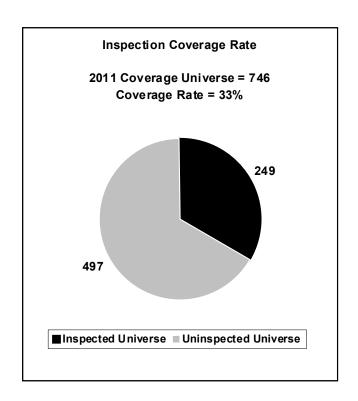
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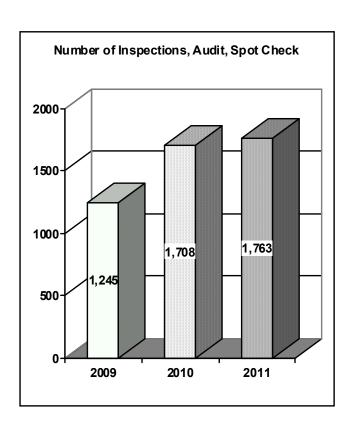
# **Sewage Sludge Utilization**

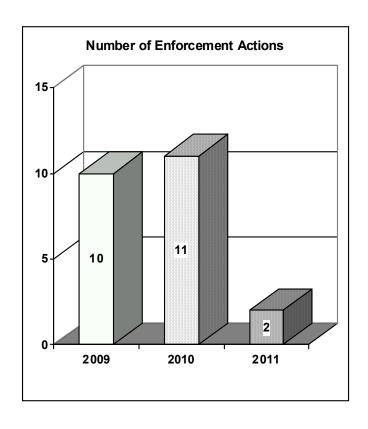
Performance Measure			TOTAL	
PERMITTED SITES/FACILITIES				
Number of permits/registrations issued				
Number of permits/registrations in effect at fiscal year	end		715	
OTHER REGULATED SITES/FACILITIES				
Unpermitted sites			31	
INSPECTIONS				
Number of sites inspected ("inspected" defined as at the	ne site)		249	
Number of sites receiving off-site audits and record rev	views, but not ins	pected.	296	
Number of sites evaluated for compliance (sum of the	two measures ab	ove, same as		
#11 on the prior charts)			545	
Number of inspections, spot checks (captures number	of compliance ac	ctivities at sites)	453	
Number of audits (captures number of reviews of file/s	ubmittals for com	pliance)	1,310	
Number of inspections, audits, spot checks (sum of the	two measures a	lbove)	1,763	
COMPLIANCE PROFILE				
Number of inspected sites/facilities with significant violations			2	
Percentage of inspected sites/facilities with significant	violations		1%	
Inspection coverage rate (number of sites inspected/co	verage universe	)*	33%	
SIGNIFICANT VIOLATIONS				
Number of significant violations involving environmental or health impact				
Number of significant violations based on technical/preventative deficiencies			2	
Number of significant violations carried over awaiting disposition from previous fiscal				
year			3	
Total number of significant violations (sum of the three measures above)			5	
	DISPOSITION OF SIGNIFICANT VIOLATIONS			
Resolved			3	
Ongoing			2	
ENFORCEMENT ACTIONS			6	
Number of compliance assistance rendered				
	Administrative	Civil/Judicial	Total	
Number of show cause, remedial, corrective actions				
issued	0	0	0	
Number of stop work orders	0	0	0	
Number of injunctions obtained	0	0	0 2	
Number of penalty and other enforcement actions 2 0				
Number of referrals to Attorney General for possible criminal action			0	
PENALTIES				
Amount of administrative or civil penalties obtained (\$ collected in FY)			\$1,500	

<sup>\*</sup> Coverage rate above is computed as the total number of sites inspected and dividing that by the total number of permits/licenses in effect.

## **Sewage Sludge Utilization**







### **Concentrated Animal Feeding Operations**

#### **PURPOSE**

The Concentrated Animal Feeding Operations (CAFO) Section regulates discharges from farms with animals that are stabled or confined for 45 days or more in any 12-month period in an area where crops/forage are not grown. Animal feeding operations have the potential to discharge nutrients and sediments to surface waters if improperly designed, constructed, operated, or maintained. These facilities are subject to regulation through registration as a CAFO or MAFO (Maryland Animal Feeding Operation) under a General Discharge Permit for Animal Feeding Operations. The classification as a CAFO or MAFO is determined by a combination of factors including the number and type of animals, and the potential for discharge to waters of the State. This General Discharge Permit requires these entities to be designed, constructed, operated and maintained according to specific standards which control or eliminate discharges of pollutants to the waters of the State.

#### **AUTHORITY**

FEDERAL: Federal Clean Water Act

STATE: Environment Article, Title 9, Subtitle 3; COMAR 26.08.01 through 26.08.04.

#### **PROCESS**

During the five-year duration of the General Permit, every registrant will be inspected at least once to ensure compliance with the permit conditions, which incorporate relevant portions of farm-specific Comprehensive Nutrient Management Plans (CNMP), written in accordance with Maryland Department of Agriculture (MDA) and USDA-Natural Resources Conservation Service requirements, along with MDA soil conservation and water quality plans. Complaints involving CAFOs or MAFOs are addressed by inspectors specifically assigned to the CAFO Section. Enforcement is accomplished through site complaints, notices of violation, and administrative, civil and criminal mechanisms. The inspector may recommend corrective actions if any are required. If a significant violation is found, site complaints are issued. Corrective orders and penalties may be issued for violations in accordance with Department guidelines and procedures. Inspectors also investigate citizens' complaints related to CAFOs and MAFOs and provide compliance assistance to these facilities.

#### SUCCESSES/CHALLENGES

The CAFO/MAFO program began its implementation phase on July 1, 2009 after a Department reorganization shifting the program to Land Management Administration.

By the end of the FY 2011, 565 operators submitted Notices of Intent to be covered by either CAFO or a MAFO permit. 331 of the CAFO operators entered into General Compliance Schedules with MDE that set schedules and requirements related to permit compliance and a timeframe for reporting the status of the operators' completion of a Comprehensive Nutrient Management Plan (CNMP). Seventy-six operations were fully registered under the General Discharge Permit. MDE completed 916 inspections, audits, and spot checks by the end of the fiscal year. Permit fees were waived during FY 2011.

Although not all operations have been registered under the General Discharge Permit, the General Compliance Schedule has allowed inspectors to have the ability to perform full

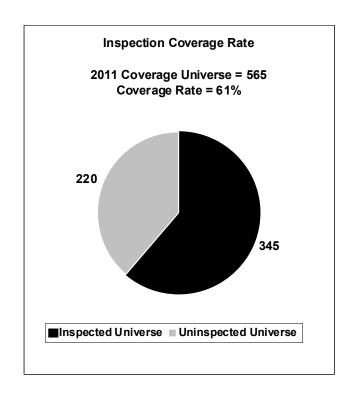
inspections of all registered operations in addition to those under the General Compliance Schedule, currently 407 farms. The remaining operations are subject to Clean Water Act requirements allowing no discharge without a permit.

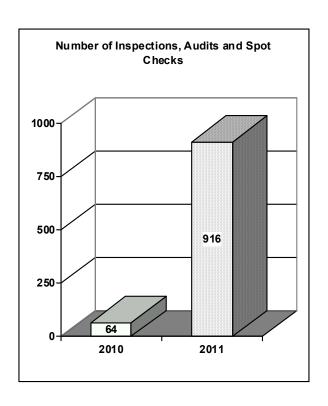
The General Compliance Schedules are necessary because the technical assistance needed to develop CNMPs is far exceeded by the number of farms required by the General Discharge Permit to have those Plans. The State is continuing to identify additional avenues for technical assistance with CNMPs. FY 2011 was the first full year of operation for the program.

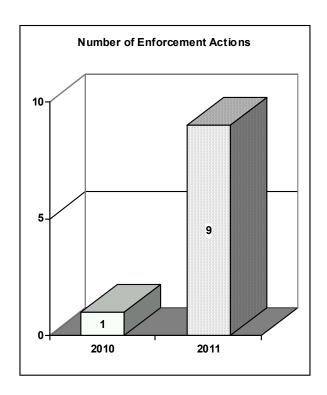
# **Concentrated Animal Feeding Operations**

Performance Measure			TOTAL
PERMITTED SITES/FACILITIES			
Number of permits/registrations issued			
Number of permits/registrations in effect at fiscal year er	nd		76
OTHER REGULATED SITES/FACILITIES			
Sites with pending registrations			489
INSPECTIONS			
Number of sites inspected ("inspected" defined as at the			345
Number of sites receiving off-site audits and record review			220
Number of sites evaluated for compliance (sum of the tw	o measures abo	ve, same as	
#11 on the prior charts)			565
Number of inspections, spot checks (captures number of			365
Number of audits (captures number of reviews of file/sul			551
Number of inspections, audits, spot checks (sum of the	two measures ab	ove)	916
COMPLIANCE PROFILE			
Number of inspected sites/facilities with significant violation			5
Percentage of inspected sites/facilities with significant vi			1%
Inspection coverage rate (number of sites inspected/cov	rerage universe)		61%
SIGNIFICANT VIOLATIONS			
Number of significant violations involving environmental or health impact			3
Number of significant violations based on technical/preventative deficiencies			2
Number of significant violations carried over awaiting disposition from previous fiscal			
year			1
Total number of significant violations (sum of the three measures above)			6
DISPOSITION OF SIGNIFICANT VIOLATIONS			
Resolved			1
Ongoing			5
ENFORCEMENT ACTIONS			
Number of compliance assistance rendered			44
	Administrative	Civil/Judicial	Total
Number of show cause, remedial, corrective actions			
issued		0	
Number of stop work orders	0	0	0
Number of injunctions obtained	0	0	0
Number of penalty and other enforcement actions	9	0	9
Number of referrals to Attorney General for possible crir	ninal action		0
PENALTIES			
Amount of administrative or civil penalties obtained (\$ collected in FY) \$1,300			,300

## **Concentrated Animal Feeding Operations**







### **Natural Wood Waste Recycling**

#### **PURPOSE**

The purpose of the permits is to ensure that natural wood wastes are managed in a manner protective of public health and the environment. In particular, the permitting system is intended to prevent large-scale fires at these facilities. A General Permit is authorized and in use for facilities following common industry practices as described in the regulation.

Natural wood waste facilities were targeted for additional inspections in FY 2003 and FY 2004 after several severe fires at this type of facility in FY 2002.

#### **AUTHORITY**

STATE: Environment Article, Title 9, Subtitle 17; COMAR 26.04

#### **PROCESS**

Permits are required for the operation of facilities that recycle natural wood waste (stumps, root mat, branches, logs, and brush). Recycling is conducted by chipping the wastes and converting them into mulch. This process is regulated by the conditions in the permit. Routine unannounced inspections may be performed at these facilities several times per year to ensure compliance with the permit conditions. MDE inspectors also investigate citizen complaints about wood waste recycling operations. Corrective orders and penalties may be issued for violations in accordance with Department guidelines and procedures.

#### SUCCESSES/CHALLENGES

The Solid Waste Program's natural wood waste facility inspection coverage rate was 100%; 47 unique sites were inspected and four out of eight significant violations were resolved at the end of the FY 2011.

The Solid Waste Program's number of natural wood waste facility inspections remained consistent during FY 2011 with 171 as opposed to 172 reported in FY 2010. The number of compliance assistance actions rendered increased in FY 2011 to 10 verses 4 that were reported in FY 2010. There were 25 audits performed during FY 2011.

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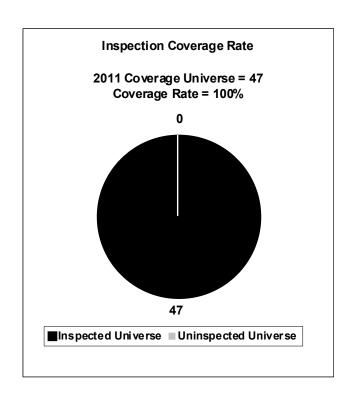
### **Natural Wood Waste Recycling**

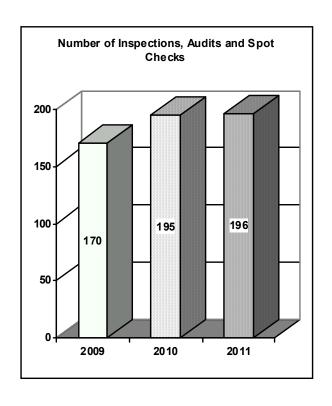
Performance Measure			TOTAL
PERMITTED SITES/FACILITIES			
Number of permits/registrations issued			9
Number of permits/registrations in effect at fiscal year er	nd		32
OTHER REGULATED SITES/FACILITIES			
Unpermitted sites at fiscal year end			15
INSPECTIONS			
Number of sites inspected ("inspected" defined as at the			47
Number of sites receiving off-site audits and record review	ews, but not inspe	ected	0
Number of sites evaluated for compliance (sum of the tw	o measures abo	ve, same as	
#11 on the prior charts)			47
Number of inspections, spot checks (captures number o	f compliance acti	vities at sites)	171
Number of audits (captures number of reviews of file/sub	omittals for comp	liance)	25
Number of inspections, audits, spot checks (sum of the t	wo measures ab	ove)	196
COMPLIANCE PROFILE			
Number of inspected sites/facilities with significant violat	ions		6
Percentage of inspected sites/facilities with significant vi			13%
Inspection coverage rate (number of sites inspected/cov	erage universe)*	·	100%
SIGNIFICANT VIOLATIONS			
Number of significant violations involving environmental or health impact			0
Number of significant violations based on technical/preventative deficiencies			6
Number of significant violations carried over awaiting disposition from previous fiscal			
year			2
Total number of significant violations (sum of the three measures above)			8
DISPOSITION OF SIGNIFICANT VIOLATIONS			
Resolved			4
Ongoing			4
ENFORCEMENT ACTIONS			
Number of compliance assistance rendered			10
	Administrative	Civil/Judicial	Total
Number of show cause, remedial, corrective actions			
issued	0	0	0
Number of stop work orders	0	0	0
Number of injunctions obtained	0	0	0
Number of penalty and other enforcement actions 9 0		9	
Number of referrals to Attorney General for possible criminal action 0			
PENALTIES			
Amount of administrative or civil penalties obtained (\$ co	ollected in FY)	\$	500

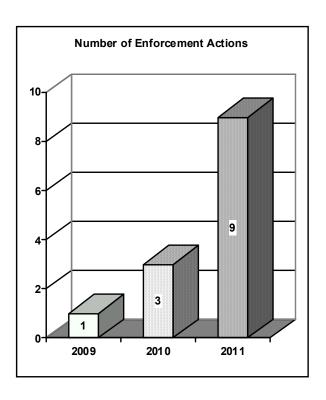
<sup>\*</sup> Number of inspected sites includes permitted facilities, government facilities that do not require permits, unpermitted natural wood waste operations and citizen complaints.

<sup>\*\*</sup> Coverage rate is computed as the total number of sites inspected and dividing that by the total number of permits/licenses in effect plus the number of unpermitted sites discovered and inspected.

## **Natural Wood Waste Recycling**







### Mining - Coal

#### **PURPOSE**

The purpose of a coal mining permit is to allow, where appropriate, for the utilization of the resource while minimizing the effects of coal mining on the environment. In addition to environmental controls, the permit provides for proper land reclamation and ensures public safety. Performance bonds must also be posted and are released after satisfactory reclamation. Permits issued by the Bureau of Mines are required for surface coal mining, deep coal mining, prospecting, preparation plants, loading facilities, and refuse reclamation operations. All coal mining activity occurs in Allegany and Garrett Counties. Coal mining permitting, compliance, and enforcement activity has been managed under LMA since July 1, 2009.

#### **AUTHORITY**

FEDERAL: Surface Mining Control and Reclamation Act of 1977 STATE: Environment Article, Title 15, Subtitle 5; COMAR 26.20

#### **PROCESS**

Upon issuance of a permit, the site is assigned an inspection frequency, which the Department makes every effort to fulfill. By agreement with the federal Office of Surface Mining (OSM), the program has committed to inspect each permitted facility on a monthly basis. In addition to State inspections, the Office of Surface Mining also regularly conducts oversight inspections and provides their findings to the Department. The inspectors schedule routine inspections of the facilities adhering to the assigned priority as much as workload allows. Facilities are not given advance notification of routine inspections. At any time during the process, the inspection frequency can be adjusted as site conditions or workload demand. All media such as water quality permits, wetland and waterway permits, and sediment control plans are inspected as part of the mine permit inspection.

Coal mining has a potential to degrade water quality through the transport of sediment-laden water and acidic water that can adversely impact the aquatic habitat. Proper land reclamation after the completion of the mining activity provides a benefit to the water quality as well as productive use of the land. Proper planning and land reclamation is important to ensure that these negative impacts do not occur. The Mining Program strives to perform monthly inspections of each active surface mining and reclamation operation.

#### SUCCESSES/CHALLENGES

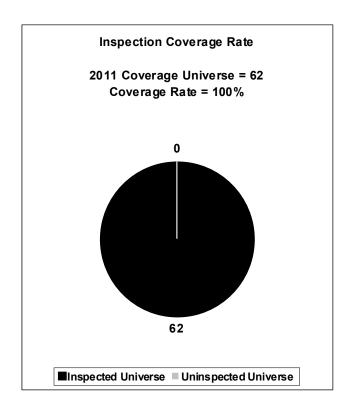
The mining program inspected 100% of their sites in FY 2011. There was an increase of 38% in the total number of inspections, audits and spot checks in FY 2011.

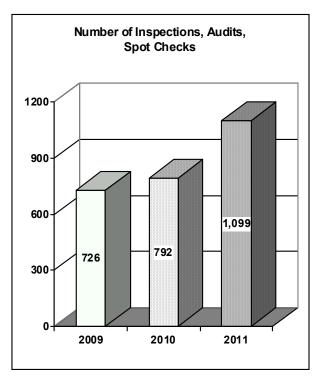
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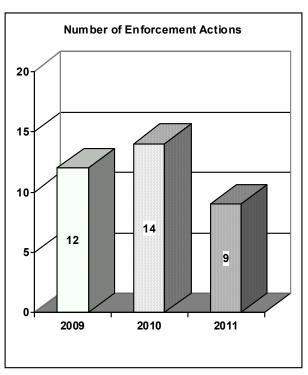
# Mining - Coal

Performance Measure			TOTAL
PERMITTED SITES/FACILITIES			
Number of permits/licenses issued			8
Number of permits/licenses in effect at fiscal year end			53
OTHER REGULATED SITES/FACILITIES			
Prospect and forfeiture sites			9
Coal mining operator licenses issued			33
Coal mining operator licenses in effect at fiscal year er	nd		33
Surface coal mining blaster certifications issued			7
Surface coal mining blaster certifications at fiscal year	end		46
INSPECTIONS			
Number of sites inspected ("inspected" defined as at the	ne site)		62
Number of sites audited but not inspected (places whe	re MDE reviewed	d submittals but	
did not go to the site)			0
Number of sites evaluated for compliance (sum of the	two measures ab	ove, same as	
#11 on the prior charts)			62
Number of inspections, spot checks (captures number	of compliance ac	ctivities at sites)	763
Number of audits (captures number of reviews of file/s	ubmittals for com	pliance)	336
Number of inspections, audits, spot checks (sum of the	two measures a	above)	1099
COMPLIANCE PROFILE			
Number of inspected sites/facilities with significant viol	ations		4
Percentage of inspected sites/facilities with significant violations			6%
Inspection coverage rate (number of sites inspected/coverage universe)			100%
SIGNIFICANT VIOLATIONS			
Number of significant violations involving environmental or health impact			0
Number of significant violations based on technical/preventative deficiencies			8
Number of significant violations carried over awaiting of	lisposition from p	revious fiscal	
year			0
Total number of significant violations (sum of the three measures above)			8
DISPOSITION OF SIGNIFICANT VIOLATIONS			
Resolved			6
Ongoing			2
ENFORCEMENT ACTIONS			
Number of compliance assistance rendered			59
	Administrative	Civil/Judicial	Total
Number of show cause, remedial, corrective actions			
issued		0	
Number of stop work orders	0	0	0
Number of injunctions obtained	0	0	0
Number of penalty and other enforcement actions 9 0			9
Number of referrals to Attorney General for possible criminal action			0
PENALTIES			
Amount of administrative or civil penalties obtained (\$ collected in FY)			\$74,350

## Mining - Coal







### Mining - Non-Coal

#### **PURPOSE**

The purpose of mining permits is to allow, where appropriate, for utilization of the resource while minimizing the effects of surface mining on the environment. In addition to environmental controls, the permit provides for proper land reclamation and ensures public safety. A performance bond of \$1,250 per acre is required to ensure that proper reclamation occurs.

#### **AUTHORITY**

STATE: Environment Article – Title 15, Subtitle 8; COMAR 26.21

#### **PROCESS**

Upon issuance of a permit the site is assigned an inspection frequency, which the Department makes every effort to fulfill. The inspectors then schedule routine inspections of the facilities adhering to the assigned priority as much as workload allows. Facilities are not given advance notification of routine inspections. At any time during the process, the inspection frequency can be adjusted as site conditions or workload demand. All media such as water quality permits, wetland and waterway and sediment approvals are inspected as part of the mine permit inspection. Non-coal mining permitting, compliance, and enforcement activity has been managed under LMA since July 1, 2009.

MDE does not have statutory authority to collect administrative penalties for non-coal mining permits but violations of other media associated with mining may be penalized as warranted. Mining laws do provide for civil and criminal penalties.

Mining has the potential to degrade water quality through the transport of sediment-laden water from drainage and stormwater runoff. These factors can adversely impact the aquatic habitat. Proper mining practices and land reclamation after the completion of the mining activity provides a benefit to the water quality. The inspection program evaluates mining practices, reclamation and stormwater management for compliance to ensure that adverse impacts to surface and groundwater are minimized. §15-828(a) of the Environment Article states, "At any reasonable time which the Department elects, but at least once a year, the Department shall cause each permit area to be inspected to determine if the permittee has complied with the mining and reclamation plan, the requirements of this subtitle, any rules and regulations adopted under it..." The Mining Program strives to perform frequent inspections as resources allow.

#### SUCCESSES/CHALLENGES

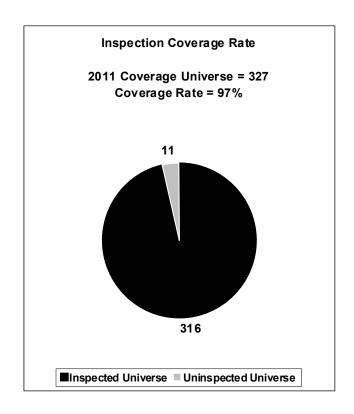
The mining program achieved a coverage rate of 97% in FY2011. In addition, the program substantially increased the number of inspections, audits, and spot checks performed compared to FY 2010.

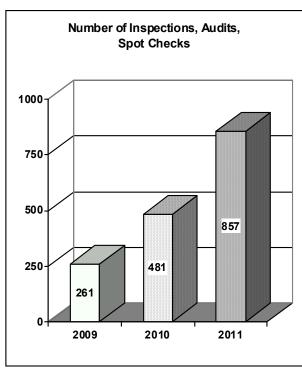
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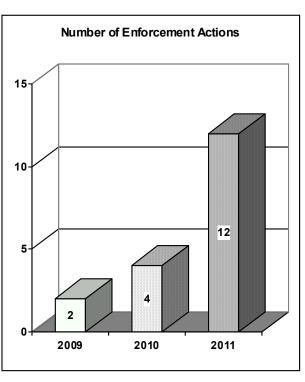
# Mining - Non-Coal

Performance Measure			TOTAL
PERMITTED SITES/FACILITIES			
Number of permits/licenses issued			
Number of permits/licenses in effect at fiscal year end			327
INSPECTIONS			
Number of sites inspected ("inspected" defined as at the	ne site)		316
Number of sites audited but not inspected (places whe	re MDE reviewed	submittals but	
did not go to the site)			1
Number of sites evaluated for compliance (sum of the	two measures ab	ove, same as	
#11 on the prior charts)			317
Number of inspections, spot checks (captures number			
Number of audits (captures number of reviews of file/s			385
Number of inspections, audits, spot checks (sum of the	two measures a	ibove)	857
COMPLIANCE PROFILE			
Number of inspected sites/facilities with significant violations			8
Percentage of inspected sites/facilities with significant			3%
Inspection coverage rate (number of sites inspected/co	overage universe	)	97%
SIGNIFICANT VIOLATIONS			
Number of significant violations involving environmental or health impact			
Number of significant violations based on technical/preventative deficiencies			0
Number of significant violations carried over awaiting disposition from previous fiscal			
year			1
Total number of significant violations (sum of the three measures above)			10
DISPOSITION OF SIGNIFICANT VIOLATIONS			
Resolved			10
Ongoing			0
ENFORCEMENT ACTIONS			
Number of compliance assistance rendered			38
	Administrative	Civil/Judicial	Total
Number of show cause, remedial, corrective actions			
issued	3	0	3
Number of stop work orders	0	0	0
Number of injunctions obtained	0	0	<u> </u>
Number of penalty and other enforcement actions 9 0			
Number of referrals to Attorney General for possible criminal action			0
PENALTIES			
Amount of administrative or civil penalties obtained (\$ collected in FY)			\$49,000

## Mining - Non-Coal







### Oil and Gas Exploration and Production

#### **PURPOSE**

Permits are required for the drilling and operation of a gas or oil well, the operation of a natural gas storage facility, and for oil and natural gas exploration using seismic operations. Permits include environmental controls to ensure public safety, to provide for the protection of public and private property, and to minimize impacts resulting from the operation.

#### **AUTHORITY**

STATE: Environment Article - Title 14, Subtitles 1, 2 and 3; COMAR 26.19.

#### **PROCESS**

Upon issuance of a permit, license, or authorization, the site is assigned an inspection frequency. The inspectors then schedule routine inspections of the facilities in accordance with the assigned priority. Facilities are not given advance notification of routine inspections. Site inspections may be adjusted to reflect changing workloads or inspection priorities. The inspectors assess whether the operator is in compliance with permit conditions and determines whether corrections are required. The Mining Program strives to perform inspections of these facilities as resources allow. Frequent inspections are required during active drilling operations but a more infrequent inspection schedule may be sufficient once the well is complete.

#### SUCCESSES/CHALLENGES

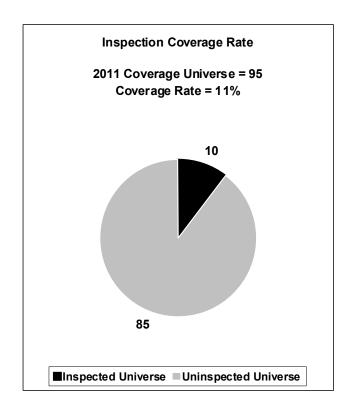
Many of the sites are not in current production mode. There were no new wells drilled in FY 2011.

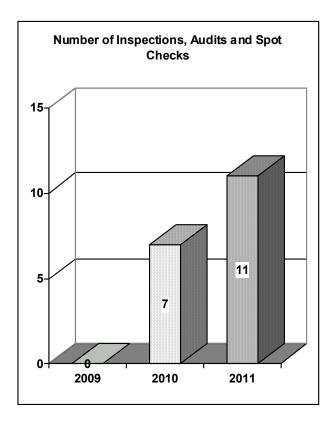
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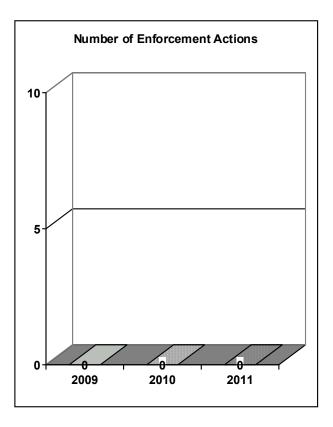
# Oil and Gas Exploration and Production

Performance Measure			TOTAL
PERMITTED SITES/FACILITIES			
Number of permits/licenses issued			35
Number of permits/licenses in effect at fiscal year end			95
INSPECTIONS			
Number of sites inspected ("inspected" defined as at the			10
Number of sites audited but not inspected (places whe	re MDE reviewed	d submittals but	
did not go to the site)			0
Number of sites evaluated for compliance (sum of the	wo measures ab	ove, same as	
#11 on the prior charts)			10
Number of inspections, spot checks (captures number			
Number of audits (captures number of reviews of file/s			0
Number of inspections, audits, spot checks (sum of the	two measures a	ibove)	11
COMPLIANCE PROFILE			_
Number of inspected sites/facilities with significant violations			0
Percentage of inspected sites/facilities with significant			0%
Inspection coverage rate (number of sites inspected/co	verage universe	)	11%
SIGNIFICANT VIOLATIONS			
Number of significant violations involving environmental or health impact			0
Number of significant violations based on technical/preventative deficiencies			0
Number of significant violations carried over awaiting disposition from previous fiscal			
year			0
Total number of significant violations (sum of the three measures above)			0
DISPOSITION OF SIGNIFICANT VIOLATIONS			
Resolved			0
Ongoing			0
ENFORCEMENT ACTIONS			
Number of compliance assistance rendered			0
	Administrative	Civil/Judicial	Total
Number of show cause, remedial, corrective actions	_	_	
issued	0	0	0
Number of stop work orders	0	0	0
Number of injunctions obtained	0	0	0
Number of penalty and other enforcement actions 0 0			0
Number of referrals to Attorney General for possible criminal action			0
PENALTIES TO THE PENALT			<u> </u>
Amount of administrative or civil penalties obtained (\$ collected in FY)			\$0

## Oil and Gas Exploration and Production







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# WATER MANAGEMENT ADMINISTRATION

### Water Management Administration Executive Summary

The Water Management Administration (WMA) has inspection and enforcement responsibilities for the water quality and resource conservation programs that follow in this report. The Water Supply Program is responsible for public drinking water and water appropriation permit compliance, and the Sediment, Stormwater and Dam Safety Program is responsible for dam safety compliance. The Compliance Program is responsible for compliance associated with groundwater discharges, surface water discharges and federal discharge permits, pretreatment, erosion and sediment control for construction activity, waterway construction, and tidal and non-tidal wetlands.

The Compliance Program assigns each inspection a priority. Routine inspections are scheduled based on the assigned priority and as workload allows. Facilities are not given advance notification of routine inspections. At any time during the process, the inspection frequency can be adjusted as site conditions or workload demand. The Compliance Program also responds to complaints from citizens across all of the facility types for which it has responsibility. During FY 2011, the Compliance Program received nearly 1,300 complaints.

The Compliance Program uses a variety of approaches to bring facilities into compliance, including compliance assistance, administrative orders, civil cases, stop work orders, and penalties.

During FY 2011, the Compliance Program implemented a new round of changes to the electronic record-keeping system for tracking inspections, called TRIP (TEMPO Remote Inspection Process). Inspectors in the field enter inspection information into TRIP, which feeds into MDE's Department-wide tracking system. These changes were designed to improve the workflow for inspectors entering information and also to improve tracking capabilities in the Department-wide data system. Tracking permits and compliance activities in a single database provides many benefits for managing and reporting on inspections and enforcement cases. While the total number of Compliance Program inspections was similar to FY 2010, that number may continue to be affected by the implementation of TRIP since inspectors need additional time to record enhanced information from each inspection when compared with the Program's older, less-detailed inspection tracking system.

During FY 2011, the Water Supply Program continued to regulate all public water systems in Maryland, and continued efforts to manage the drinking water resources throughout Maryland. Implementation of major new regulations including the Stage 2 Disinfection Byproduct Rule, the Long Term 2 Surface Water Treatment Rule, and the Ground Water Rule continue to impact the overall compliance rate for water systems. New federal and State regulations also continued to increase enforcement activities in FY 2011. The total number of Water Appropriation Permits was decreased as a result of the new exemption authority that was adopted in recent legislation.

The Mining Program was transferred to the Land Management Administration at the beginning of FY 2010. The Mining Program continues to provide inspection support for WMA-permitted activities at mine sites.

# Water Management Administration Performance Measures Executive Summary

	2010 Totals	2011 Totals
PERMITTED SITES/FACILITIES  Number of Permits/Licenses Issued  Number of Permits/Licenses in Effect at Fiscal Year End	4,090 53,726	4,432 52,011
OTHER REGULATED SITES/FACILITIES Other Sites	4,202	4,069
INSPECTIONS Number of Sites Inspected Number of Sites Audited but Not Inspected Number of Inspections, Audits, Spot Checks	7,565 3,478 58,127	6,877 3,313 56,845
ENFORCEMENT ACTIONS  Number of Compliance Assistance Rendered  Number of Enforcement Actions Taken*	6,807 1,414	6,800 1,077
PENALTIES Amount of Administrative or Civil Penalties Obtained	\$2,466,483	\$1,480,440

<sup>\*</sup> Calculated as the sum of all enforcement actions for each program as listed in the chart for each.

## **Discharges – Groundwater (Municipal & Industrial)**

#### **PURPOSE**

Excessive nutrients, bacteria, and industrial pollutants in wastewater have the potential to impact the quality of groundwater. The groundwater discharge permitting process provides a means of managing these impacts through monitoring, inspection and enforcement. The Wastewater Permits Program issues groundwater discharge permits to control the disposal of treated municipal or industrial wastewater into the State's groundwater via spray irrigation or other land-treatment methods such as subsurface discharge. Upon permit issuance, the Compliance Program is responsible for inspections and compliance assurance. Groundwater discharge permits establish pollutant discharge limits and require the permit holder to meet self-monitoring, record-keeping, and reporting requirements to protect public health and minimize groundwater pollution.

#### **AUTHORITY**

STATE: Environment Article, Title 9, Subtitle 3; COMAR 26.08

#### **PROCESS**

The Compliance Program performs inspections of sites with groundwater discharge permits as part of its overall inspection priority scheme, with priority given to sites that are the subject of complaints or are in violation based on failure to perform required self-monitoring and reporting, or due to violations of the effluent limitations in the permit. The inspector may conduct unannounced inspections and may collect samples for independent laboratory analysis as necessary to verify compliance with permit limits. Self-monitoring results are filed at the frequency specified by the permit (usually monthly or quarterly) in the form of Discharge Monitoring Reports (DMRs). DMRs are reviewed in the office and at the facilities in order to determine whether the facility is in compliance with applicable requirements. DMR reviews are shown in the following table on the line identified as "Inspections, Audits, Spot Checks." DMR reviews are not included in the determination of the inspection coverage rate.

#### SUCCESSES/CHALLENGES

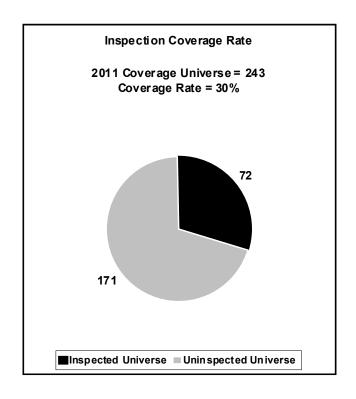
WMA continues to investigate and pursue enforcement cases to address cases involving groundwater pollution. WMA is currently working with the Attorney General's Office on a number of additional enforcement cases to address groundwater pollution concerns.

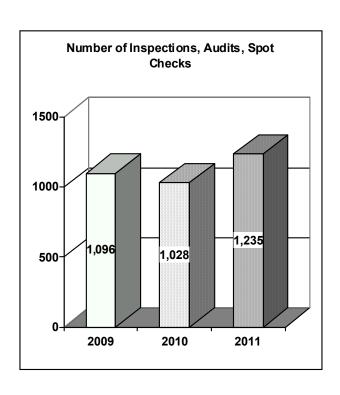
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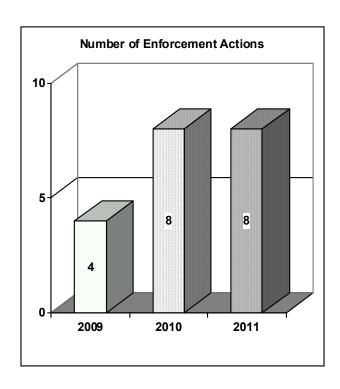
# **Discharges – Groundwater (Municipal and Industrial)**

Performance Measure			TOTAL	
PERMITTED SITES/FACILITIES				
Number of permits/licenses issued			28	
Number of permits/licenses in effect at fiscal year end			243	
INSPECTIONS				
Number of sites inspected ("inspected" defined as at the	e site)		72	
Number of sites audited but not inspected (places whe	re MDE reviewed	d submittals but		
did not go to the site)			107	
Number of sites evaluated for compliance (sum of the	two measures ab	ove, same as		
#11 on the prior charts)			179	
Number of inspections, spot checks (captures number			144	
Number of audits (captures number of reviews of file/s			1,091	
Number of inspections, audits, spot checks (sum of the	two measures a	ibove)	1,235	
COMPLIANCE PROFILE				
Number of inspected sites/facilities with significant violations			5	
Percentage of inspected sites/facilities with significant			7%	
Inspection coverage rate (number of sites inspected/co	verage universe	)	30%	
SIGNIFICANT VIOLATIONS				
Number of significant violations involving environmental or health impact			8	
Number of significant violations based on technical/preventative deficiencies			2	
Number of significant violations carried over awaiting disposition from previous fiscal				
year			19	
Total number of significant violations (sum of the three measures above)			29	
DISPOSITION OF SIGNIFICANT VIOLATIONS				
Resolved			8	
Ongoing			21	
ENFORCEMENT ACTIONS				
Number of compliance assistance rendered			0	
	Administrative	Civil/Judicial	Total	
Number of show cause, remedial, corrective actions			2	
issued 0 2				
Number of stop work orders 0 0				
Number of injunctions obtained 0 0				
Number of penalty and other enforcement actions 6 0				
Number of referrals to Attorney General for possible criminal action			0	
PENALTIES				
Amount of administrative or civil penalties obtained (\$ collected in FY)			\$73,800	

## **Discharges – Groundwater (Municipal and Industrial)**







# Discharges - Surface Water (Municipal & Industrial) State and NPDES Permits

#### PURPOSE

The federal Clean Water Act's National Pollutant Discharge Elimination System (NPDES) Program controls water pollution generated from a wide variety of sources including industrial activities, sewage treatment plants, certain agricultural activities and stormwater runoff from industrial, municipal and agricultural sources. All industrial, commercial or institutional facilities that discharge wastewater, including stormwater from certain industrial facilities, directly to surface waters of Maryland need a permit. Permittees include local, state, and federal government agencies, as well as privately-owned treatment systems and private residences. Some industrial discharges to municipal wastewater collection systems may require a pretreatment permit. Certain agricultural activities, specifically concentrated animal feeding operations, are also required to obtain a NPDES discharge permit.

The NPDES permit system includes a stormwater component to control pollution generated from runoff associated with industrial sites, municipal storm sewer systems, construction activities, and concentrated animal feeding operations. Eleven categories of industry, and storm sewer systems operated by certain government agencies, are required under the Clean Water Act to have their stormwater covered under an NPDES permit. For any construction activity that disturbs one or more acres, coverage must be obtained under the MDE's general and individual NPDES permits for construction activity. These permits require developers to perform self-inspection and record keeping to ensure that sediment and erosion control measures are maintained and functioning in accordance with approved plans to prevent water pollution and stream bank erosion caused by excess erosion, siltation, and stormwater flows from construction sites.

Surface water discharge permits combine applicable State and NPDES requirements into one permit for facilities that discharge to State surface waters. The permit is designed to protect water quality in the water receiving the discharge.

Effective at the beginning of FY 2010, responsibility for NPDES permits for concentrated animal feeding operations (CAFOs) moved from WMA to the Land Management Administration, and is discussed on page 88.

Note that, beginning with the FY 2007 Annual Enforcement and Compliance Report, the inspections performed related to discharge permits for stormwater associated with construction activities were included in this table for surface water discharges. In previous years, those inspections were included in the table for Stormwater Management and Erosion & Sediment Control.

#### **AUTHORITY**

FEDERAL: Clean Water Act

STATE: Environment Article, Title 9, Subtitle 3; COMAR 26.08

#### **PROCESS**

The Compliance Program performs inspections of sites with surface water discharge permits as part of its overall inspection priority scheme, with priority given to sites that are the subject of complaints or in violation based on failure to perform permit required self-monitoring and reporting or due to violations of the effluent limitations in the permit. The inspector may conduct unannounced inspections and may collect samples for independent laboratory analysis as necessary to verify compliance with permit limits. Self-monitoring results are filed at the frequency specified by the permit (usually monthly or quarterly) in the form of Discharge Monitoring Reports (DMRs). DMRs are reviewed in the office and at the facilities in order to determine whether the criteria for "Significant Noncompliance" have been met. DMR reviews performed by the Compliance Program's Enforcement Division are included in the following Table on the line identified as "Inspections, Audits, Spot Checks." DMRs were reviewed for all permitted sites that require DMR submittals as a part of their permit.

#### SUCCESSES/CHALLENGES

WMA is actively pursuing hundreds of cases involving surface water pollution. WMA's Compliance Program inspects sites to check for compliance with numerous laws, regulations and permits or other authorizations addressing wastewater discharges, surface water and groundwater pollution, stormwater discharges and erosion and sediment control, tidal and nontidal wetlands and waterway construction so many of the enforcement cases address numerous categories of violations and injunctive relief. An anticipated decrease in enforcement actions occurred concurrent with the deployment of new inspection technology in FY 2009 and FY 2010. In addition, the number of inspection and enforcement personnel relative to the number of regulated entities continues to be a challenge.

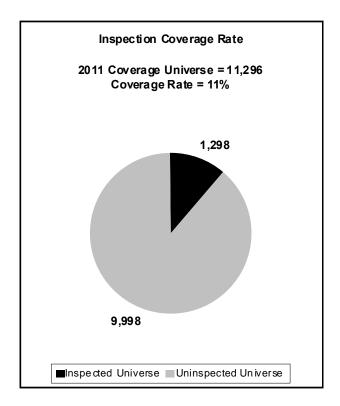
During FY 2011, MDE sent letters to over 10,000 permittees who had obtained coverage under the General Permit for Stormwater Associated with Construction Activity prior to 2009. This letter advised the permittees that, if they were continuing with their project, they must now comply with the 2009 General Permit. The letter also asked those who had finished their projects but never terminated their permit coverage to send a Notice of Termination to MDE. More than 3,400 permittees returned Notices of Termination. This caused a large decrease in the universe of surface water permittees as compared to that reported in FY 2010.

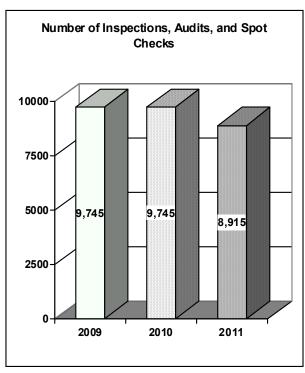
# Discharges – Surface Water (Municipal and Industrial) State and NPDES Permits

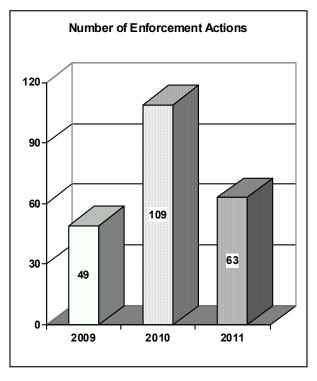
Performance Measure			TOTAL	
PERMITTED SITES/FACILITIES				
Number of permits/licenses issued*				
Number of permits/licenses in effect at fiscal year end			11,296	
INSPECTIONS				
Number of sites inspected ("inspected" defined as at the			1,288	
Number of sites audited but not inspected (places whe	re MDE reviewed	d submittals but		
did not go to the site)			649	
Number of sites evaluated for compliance (sum of the	two measures ab	ove, same as		
#11 on the prior charts)			1,937	
Number of inspections, spot checks (captures number				
Number of audits (captures number of reviews of file/s			6,583	
Number of inspections, audits, spot checks (sum of the	two measures a	ibove)	8,915	
COMPLIANCE PROFILE				
Number of inspected sites/facilities with significant viol			117	
Percentage of inspected sites/facilities with significant			9%	
Inspection coverage rate (number of sites inspected/co	overage universe	)	11%	
SIGNIFICANT VIOLATIONS				
Number of significant violations involving environmental or health impact			159	
Number of significant violations based on technical/preventative deficiencies			15	
Number of significant violations carried over awaiting disposition from previous fiscal				
year			114	
Total number of significant violations (sum of the three measures above)			288	
DISPOSITION OF SIGNIFICANT VIOLATIONS				
Resolved			63	
Ongoing			225	
ENFORCEMENT ACTIONS			0.5	
Number of compliance assistance rendered	A sharing in the Constitute	O': -:'1/ 1:: : -: -1	85 T-1-1	
North and the control of the control	Administrative	Civil/Judicial	Total	
Number of show cause, remedial, corrective actions			4	
issued	2	2	<u>4</u> 0	
Number of stop work orders     0     0       Number of injunctions obtained     0     0				
			59	
Number of referrals to Attorney General for possible criminal action  PENALTIES			0	
	collected in EVA	T	¢545,000	
Amount of administrative or civil penalties obtained (\$ collected in FY) \$5			\$545,990	

<sup>\*</sup> This number includes new permits, renewals, and conversions/modifications of permits.

# Discharges – Surface Water (Municipal & Industrial) State and NPDES Permits







### **Discharges – Pretreatment (Industrial)**

#### **PURPOSE**

The Pretreatment Program is responsible for regulating wastewaters from industrial and other non-domestic sources discharged into publicly-owned treatment works (POTW) to prevent the discharge of toxic or corrosive discharges to the collection systems serving POTWs that may result in process upsets and failure of critical infrastructure. In accordance with its authority as delegated by EPA, MDE oversees 20 local pretreatment programs that are responsible for 192 industrial sources. In addition, pretreatment permits are issued directly to four industries discharging to non-delegated POTWs. Local pretreatment program responsibilities include issuing discharge permits to industrial users, conducting industrial inspections and performing compliance monitoring, developing and enforcing local limits, enforcing federal pretreatment standards, and assessing penalties against industrial users. These requirements are included in a delegation agreement, which is signed by the operator of the POTW and WMA, and incorporated by reference into the NPDES permit issued by WMA. Local governments are responsible for issuing penalties and enforcement actions associated with this program; therefore, those numbers are not reflected in WMA's enforcement statistics.

#### **AUTHORITY**

FEDERAL: Clean Water Act

STATE: Environment Article, Title 9, Subtitle 3; COMAR 26.08

#### **PROCESS**

The Pretreatment Program oversees local pretreatment program implementation. This oversight is performed by the permitting program staff by conducting pretreatment compliance inspections of pretreatment programs; audits of pretreatment programs; joint review of industrial user permits; independent and joint industrial inspections with the POTW; review of quarterly status reports from the delegated POTWs; and initiation of enforcement actions when the POTW fails to act in accordance with its delegated responsibilities. The Pretreatment Program also issues permits to categorical industrial users discharging to wastewater treatment plants in areas of the state without delegated pretreatment programs. Compliance of these industrial users is tracked by review of periodic compliance reports and the results of annual inspections.

#### SUCCESSES/CHALLENGES

WMA oversees delegated pretreatment programs and takes enforcement action when needed to support the proper treatment of industrial discharges to wastewater collection and treatment systems to prevent damage to the treatment processes or infrastructure and pass through of pollutants to waters of the State.

The Pretreatment Program currently issues permits to categorical industrial users located in areas not serviced by jurisdictions with delegated pretreatment programs. In addition it provides oversight to 20 delegated pretreatment programs with technical and regulatory

assistance. The Pretreatment Program also performed inspections at several industrial users that are permitted by local delegated pretreatment programs. The inspection coverage rate includes these industrial users as well as the entities directly permitted by WMA.

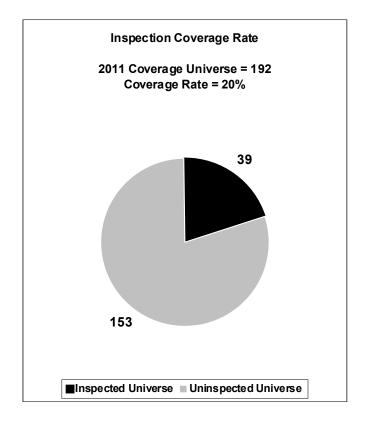
### **Discharges – Pretreatment (Industrial)**

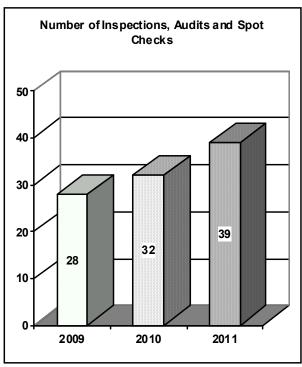
Performance Measure				
PERMITTED SITES/FACILITIES				
Number of permits/licenses issued			0	
Number of permits/licenses in effect at fiscal year end	*		4	
OTHER REGULATED SITES/FACILITIES				
POTWs			20	
POTW issued permits (delegated programs)**			192	
INSPECTIONS				
Number of sites inspected ("inspected" defined as at the			39	
Number of sites audited but not inspected (places whe	re MDE reviewed	d submittals but		
did not go to the site)			0	
Number of sites evaluated for compliance (sum of the	two measures ab	ove, same as		
#11 on the prior charts)			39	
Number of inspections, spot checks (captures number	of compliance ac	tivities at sites)	39	
Number of audits (captures number of reviews of file/s			0	
Number of inspections, audits, spot checks (sum of the	two measures a	ibove)	39	
COMPLIANCE PROFILE				
Number of inspected sites/facilities with significant viol	ations		0	
Percentage of inspected sites/facilities with significant violations				
Inspection coverage rate (number of sites inspected/coverage universe)				
SIGNIFICANT VIOLATIONS				
Number of significant violations involving environmental or health impact				
Number of significant violations based on technical/preventative deficiencies			0	
Number of significant violations carried over awaiting disposition from previous fiscal				
year			0	
Total number of significant violations (sum of the three	measures above	2)	0	
DISPOSITION OF SIGNIFICANT VIOLATIONS				
Resolved			0	
Ongoing			0	
ENFORCEMENT ACTIONS				
Number of compliance assistance rendered			0	
	Administrative	Civil/Judicial	Total	
Number of show cause, remedial, corrective actions				
issued	0	0	0	
Number of stop work orders	0	0	0	
Number of injunctions obtained 0 0				
Number of penalty and other enforcement actions 0 0			0	
Number of referrals to Attorney General for possible cr	iminal action		0	
PENALTIES				
Amount of administrative or civil penalties obtained (\$ collected in FY)			\$25,000	

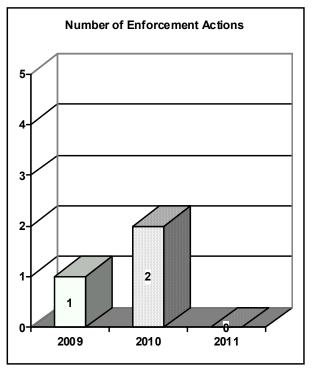
<sup>\*</sup> These are State-permitted industries subject to Categorical Pretreatment Standards under U.S. EPA regulations 40 CFR 403.6 and 40 CFR Chapter I, Subpart N.

<sup>\*\*</sup> Coverage rate is defined as the number of sites inspected divided by the sum of permits/licenses in effect, the POTWs and the significant industrial users. However, the Program is responsible for inspecting only the permittees, the POTWs and only some of the industrial users. The Program is required by statute to provide a 100% coverage rate of those facilities. In FY 2011, the program met that requirement.

# **Discharge – Pretreatment (Industrial)**







# Stormwater Management and Erosion & Sediment Control for Construction Activity

#### **PURPOSE**

The purpose of the erosion and sediment control program is to lessen the impact to the aquatic environment caused by sediment leaving construction sites. The purpose of the stormwater management program is to reduce stream channel erosion, pollution, siltation, and local flooding caused by land use changes associated with urbanization. This is accomplished by maintaining, after development, the pre-development runoff conditions through the use of various stormwater management measures. Any construction activity in Maryland that disturbs 5,000 square feet or more of land or results in 100 cubic yards or more of earth movement must have approved erosion and sediment control and stormwater management plans before construction begins.

#### **AUTHORITY**

FEDERAL: Clean Water Act, Section 402; 40 CFR

STATE: Environment Article, Title 4, Subtitle 1 and Subtitle 2; COMAR 26.17

#### **PROCESS**

Inspection and enforcement authority for erosion and sediment control has been delegated or partially delegated to 14 counties and ten municipalities by the state. MDE inspections cover construction projects in non-delegated counties and state and federal projects. This report does not reflect the erosion and sediment control inspection and enforcement activities conducted by local governments in delegated jurisdictions.

Stormwater management approval for all non-state and non-federal projects is, by law, the responsibility of each local jurisdiction. MDE inspections of stormwater management facilities are performed for state and federal projects only. Upon issuance of a permit or authorization (whether by WMA's Sediment and Stormwater Plan Review Division or by the local sediment control approval authority), the file is transferred to the Compliance Program where an inspection priority is assigned. Routine inspections are scheduled based on the assigned priority and as workload allows. Facilities are not given advance notification of routine inspections. At any time during the process, the inspection frequency can be adjusted as site conditions or workload demand.

Stormwater and Erosion and Sediment Control are combined into one table because at the State level these projects are reviewed and approved as one project. For state and federal projects, plan review is performed by the Sediment, Stormwater and Dam Safety Program and inspections are performed by the Compliance Program. All other projects are reviewed at the local level, and if delegated, inspected at the local level. In non-delegated jurisdictions, the MDE Compliance Program performs sediment control inspections.

Inspections performed related to an NPDES permit for the discharge of stormwater associated with construction activities are included in the table for surface water discharges.

#### SUCCESSES/CHALLENGES

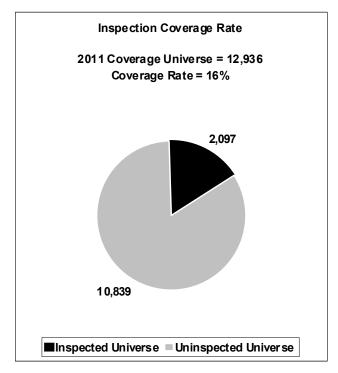
Although inspections remain a priority, the WMA Compliance Program does not have a sufficient number of inspectors to meet the goal of inspecting every active construction site disturbing 5,000 square feet or more every two weeks. WMA focuses on large construction sites in non-delegated areas and State and federal projects, along with sites brought to MDE's attention by citizen complaints.

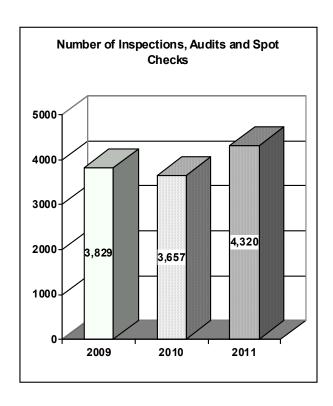
As in previous years, the Allegany, Caroline, Frederick, and Queen Anne's Soil Conservation Districts continued to perform Erosion and Sediment Control inspections on behalf of MDE as part of a Memorandum of Understanding. These districts are independent of county government. The numbers of sites inspected and numbers of inspections on the following table only include MDE's activities.

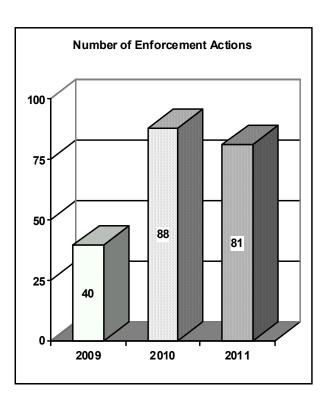
# Stormwater Management and Erosion & Sediment Control for Construction Activity

Performance Measure			TOTAL	
PERMITTED SITES/FACILITIES				
Number of approvals issued			301	
Number of approvals in effect at fiscal year end			12,936	
INSPECTIONS				
Number of sites inspected ("inspected" defined as at the			2,097	
Number of sites audited but not inspected (places whe	re MDE reviewed	d submittals but	0	
did not go to the site)				
Number of sites evaluated for compliance (sum of the #11 on the prior charts)	two measures ab	ove, same as	2,097	
Number of inspections, spot checks (captures number	of compliance ac	rtivities at sites)	4,320	
Number of audits (captures number of reviews of file/s			0	
Number of inspections, audits, spot checks (sum of the			4,320	
COMPLIANCE PROFILE			1 1,020	
Number of inspected sites/facilities with significant viol	ations		97	
Percentage of inspected sites/facilities with significant			5%	
Inspection coverage rate (number of sites inspected/co		)	16%	
SIGNIFICANT VIOLATIONS				
Number of significant violations involving environmental or health impact			94	
Number of significant violations based on technical/preventative deficiencies				
Number of significant violations carried over awaiting disposition from previous fiscal			73	
year				
Total number of significant violations (sum of the three	measures above	<del>e</del> )	170	
DISPOSITION OF SIGNIFICANT VIOLATIONS				
Resolved			77	
Ongoing			93	
ENFORCEMENT ACTIONS				
Number of compliance assistance rendered			65	
	Administrative	Civil/Judicial	Total	
Number of show cause, remedial, corrective actions				
issued	5	2	7	
Number of stop work orders	4	0	<u>4</u> 0	
Number of injunctions obtained 0 0				
Number of penalty and other enforcement actions 67 3				
Number of referrals to Attorney General for possible cr	iminal action		0	
PENALTIES				
Amount of administrative or civil penalties obtained (\$	collected in FY)		\$716,666	

# Stormwater Management and Erosion & Sediment Control for Construction Activity







#### **PURPOSE**

The Water Supply Program (WSP) ensures that public drinking water systems provide safe and adequate water to all present and future users in Maryland, and that appropriate usage, planning and conservation policies are implemented for Maryland water resources. This is accomplished through permitting and proper planning for water withdrawal, protection of water resources that are used for public water supplies, oversight and enforcement of routine water quality monitoring at public water systems and of water appropriation permits, regular on-site inspections of water systems, and prompt response to water supply emergencies.

#### **Community and Non-Transient Non-Community Water Systems**

The WSP regulates approximately 1,023 community water systems (including municipal, county, and private systems), and non-transient non-community water systems (such as businesses, schools, and day cares). These systems must test for over 90 regulated contaminants on schedules that vary based on water source, system type and population.

#### **Transient Non-Community Water Systems**

In addition, there are approximately 2,428 transient non-community water systems (such as rest areas, gas stations, campgrounds, and restaurants) throughout the State, which are regularly inspected and tested for acute contaminants. Since 1998, the WSP has negotiated delegation agreements with county health departments for enforcement of Safe Drinking Water Act regulations for the transient non-community water systems. Twenty of the twenty-three counties have accepted delegated authority for these systems, and the WSP has direct enforcement of the requirements for the three remaining counties.

#### **Drinking Water Laboratory Certification**

This program is mandated by the federal Safe Drinking Water Act. The certification assures the reliability of the compliance samples that are analyzed by State-certified laboratories. Providing high quality data is critical to evaluating public water systems, and is the primary means of evaluating the safety of the drinking water supplies. The laboratories that are certified under this program are also used by the county health departments and other MDE programs to analyze drinking water for private wells, and for investigation of underground storage tanks.

#### **Water Appropriation Permits**

The Water Supply Program (WSP) regulates water withdrawals and diversions through a permitting program to conserve and protect the State's water resources. Water uses for most purposes, including public supply, business, institutional, subdivision of land, or agricultural use over 10,000 gallons per day (gpd), require a permit. Since FY 2007, groundwater uses of 5,000 gpd or less are exempted from obtaining a permit unless the use is by a community water system, or within a designated water management strategy area. Uses for fire fighting and domestic purposes are also exempt. Maryland regulates

water use under the doctrine of reasonable use. This means that the quantity must be reasonable for its intended purpose, the impacts of the use to the natural resources of the State must not be unreasonable, and the impacts to other users must not be unreasonable.

#### **AUTHORITY**

#### **Public Drinking Water**

FEDERAL: Safe Drinking Water Act; 40 CFR 141, 142, and 143

STATE: Environment Article, Title 9, Subtitles 2, 4, and 5; COMAR 26.04.01 and

COMAR 26.08.05

**Water Appropriation Permits** 

STATE: Environment Article, Title 5, Subtitles 2, 3, 4, and 5; COMAR 26.17.06 and

COMAR 26.17.07

#### **PROCESS**

#### **Community and Non-Transient Non-Community Water Systems**

WSP uses a multiple-barrier approach to ensure that public drinking water systems in Maryland are able to provide a safe and adequate supply of drinking water to their consumers. This approach includes review and approval of potential water sources and construction plans; evaluation of a new system's technical, financial, and managerial capacity; regular inspection of drinking water facilities; close oversight of water quality monitoring; and ensuring licensed operators are employed by water treatment facilities.

Public water systems are required to conduct routine sampling of their water quality. The type and frequency of analysis depend on the type of system, its population, and the vulnerability of its water supply. WSP reviews and evaluates more than 35,000 water quality records each year. Emphasis is placed on preventive measures to avoid serious public health incidents. The vast majority of drinking water violations are corrected immediately, or following the issuance of a Notice of Violation. Systems must notify their consumers when violations of the Safe Drinking Water Act occur.

#### **Transient Non-Community Water Systems**

Twenty of the twenty-three counties are delegated responsibilities for transient non-community water systems. These counties conduct routine inspections and ensure that systems are monitored in accordance with State and federal requirements. Transient non-community water systems are required to monitor only for contaminants that have acute health risks, including nitrate, nitrite, and bacteria. In addition to providing funding, the WSP provides guidance and training to the counties, and reports only health-based violations to EPA for these systems. WSP is in the process of concluding statewide evaluations to determine whether groundwater systems are under the influence of surface water. Groundwater systems under the influence of surface water will be required to meet federally-mandated treatment technique requirements, and to conduct additional bacteria monitoring as well as turbidity monitoring. In addition, the WSP performs audits of the delegated counties every three years in order to determine that regulations are implemented appropriately.

WSP directly oversees implementation of federal and State regulations for 108 transient non-community water systems in Prince George's, Montgomery and Wicomico counties since these three counties declined acceptance of the delegated program and funding assistance. Oversight includes regular inspections of the systems, enforcement of monitoring requirements, and follow-up to occasional water quality problems that arise. WSP reports technical and health-based violations to EPA on a quarterly basis for these systems.

#### **Drinking Water Laboratory Certification**

The Water Supply Program regulates approximately 109 in-State and out-of-State laboratories that analyze compliance samples for public drinking water systems. All instate laboratories are inspected on a triennial basis. In addition, laboratories submit an annual renewal package that includes performance testing results for each approved test method, standard operating procedures, and method detection limit studies. An inspection is required before a laboratory receives certification, or approval for a new test method.

#### **Water Appropriation Permits**

The Water Appropriation Permit review process is complex, and requires significant technical evaluation. Applicants are required to submit the results of aquifer tests and hydrogeologic investigations for review by program geologists. In some cases, the WSP may determine that the requested withdrawal could have a major impact on the water resource and/or other users in the vicinity and, as a result, the permit may be denied or modified. Technical assistance is provided to correct reporting errors, and permits are revised as needed.

In FY 2011, 643 water appropriation permits were issued. At the end of the FY 2011, 11,107 permits were in effect. Inspection of regulated permittees is not a statutory requirement of this program.

#### SUCCESSES/CHALLENGES

#### **Community and Nontransient Noncommunity Water Systems**

In FY 2010, several major regulations were adopted and implemented including the Long Term 2 Surface Water Treatment Rule, and the Stage 2 Disinfection Byproduct Rule. In FY 2011, the Lead and Copper Rule and the Ground Water Rule were adopted. The regulations are complex, and, in many case, result in increased monitoring and capital costs. Training on new federal regulations was provided to new water systems throughout the State in order to assist them with meeting the compliance requirements of the rules. However, even with the increased assistance from the WSP, the enforcement of new regulations resulted in an increase in the number of technical violations that were incurred by community and non-transient non-community water systems during the fiscal year. Compliance with the new regulations is expected to improve as water systems become familiar with the new requirements.

In FY 2012, the WSP will begin the process of replacing the current ORACLE database that was developed in the early 1990s with SDWIS-State, a nationwide database that is used by over 40 states in the country. The new system will be modified to incorporate activities that are available in the program's existing system.

#### **Water Appropriation Permits**

During FY 2012, the Department expects to award a contract to build a new database management system that will replace the existing legacy system, which is not capable of maintaining data related to enforcement actions. The new system should be functional in 2014.

The Water Supply Program is in the process of revising its regulations to incorporate statutory changes that (1) allow uses of 5,000 gallons per day or less to obtain a waiver from the permit requirements, and (2) provide the Department with the authority to allocate additional water to public water systems that serve municipal corporations or priority funding areas in Frederick, Carroll, and Washington Counties that were established prior to January 1, 2000. The revised regulations will be proposed in 2012.

The Water Supply Program is conducting water supply studies in both the Coastal Plain and Fractured Rock areas of the State, with assistance from the Maryland Geological Survey and the U.S. Geological Survey. These studies will improve the understanding of water availability in Maryland, and identify the potential impacts of withdrawals on the resource, aquatic habitat, and other water users. The studies began in 2006 and are scheduled to be completed in 2014.

#### **Laboratory Certification**

The Environmental Protection Agency (EPA) requires that all certification officers are trained and certified by EPA. The training is offered annually in Cincinnati, Ohio, and attendance requires approval from EPA. WSP has two certification officers that are fully trained, and has a plan to train existing staff to assist intermittently, as necessary. In FY 2011, the Laboratory Certification Program was not able to complete all triennial inspections for the year. Maryland has the highest ratio of laboratories per certification officer in the region. In order to address the staffing needs for this activity, a third party contract will be established to provide support in FY 2012 and FY 2013.

#### **Enforcement**

The WSP continued issuing notices of violation for permit requirements, including failure to obtain or renew a permit, failure to report water usage as required by the permit, failure to maintain adequate flow-bys or meet other special conditions, and for withdrawing more water than is allowed under the permit. In FY 2011, the WSP enforcement section issued 64 formal notices of violation, two consent agreements, and \$8,380 was collected from five water systems with significant violations.

#### **Community and Non-Transient Non-Community Water Systems**

Performance Measure			TOTAL
PERMITTED SITES/FACILITIES			
Number of permits/licenses issued			0
Number of permits/licenses in effect at fiscal year end			0
OTHER REGULATED SITES/FACILITIES			
Number of community and non-transient non-communi	ty water systems	*	1,023
INSPECTION	NS		
Number of sites inspected ("inspected" defined as at the	e site)		680
Number of sites audited but not inspected (places whe	re MDE reviewed	submittals but	
did not go to the site)			343
Number of sites evaluated for compliance (sum of the t	wo measures ab	ove, same as	
#11 on the prior charts)			1,023
Number of inspections, spot checks (captures number	of compliance ac	ctivities at sites)	680
Number of audits (captures number of reviews of file/si	ubmittals for com	pliance)	25,666
Number of inspections, audits, spot checks (sum of the	two measures a	lbove)	26,346
COMPLIANCE PROFILE			
Number of inspected sites/facilities with significant viola			14
Percentage of inspected sites/facilities with significant			2%
Inspection coverage rate (number of sites inspected/coverage universe) ***			66%
SIGNIFICANT VIOL			
Number of significant violations involving environmental or health impact			0
Number of significant violations based on technical/pre			0
Number of significant violations carried over awaiting disposition from previous fiscal			14
year			
Total number of significant violations (sum of the three measures above)			14
DISPOSITION OF SIGNIFICA	ANT VIOLATION	IS	
Resolved			9
Ongoing			5
ENFORCEMENT ACTIONS			
Number of compliance assistance rendered ****			1,023
	Administrative	Civil/Judicial	Total
Number of show cause, remedial, corrective actions			
issued	0	0	0
Number of stop work orders	0	0	0
Number of injunctions obtained	0	0	0
Number of penalty and other enforcement actions 540 0			540
Notices given to public by water systems under Section 9-410			161
Number of referrals to Attorney General for possible criminal action			0
PENALTIES  Amount of a designistrative or similar anothing obtained (f) collected in EV)			Ф0.000
Amount of administrative or civil penalties obtained (\$ collected in FY)			\$8,380

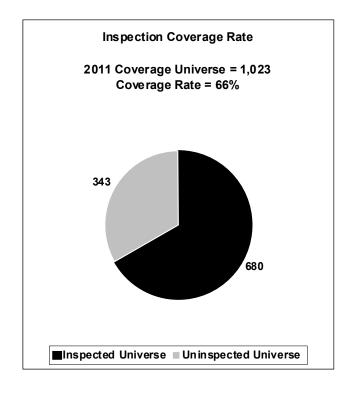
<sup>\*</sup> This number includes 473 community water systems and 549 non-transient non-community water systems.

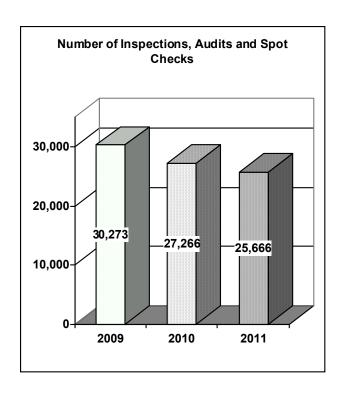
\*\* Number of sites in significant violation includes sites with violations carried over. MDE adopted a new policy for significant violations that was implemented in FY 2009. .

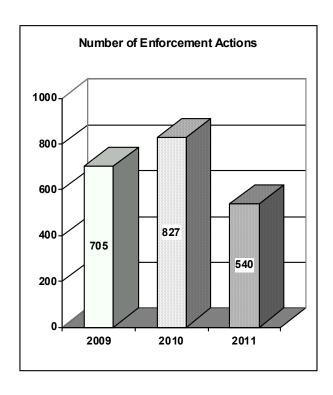
<sup>\*\*\*</sup> Coverage rate is computed by dividing the number of inspected systems by the total number of community and non-transient noncommunity water systems.

<sup>\*\*\*\*</sup> This number includes actions to inform public water systems of monitoring requirements under the Safe Drinking Water Act.

### Community and Nontransient Non-Community Water Systems







#### **Transient Non-Community Water Systems**

Performance Measure			TOTAL
PERMITTED SITES/FACILITIES			
Number of permits/licenses issued			N/A
Number of permits/licenses in effect at fiscal year end			N/A
OTHER REGULATED SITES/FACILITIES			
Number of transient non-community water systems			2,428
INSPECTION	IS		
Number of sites inspected ("inspected" defined as at the	e site)		431
Number of sites audited but not inspected (places whe	re MDE reviewed	d submittals but	1,813
did not go to the site)			
Number of sites evaluated for compliance (sum of the	two measures ab	ove, same as	2,244
#11 on the prior charts)			
Number of inspections, spot checks (captures number	of compliance ac	ctivities at sites)	431
Number of audits (captures number of reviews of file/s	ubmittals for com	pliance)	11,364
Number of inspections, audits, spot checks (sum of the	two measures a	ibove)	11,795
COMPLIANCE PROFILE			
Number of inspected sites/facilities with significant violations			0
Percentage of inspected sites/facilities with significant			0%
Inspection coverage rate (number of sites inspected/coverage universe) *			18%
SIGNIFICANT VIOLATIONS			
Number of significant violations involving environmental or health impact			0
Number of significant violations based on technical/pre			0
Number of significant violations carried over awaiting d	lisposition from p	revious fiscal	
year			5
Total number of significant violations (sum of the three			5
DISPOSITION OF SIGNIFICANT VIOLATIONS			
Resolved			2
Ongoing			3
ENFORCEMENT ACTIONS			1 -
Number of compliance assistance rendered	1		0
	Administrative	Civil/Judicial	Total
Number of show cause, remedial, corrective actions	_	_	_
issued	0	0	0
Number of stop work orders	0	0	0
Number of injunctions obtained	0	0	0
Number of penalty and other enforcement actions 265 0			265
Notices given to public by water systems under Section 9-410 **			105
Number of referrals to Attorney General for possible criminal action			0
PENALTIES TO THE PENALT			0.0
Amount of administrative or civil penalties obtained (\$ collected in FY)			\$0

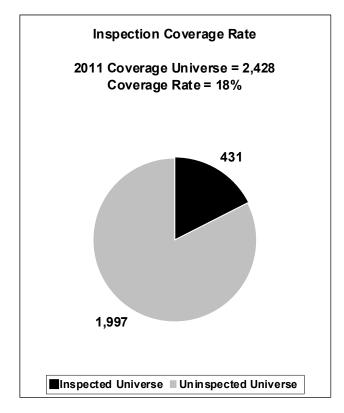
<sup>\*</sup> Coverage rate is computed by dividing the number of inspected systems by the total number of transient non-community water

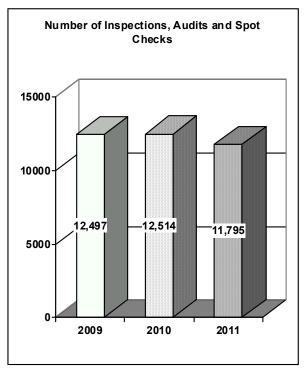
systems.

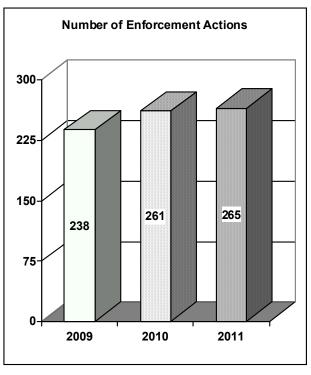
\*\* This number includes actions to inform public water systems of monitoring requirements under the Safe Drinking Water Act.

Note: MDE adopted a new policy for significant violations that was implemented in FY 2009.

# Water Supply Program Transient Non-Community Water Systems





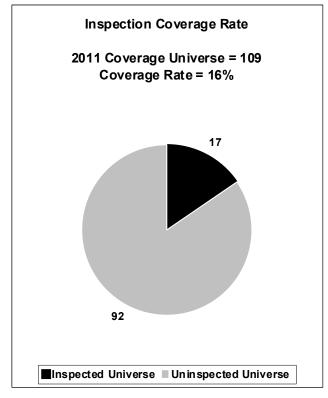


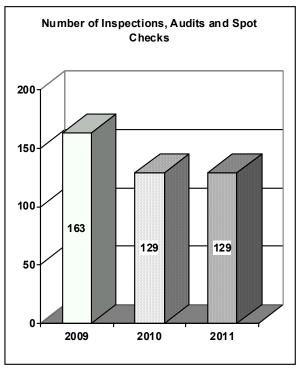
# Water Supply Program Drinking Water Laboratory Certification

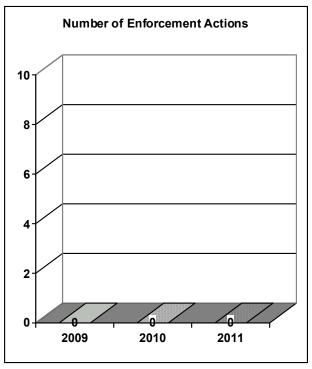
Performance Measure			TOTAL	
PERMITTED SITES/FACILITIES				
Number of permits/licenses issued			110	
Number of permits/licenses in effect at fiscal year end			109	
OTHER REGULATED SITES/FACILITIES				
Number of state-certified drinking water laboratories			109	
INSPECTIONS				
Number of sites inspected ("inspected" defined as at the			17	
Number of sites audited but not inspected (places whe did not go to the site)	re MDE reviewed	d submittals but	109	
Number of sites evaluated for compliance (sum of the #11 on the prior charts)	two measures ab	ove, same as	126	
Number of inspections, spot checks (captures number	of compliance ac	ctivities at sites)	19	
Number of audits (captures number of reviews of file/s			110	
Number of inspections, audits, spot checks (sum of the	e two measures a	bove)	129	
COMPLIANCE PROFILE		<u> </u>		
Number of inspected sites/facilities with significant viol	ations		0	
Percentage of inspected sites/facilities with significant	violations		0%	
Inspection coverage rate (number of sites inspected/co	overage universe	*	16%	
SIGNIFICANT VIOLATIONS				
Number of significant violations involving environmental or health impact			0	
Number of significant violations based on technical/pre	ventative deficie	ncies	0	
Number of significant violations carried over awaiting disposition from previous fiscal year			0	
Total number of significant violations (sum of the three measures above)			0	
DISPOSITION OF SIGNIFICANT VIOLATIONS				
Resolved			0	
Ongoing			0	
ENFORCEMENT ACTIONS				
Number of compliance assistance rendered			0	
	Administrative	Civil/Judicial	Total	
Number of show cause, remedial, corrective actions	0	0	0	
issued				
Number of stop work orders 0 0				
Number of injunctions obtained	0	0	0	
Number of penalty and other enforcement actions 0 0			0	
Notices given to public by water systems under Section 9-410			N/A	
Number of referrals to Attorney General for possible criminal action			0	
PENALTIES				
Amount of administrative or civil penalties obtained (\$	collected in FY)		\$0	

<sup>\*</sup> Coverage rate is computed by dividing the number of inspected systems by the total number of water quality laboratories.

**Drinking Water Laboratory Certification** 





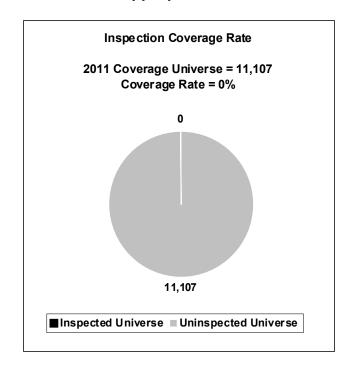


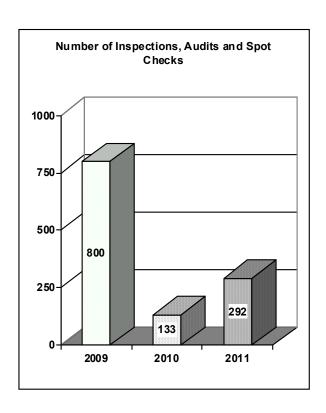
# Water Supply Program Water Appropriation Permits

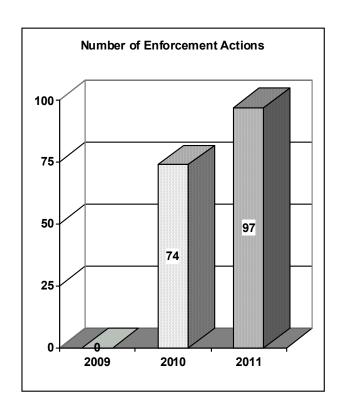
Performance Measure			TOTAL
PERMITTED SITES/FACILITIES			
Number of permits/licenses issued			643
Number of permits/licenses in effect at fiscal year end			11,107
OTHER REGULATED SITES/FACILITIES			
			N/A
INSPECTION	IS		
Number of sites inspected ("inspected" defined as at the	ie site)		0
Number of sites audited but not inspected (places whe	re MDE reviewed	d submittals but	
did not go to the site)			292
Number of sites evaluated for compliance (sum of the	two measures ab	ove, same as	
#11 on the prior charts)			292
Number of inspections, spot checks (captures number	of compliance ac	ctivities at sites)	0
Number of audits (captures number of reviews of file/s	ubmittals for com	pliance)	292
Number of inspections, audits, spot checks (sum of the	two measures a	ibove)	292
COMPLIANCE PROFILE*			
Number of inspected sites/facilities with significant violations	ations		0
Percentage of inspected sites/facilities with significant	violations		0%
Inspection coverage rate (number of sites inspected/coverage universe)			0%
SIGNIFICANT VIOL	.ATIONS		
Number of significant violations involving environmental or health impact			0
Number of significant violations based on technical/preventative deficiencies			0
Number of significant violations carried over awaiting disposition from previous fiscal			
year			0
Total number of significant violations (sum of the three measures above)			0
DISPOSITION OF SIGNIFICANT VIOLATIONS			
Resolved			0
Ongoing			0
ENFORCEMENT ACTIONS			
Number of compliance assistance rendered			5433
	Administrative	Civil/Judicial	Total
Number of show cause, remedial, corrective actions			
issued	0	0	0
Number of stop work orders	0	0	0
Number of injunctions obtained	0	0	0
Number of penalty and other enforcement actions 97 0			97
Notices given to public by water systems under Section 9-410			N/A
Number of referrals to Attorney General for possible criminal action			0
PENALTIES (2) (2) (3) (4) (4) (5) (6) (6) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7			
Amount of administrative or civil penalties obtained (\$ collected in FY)			\$0

<sup>\*</sup> This activity does not include inspections. Annual or semiannual reports are required for certain water appropriation permits.

# Water Supply Program Water Appropriation Permits







### **Waterway Construction – Dam Safety**

#### **PURPOSE**

The purpose of the Dam Safety Division is to ensure that dams and other impoundment structures are designed, constructed, operated, and maintained safely, in order to protect public safety. The Dam Safety Division issues waterway construction permits for new dams and ponds, as well as for modifications to existing water impoundments. In addition, the Dam Safety Division conducts safety inspections of existing dams, conducts construction inspections, and provides technical assistance to dam owners and local Soil Conservation Districts (SCDs).

Many dams in Maryland were constructed decades ago and are now showing signs of deterioration. In order to provide safe service, dams require frequent safety inspections, monitoring, maintenance, and rehabilitation. In addition to larger dams, thousands of smaller dams (typically under 20 feet high) were constructed decades ago with corrugated metal pipe spillways. Often constructed on farms that have since been developed into residential communities, many of these dams are now in poor condition and threaten the safety of residents who live in newer homes constructed downstream of them.

The Dam Safety Division, through its dam inspection, dam owner assistance, permitting, and enforcement activities, seeks to prevent dam failures and the resultant loss of life, property damage, and environmental impacts. Dam failures cause significant erosion of stream channels and sediment deposition in the channel and in the storage area behind the impoundment. In addition, dam failures can cause significant damage to wetlands and habitat, both aquatic and terrestrial, through the destructive force of the depth and velocity of the flood wave.

#### **AUTHORITY**

STATE: Environment Article, Title 5, Subtitle 5; COMAR 26.17.04

#### **PROCESS**

Upon issuance of a permit, copies of the approved plans and a copy of the Permit are forwarded to the Compliance Program. Dam Safety Division engineers conduct quality assurance inspections. The Compliance Program may inspect the site to determine whether construction has begun or to perform sediment control inspections at the request of the permitting division or in response to citizens' complaints.

Dams are classified into three categories according to the consequences of a potential failure:

- High Hazard: loss of life and significant property damage
- Significant Hazard: property/infrastructure damage
- Low Hazard: damage to floodplain and the dam itself

The inspection frequency is based on national guidelines and is responsive to the potential failure consequences as follows:

Hazard Class	Number in Category	Inspection Frequency	Sites Targeted/Year
High	72	Annually	72
Significant	103	Every 3 years	34
Low	238	Every 6 years	40
Total	413		146

In addition, the Division inspects sites with permits to construct new dams, reinspects existing dams when problems are found during the initial inspection, and inspects SCD ponds and Natural Resources Conservation Service dams.

Based upon the inspection findings, the Dam Safety Division may initiate enforcement actions, varying from a letter advising the owner to correct noted deficiencies up to declaring the dam unsafe and in need of repair with an order requiring repairs or other action be taken to ensure the safety of the dam.

MDE does not have the statutory authority to collect administrative or civil penalties for this program. However, the administration has statutory authority to collect criminal penalties.

#### SUCCESSES/CHALLENGES

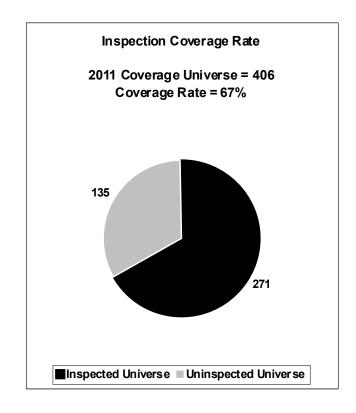
When the Dam Safety Division set its inspection targets at the start of FY 201, the Division was responsible for 526 dams. Some of these dams are currently breached and therefore not in operation; the remaining 413 dams are in operation. The Dam Safety Division inspects all high-hazard dams every year, and inspected 271 dams total in FY 2011.

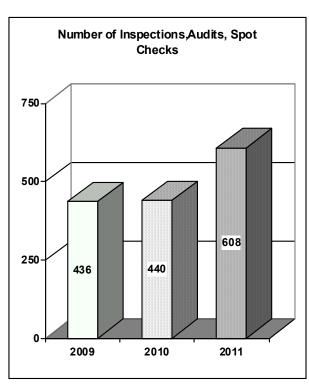
## **Waterway Construction – Dam Safety**

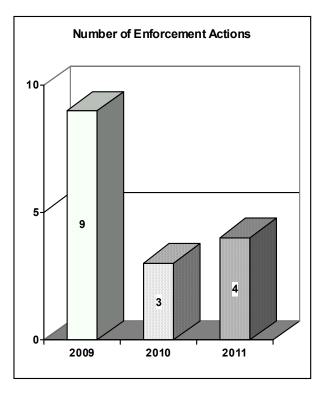
Performance Measure			TOTAL
PERMITTED SITES/FACILITIES			
Number of permits/licenses issued			22
Number of permits/licenses in effect at fiscal year end			567
OTHER REGULATED SITES/FACILITIES			
Dams in operation			406
INSPECTIONS			
Number of sites inspected ("inspected" defined as at the	e site)		271
Number of sites audited but not inspected (places whe	re MDE reviewed	d submittals but	
did not go to the site)			0
Number of sites evaluated for compliance (sum of the	wo measures ab	ove, same as	
#11 on the prior charts)			271
Number of inspections, spot checks (captures number	of compliance ac	ctivities at sites)	271
Number of audits (captures number of reviews of file/s	ubmittals for com	pliance)	337
Number of inspections, audits, spot checks (sum of the	two measures a	ibove)	608
COMPLIANCE PROFILE			
Number of inspected sites/facilities with significant violations			17
Percentage of inspected sites/facilities with significant	violations		6%
Inspection coverage rate (number of sites inspected/co	verage universe	)*	67%
SIGNIFICANT VIOLATIONS			
Number of significant violations involving environmental or health impact			
Number of significant violations based on technical/preventative deficiencies			
Number of significant violations carried over awaiting d	isposition from p	revious fiscal	
year			6
Total number of significant violations (sum of the three	measures above	<del>e</del> )	13
DISPOSITION OF SIGNIFICANT VIOLATIONS			
Resolved			3
Ongoing			10
ENFORCEMENT ACTIONS			
Number of compliance assistance rendered			142
	Administrative	Civil/Judicial	Total
Number of show cause, remedial, corrective actions			
issued	4	0	<u>4</u> 0
Number of stop work orders 0 0			
Number of injunctions obtained 0 0			
Number of penalty and other enforcement actions 0 0			
Number of referrals to Attorney General for possible criminal action			
PENALTIES			
Amount of administrative or civil penalties obtained (\$ collected in FY)			\$0

<sup>\*</sup> Coverage rate above is computed as the total number of sites inspected and dividing that by the dams in operation. See narrative for more detail about the Dam Safety Division's approach to inspection frequency.

# **Waterway Construction – Dam Safety**







# Wetlands and Waterways Non-Tidal and Floodplain

#### **PURPOSE**

The goal of the Non-Tidal Wetlands Protection Act is to attain no net loss in non-tidal wetland acreage and to strive for a net resource gain in non-tidal wetlands over present conditions. One of the mechanisms established by the Act to accomplish this goal is a comprehensive regulatory program that targets all activities that have a potential to adversely impact non-tidal wetlands. These activities include the following:

- Removal, excavation, or dredging of soil or materials of any kind;
- Changing existing drainage or flood retention characteristics;
- Disturbance of the water level or water table by drainage, impoundment, or other means;
- Filling, dumping, discharging of material, driving piles, or placing obstructions;
- Grading or removal of material that would alter existing topography; and
- Destruction or removal of plant life.

Through its permit application review process, MDE first prevents wetland loss by requiring the applicant to evaluate project designs that will avoid wetland impacts. Based on this evaluation of alternatives, if MDE finds that impacts are unavoidable, the applicant is required to utilize the project design that will minimize the wetland impacts and provide appropriate mitigation for those impacts.

Mitigation, required for all unavoidable impacts that are authorized by MDE, means that the applicant must replace lost wetland acreage, function and value. This is usually accomplished by requiring the creation of new wetlands, restoration of relic wetlands, enhancement of degraded wetlands or some acceptable combination. MDE may also accept monetary compensation if it is determined that mitigation for non-tidal wetland losses is not a feasible alternative. For example, monetary compensation may be accepted if the size of the non-tidal wetland loss is less than one acre and a suitable mitigation site cannot be identified within the impacted watershed. The payment is deposited into the State's Non-Tidal Wetlands Compensation Fund and used by the State to construct non-tidal wetlands throughout Maryland.

In addition, MDE is also responsible for addressing potential impacts to the State's non-tidal waterways. Authorization is required to conduct any activity that changes the course, current or cross-section of a non-tidal stream or body of water, including the 100-year floodplain. Waterway construction activities are evaluated to ensure that they do not create flooding on upstream or downstream properties. Such activities are additionally evaluated to ensure protection of aquatic resources, including the maintenance of fish habitat and migration, from degradation.

#### **AUTHORITY**

STATE: Environment Article, Title 5, Subtitles 5 and 9; COMAR 26.17 and 26.23

### **PROCESS**

Upon issuance of a permit, license, or authorization the file is transferred to the Compliance Program where an inspection priority is assigned. The inspectors then schedule routine inspections of the facilities adhering to the assigned priority as workload allows. Facilities are not given advance notification of routine inspections. At any time during the process, the inspection frequency can be adjusted as site conditions or workload demand. Inspections are performed to verify that the projects are in accordance with the authorization. Because a site may involve non-tidal wetland and/or 100-year floodplain impacts, inspections evaluate whether all the resultant construction impacts are in accordance with the permits. This may involve identifying or verifying a non-tidal wetland boundary and documenting findings in the inspection report. At sites where there may be 100-year floodplain impacts, it may be necessary to determine the floodplain boundary before project compliance can be determined.

MDE does not have the statutory authority to collect administrative penalties for this program.

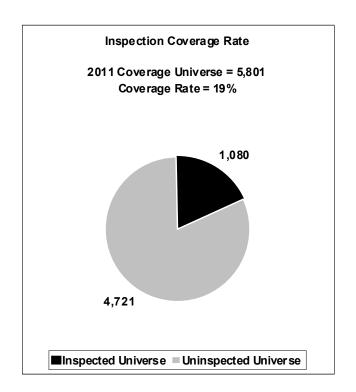
#### SUCCESSES/CHALLENGES

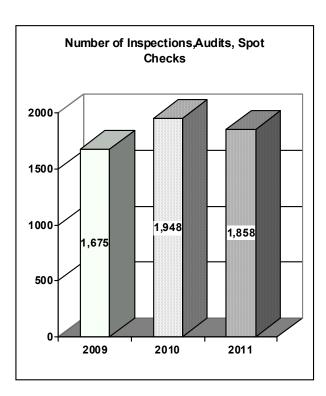
WMA continues to inspect and take enforcement actions to address violations impacting non-tidal wetlands and waterways. WMA is currently pursuing a large number of enforcement cases involving nontidal wetlands through referrals to the Attorney General's Office, many as a result of investigation of citizen complaints. A challenge is the limited number of WMA inspectors, enforcement staff, and attorneys to handle legal actions.

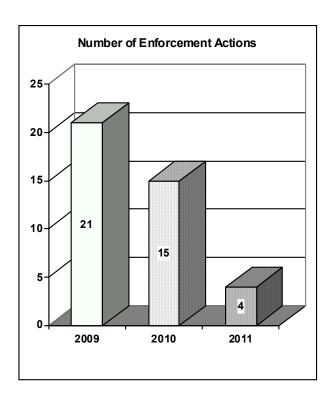
## Wetlands and Waterways - Non-Tidal and Floodplain

Performance Measure						
PERMITTED SITES/FACILITIES						
Number of permits/licenses issued			947			
Number of permits/licenses in effect at fiscal year end			5,801			
INSPECTIONS						
Number of sites inspected ("inspected" defined as at the	e site)		1,080			
Number of sites audited but not inspected (places whe	re MDE reviewed	d submittals but				
did not go to the site)			0			
Number of sites evaluated for compliance (sum of the	two measures ab	ove, same as				
#11 on the prior charts)			1,080			
Number of inspections, spot checks (captures number						
Number of audits (captures number of reviews of file/s			0			
Number of inspections, audits, spot checks (sum of the	two measures a	ibove)	1,858			
COMPLIANCE PROFILE						
Number of inspected sites/facilities with significant violations			24			
Percentage of inspected sites/facilities with significant			2%			
Inspection coverage rate (number of sites inspected/co	verage universe	)	19%			
SIGNIFICANT VIOLATIONS						
Number of significant violations involving environmenta			24			
Number of significant violations based on technical/pre			0			
Number of significant violations carried over awaiting d	lisposition from p	revious fiscal				
year			63			
Total number of significant violations (sum of the three	measures above	<del>)</del>	87			
DISPOSITION OF SIGNIFICANT VIOLATIONS						
Resolved			3			
Ongoing			84			
ENFORCEMENT ACTIONS			38			
Number of compliance assistance rendered						
Administrative Civil/Judicial						
Number of show cause, remedial, corrective actions						
issued 0 0						
Number of stop work orders 1 0						
Number of injunctions obtained 0 0						
Number of penalty and other enforcement actions 3 0						
Number of referrals to Attorney General for possible criminal action						
PENALTIES  Amount of administrative or civil penalties obtained (\$ collected in FY)						
Amount of administrative or civil penalties obtained (\$ collected in FY)						

# Wetlands and Waterways – Non-Tidal and Floodplain







### Wetlands - Tidal

### **PURPOSE**

Tidal wetlands are open water and vegetated estuarine systems affected by the rise and fall of the tide. In 1970, the Maryland General Assembly recognized that many tidal wetlands had been lost or despoiled throughout the State by unregulated activities such as dredging, dumping and filling, and that remaining tidal wetlands were in jeopardy. The Wetlands and Riparian Rights Act established a comprehensive plan to restrict and regulate activities conducted in tidal wetlands in order to preserve and protect them.

Prior to enactment of the Wetlands and Riparian Rights Act, over 1,000 acres of wetlands were being destroyed throughout tidewater Maryland every year. Today, through its regulatory program, MDE strives for a net resource gain over present conditions. Tidal wetlands are managed to provide reasonable use while furnishing essential resource protection. Licenses are issued for activities conducted in State wetlands by the Maryland Board of Public Works, based on recommendations from MDE. Permits are issued directly by MDE for activities conducted in private wetlands. A license or permit must be obtained before a person dredges, fills or otherwise alters a tidal wetland.

The following projects require authorization from MDE if conducted in tidal wetlands: dredging or filling; shoreline protection projects, including marsh creation, stone revetments and bulkheads; piers; boat ramps; jetties, groins and breakwaters; cable crossings; storm drain systems; and similar structures. The regulatory process for tidal wetlands is similar to that described for non-tidal wetlands and waterways. Applications are evaluated to insure that appropriate steps are taken to first avoid, and then minimize impacts to tidal wetlands. Mitigation is required for unavoidable impacts, with the amount of mitigation based on resources impacted; type of mitigation proposed; and location of mitigation. In-kind and on-site mitigation is preferred and required wherever appropriate site conditions exist.

### **AUTHORITY**

STATE: Environmental Article Title 16; Subtitle 2; COMAR 26.24

### **PROCESS**

Upon issuance of a license/permit/authorization, the file is transferred to the Compliance Program where an inspection priority is assigned. The inspectors then schedule routine inspections of the facilities adhering to the assigned priority as workload allows. Facilities are not given advance notification of routine inspections. At any time during the process, the inspection frequency can be adjusted as site conditions or workload demand. Inspections typically verify that the work being performed is in accordance with the work authorized and that all license or permit conditions are in compliance.

MDE does not have the statutory authority to collect administrative penalties for this program.

#### SUCCESSES/CHALLENGES

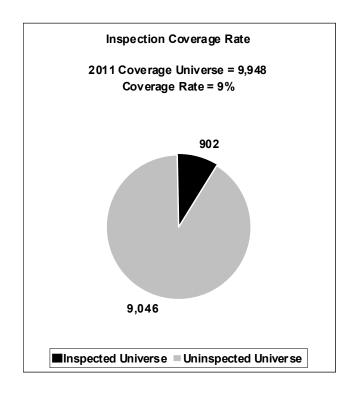
WMA actively worked in close cooperation with the Attorney General's Office to resolve numerous cases involving unauthorized impacts to tidal wetlands. Many of the cases are developed as the result of citizen complaints about pier extensions, adding boat lifts or boat houses, or building or extending bulkheads.

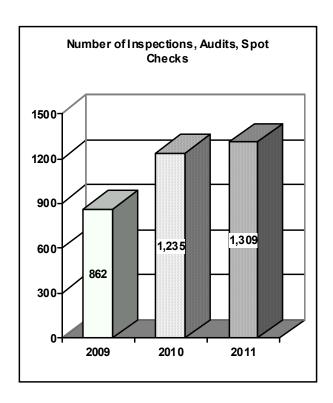
WMA is responding to a large number of citizen complaints in certain areas of the State to identify the majority of tidal wetlands violations through on-site inspections. Development of improved access to regular aerial photography of tidal coastlines with sufficient staff to review the information to identify work underway that has not been approved by MDE could help identify many other sites in violation. The on-site investigation and enforcement process is impacted by the limited number of inspectors, enforcement staff, and attorneys available to devote to tidal wetlands actions, and many cases will require significant time from identification to conclusion if a court action is needed.

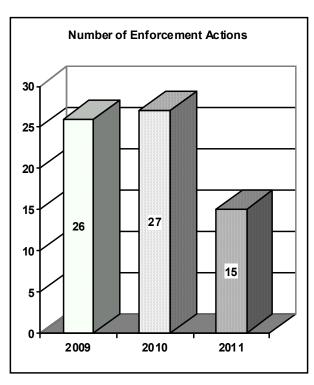
### Wetlands - Tidal

Performance Measure						
PERMITTED SITES/FACILITIES						
Number of permits/licenses issued						
Number of permits/licenses in effect at fiscal year of	end		9,948			
INSPECTIONS						
Number of sites inspected ("inspected" defined as	at the site)		902			
Number of sites audited but not inspected (places	where MDE rev	viewed				
submittals but did not go to the site)			0			
Number of sites evaluated for compliance (sum of	the two measu	res above,				
same as #11 on the prior charts)			902			
Number of inspections, spot checks (captures num	ber of complia	nce activities				
at sites)			1,309			
Number of audits (captures number of reviews of fi			0			
Number of inspections, audits, spot checks (sum o	f the two meas	ures above)	1,309			
COMPLIANCE PROFILE						
Number of inspected sites/facilities with significant			45 5%			
Percentage of inspected sites/facilities with significant violations						
Inspection coverage rate (number of sites inspecte	d/coverage un	verse)	9%			
SIGNIFICANT VIOLATIONS						
Number of significant violations involving environm			45			
Number of significant violations based on technical			0			
Number of significant violations carried over awaiting	ng disposition t	rom previous	0=			
fiscal year			95 140			
Total number of significant violations (sum of the three measures above)						
DISPOSITION OF SIGNIFICANT VIOLATIONS						
Resolved			15			
Ongoing			125			
ENFORCEMENT ACTIONS			15			
Number of compliance assistance rendered						
Administrative Civil/Judicial						
Number of show cause, remedial, corrective actions issued 1 1						
Number of stop work orders 0 0						
Number of injunctions obtained 0 0						
Number of penalty and other enforcement actions 13 0						
Number of referrals to Attorney General for possible criminal action						
PENALTIES						
Amount of administrative or civil penalties obtained (\$ collected in FY)						

### Wetlands - Tidal







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## OFFICE OF BUDGET AND FINANCE

### **Water Supply and Sewerage Construction**

### **PURPOSE**

Adequate water and sewer infrastructure is essential to public health and water quality protection. Water and sewerage construction permits help ensure that projects for water and sewerage are designed and constructed in accordance with sound engineering principles and comply with the State design guidelines to protect water quality and public health. These permits are required before installing, extending or modifying community water supply and/or sewerage systems including treatment plants, pumping stations and major water mains and sanitary sewers greater than 15 inches in diameter. These permits also help to ensure compliance with local comprehensive land use and water and sewerage plans and are supportive of community revitalization and land redevelopment.

### **AUTHORITY**

STATE: Environment Article, Title 9, Subtitle 2, COMAR 26.03.12

#### **PROCESS**

<u>Pre-approval</u>: The applicant must show that the proposed water or sewerage facility is included in the current county water and sewerage plans, has a valid NPDES discharge permit (if applicable), and will be operated either publicly or privately under a financial management plan.

<u>Post-approval:</u> The project must be constructed in accordance with the approved plans and specifications. Staff engineers perform inspections to verify the facility is constructed to the approved design and/or the permittee submits "as built" plans or certification that the project was built in accordance with original plans as approved by MDE. Other approvals associated with the construction (i.e. sediment control, wetlands, etc.) are inspected under those media and by those inspectors. This program does not have authority to pursue traditional enforcement actions. For projects where MDE is providing funding, construction violations would necessitate the return of state funds by the local jurisdiction. If a construction violation were to go unnoticed, the eventual result would be the failure of the facility to meet its discharge permit requirements or other performance requirements. At that time, traditional enforcement tools available under the discharge permit program would be utilized.

There is no correlation between the number of permits issued and the number of sites inspected because inspections are performed only at active construction sites for projects being financed by MDE. Once construction has begun these funded projects are inspected on a routine basis through completion.

### SUCCESSES/CHALLENGES

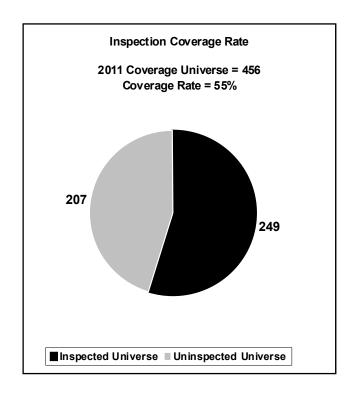
Over the past year the activity numbers have remained fairly consistent with the previous years' activities; the program is on target with its goals. The number of inspections performed is a function of the number of active construction projects being financed by MDE. MDE monitors all projects for which State financial assistance is being provided. Accordingly, the annual number of inspections will vary as the number of financed projects initiate and complete construction.

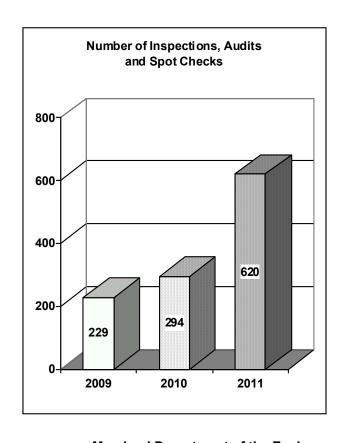
## **Water Supply and Sewerage Construction**

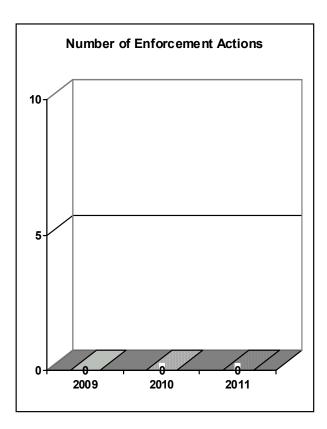
Performance Measu	re		TOTAL			
PERMITTED SITES/FACILITIES						
Number of permits/licenses issued						
Number of permits/licenses in effect at fiscal year end						
INSPECTIONS						
Number of sites inspected ("inspected" defined as at the	ne site)		249			
Number of sites audited but not inspected (places whe	re MDE reviewed	d submittals but				
did not go to the site)			0			
Number of sites evaluated for compliance (sum of the	two measures ah	one same as	0			
#11 on the prior charts)	iwo measures ac	ove, same as	249			
Number of inspections, spot checks (captures number	of compliance ad	ctivities at sites)	620			
Number of audits (captures number of reviews of file/s			0			
Number of inspections, audits, spot checks (sum of the			620			
COMPLIANCE PROFILE			1 3 3			
Number of inspected sites/facilities with significant violations						
% of inspected sites/facilities with significant violations						
Inspection coverage rate (number of sites inspected/coverage universe)						
SIGNIFICANT VIOLATIONS						
Number of significant violations involving environmental or health impact						
Number of significant violations based on technical/preventative deficiencies						
Number of significant violations carried over awaiting of	lisposition from p	revious fiscal				
year			0			
Total number of significant violations (sum of the three	measures above	e)	0			
DISPOSITION OF SIGNIFICANT VIOLATIONS						
Resolved			0			
Ongoing			0			
ENFORCEMENT ACTIONS*						
Number of compliance assistance rendered						
Administrative Civil/Judicial						
Number of show cause, remedial, corrective actions						
issued 0 0						
Number of stop work orders 0 0						
Number of injunctions obtained 0 0						
Number of penalty and other enforcement actions 0 0						
Number of referrals to Attorney General for possible criminal action						
PENALTIES  Appropriate (and principle of the propriate of						
Amount of administrative or civil penalties obtained (\$ collected in FY)						

<sup>\*</sup> Program does not have direct legal authority to pursue traditional enforcement actions for violations. It may require the return of State funding if significant problems arise. MDE may indirectly use its general water pollution authority if a constructed facility violates the law.

## **Water Supply and Sewerage Construction**







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# OFFICE OF THE ATTORNEY GENERAL ENVIRONMENTAL CRIMES UNIT

# **Environmental Crimes Unit Executive Summary**

The Environmental Crimes Unit (ECU) of the Criminal Division of the Maryland Attorney General's Office investigates and prosecutes environmental crimes in Maryland. During FY 2011, the ECU opened thirty-seven in-depth criminal investigation cases. ECU filed charges in thirty-two of the cases opened. Of the thirty-seven cases, seventeen were the result of referrals from MDE administrators. Thirty-two prosecutions were completed in the state courts during the fiscal year, resulting in jail terms totaling eighteen years and nine months, probation terms totaling forty-one years and four months and imposed fines totaling \$178,523.90. Courts additionally ordered community work service and other penalties. Additionally, there were numerous calls or requests for Investigations which were investigated and reviewed without opening a full scale criminal investigation. This can occur when there is insufficient information available at the time for the unit to justify opening a full scale investigation, when the matter can be easily resolved, or when a referral is made to another, more appropriate agency to handle.

### **Environmental Crimes Unit**

### **PURPOSE**

The Attorney General's Environmental Crimes Unit (ECU) investigates and prosecutes environmental crimes in Maryland. ECU is a criminal investigation and prosecution unit under the direction of the Criminal Division of the Attorney General's Office. ECU utilizes the prosecutorial authority of the Attorney General and also, in part, the investigative skills and law enforcement authority of the Maryland State Police and local police departments to investigate environmental violations. When appropriate, ECU files criminal charges against both corporate and individual offenders. Criminal enforcement is an effective and necessary tool in the compliance effort because it ensures that the offenders are subjected to criminal sanctions. This is important to protect public health and ensure a level playing field for those that do comply with Maryland's environmental laws. Criminal investigations and prosecutions may be pursued in circumstances such as when repeated unsuccessful civil actions have been attempted, or when the offenses are particularly significant or involve immediate danger to the environment. Criminal enforcement is used whenever the prospect of imprisonment and/or being stigmatized by a criminal conviction is deemed a necessary tool to protect health and the quality of Maryland's air, land and water resources.

ECU has jurisdiction throughout the State. ECU's statewide multi-media responsibilities are currently carried out with an extensively decreased staff that numbered only five at the end of the fiscal year. Staff included 1 investigator and 3 prosecutors, all of whom are directly involved in the criminal investigation and enforcement work of the unit throughout the State. The decreased staffing, most notably in the number of investigators assigned to the unit,

dramatically hampers the ability of ECU to function properly. Additionally, various outside police agencies which have historically had officers assigned to this division have taken all officers out of the unit completely because of their own budgetary constraints. It is only through complete and full investigation that criminal cases can be properly assessed and charges filed. The minimal investigative resources currently available to ECU translates directly to fewer viable cases investigated and charged.

#### **AUTHORITY**

STATE: The General Assembly, through the *Environment Article*, provides the Attorney General exclusive or concurrent authority to prosecute criminal violations stemming from investigations involving water pollution, air pollution and hazardous waste. The Attorney General also has authority under Article V. Section 3 of the Constitution of Maryland to investigate and prosecute other crimes as directed by the Governor. Historically the Governor has granted ECU continuing authority to investigate and prosecute violations of Maryland's Litter Control Law (§10-110 of the Criminal Law Article), and other broadly defined related offenses. ECU seeks the Governor's authorization to investigate and prosecute other violations not within the Environment Article on either a caseby-case basis, or based on specific areas of concern.

### **PROCESS**

ECU receives complaints about possible criminal activity from multiple sources: citizen complaints, other governmental and law enforcement agencies, the MDE Administrations, or from their own initiatives. Complaints are initially reviewed by an ECU prosecutor and investigator to assess the potential case. Cases deemed potentially appropriate for prosecution are subjected to full investigations for the purpose of gathering sufficient evidence to accurately assess whether the filing of criminal charges is warranted. If charges are filed or indictments returned by grand juries, ECU prosecutors and investigators work the case through trial and any appeals.

### SUCCESSES/CHALLENGES

In FY 2011, ECU successfully assisted MDE in furthering its compliance and enforcement goals by opening thirty-seven in-depth criminal cases and filing charges in thirty-two of those cases. Of these thirty-seven cases, seventeen were the result of referrals from MDE administrations. Thirty-two court prosecutions were completed during the fiscal year, resulting in jail terms totaling eighteen years and nine months, probation terms totaling forty-one years and four months and imposed fines totaling \$178,523.90, in addition to community work service and other penalties.

A continuing challenge is to restore investigative resources at least to levels experienced in the 1990's. Sworn law enforcement personnel with statewide authority assigned to this Unit have now been reduced by 100% from FY 1999. All police agencies have removed their officer positions previously assigned to the Unit. The lack of sworn police officers assigned to the division limits the actions which ECU can pursue.

There is a desire for the Unit to be able to be more proactive in the pursuit of industries and businesses, as well as individuals, who are often found repeating the same dangerous environmental crimes. In order to be able to be effective in this effort, and to bring sufficient results, it will be necessary to be fully staffed with both attorneys and investigators. The cases can be complex and involved, especially in a pro-active form, and without the proper staffing, results will be limited. The Unit continues to lack in staffing for both attorneys and investigators to achieve its goals.

**CHART 1** shows the number of investigations conducted by ECU during FY 2011 and the source of the complaints leading to the investigations.

	FY '11 – INVESTIGATIONS OPENED					
	SOURCE OF COMPLAINTS	INVESTIGATIONS OPENED				
М	ARMA	1				
D	LMA	16				
F	WMA	7				
	ERD	0				
_	MDE TOTAL	24				
0	THER SOURCES	13				
_	TOTAL	37				

The MDE administrations, ARMA, WAS, and WMA, have traditional enforcement programs. The Emergency Response Division often responds to environmental emergencies that may be caused by criminal activities.

**CHART 2** shows the number of cases prosecuted by ECU during FY 2011. The chart distinguishes between the number of cases where prosecution was initiated during FY 2011 and the number of cases concluded during FY 2011. In prosecuting criminal cases, it is not uncommon for charges in a case to be filed during one fiscal year and concluded during a subsequent fiscal year. Charges may also be formally filed in a different fiscal year than when the investigation was opened by ECU.

	FY '11 - PR0SECUTIONS						
	SOURCE OF COMPLAINTS	NO. OF CASES CONCLUDED					
	ARMA	1	1				
M	LMA	14	14				
D	WMA	5	5				
E	ERD	0	0				
	OS	0	0				
	MDE TOTAL 20		20				
OT	HER SOURCES	12					
	TOTAL	32	32				

**CHART 3** The Report of Enforcement Activities mandated by §1-301(d) of the Environment Article requires reporting of information for criminal cases prosecuted under specified subtitles of the Environment Article. The chart reflects all ECU activity for the fiscal year.

	EN	Е	N	EN	E	:N		EN		EN	1	CL		ı	NR		
FY '11 – YEARLY TOTALS	Title 1	Titl	le 4	Title 5	Tit	le 7		Title 8		Title	9	Title 10		Title 4		Title 8	TOTALS
	Subtitle 3	Subtitle 1	Subtitle 4	Subtitle 9	Subtitle 1	Subtitle 2	Subtitle 5	Subtitle 6	Subtitle 7	Subtitle 2	Subtitle 3	Subtitle 1	Subtitle 2	Subtitle 1	0 Subtitle 11	Subtitle 7	
* Number of Convictions Obtained	13	6	33	2	1	1	1	14	1	4	13	2	5	2	1	1	100
Imprisonment Time Ordered (Years)	3 Yrs 6 Mos	5 Mos	0	0	0	0	1 Yr	0	0	11 Yrs 1 Mos	1 Yr 3 Mos	0	0	0	0	0	18 Yrs 9 Mos
Imprisonment Time To Be Served	0	0	0	0	0	0	2 Mos	0	0	5 Yrs	3 Mos	0	0	0	0	0	5 Yrs 5 Mos
Probation Ordered (Years)	5 Yrs	3 Yrs 9 Mos	0	0	0	0	3 Yrs	0	0	15 Yrs	5 Yrs	4 Yrs 6 Mos	3	1 Yr 6 Mos	7 Mos	0	41 Yrs 4 Mos
Community Service Ordered (Hours)	800	140	0	0	0	0	0	0	0	0	100	90	0	0	0	0	1130 Hrs
Criminal Fines, Restitution & Costs Imposed	50,000	8,500	0	60,135	0	0	1,000	0	0	15,431.40	33,000	0	7,612.50	1,845	1,000	0	178,523.90
Criminal Fines, Restitution & Costs to be Paid	5,000	8,500	0	60,135	0	0	500	0	0	4,531.40	27,000	0	2,610	845	1,672.50	0	110,793.90

<sup>\*</sup> Note – A single case may involve charges from any number of the various titles.

#### **Environmental Article (EN)**

Title 1 - Enforcement

Title 4 – Water Management/Waste Mgmt.

Title 5 – Water Resources

Title 7 - Hazardous Materials & Substances

Title 8 - Radiation

Title 9 - Water

Title 10 - Crimes

#### Criminal Law Article (CL)

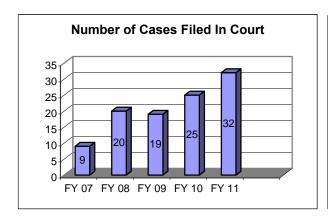
Title 10 - Crimes Against Public Health

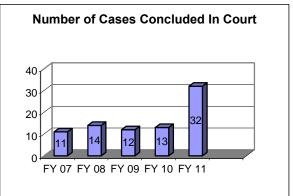
#### Natural Resources Article (NR)

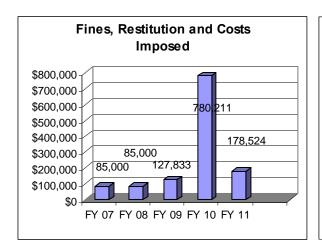
Title 4 - Fish and Fisheries

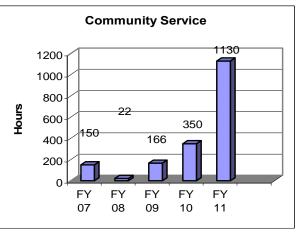
Title 8 – Water & Water Resources

### **Environmental Crimes Unit**







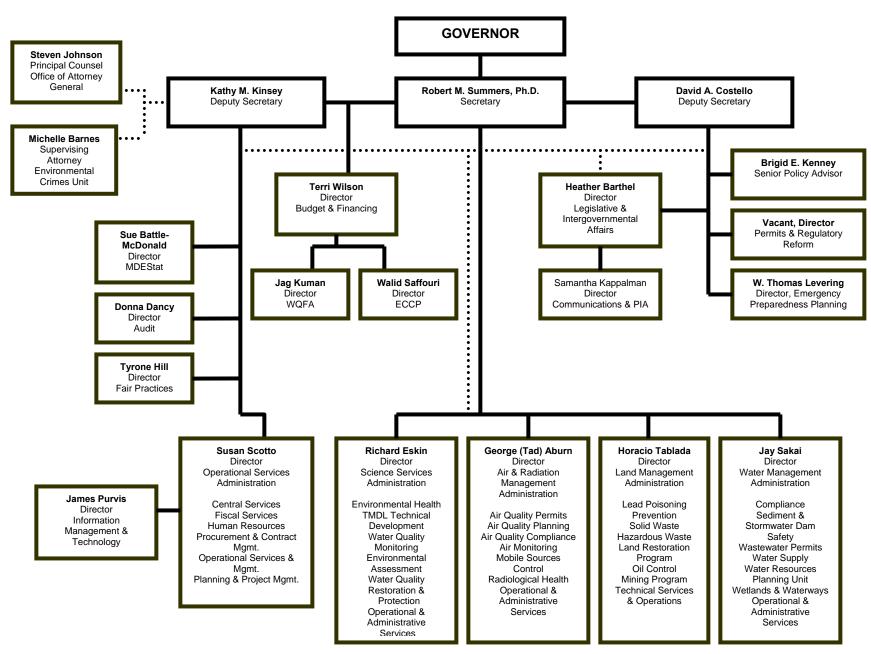


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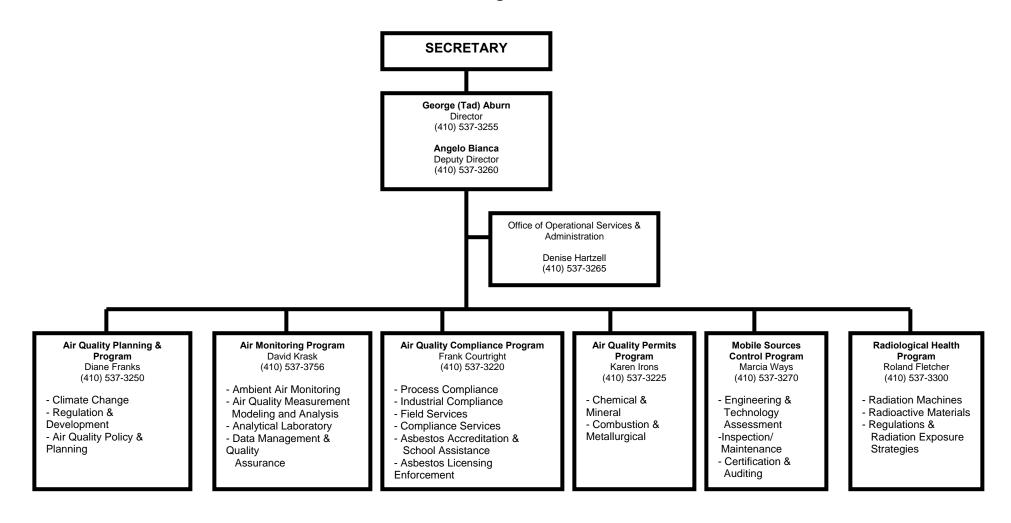
# SECTION THREE APPENDICES

# **APPENDIX A MDE Organization**

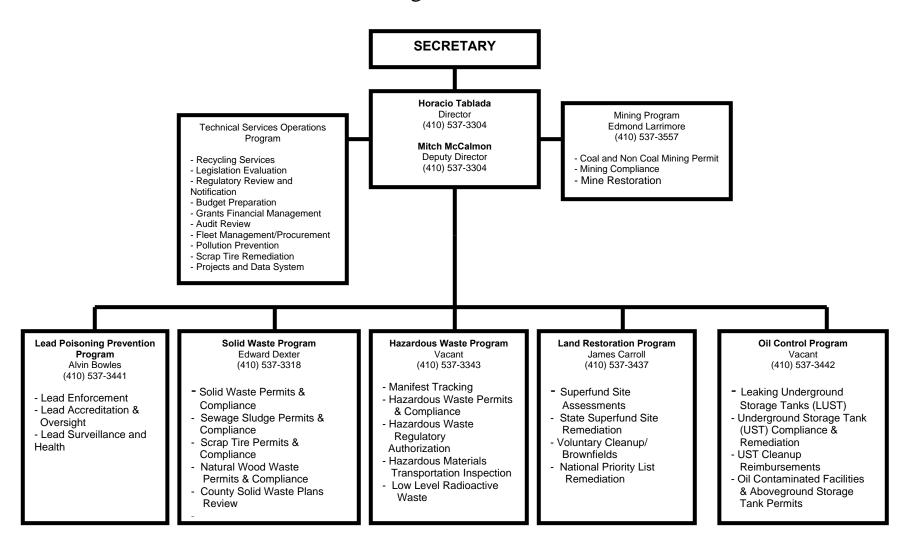
### MARYLAND DEPARTMENT OF THE ENVIRONMENT



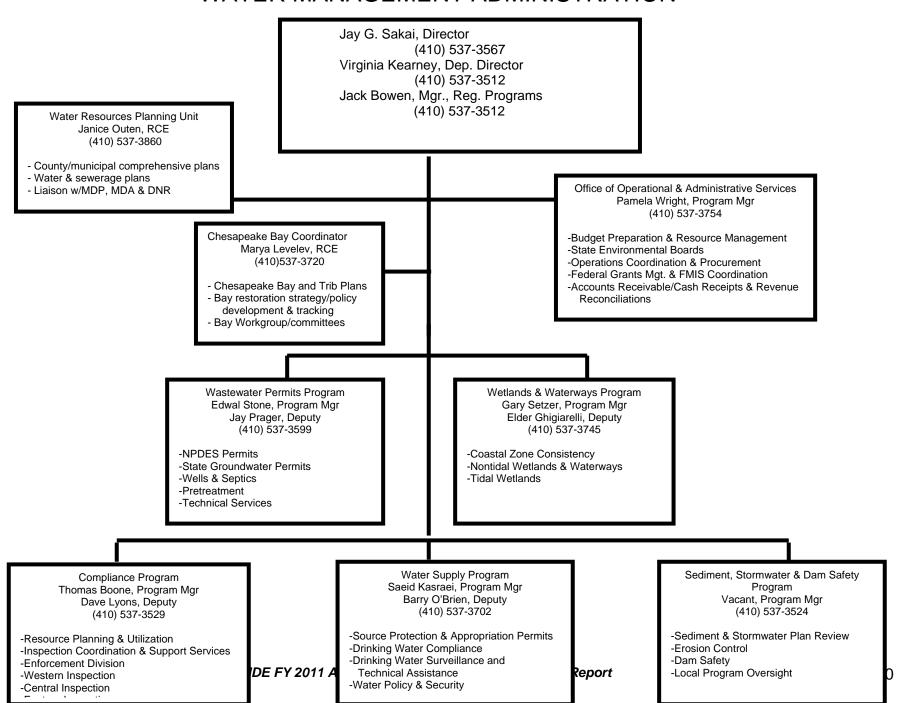
### Air and Radiation Management Administration



### Land Management Administration



### WATER MANAGEMENT ADMINISTRATION



# APPENDIX B List of Programs Included In This Report 1-301(d)

### PROGRAMS INCLUDED IN ANNUAL ENFORCEMENT AND COMPLIANCE REPORT

- Ambient Air Quality Control
  - o High-Impact Facilities
  - o Low-Impact Facilities
- Air Quality Complaints
- Asbestos
- Radiological Health Program
  - o Radiation Machines Program
  - Radioactive Materials Licensing and Compliance
- Environmental Restoration and Redevelopment
- Hazardous Waste
- Lead Poisoning Prevention
- Oil Aboveground Facilities
- Oil Pollution Remediation Activities
- Oil Underground Storage Tank Systems
- Refuse Disposal
- Scrap Tires
- Sewage Sludge Utilization
- Animal Feeding Operations
- Natural Wood Waste Recycling
- Mining Coal
- Mining Non-Coal
- Oil and Gas Exploration and Production
- Discharges Groundwater (Municipal and Industrial)
- Discharges Surface Water (Municipal and Industrial) State and NPDES Permits
- Discharges Pretreatment (Industrial)
- Stormwater Management and Erosion and Sediment Control for Construction Activity
- Water Supply Program Community and Non-transient Non-community Water Systems
- Water Supply Program Transient Non-community Water Systems
- Water Supply Program Laboratory Certification
- Water Supply Program Water Appropriation and Use
- Water Supply and Sewerage Construction
- Waterway Construction Dam Safety
- Wetlands and Waterways Non-tidal and Floodplain
- Wetlands Tidal
- Environmental Crimes Unit

# APPENDIX C Environmental Article Section 1-301(d)

### §1-301(d) Report on Enforcement Activities.

- (1) (i) On or before October 1 of each year, the Secretary, in consultation with the Attorney General, shall submit to the Legislative Policy Committee, in accordance with §2-1246 of the State Government Article, a report on enforcement activities conducted by the Department during the previous fiscal year.
  - (ii) The report shall:

article:

- 1. Include the information required under this subsection and any additional information concerning environmental enforcement that the Secretary decides to provide;
- 2. Be available to the public as soon as it is forwarded to the Legislative Policy Committee;
- 3. Include information on the total number of permits and licenses issued by or filed with the Department at any time and still in effect as of the last date of the fiscal year immediately preceding the date on which the report is filed;
- 4. Include information concerning specific enforcement actions taken with respect to the permits and licenses during the immediately preceding fiscal year; and
- 5. Include information on the type and number of contacts or consultations with businesses concerning compliance with State environmental laws.
- (iii) The information required in the report under paragraph (3) of this subsection shall be organized according to each program specified.
- (2) The report shall state the total amount of money as a result of enforcement actions, as of the end of the immediately preceding fiscal year:
  - (i) Deposited in the Maryland Clean Air Fund;
- (ii) Deposited in the Maryland Oil Disaster Containment, Clean-up and Contingency Fund;
  - (iii) Deposited in the Nontidal Wetland Compensation Fund:
  - (iv) Deposited in the Maryland Hazardous Substance Control Fund;
- (v) Recovered by the Department from responsible parties in accordance with §7-221 of this article;
  - (vi) Deposited in the Sewage Sludge Utilization Fund; and
  - (vii) Deposited in the Maryland Clean Water Fund.
- (3)(i) The report shall include the information specified in subparagraphs (ii), (iii), (iv), and (v) of this paragraph for each of the following programs in the Department:
  - 1. Ambient air quality control under Title 2. Subtitle 4 of this article:
  - 2. Oil pollution under Title 4, Subtitle 4 of this article;
  - 3. Nontidal wetlands under Title 5, Subtitle 9 of this article;
  - 4. Asbestos under Title 6, Subtitle 4 of this article:
  - 5. Lead paint under Title 6, Subtitle 8 of this article;
  - 6. Controlled hazardous substances under Title 7, Subtitle 2 of this
- 7. Water supply, sewerage systems, and refuse disposal systems under Title 9, Subtitle 2 of this article;
  - 8. Water discharges under Title 9, Subtitle 3 of this article;

- 9. Drinking water under Title 9, Subtitle 4 of this article; and
- 10. Wetlands under Title 16, Subtitle 2 of this article.
- (ii) For each of the programs set forth in subparagraph (i) of this paragraph, the Department shall provide the total number or amount of:
- 1. Final permits or licenses issued to a person or facility, as appropriate, and not surrendered, suspended or revoked;
  - 2. Inspections, audits, or spot checks performed at facilities permitted;
  - 3. Injunctions obtained;
  - 4. Show cause, remedial, and corrective action orders issued;
  - 5. Stop work orders;
  - 6. Administrative or civil penalties obtained:
- 7. Criminal actions charged, convictions obtained, imprisonment time ordered, and criminal fines received; and
- 8. Any other actions taken by the Department to enforce the requirements of the applicable environmental program, including:
- A. Notices of the removal or encapsulation of asbestos under §6-414.1 of this article; and
- B. Actions enforcing user charges against industrial users under §9-341 of this article.
- (iii) In addition to the information required in subparagraph (ii) of this paragraph, for the Lead Paint Program under Title 6, Subtitle 8 of this article, the report shall include the total number or amount of:
  - 1. Affected properties registered; and
- 2. Inspectors or other persons accredited by the Department, for whom accreditation has not been surrendered, suspended, or revoked.
- (iv) In addition to the information required in subparagraph (ii) of this paragraph, for the Controlled Hazardous Substances Program under Title 7, Subtitle 2 of this article, the report shall include the following lists, updated to reflect the most recent information available for the immediately preceding fiscal year:
- 1. Possible controlled hazardous substance sites compiled in accordance with §7-223 (a) of this article.
- 2. Proposed sites listed in accordance with §7-223 (c) of this article at which the Department intends to conduct preliminary site assessments; and
- 3. Hazardous waste sites in the disposal site registry compiled in accordance with §7-223 (f) of this article;
- (v) In addition to the information required in subparagraph (ii) of this paragraph, for the Drinking Water Program, the report shall include the total number of:
- 1. Actions to prevent public water system contamination or to respond to a Safe Drinking Water Act emergency under §§9-405 and 9-406 of this article; and
  - 2. Notices given to the public by public water systems under §9-410 of this article.

# APPENDIX D Legislation Enacted During 2011 Affecting Enforcement and Penalties

**HB0053/SB0320 – Environment - Phosphorus - Commercial Dishwashing Detergent** This bill prohibits, beginning July 1, 2013, a person from using, selling, manufacturing, or distributing for use or sale within the State any detergent for use in a commercial dishwashing machine that contains more than 0.5% phosphorus by weight.

HB0054/SB0221 – Environment - Decabrominated Diphenyl Ether - Trace Amounts
This emergency bill alters the current phase-out of decabrominated diphenyl ether (decaBDE) in specified products to add a permissible threshold level of 0.1% decaBDE by mass. The 0.1% threshold applies to all product categories of the phase-out; however, the bill provides an additional exemption from the phase-out for aircraft and aircraft parts.

### HB0057/SB0539 - Environment - Bay Restoration Fund - Authorized Uses

This bill expands the uses of the Septics Account of the Bay Restoration Fund (BRF) to include providing grants or loans for connecting a property served by an on-site sewage disposal (septic) system to an existing municipal wastewater facility achieving enhanced nutrient removal (ENR) level treatment. The grants or loans may be for up to the cost that would be currently authorized for repairing or replacing a failing septic system with one that uses best available technology (BAT) for nitrogen removal. Funding may only be provided if (1) the environmental impact of the septic system is documented by the local government and confirmed by MDE; (2) it can be demonstrated that the replacement of the septic system with service to a wastewater facility with ENR is more cost-effective for nitrogen removal than upgrading an individual septic system or the individual replacement of the septic system is not feasible; (3) the project is consistent with the appropriate county's comprehensive plan; (4) the septic system was installed on or before October 1, 2008, and the property it serves is located in a priority funding area (PFA); and (5) the local government has adopted a policy or procedure that guarantees that all future connections with the ENR facility meet each of these conditions.

### HB0145 - Environment - Cadmium in Children's Jewelry - Prohibition

This bill prohibits a person from, on or after July 1, 2012, manufacturing, selling, offering for sale, or distributing any children's jewelry containing cadmium at more than 0.0075% by weight. The Maryland Department of the Environment (MDE) may adopt regulations to carry out the bill's provisions.

HB0966 – Natural Resources - Restricted Waters for Shellfish Harvesting - Testing This bill requires the Maryland Department of the Environment (MDE) to use the most reliable available tests to determine whether a shellfish production area poses a risk to human health and rule out contaminants that do not pose a risk, including specified bacteria, in determining whether to restrict, or lift any restrictions on, an area used to catch or store shellfish.

MDE must, by December 31, 2011, reconsider the designation of State waters that are currently restricted from shellfish harvesting, giving priority to areas where there are existing or pending shellfish leases or aquaculture permits.

## HB1033/SB0840 – Environment - Reducing Lead Risk in Housing - Risk Reduction Standards

The bill requires an owner of an affected property under the Reduction in Lead Risk in Housing Program to satisfy the risk reduction standard at the initial and each subsequent change of occupancy by passing the test for lead-contaminated dust. At each change in occupancy, an owner of affected property must have the property inspected to verify that the risk reduction standard has been satisfied. The bill maintains the existing condition that, at the initial change in occupancy, any chipping, peeling, or flaking paint be removed or repainted on the interior and exterior surfaces of the property. However, the option to satisfy the risk reduction standard by performing specified lead hazard reduction treatments is repealed. The bill alters the modified risk reduction standard by requiring both the test for lead-contaminated dust and the performance of specified lead hazard reduction treatments.

The bill also allows a property owner to comply with the modified risk reduction standard by providing for the temporary relocation of tenants to either a lead-free dwelling unit or another dwelling unit that has satisfied the risk reduction standard for an affected property within 30 days after the receipt of a notice of elevated blood lead level or a notice of defect. The bill requires that the satisfaction of the modified risk reduction standard be verified by submitting a report from an accredited inspector and repeals the option to submit a statement of the work that is verified by the tenant and an accredited supervisor or contractor. Also repealed is the requirement to submit the report within a specified time period.

The bill also authorizes the enforcement of the Reduction Lead Risk in Housing laws through civil penalties of up to \$25,000 per violation; each day that a violation occurs constitutes a separate violation. MDE must conduct a specified study in consultation with members of the General Assembly and representatives of specified State and local agencies and organizations reflecting the interests of landlords, housing owners, and lead poisoning prevention advocates, among others. The study must evaluate processes that reduce the incidence of lead poisoning in affected and nonaffected properties, including rental properties built from 1950 through 1978 and owner-occupied properties. The bill lists several specific issues that must be studied and requires MDE to report the results of the study to the General Assembly by December 31, 2011. MDE must also adopt regulations related to reporting requirements of dust testing laboratory results.

**HB1254 – Environment - Reduction of Lead Risk in Housing - Registration and Fees**This departmental bill alters the requirement for the owner of an "affected property" to renew registration on an annual basis, such that an owner may renew according to a schedule established by regulation by the Maryland Department of the Environment (MDE). In addition, the bill allows the annual fee for an affected property to be paid according to a schedule established by MDE regulations.

**SB0751 – Environment - Dishwashing Detergent Containing Phosphorus - Penalties** This bill enhances existing penalty provisions by establishing a misdemeanor penalty of up to \$1,000 for a first offense and between \$1,000 and \$25,000 for a subsequent offense, for a person who knowingly violates the existing prohibition on the sale or distribution of a household dishwashing detergent containing more than 0.5% phosphorus by weight.

### SB0847 - Natural Resources - Aquaculture

This Administration bill transfers specified aquaculture, seafood, and related marketing functions from the Maryland Department of Agriculture (MDA), the Maryland Department of the Environment (MDE), and the Board of Public Works (BPW) to the Department of Natural Resources (DNR) and establishes DNR as the lead State agency for (1) coordinating and streamlining the process of applying for a State aquaculture permit; (2) promoting, coordinating, and marketing aquaculture and aquaculture products; and (3) enforcing laws, regulations, and rules. The bill requires the State's Aquaculture Coordinator to be employed by DNR and alters the membership of the Aquaculture Review Board, which is chaired by the Aquaculture Coordinator. DNR is authorized to issue water column leases in State waters that MDE classifies in a specified manner.

# **APPENDIX E MDE Penalty Policy**

### MDE's Approach to Determining the Appropriate Response to Violations

MDE is committed to a consistent, timely and appropriate compliance assurance program, which is protective of the public health and the environment while creating a credible deterrent against future violations. It is MDE's policy to assess fair and equitable penalties in keeping with the factors specified by the governing statute, and commensurate with the nature of the violations. The statutory factors that MDE must consider in assessing administrative penalties are:

- 1. The *willfulness of the violation*, the extent to which the existence of the violation was known to but uncorrected by the violator, and the extent to which the violator exercised reasonable care:
- 2. Any *actual harm to the environment or to human health*, including injury to or impairment of the air, waters, or natural resources of this State;
- 3. The **cost of cleanup and the cost of restoration** of the natural resource;
- 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 the location near waters of this State or areas of human population, creates the potential for harm to the environment or to human health and safety;
- 6. The *available technology* and economic reasonableness of controlling, reducing, or eliminating the violation:
- 7. The degree of *hazard posed by the particular pollutant* or pollutants involved;
- 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.

MDE will consider each of the specific factors on a case-by-case basis. While all factors set forth in the statute will be considered, it is not necessary for all of the factors to be applicable before the maximum penalty may be assessed. A single factor may warrant the imposition of the maximum penalty. Furthermore, all factors, even if applicable in a given case, are not necessarily of equal weight in MDE's determination of a reasonable penalty.

# APPENDIX F Environmental Audit Guidance (Revised 5/15/2006)

he Maryland Department of the Environment (MDE) recognizes the benefit from regulated entities that routinely evaluate their internal work processes for compliance with federal and State environmental requirements. Equally as important as identifying violations is the reporting of such violations to MDE for proper and complete remediation and abatement. MDE encourages self-auditing and compliance management as effective environmental management techniques. MDE may use its enforcement discretion in evaluating penalties for regulated entities that disclose violations of environmental laws or regulations as provided herein.

This guidance is not intended nor should it be construed to be a regulation as defined in Section 10-101, State Government Article. It sets forth criteria and guidelines for use by MDE staff in resolution of enforcement cases, and does not confer any legal rights upon any person.

### **Definitions**

"Department" means the Maryland Department of the Environment.

"Environmental Audit" and "Compliance Management System" have the definitions used in the Environmental Protection Agency's "Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations," Final Policy Statement effective May 11, 2000:

"Environmental Audit" is a systematic, documented, periodic and objective review by regulated entities of facility operations and practices related to meeting environmental requirements.

"Compliance Management System" encompasses the regulated entity's documented systematic efforts, appropriate to the size and nature of its business, to prevent, detect, and correct violations through various procedures, policies, mechanisms, and efforts.

"Environmental Requirement" means a requirement in (1) a state or federal law or regulation enforced by the Department, a rule adopted by the Department, a permit or order issued by the Department, or (2) an ordinance or other legally binding requirement of a local government unit under authority granted by state law relating to environmental protection.

"Regulated Entity" means a corporation, partnership, individual, municipality, governmental unit, or any other legal entity regulated under federal, state, or local environmental laws or regulations.

### **Statement of Guidance**

- A. The Department may reduce a civil or administrative penalty for violations of environmental requirements that are voluntarily disclosed following an environmental audit or as a result of compliance management if:
  - The regulated entity discloses the violation to the Department in writing within 21 days after the violation is discovered, or within a shorter time limit, if required by statute or regulation;
  - The regulated entity promptly initiates action to correct or eliminate the violation and all public or environmental harm caused by the violation. If the violation cannot be fully corrected within 60 days, the regulated entity shall submit a compliance plan to the Department within 60 days for review. The regulated entity shall maintain compliance with the plan as approved by the Department;
  - 3. The regulated entity provides the Department with a plan that includes steps to prevent recurrence of the violation; and
  - 4. The regulated entity fully cooperates with the Department regarding investigation of the disclosed violation.
- B. The relief outlined in Section A is not available if the Department determines that:
  - 1. The violation was discovered through a legally mandated monitoring or sampling requirement prescribed by statute, regulation, permit, judicial or administrative order, or consent agreement. The violation must be discovered voluntarily and not as a result of an environmental requirement;
  - 2. The Department or a third party discovered the violation prior to disclosure by the regulated entity to the Department, or the regulated entity made the disclosure after commencement of a federal, State, or local agency inspection, investigation, or request for information;
  - 3. The violation was committed willfully, wantonly, intentionally, knowingly, or with gross negligence by the regulated entity;
  - 4. The regulated entity did not promptly initiate or diligently act to correct or eliminate the violation;
  - 5. The violation made imminent or caused significant environmental harm or had a significant effect upon public health;
  - 6. The same or a related violation has occurred within the past three years or the violation is part of a pattern of recurrent violations by the regulated entity. For purposes of this section, violation includes any violation of a federal, State or local environmental law or regulation identified in a judicial or

administrative order, consent agreement, order or decree, complaint, or notice of violation, conviction or plea agreement; or

- 7. The disclosure is made for a fraudulent purpose.
- C. This guidance is not intended for use under circumstances in which the violation(s) at issue would result in the regulated entity gaining an economic advantage over its competitors.
- D. This guidance does not affect individual liability for criminal misconduct.
- E. This guidance does not apply to liability under a judicial or administrative order, consent agreement, order or decree, complaint, notice of violation, conviction or plea agreement.
- F. Relief under this guidance shall not be available if the Department receives formal notification from the delegating federal agency of that agency's intention to propose rescission of the Department's authority over the applicable federal environmental program.

Original signed by Secretary Philbrick
Kendl P. Philbrick
Secretary, Maryland Department of
the Environment

May 15, 2006 Date

# APPENDIX G Supplemental Environmental Projects

A Supplementary Environmental Project (SEP) is an enforcement tool that augments traditional penalty actions. They are important because the projects provide direct environmental benefits to communities beyond those achieved by facilities returning to compliance. The Air and Radiation Management Administration (ARMA) made use of SEPs during FY 2011 totaling \$175,000. ARMA issued two SEPs during FY 2011. The Land Management Administration made use of SEPs during FY 2011 totaling \$494,000. The administrations issued six SEPs during FY 2011. Details about each administration's SEPs are on the following pages.

Administration	Number	of SEPs	Total Valu	ue of SEPs
	2010	2011	2010	2011
Air and Radiation				
Management				
Administration	0	2	\$0	\$175,000
Land				
Management				
Administration	7	6	\$116,000	\$494,000
Water				
Management				
Administration	0	0	\$0	\$0
TOTALS	7	8	\$116,000	\$669,000

### Air and Radiation Management Administration SEPs, FY 2011

Total SEPs: 2

Total Cost: \$175,000

Air and Radiation Management Administration had two SEPs in FY 2011. Both were for air quality compliance cases. The two SEPs were:

- 1. BWI Airport: \$50,000 for conversion of three buses to clean diesel technology to reduce particulate emissions.
- 2. Schmidt Baking Company: \$125,000 to control VOC emissions from a process line that was not required by regulation to be controlled.

### Land Management Administration SEPs, FY 2011

Total SEPs: 6

Total Cost: \$494,000

All of the Land Management Administration SEPs in FY 2011 were for lead enforcement cases. Most of these required property owners to replace all windows in rental units containing lead based paint. A few other properties were required to exceed State Standards by obtaining a Lead Free Certificate. The following table lists the individual SEPs:

Duaman	Cooo #	Duran auto Occura au	Heite	CED Volus
Program Lead	Case # 09-30-13637	Property Owner Thomas Gangl	Units 5 - Units Requiring Window Replacement	<b>SEP Value</b> \$20,000
Lead	09-02-13148	Spaw LLC	41 - Lead Free Units	\$410,000
Lead	09-02-13148	Spaw LLC	5 - Units Requiring Window Replacement	\$20,000
Lead	10-30-13937	Dumbarton Investment, LLC	8 - Units Requiring Window Replacement	\$32,000
Lead	10-21-13154	John Rollins	1 - Unit Requiring Window Replacement	\$4,000
Lead	10-17-13360	Charles Schelts	2 - Units Requiring Window Replacement (amend)	\$8,000

### Water Management Administration SEPs, FY 2011

Total SEPs: 0 Total Cost: \$0

WMA did not authorize any SEPs in FY 2011.

### **APPENDIX H**

### Citizen Suit Notices and Petitions

Many environmental laws provide an opportunity for citizens to sue regulated entities directly when they believe the responsible agency has failed to enforce regulatory requirements. These legal actions are known as "citizen suits." These laws generally require the citizen to provide 60 or 90 days' notice to the parties and regulatory agencies prior to filing suit. This provides an opportunity for the parties to evaluate the claims and possibly settle them before the formal suit is filed. MDE evaluates the claims of each citizen suit notice it receives and decides on the appropriate course of action. This may include taking an enforcement action, entering into a consent agreement, taking no action because it believes there is no violation, taking no action because resources are directed to higher priority violations, or supporting the citizens' position. In addition, federal environmental laws frequently provide citizens with the right to petition federal agencies to correct the failure of a state agency to comply with federal regulatory requirements.

The table below provides information on the citizen suits and petitions during FY 2011. This includes suits that were filed in prior years that MDE believes to still be active. Since MDE is not a direct party for some of these suits, it is possible that the status has changed without MDE being aware of it.

Facility Name	Name of Party Filing 60-Day Notice or Petition	Federal Statute	Brief Summary of Allegations
Mirant (Chalk Point Power Plant)	The Environmental Integrity Project (EIP)	Clean Air Act (CAA)	Air quality violations
Mirant (Chalk Point Power Plant)	The Environmental Integrity Project (EIP)	CAA Title V Operating Permit	Delay in issuing a Title V air operating permit
Dundalk Marine Terminal	Baltimoreans United in Leadership Development (BUILD)	Resource Conservation and Recovery Act (RCRA)	Complaint against the Maryland Port Administration and Honeywell for RCRA violations

Facility Name	Name of Party Filing 60-Day Notice or Petition	Federal Statute	Brief Summary of Allegations
Wheelabrator	The Environmental Integrity Project (EIP)	CAA	Petition filed with EPA alleging permit conditions do not fully comply with CAA; Petition granted in part
Title V Operating Permit Program	The Environmental Integrity Project (EIP)	Clean Air Act (CAA)	Petition requesting EPA to withdraw approval of MDE's Title V Operating Permit Program for alleged program deficiencies
Luke Paper Company	The Environmental Integrity Project (EIP)	CAA	Petition filed with EPA objecting to conditions in facility's Title V operating permit
Luke Paper Company	The Environmental Integrity Project (EIP)		Complaint filed on December 7, 2009 seeking court order requiring EPA to grant or deny Title V petition
Cove Point	June Sevilla	CAA	Petition filed with EPA objecting to conditions in the Title V operating permit for Dominion Cove Point Title V

# APPENDIX I Land Restoration Program State Master List

Land Restoration Program State Master List is on CD.

# APPENDIX J Formerly-Investigated Sites List

Formerly-Investigated Sites List is on CD.