

## **Region 1 Review of the Massachusetts CWA NPDES Program**

Massachusetts is not authorized for the Clean Water Act NPDES program. However, the Massachusetts Department of Environmental Protection (MassDEP) has state authority over surface water discharges that parallel the Federal authorities and performs enforcement activities. EPA Region 1 and MassDEP consult with each other on the implementation of the enforcement work for this program. During round 1 of the State Review Framework, Region 1 conducted a review of the MassDEP NPDES enforcement program in order to acknowledge the state's work in that area. The following is Region 1's report of that review.

**Review of the Massachusetts Department of  
Environmental Protection FY 2005 State  
Enforcement and Compliance Programs**

**U.S. EPA Region 1 New England**

**October 31, 2006**

## **EXECUTIVE SUMMARY**

### **Overall Picture**

The Massachusetts Department of Environmental Protection (MassDEP) meets federal standards for implementing its federally delegated Clean Air Act (CAA) Stationary Source and Resource Conservation and Recovery Act Subtitle C enforcement programs.

This means MassDEP is meeting federal program expectations.

MassDEP does not have delegation of the Clean Water Act (CWA) NPDES Enforcement Program. However, MassDEP implements a state-authorized Water enforcement program that is similar to the CWA NPDES enforcement program. Region 1 reviewed this program.

Prior to and during the MassDEP review, EPA negotiated with MassDEP in response to MassDEP's request for "resource flexibility credit" to support its Environmental Results Program (ERP) for dry cleaners. As part of those discussions, EPA used preliminary material from this review in determining that MassDEP's core enforcement program was adequate. In some instances MassDEP modified its procedures, and made commitments for further modifications, as a result of discussions about core program adequacy during the ERP credit review process. These commitments have been documented in the Region's 6/19/06 Memorandum Approving Recognition and Resource Flexibility Credit for MA for Its ERP Work in the Dry Cleaner Sector. Where Region 1 has been able to determine that these commitments have been implemented, it has not included them as recommendations in this review. Where there are actions that MA has yet to complete, those are noted in the Recommendation sections.

### **MassDEP Regional Offices and Multi-Media Compliance and Enforcement Program**

MassDEP has four regional offices. These offices are located in different geographic regions of the state. The inspection, enforcement, and permitting work is divided among the regions based on geographic boundaries. The proximity to regulated facilities allows the regions to be efficient in permitting, compliance monitoring, and enforcement activities. Although the regions coordinate on some issues, for the most part, they function independently of one another which helps foster creativity and innovation. However, their autonomy can also lead to differences in how they address compliance, enforcement, and permitting issues. Through training, document templates, and better communication, MassDEP's Boston office is exploring ways to improve consistency, while still encouraging the development of independent region-specific solutions.

In the mid-1990s, MassDEP re-organized its compliance and enforcement programs, making them fully multi-media. That means that MassDEP inspectors are no longer media inspectors (CAA, RCRA, etc.) Instead they are FIRST (Facility-Wide Inspections to Reduce the Source of Toxics) inspectors. When carrying out an inspection, a FIRST inspector assesses the compliance of a facility with all applicable statutes. All inspection documents and any subsequent enforcement documents address all applicable statutes. MassDEP usually addresses all violations at a facility through a single action that includes violations under all

of the specific statutes involved. Region 1 will continue to support Mass DEP's multi-media approach.

Although MassDEP has a multimedia program, Region 1 conducted this review by evaluating the individual media (i.e., air, RCRA, and water) independently, and by comparing performance in a particular media to the national program guidance for that media. The national program guidance is designed to achieve compliance in each specific media. However, due to inherent differences among the media programs and legal authorities, the national program guidance for each program is different. As a result, in this report, EPA may comment differently in different media about MassDEP's performance in a particular element. In other words, MassDEP's performance in the same element may be consistent with national guidance in one program, but not in another or vice versa. It is therefore important that MassDEP consider the recommendations of this review in the context of the national guidance for each media even though MassDEP has a multimedia program.

While Region 1 did not evaluate the benefits of a multi-media compliance program as part of this review, MassDEP reports that multimedia inspections prevent inter-media transfer of pollutants and that MassDEP includes Toxic Use Reduction requirements in its program.

Implementation of this review is already producing improvements in MassDEP procedures. For example, as part of the CAA portion of the review, Region 1 and MassDEP staff identified several areas in which MassDEP was not applying EPA guidance consistent with EPA expectations. (See Elements 4, 6, 7 and 10) This resulted in data system reports from MassDEP to EPA that understated the performance of MassDEP's air enforcement program. MassDEP immediately implemented changes to its procedures, with the result that Region 1 is not making recommendations for these issues.

### **Sources of Information Included in Review**

EPA New England developed these findings from a review of MassDEP operations in Federal Fiscal Year 2005 (FY2005, October 1, 2004-September 30, 2005). EPA reviewers examined FY2005 MassDEP/EPA agreements, information in EPA and MassDEP databases, and 102 MassDEP files (39 Air files, 32 Water files and 31 RCRA files). EPA reviewers discussed all this information with MassDEP program managers and staff.

### **Inspection Implementation**

In FY2005, MassDEP programs came close to meeting (CAA) or exceeded (RCRA) their inspection commitments. Region 1 is recommending increased inspection activity in the non-delegated Water program. Reviewers are recommending improvements in documenting inspections in all programs. Generally, MassDEP completes its inspection reports quickly.

### **Enforcement Activity**

Enforcement response is good in all programs. Generally, MassDEP correctly identifies significant violations and implements an appropriate enforcement response with particular

success in returning violators to compliance. EPA is recommending improvements in how MassDEP Water and RCRA enforcement programs either calculate the economic benefit component of penalties or document the absence of economic benefit. In the RCRA program, EPA recommends changes to insure that MassDEP reports high priority violations to EPA more quickly.

### **Commitments in Annual Agreements**

Region 1 is recommending an increase in Water inspections and encouraging improvements in transmitting Air compliance data from state systems to EPA systems.

### **Data Integrity**

MassDEP does an adequate job managing federal data systems. During the review, MassDEP changed its procedures for CAA data submissions, making them much more consistent with EPA guidance. MassDEP should develop plans and procedures to improve data accuracy in RCRA.

### **Element 13**

Region 1 determined that MassDEP should receive both recognition credit and resource flexibility credit for the MassDEP dry cleaner ERP. Although MassDEP did not submit its proposal under Element 13 of the State Review Framework, Region 1 evaluated the proposal using the guidance developed for Element 13. Credit is to be made available in the MassDEP PPA.

## **MassDEP Clean Air Act Stationary Source Enforcement Program**

### **OVERVIEW**

The Clean Air Act (CAA) portion of the Massachusetts Department of Environmental Protection (MassDEP) State Review Framework (SRF) evaluation included the review of 20 inspection files and 19 enforcement files, all of which were randomly selected. MassDEP reported in the federal database for air compliance information – Air Facility System (AFS) – that it conducted some activity (inspection or enforcement) at these facilities in FY2005. For the inspections, MassDEP reported that it conducted full compliance evaluations (FCEs) at these 20 facilities. For the enforcement actions, MassDEP reported that it issued some type of enforcement action at these 19 facilities.

MassDEP has 4 regional offices. EPA Region 1 evaluated roughly 5 air inspection and 5 air enforcement files in each DEP regional office. If MassDEP took a CAA action at a source in FY2005, EPA Region 1 also reviewed inspections or actions that preceded and/or followed-up on the FY2005 action even if these actions occurred in a different fiscal year. (See Table 1 for a list of the air inspection and enforcement files that EPA Region 1 reviewed.)

Of the 20 inspection files reviewed, 12 were major sources, 8 were synthetic minor sources, and 3 were not inspections, but rather off-site reviews of a report or reports that the facility submitted to MassDEP. Of the 19 enforcement files reviewed, 8 were major sources, 7 were synthetic minor sources, and 4 were minor sources. In addition, 7 of the 19 enforcement actions were HPVs.

The CAA evaluation also involved the review of data from AFS (primarily for FY2005), supplied by EPA Headquarters, which compared MassDEP's performance on certain metrics to national policy goals. When Region 1 began the review, EPA noted a number of very significant problems with the Massachusetts data for these metrics in On-line Tracking Information System (OTIS) SRF Results. (See Table 2: OTIS SRF printout from April 2006.) In discussing these problems with MassDEP, it became clear that MassDEP had a difficulty translating data from its own data system to EPA's data system. Although MassDEP had struggled with these data translation problems for many years prior to the state review, the state did not fully understand the true nature and magnitude of the problem. Fortunately, after a series of meetings with managers and staff, MassDEP was able to resolve these problems quickly both retrospectively and prospectively. (See Table 3: OTIS SRF printout from August 2006.)

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## **Section 1: Review of Inspection Program Implementation**

**1) Degree to which state program has completed the universe of planned inspection/evaluations (covering core requirements and federal, state, and regional priorities).**

### **FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT):**

EPA's Compliance Monitoring Strategy (CMS) of April 2001 creates a baseline requirement that states conduct a full compliance evaluation (FCE) at each of their major Title V sources at least one every 2 years, and at each of their synthetic minor sources – permitted at above 80% of the major source threshold – (SM80s) at least once every 5 years. However, these timeframes may be modified, if the state receives approval from the EPA Regional office. The CMS suggests several acceptable reasons for modified FCE schedules.

It is Region 1's understanding that in 2002 MassDEP asked to shift from 2-year FCE frequency to a 3-year FCE frequency for major sources in exchange for conducting FCEs at 98 minor sources. Due to the multimedia nature of MassDEP's program and an added emphasis on Title V permitting, EPA allowed MassDEP to make this shift. Then, in the Performance Partnership Agreement (PPA) negotiations for FY2005 (based on the strong emphasis on minor source inspections as well as the multimedia focus), EPA again approved a 3-year FCE cycle at Title V majors for MassDEP. The 3-year cycle covered FY2002-FY2004. However, for the purposes of the SRF, EPA Headquarters pulled data for FY2004 and FY2005. As a result, EPA Region 1 evaluated MassDEP's performance in FY2004 and FY2005. Moreover, because the CMS began in 2001, OTIS only has data beginning in FY2002. Consequently, for SM80s, EPA Region 1 evaluated MassDEP's performance over a 4-year (instead of 5-year period). During this inspection cycle (FY2002 – FY2005), MassDEP remained on the standard 5-year FCE cycle for SM80s required by the CMS. Most recently, MassDEP committed to increase inspection coverage of SM80s and shift from a 5-year to a 3-year FCE cycle of all non-combustion SM80s.

#### **Metric 1A – Major Sources**

To meet the 3-year inspection cycle for major sources, during FY2004 and FY2005, MassDEP should have conducted 110 FCEs at air majors. In this time frame, MassDEP conducted 106 FCEs at air majors. This means that MassDEP conducted FCEs at 96.4% of the air major sources, which is well above the national average of 75.4%.

#### **Metric 1B – SM80 Sources**

For SM80s, MassDEP should have conducted FCEs at 173 SM80s between FY2002 through FY2005. In this time frame, MassDEP conducted FCEs at 110 SM80s. This means that MassDEP conducted FCEs at 63.6% of the SM80s, which is below the national average of 77.3%. It is worth noting that MassDEP conducted 145 FCEs at SM80s, but visited 34 facilities more than once. MassDEP committed to cover the entire universe of non-combustion SM80s and actually increase FCE coverage of these SM80s by shifting from a 5-year to a 3-year inspection cycle. Combustion sources that are SM80s will remain on a 5-year inspection cycle.

**Metric 1C and 1D – Synthetic Minor Sources and Minor Sources**

MassDEP has been very active in its work to inspect synthetic minor sources (non-SM80s) and minor sources between FY2002 and FY2005. Of the 880 CAA synthetic minor sources, MassDEP has inspected 816, and MassDEP has inspected all of the 179 CMS synthetic minor sources. Of the 3,390 minor sources, MassDEP has inspected 1,730.

**Metric 1F – Review of Self-Certifications**

In FY2005, MassDEP received 127 self-certifications for Title V sources. Of the 127, MassDEP has reviewed 112, or 88.2% of them. This is well above the national average of 77.1%.

**Metric 1G – Unknown Compliance**

MassDEP has 20 sources that are in unknown compliance status. MassDEP has made inspecting any sources that are in unknown compliance status a top priority for FY2007.

MassDEP will conduct FCEs with on-site inspection at all of its non-combustion major sources and non-combustion SM80 sources at least once every 3 years. MassDEP will conduct FCEs with on-site inspection at all of its combustion major and SM80 sources at least once every 5 years. For major combustion sources, MassDEP will augment the FCE every 5 years with an off-site FCE for each source every 2 years.

MassDEP has made inspecting any sources that are in unknown compliance status a top priority for FY2007.

**CITATION OF INFORMATION REVIEWED FOR THIS ELEMENT:**

CAA Stationary Source Compliance Monitoring Strategy, April 25, 2001



## **RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED:**

- By September 30, 2007 MassDEP should demonstrate to EPA that MassDEP inspectors have conducted FCEs with on-site inspection at the following frequencies: once within a 3- year period for each non-combustion major and SM80 source, and once within a 5- year period for each combustion major and SM80 source. FCEs without an on-site inspection will be performed once within a 2-year period for each combustion major source.
- By September 30, 2007 MassDEP should demonstrate to EPA that it has conducted FCEs at sources that currently are in unknown compliance status.
- By September 30, 2007 MassDEP should review 100% of the Title V certifications it receives.

### **2) Degree to which inspection / evaluation reports document FCE findings, including accurate identification of violations.**

## **FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT):**

Of the 20 inspection files we reviewed, 3 were not FCEs, but rather off-site reviews of a report or reports that the facility submitted to MassDEP. These 3 inspections should have been entered as partial compliance evaluations (PCEs) because they were off-site reviews of a report or reports that facilities submitted to MassDEP. An additional 7 inspection reports did not appear to indicate that MassDEP had conducted appropriate compliance monitoring activities. No reports indicated whether the inspection was an FCE or a PCE. Only 2 reports listed the applicable requirements and only 3 reports included a discussion of enforcement history. However, many files (at least 11) contained a pre-inspection activity report – which MassDEP generates from its data system – containing a detailed enforcement history from well back into the 1990s. In addition, many files contained a copy of the permit, which contains the applicable requirements. In general, MassDEP does a good job describing regulated units and processes, and all 17 inspection reports included the findings and recommendations.

We have raised the issue of improving the quality of inspection reports with senior MassDEP managers in the Boston office and in the MassDEP regional offices and have received a written commitment from them to improve the quality and consistency of inspection reports. This work is being done in conjunction with implementation of a new activity code in MA's tracking system. This activity code will allow MassDEP to better track off-site as well as on-site FCEs. Additional steps that MassDEP will likely take include offering advanced training for inspectors, developing new MassDEP procedures for inspection reports, and preparing checklists/model reports.

As part of this review, we learned that MassDEP has set a very high bar for the number of inspections that each individual inspector should conduct. In general, each individual inspector is expected to conduct over 40 inspections per year. In addition, each inspector is responsible for overseeing any follow-up enforcement. While we commend MassDEP for its

efforts to have a strong inspection presence in the field, we think the emphasis on the number of inspections may be affecting the ability of MassDEP to produce inspection reports that meet the criteria for FCEs outlined in EPA's Compliance Monitoring Strategy. Region 1 encourages MassDEP to monitor the effects of specific numeric targets for inspector productivity on the quality of inspection reports. We suggest that MassDEP make adjustments as necessary to meet its goals for productivity and inspection quality.

- MassDEP has created a new activity code to distinguish FCEs from PCEs in MassDEP's data system.
- MassDEP will implement new procedures to improve the quality and consistency of inspection reports and the documentation of FCEs. Reports will include:
  - A "past enforcement history" section (or reference an attached pre-inspection activity report) that details any past air enforcement at the source, or state "none" if there has been no such enforcement.
  - All applicable requirements or a reference to the appropriate permit in the inspection report.
  - An indication of whether the inspection was an FCE or a PCE for Air.

#### **CITATION OF INFORMATION REVIEWED FOR THIS ELEMENT:**

CAA Stationary Source Compliance Monitoring Strategy, April 25, 2001

#### **RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED:**

By September 30, 2007 MassDEP should report progress on the specific steps taken to improve the quality of inspection reports, including but not limited to, any additional training for inspectors and the development of new MassDEP procedures, checklists/model reports.

#### **3) Degree to which inspection reports are completed in a timely manner, including timely identification of violations.**

#### **FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT):**

Although there is no strict deadline for inspection report completion, many states and EPA regional offices generally agree that inspection reports should be completed within 2-6 weeks of the on-site visit. Of the 20 inspection reports reviewed, 4 were not timely as they were finalized more than 90 days after the inspection. An additional 4 reports did not contain a "prepared" date. We have raised the issue of timeliness with MassDEP managers and received a commitment from them to produce more timely inspection reports. MassDEP has already begun to address this through a department-wide initiative to create more consistent electronic documents and forms for compliance and enforcement that should facilitate more timely completion of inspection reports. With respect to identifying violations in inspection reports, we concluded that MassDEP identifies problems at facilities and includes appropriate recommendations for follow-up actions.

MA will implement new procedures to ensure that inspection reports are completed in a timely manner.

**CITATION OF INFORMATION REVIEWED FOR THIS ELEMENT:**

CAA Stationary Source Compliance Monitoring Strategy, April 25, 2001

**RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED:**

By September 30, 2007 MassDEP should report progress on the specific steps taken to improve the timeliness of inspection reports.

**Section 2: Review of State Enforcement Activity**

**4) Degree to which significant violations are reported to EPA in a timely and accurate manner.**

**FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT):**

It is Region 1's understanding that MassDEP has a policy that it will not publicly identify a source as an HPV before the source has been notified by MassDEP of the violation. As a result, MassDEP was setting day zero as the day DEP notified the facility, which often was more than 45 days after the discovery date of the violation. However, through a training exercise in March 2006, EPA clarified that the timelines of the HPV policy allow time for MA to notify the facility and still identify the HPV in a timely manner. MA has modified its procedures to ensure timely identification of HPVs. Moreover, MassDEP has developed and is already using a new flow chart (see Table 2 – MassDEP HPV flow chart) outlining this procedure to ensure that all MassDEP regional offices are reporting HPVs consistently. The new procedure is a tremendous change from MassDEP's previous approach, and Region 1 is already seeing the benefits. MassDEP has one person in the Boston office who reviews all HPV forms and ensures that the forms are submitted to Region 1 promptly. Staff from Region 1 and MassDEP are meeting monthly to discuss new and existing HPVs. In addition, Region 1 is conducting more detailed HPV training for the MassDEP regional offices. The first training occurred at the Central Regional Office on July 12, 2006. The second training took place at the Southeastern Regional Office September 20, 2006. The third training took place at the Northeast Regional Office on September 26, 2006. Training for the Western Regional Office will take place in October 10, 2006.

**Metric 4a – HPV Discovery Rate per Major FCE Coverage**

MassDEP's HPV discovery rate per major FCE is 20.0%. This is well above the national average of 9.8%.

**Metric 4b – HPV Discovery Rate per Major Source**

MassDEP's HPV discovery rate per major source is 6.8%. This is above the national average of 4.5%

**Metric 4d – Percent of Enforcement Actions that are HPVs**

In FY2005, MassDEP took 8 formal enforcement actions at major sources. Of these actions, 5 were at HPVs (62.5%). The national average for this metric is 78.4%, but the goal is for states to be more than half the national average, which MA clearly exceeds.

MassDEP has implemented effective new procedures to identify and track HPVs in a timely manner that are consistent with the HPV policy.

**CITATION OF INFORMATION REVIEWED FOR THIS ELEMENT:**

Timely and Appropriate Enforcement Response to High Priority Violators (“the HPV policy”) July 1999

**RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED:**

None

**5) Degree to which state enforcement actions include required injunctive relief, such as corrective or complying actions, that will return facilities to compliance in specified time frame.**

**FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT):**

All of the 19 enforcement actions EPA reviewed as part of the SRF had appropriate injunctive relief and compliance schedules that returned facilities to compliance in a timely manner. Region 1 concluded that MassDEP is doing a good job of bringing facilities back into compliance quickly after violations are discovered.

MassDEP will continue its work to seek appropriate injunctive relief and return facilities to compliance in a timely manner.

**CITATION OF INFORMATION REVIEWED FOR THIS ELEMENT:**

Timely and Appropriate Enforcement Response to High Priority Violators (“the HPV policy”) July 1999

**RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED:**

None

**6) Degree to which the state takes enforcement actions, in accordance with national enforcement response policies relating to specific media, in a timely and appropriate manner.**

## **FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT):**

Through the SRF, Region 1 concluded that overall MA has a strong, well-developed enforcement program. Historically, however, MassDEP has had difficulty reporting data to EPA, which has made it difficult for Region 1 to evaluate MassDEP's program. While MA is taking timely and appropriate enforcement in almost all cases, it is worth noting that there are some differences between EPA enforcement policies and MA's enabling statute, the Administrative Penalties Act (APA). Although the APA limits MassDEP in some ways, it does provide MassDEP with specific penalty authorities and, in effect, compels MassDEP to prioritize getting sources back into compliance quickly. The APA gives MassDEP authority to assess penalties for environmental violations without having to refer the cases to the state Attorney General's office. However, there is a specific procedure that MassDEP must follow to notify a facility of noncompliance before assessing penalties.

Specifically, MassDEP is directed to issue a Notice of Noncompliance (NON) to a facility, which directs the facility to come back into compliance often within 30 days. The APA prohibits MassDEP from taking higher level enforcement unless the facility fails to respond to the NON. In certain cases, MassDEP can assess penalties without prior notice. For example, if MassDEP discovers a significant emissions violation well above a permitted limit, or discovers a facility operating without a permit, MassDEP can directly pursue enforcement and assess penalties. In addition, if a facility willfully violates, fails to comply with an NON, or if MassDEP discovers the same type of violation at a facility that has already been cited, MassDEP can directly pursue enforcement and assess penalties.

With respect to HPVs, MassDEP has often been selecting day zero as the day MassDEP notifies the facility. However, after discussing the issue with MassDEP and offering some training, MassDEP has implemented effective new procedures to identify and track HPVs in a timely manner that are consistent with the HPV policy (including proper identification of day zero).

### **Metric 6a – Percent of HPVs that are Unaddressed for More Than 270 days**

Only 7.1% of MA's HPVs were unaddressed for more than 270 days. However, because we concluded through this review that MassDEP has not been properly selecting day zero, it is likely that this percentage is higher. MassDEP has committed to follow the timelines in the HPV policy for day zero date selection and to make every effort to address HPVs within 270 days of day zero.

## **CITATION OF INFORMATION REVIEWED FOR THIS ELEMENT:**

- Timely and Appropriate Enforcement Response to High Priority Violators ("the HPV policy") July 1999
- 310 Code of Massachusetts Regulations, Chapter 5.00 – Civil Administrative Penalty Regulations

**RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED:**

None

**7) Degree to which the State includes both gravity and economic benefit calculations in penalty assessments.**

**FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT):**

MassDEP is placing a greater emphasis on calculating economic benefit as part of the penalty in enforcement actions. MassDEP is using a penalty calculation spreadsheet to track penalties in enforcement actions. The input sheet for the penalty calculation requires the user to indicate assumptions made about economic benefit, even if it is zero.

Of the 19 enforcement files that EPA reviewed as part of the SRF, all included a penalty calculation and seemed to take timely and appropriate enforcement actions. Moreover, 12 of the actions were penalty actions, 3 assessed penalties for both gravity and economic benefit, 7 assessed penalties for gravity, but had little or no economic benefit (and so it was not necessary for the state to determine economic benefit), and 2 are still on-going cases.

MA will continue to implement its program for calculating penalties and include both gravity and economic benefit (where appropriate) in its penalty assessments.

**CITATION OF INFORMATION REVIEWED FOR THIS ELEMENT:**

Clean Air Act Stationary Source Civil Penalty Policy, October 25, 1991

**RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED:**

None

**8) Degree to which final enforcement action settlements take appropriate action to collect economic benefit and gravity portions of a penalty, in accordance with penalty policy considerations.**

**FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT):**

MassDEP does a good job assessing and collecting penalties. In FY2005, MassDEP collected over \$600,000 in penalties. Of the 12 penalty actions that we reviewed as part of the SRF, 10 penalties have been collected and the remaining 2 are still on-going cases. Of the files we reviewed, all established initial penalties that were consistent with the state's penalty policy. In almost all cases, the assessed penalty was modestly less than the initial

penalty. The difference between the assessed penalty and the final penalty seemed to be the result of negotiations with violators.

**Metric 8a – Actions with Penalties**

Of the 46 formal enforcement actions that MassDEP issued in FY2005, 34 were penalty actions.

**Metric 8b – Percent of Actions at HPVs with Penalties**

Of the 46 formal enforcement actions, 15 were at HPVs, and 12 of those actions (80.0%) were penalty actions. This meets the national goal that 80% of actions at HPVs should be penalty actions.

MA will continue its work to assess and collect appropriate penalties.

**CITATION OF INFORMATION REVIEWED FOR THIS ELEMENT:**

Clean Air Act Stationary Source Civil Penalty Policy, October 25, 1991

**RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED:**

None

**Section 3: Review of Performance Partnership Agreement**

**9) Degree to which enforcement commitments in the PPA are met and any products or projects are completed.**

**FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT):**

MassDEP maintains its own database for compliance and enforcement information. Historically, MassDEP has had difficulty translating information from MassDEP's system known as the Facility Master File (FMF) to AFS. The multi-media nature of MassDEP's program complicates things further. However, for the past 6 months, MassDEP has been working closely with EPA Headquarters on the Universal Interface (UI) to resolve most (if not all) of these historic translation issues. In addition, Region 1 has met with MassDEP a number of times to further clarify how the state data should be translated to the federal system.

EPA and MassDEP have been successful in identifying and correcting a number of discrepancies over the past six months. However, implementation of the UI has identified new data translation issues that the state is working to address. The process is iterative, but MassDEP is fully committed to successfully implementing the UI.

MassDEP will ensure that data is properly translated from its FMF data system to AFS.

In FY2005, MassDEP committed to inspect 1/3 of its major sources (i.e., conduct 55 FCEs at majors) and inspect 1/5 of its SM80s (i.e., conduct 32 FCEs at SM80s). In spite of data translation challenges, data in OTIS reveal that MassDEP met this commitment.

**CITATION OF INFORMATION REVIEWED FOR THIS ELEMENT:**

EPA's Performance Partnership Agreement with Massachusetts

**RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED:**

By September 30, 2007, MassDEP should demonstrate to EPA that the UI is fully functional.

**Section 4: Review of Data Integrity**

**10) Degree to which the Minimum Data Requirements (MDRs) are entered into AFS in a timely manner.**

**FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT):**

Although MassDEP has had some issues with timely HPV identification, MassDEP enters most all MDRs in a timely manner. MassDEP has historically had difficulty selecting an appropriate date for day zero. Six of the enforcement actions we reviewed were identified by MassDEP as HPVs. Three of these six were reported to EPA in a timely manner. The remaining 3 were not identified in a timely manner. In fact, 70.0% of MassDEP's HPVs were entered more than 60 days after day zero. However, as discussed in Element 4, this is because MassDEP has had long-standing misconceptions regarding the timing of HPV identification. After discussions with Region 1, these misconceptions no longer exist and MassDEP has developed new procedures for HPV tracking (see Table 4). Region 1 fully expects that MassDEP's new procedure for HPV identification and tracking will ensure timely HPV reporting to EPA.

**Metric 10a – Percent of HPVs Entered More Than 60 Days after Day Zero**

70.0% of MassDEP's HPVs were entered more than 60 days after day zero.

MassDEP has implemented effective new procedures to identify and track HPVs in a timely manner (including proper identification of day zero).

**CITATION OF INFORMATION REVIEWED FOR THIS ELEMENT:**

- Timely and Appropriate Enforcement Response to High Priority Violators (“the HPV policy”) July 1999
- Compliance and State Action Reporting for Stationary Sources of Air Pollution, Information Collection Request (66 Fed. Reg. 8588)



**RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED:**

None

**11) Degree to which the MDRs are accurate.**

**FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT):**

There were four MDRs for which AFS data did not appear to be accurately reflecting MassDEP's performance due to data quality and translation issues, namely Title V air program code, stack test results, CMS classification, and marking sources as being in non-compliance.

In terms of the Title V air program code, when Region 1 began the review, many major sources were missing the Title V air program code. However, MassDEP has since added the Title V code to all Title V major sources and has new procedures in place to continue to add the air program code to any new Title V major sources.

For stack test results, because MassDEP's FMF tracks stack test observations in a very different way than AFS, MassDEP's stack test work has not translated accurately to AFS. However, MassDEP has implemented a new technique for entering stack test information in FMF so that it will translate to AFS. As result of this new technique, MassDEP went from having 49% of its stack tests without pass/fail codes to having only 11%.

For CMS classifications, MassDEP recently checked all CMS classifications and provided Region 1 with an update. As a result, MassDEP went from having 19 sources without CMS codes to now having only 2. To ensure accurate CMS classifications going forward, MassDEP has implemented new procedures for regular CMS classification review and update.

With respect to non-compliance status, Region 1 has informed MassDEP that AFS does not automatically change the compliance status of a source to be "in violation." MassDEP will need to manually make this change for all sources. As a result, MassDEP will implement a procedure for regular review and update.

**Metric 11a –HPVs Compared to Non-Complying Sources**

Of the 23 HPVs that should have been identified as being in non-compliance, only 12 were properly identified by MassDEP.

**Metric 11b – Stack Test Results with Pass/Fail Code**

Of the 72 stack tests the state conducted, only 8 are missing pass/fail codes (11.1%). As a result, MassDEP is just slightly above the national average of 7.4%.

MassDEP will take steps to ensure that MDRs are accurate and timely.

### **CITATION OF INFORMATION REVIEWED FOR THIS ELEMENT:**

- Timely and Appropriate Enforcement Response to High Priority Violators (“the HPV policy”) July 1999
- Compliance and State Action Reporting for Stationary Sources of Air Pollution, Information Collection Request (66 Fed. Reg. 8588)

### **RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED:**

By December 31, 2006, MassDEP should mark the past and current compliance status of all sources in AFS.

**12) Degree to which the MDRs are complete, unless otherwise negotiated by the Region and State or prescribed by a national initiative.**

### **FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT):**

Since the start of this review, MassDEP has made significant progress in making data improvements and meeting MDRs. To ensure that MassDEP can meet all MDRs in the future, MassDEP should follow the recommendations of this report and develop a plan outlining how the state will improve data quality.

With respect to the Federal Information Processing Standard (FIPS) codes, MassDEP recognizes EPA’s concern with a non-standard FIPS code in the AFS system for sources in the state. This practice goes back over 20 years when MassDEP was advised to identify facilities by Air Quality Control Region (AQCR) in other federal data systems, including the Aerometric Information Retrieval System (AIRS). These AQCR numbers are now part of the unique facility code used to identify all facilities in MA. Nationally, EPA has told the states that within 3 to 5 years EPA plans to update the AFS system. This update will accommodate the inclusion of a standard FIPS code plus the MA facility ID, similar to what MassDEP has already done for EPA’s National Emissions Inventory (NEI) system.

Although MassDEP has identified a workable short-term solution to providing a standard FIPS code in the current AFS, the resources to implement this solution are not available because of competing priorities for those same resources (including improved compliance and enforcement tools and the important work on the Universal Interface). Therefore, submittal of MassDEP’s AFS data with standard FIPS codes is on hold until the upgrade of AFS.

Because MA is a small state, the lack of FIPS codes will not pose a problem for ECHO retrievals. The MA source list does not exceed the ECHO limit on the number of sources that can be retrieved in a single query. In addition, city searches (as opposed to county searches) can help refine searches.

**Metric 12A through J**

- MassDEP has 166 Title V sources, and 166 have Title V air program codes.
- MassDEP has 24 sources with violations. (This number should be much higher – MassDEP needs to add the violation flag to all sources with violations.)
- MassDEP issued 161 NOVs in FY2005 to 154 different sources.
- MassDEP established 20 new HPV pathways in FY2005 at 20 different sources.
- MassDEP issued 46 formal enforcement actions in FY2005 at 45 different sources.
- MassDEP assessed penalties of \$635,087 in FY2005.
- MassDEP has 2 major sources without CMS codes.

MassDEP will convert from AQCR codes to FIPS codes when AFS is modernized. MassDEP will add the violation flag to all sources in violation.

**CITATION OF INFORMATION REVIEWED FOR THIS ELEMENT:**

- Timely and Appropriate Enforcement Response to High Priority Violators (“the HPV policy”) July 1999
- Compliance and State Action Reporting for Stationary Sources of Air Pollution, Information Collection Request (66 Fed. Reg. 8588)

**RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED:**

MassDEP should incorporate FIPS codes when AFS is modernized.

By March 31, 2007, MassDEP should develop a plan outlining how it will improve data quality to meet MDRs. This plan will include a commitment that MassDEP will provide EPA with complete, accurate and timely data consistent with agency policy and the ICR (which contains all MDRs). By September 30, 2007 MassDEP should report on progress implementing the MDR data quality plan.

## **MassDEP Water Enforcement Program**

Although the NPDES program has not been delegated to the state, EPA evaluated MassDEP's surface water discharge inspection and enforcement program. MassDEP's organization is more complicated for water than for the other media. In MassDEP, the Bureau of Waste Prevention (BWP) and the Bureau of Resource Protection (BRP) share responsibility for the Water program. BWP is responsible for discharges from industrial facilities but not for sanitary wastewater. BRP is responsible for municipal treatment facilities and other sanitary wastewater discharges. Each bureau has staff operating in the four regional offices, and MassDEP headquarters in Boston. The bureaus operate independently from each other within their area of responsibility. Almost all inspections and most enforcement cases are done by staff assigned to the regional offices. The Boston office does some limited inspections and often becomes directly involved in significant enforcement cases.

Since the NPDES program is not delegated to Massachusetts, EPA and MassDEP have parallel authority over surface water discharges. To maximize the effectiveness of their combined resources the agencies coordinate their activities when possible. EPA has quarterly meetings or teleconferences with BRP and BWP in the MassDEP regional offices to discuss the quarterly non-compliance list and decide on the appropriate response and which agency should take the lead. EPA and MassDEP staffs consult with each other on an ongoing basis.

### **Information Sources Included in the Review**

Region 1 reviewed 32 inspection/enforcement case CWA files from fiscal year 2005. The review used the EPA Headquarters data pulls to provide national average and state specific information. The information from the file reviews and data pulls was used to answer specific questions covering 11 topic or element areas. The review also included examination the MassDEP Performance Partnership Agreement and a review of database integrity.

To obtain a reasonable picture of how MassDEP operates its surface water discharge program both industrial (BWP) and municipal (BRP) facilities from each of the four regional offices were included in the file review. Both major and minor facilities were included in each category. The files were selected from the list of facilities inspected by MassDEP during fiscal year 2005. To ensure that the adequacy of MassDEP's enforcement actions could be reviewed, several facilities subject to higher level enforcement actions were selected. The remaining files were selected to achieve the mix of industrial/municipal, major/minor, and location described above.

Region 1 reviewed the inspection/enforcement files for the following 17 Major facilities and 13 Minor facilities, as well as one IPP facility:

#### **Central Region:**

Fletcher Granite  
Hopedale

MA0020231 minor  
MA0102202

River Terrace Healthcare	MA0025763	minor
Southbridge	MA0100901	
Leicester	MA0101796	minor
Veryfine Products, Inc.	MA0004936	
BFI Waste Systems	MA0030066	minor
L.S. Starrett	MA0001350	
St. Gobain Abrasives	MA0000817	

**Northeast Region:**

Governor Dummer Academy	MA0030350	minor
Mirant Kendal LLC	MA0004898	
F. Diehl & Sons	MA0033022	minor
Rockport	MA0100145	
Conoco Philips Inc.	MA0004006	
Radiant Fuel Company	MA0001236	minor

**Southeast Region:**

Taunton	MA0100897	
Dartmouth	MA0101605	
Plymouth	MA0100587	
Bridgewater	MA0100641	
BIW Cable Systems	MA0028649	minor
P.J. Keating Co.	MA0029297	minor
Mirant Canal LLC	MA0004928	
Tweave Inc.	MA0005355	

**Western Region:**

Charlemont Sewer District	MA0103101	minor
Huntington	MA0101265	minor
Orange	MA0101257	
C.L. McLaughlin Trout Hatchery	MA0110043	minor
GE Pittsfield	MA0003891	
Esleek Mfg. Co.	MA0005011	
JPS Elastomerics	MA0001503	minor
BBA Non-Wovens	MA0003697	
Eastern Etching & Mfg.	IPP - Chicopee	

Of these 32 facilities, seven received a Notice of Non-compliance (NON) and five were addressed by an Administrative Consent Order (ACO). Four of the ACOs included up-front penalties. The fifth included stipulated penalties for future violations. An additional facility had minor NPDES violations that were included in a larger multi-media penalty action.

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## **Section 1: Review of State Inspection Implementation**

**1) Degree to which state program has completed the universe of planned inspections/evaluations (covering core requirements and federal, state, and regional priorities.)**

### **FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT)**

According to the EPA HQ Clean Water Act Metric Results, in fiscal year 2005, MassDEP performed inspections at 67 of the 129 major facilities (52% coverage). This is below the national average for the percentage of Majors inspected annually and does not meet the national goal of 100% coverage. BWP inspected 13 of 36 industrial major facilities (36% coverage). BRP inspected 54 of 93 municipal major facilities (58%). MassDEP also conducted 18 inspections of NPDES minor facilities. In addition to the state inspections, EPA conducted inspections of 10 major facilities, 8 minor facilities, and 28 stormwater dischargers. If these inspections are included 77 of 129 major facilities were inspected (60% coverage). OECA has traditionally given credit for inspections of minor facilities on a 2:1 basis, i.e., two minor inspections can be counted as one major inspection. If this is factored in, the adjusted coverage rate rises to 90 of 129 major facilities (70% coverage).

EPA's Data Metrics undercount the actual number of inspections done by DEP. DEP provides copies of the EPA Form 3560 to Region 1 for input to national databases. Because the focus has been on coverage inspections, multiple inspections at a single facility have not been entered into the databases. This does not affect the percent coverage shown above. Also, many of BWP's multi-media inspections include indirect discharges to municipal treatment plants that are not being reported as NPDES industrial user inspections.

The PPA does not include media-specific commitments for inspections at industrial facilities. The BWP targets its inspections primarily on a multi-media basis, along with some single media inspections in response to tips and complaints and report reviews. The number of BWP multi-media inspections with an NPDES component will vary from year to year. The BRP establishes its inspection targets primarily on a watershed basis. Each year compliance inspections are planned for all major and minor NPDES facilities in specific watersheds. Over a five-year period all watersheds in the state are targeted. In addition, BRP inspects a number of facilities of interest, generally those with historic compliance problems or an ongoing enforcement action. Some of these facilities are inspected several times during the year.

### **CITATION OF INFORMATION REVIEWED FOR THIS CRITERION:**

2004-2005 Performance Partnership Agreement

**RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED**

MassDEP should conduct compliance evaluation inspections each year at a larger percentage of its NPDES facilities. The appropriate coverage level can be negotiated as part of the Performance Partnership Agreement. MassDEP should evaluate the level of resources devoted to NPDES inspections. MassDEP should provide EPA with a Form 3560 for all NPDES inspections. Alternatively, MassDEP may begin directly entering its inspections into ICIS-NPDES.

**2) Degree to which inspection/evaluation reports document inspection findings, including accurate identification of violations.**

**FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT)**

The level of detail of the inspection reports reviewed varied widely. Most of the inspection reports reviewed consisted of a checklist (either EPA Form 3560 or a state form) with comments or inspection notes attached. A handful included a complete description of the sources of the wastewater and the treatment system unit operations, while others just noted on the checklist what areas were evaluated and included a brief description of any anomalies observed. BRP has a standard inspection form for municipal inspections, but it was not being used in all cases. The inspection reports for facilities where violations were identified were generally more detailed than the others.

Effluent data from the facilities is reported on Discharge Monitoring Reports (DMRs) submitted to EPA and MassDEP; most effluent violations were identified through review of the DMRs rather than during the inspections. For those facilities where non-effluent violations were identified, the violations were adequately documented to support the follow-up action.

**CITATION OF INFORMATION REVIEWED FOR THIS CRITERION:**

NPDES Compliance Inspection Manual, September, 1994

**RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED**

MassDEP should consider developing a standardized inspection reporting protocol that specifies the items and level of detail that should be included in all inspection reports. Where a standard reporting form exists, the inspectors should be trained to use it.

**3) Degree to which inspection reports are completed in a timely manner, including timely identification of violations.**

**FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT)**

## **IMPROVEMENT)**

The majority of inspection reports reviewed were completed within thirty days of the inspection. Many inspection reports using a detailed checklist were completed on the day of the inspection. In a number of instances, the report included only the date of the inspection but not the date the report was completed. The date of letters sending copies of these reports to the respective facilities showed they were completed in a timely manner. Roughly a quarter of the reports were not completed within thirty days. In most instances, these reports were for facilities where no violations were identified.

### **CITATION OF INFORMATION REVIEWED FOR THIS CRITERION:**

NPDES Compliance Inspection Manual, September, 1994

### **RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED**

MassDEP should strive to have all inspection reports completed within thirty days of the inspection. The inspection reports should indicate the date on which the report was completed.

## **Section 2: Review of State Enforcement Activity**

**4) Degree to which significant violations are reported to EPA in a timely and accurate manner.**

## **FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT)**

The NPDES program has not been delegated to Massachusetts. EPA is currently responsible for entry of the DMR data into the national database system, which automatically flags significant violations. MassDEP has not been made aware of the need to report Single Event Violations into ICIS-NPDES, so these are not being flagged on inspection reports sent to EPA for entry into national databases.

### **CITATION OF INFORMATION REVIEWED FOR THIS CRITERION:**

40 CFR Part 123, PCS Policy Statement

### **RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED**

EPA should provide training to MassDEP regarding Single Event Violation reporting. MassDEP should be provided with copies of the updated Form 3560 for use by its inspectors.

**5) Degree to which state enforcement actions require complying action that will return facilities to compliance in a specific time frame.**



## **FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT)**

Fourteen of the 32 facilities reviewed had violations. Eight of these had violations that were identified through the inspections. Six had violations identified through DMR review. Of these, seven with more minor violations received Notices of Non-compliance (NON) that directed the facility to take specific actions to correct the violations within a specified time frame. Five were addressed with an Administrative Consent Order (ACO), although not all had been approved by the appropriate Regional Enforcement Review Committee (RERC) at the time of the file reviews. Four of the ACOs included up-front penalties. The fifth included stipulated penalties for violations of the compliance schedule. Another facility, the Town of Rockport, was under an existing ACO that included requirements to address its ongoing flow violations. Eastern Etching and Manufacturing Co. had minor violations that were being addressed as part of a multi-media enforcement action. In addition, Esleek Manufacturing Co. reported process water spills to MassDEP that had occurred after it had been inspected. An ACO with penalties was issued to the company for these violations, but the penalty was not based on the findings of the inspection. All of the ACOs included an appropriate compliance schedule for correcting the violations.

### **CITATION OF INFORMATION REVIEWED FOR THIS CRITERION:**

Revised Policy Framework for State/EPA Agreements, August, 1986

### **RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED**

None

**6) Degree to which the state takes enforcement actions in accordance with national enforcement response policies relating to specific media in a timely and appropriate manner.**

## **FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT)**

In 13 of the 14 of the facilities found to be in violation, DEP took an appropriate action in response to the violation(s). Six of the seven NONs were issued in response to non-SNC violations. One facility was in SNC for violations of its chlorine limit.<sup>1</sup> The remaining four

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<sup>1</sup> EPA/NPDES and MassDEP have different definitions for NONs. Each agency's definition focuses on a different aspect of the NPDES enforcement process. For the EPA/NPDES program an NON is not considered a formal enforcement action because it is not legally enforceable and will not resolve SNC. In NPDES an administrative or judicial order is necessary to resolve SNC. For MassDEP an NON is a necessary first step for certain types of violations. Depending on how the violator responds, the NON may lead to resolution of the matter or it may lead to higher- level enforcement. Massachusetts statutes explicitly define an NON as formal enforcement.

SNC violators received ACOs that included a compliance schedule. Three of the ACOs included a penalty.

Region 1 meets on a regular basis with each MassDEP regional office to review the compliance status of NPDES facilities in that region. The agencies determine the appropriate enforcement response to any violations identified, and which agency should take the lead for each case.

In the past MassDEP has been reluctant to establish interim effluent limits for facilities subject to a compliance schedule. It felt that a facility under a compliance schedule would perform better if trying to meet its permit limits rather than a less stringent interim limit. More recently MassDEP has been including interim limits in permit schedules and enforcement actions, particularly when the schedule for construction of new facilities is longer than a year. Failure to include interim limits results in national databases showing continued violations by facilities that are in fact under an enforceable schedule to correct the problems causing the violation and a higher SNC rate than should actually be the case.

#### **CITATION OF INFORMATION REVIEWED FOR THIS CRITERION:**

Revised Policy Framework for State/EPA Agreements, August, 1986; 40 CFR §123.45; MASSDEP Enforcement Response Guide; 310 CMR 5.00

#### **RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED**

MASSDEP should consider developing interim limits for all facilities under a compliance schedule to remove these facilities from the SNC list.

**7) Degree to which the state includes both gravity and economic benefit calculations for all penalties.**

#### **FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT)**

MassDEP calculates penalties in accordance with its administrative penalty regulations (310 CMR 5.00). The rules include a list of factors to be considered, including gravity (actual and potential environmental impact, actual or potential damages suffered, etc.) and economic benefit (“Making compliance less costly than the failure(s) to comply that would be penalized.”) It has developed a spreadsheet to facilitate penalty calculation and insure that all appropriate factors are considered.

Of the 32 files reviewed, there were four ACOs with penalty. In all cases the gravity appeared to be calculated in accordance with the applicable regulations and guidance. In three of the four cases MassDEP concluded that it did not have adequate information to calculate the economic benefit. In the fourth case, Mirant Canal LLC, the economic benefit consisted of the avoided cost of preparing an engineering report and plans for an unapproved treatment system modification.

**CITATION OF INFORMATION REVIEWED FOR THIS CRITERION:**

Revised Policy Framework for State/EPA Agreements, August, 1986

**RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED**

MassDEP should use its information gathering authority under 314 CMR 3.03 to obtain information on the cost of corrective actions and avoided costs that can be used to calculate the economic benefit of the violation(s). Alternatively MassDEP could calculate the economic benefit based on its best estimate of the cost of corrective action and avoided costs and adjust the calculation with more accurate information obtained during settlement negotiations.

**8) Degree to which final enforcement actions (settlements or judicial results) take appropriate action to collect economic benefit and gravity portions of a penalty, in accordance with penalty policy considerations.**

**FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT)**

None of the four ACOs with penalty arising from the 32 files reviewed have been finally resolved, so the degree to which final penalties collect economic benefit and the gravity portion of the penalty cannot be assessed for these cases.

There are several points in the process where the penalty can be modified. Each case must be reviewed by the RERC. As part of the review process, the case team prepares a Case Fact Sheet, which includes the penalty calculation spreadsheet. The RERC may adjust the proposed penalty amount during the review and approval process. The penalty may be revised during settlement negotiations with the facility. Based on past experience, these changes to the penalty are not always documented in the case file, so it is not possible to evaluate whether the final penalty complies with the applicable regulations and policies.

Also, as noted above, in most cases MassDEP believes there is not enough information to calculate the economic benefit of the violations. This makes it impossible to evaluate whether the final penalty recovers the entire economic benefit.

**CITATION OF INFORMATION REVIEWED FOR THIS CRITERION:**

Revised Policy Framework for State/EPA Agreements, August, 1986

**RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED**

MassDEP should ensure that any changes from the original penalty to the final penalty are properly documented in the case file. MassDEP should ensure that economic benefit is calculated for all penalty calculations. Significant economic benefit and at least some gravity

component should be recovered absent compelling justification.

### **Section 3: Review of Performance Partnership Agreement**

**9) Enforcement commitments in the PPA/SEA (written agreements to deliver product/project at a specified time), if they exist, are met and any products or projects are complete.**

#### **FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT)**

As noted in Element 1, the MassDEP PPA does not contain any specific numerical water inspection or enforcement targets. BWP targets its inspections largely on a multi-media basis. Some portion of these will have an NPDES component, but the proportion may vary from year to year. BRP targets a large portion of its NPDES inspections on a watershed basis. The number of inspections done depends on the watersheds being considered that year. MassDEP's performance is consistent with the non-quantified enforcement statement appended to the FY 2004-2005 PPA.

#### **CITATION OF INFORMATION REVIEWED FOR THIS CRITERION:**

200-2005 Performance Partnership Agreement

#### **RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED**

MassDEP should conduct compliance evaluation inspections each year at a larger percentage of its NPDES facilities. The appropriate coverage level can be negotiated as part of the Performance Partnership Agreement. MASSDEP should evaluate the level of resources devoted to NPDES inspections.

### **Section 4: Review of Data Integrity**

**10) Degree to which Minimum Data Requirements are timely.**

#### **FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT)**

For the NPDES program, Region 1 has been responsible for entering information on inspections and enforcement actions into national data bases. MassDEP periodically provides copies of the Form 3560 for NPDES inspections. This process is currently working well. DEP also provides copies of higher level enforcement actions (ACOs, unilateral administrative orders, judicial referrals) and some NONs. Due to resource constraints Region 1 enters only higher-level enforcement actions that resolve SNC into national databases.

#### **CITATION OF INFORMATION REVIEWED FOR THIS CRITERION:**

**RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED**

None

**11) Degree to which the Minimum Data Requirements are accurate.**

**FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT)**

MassDEP provides all inspection information and appropriate enforcement information and Region 1 enters it into national databases. Region 1 periodically provides MassDEP with printouts of the information entered to check for completeness and errors.

In the past EPA Region 1 has not linked enforcement actions to the underlying violations. The Region has become aware of this problem and has begun linking enforcement actions as required.

**CITATION OF INFORMATION REVIEWED FOR THIS CRITERION:**

**RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED**

None

**12) Degree to which the Minimum Data Requirements are complete, unless otherwise negotiated by the Region and State or prescribed by a national initiative.**

**FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT)**

Region 1 enters all inspection information and appropriate enforcement information provided by MassDEP into national databases. MassDEP is periodically provided printouts of the information entered to check for completeness and accuracy. OECA will be reviewing the Region I NPDES program separately.

**CITATION OF INFORMATION REVIEWED FOR THIS CRITERION:**

**RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED**

None

## **MassDEP Resource Conservation and Recovery Act (RCRA) Enforcement Review**

### **File Review Selection:**

The Region randomly selected 20 inspection and 11 enforcement files for review. The MassDEP's field activities are conducted out of four geographically located Regional Offices. Representative files were selected for each of the regional offices.

8 files were reviewed in the Central Regional Office, 9 files were reviewed in the Northeast Regional Office, 7 files were reviewed in the Southeast Regional Office and 7 files were reviewed in the Western Regional Office. The files reviewed included inspections at SQGs, LQGs and TSDs. Enforcement files included 7 higher-level, 17 lower-level and 7 no action.

When reviewing enforcement actions in FFY2005, Region 1 reviewed the inspection documentation for those actions. This included the review of inspection documentation that occurred prior to FY2005.

### **FFY2005 File Review Selections Central Region**

#### **Inspection Files – Central Region**

MAR000509596 Amersham Biosciences Corp., Westborough  
MAD052929635 Gentex Optics Inc., Dudley  
MAD121626287 Osmonics Inc., Westborough  
MAD981201882 Satcon Electronics, Marlborough  
MAD052924495 Zecco Inc., Northborough

#### **Enforcement Files – Central Region**

MAR000006619 Aspen Aerogel Inc., Marlborough  
MAD043468768 Modern Dispersions Inc., Leominster  
MAR000012179 CVS #1198, Leominster

#### **Inspection Files – Northeast Region**

MAR000508820 Aegis Semiconductor, Woburn  
MAD091492108 Boston Medical Center, Boston  
MAD980914519 IMPRA, Billerica  
MAD047075734 Jones Environmental Services, Chelmsford  
MAD062172929 Lightolier, Wilmington  
MAD066605809 The Gillette Co., Boston

#### **Enforcement Files – Northeast Region**

MAD985307594 Alkermes Inc., Cambridge

MAD001019470 IVEX Novacel Inc., Newton  
MAD985294354 Lawrence General Hospital, Lawrence

**Inspection Files – Southeast Region**

MAD980522817 American Insulated Wire Corp, Attleboro  
MAD001956176 Globe Composite Solutions, Rockland  
MAD001192103 Kilburn Isotronics, Norton  
MAD001011071 Reed & Barton Corp, Taunton

**Enforcement Files - Southeast Region**

MAD082303777 Cyn Oil Corp, Stoughton  
MAR000503888 GTR Finishing Corp., Brockton  
MAD001065937 Revere Copper Products Inc., New Bedford

**Inspection File – Western Region**

MAD020673778 Berkshire Medical Center, Pittsfield  
MAD001118413 Fountain Plating Co., West Springfield  
MAD002084093 General Electric Co., Pittsfield  
MAD001114206 Smith & Wesson, Springfield  
MAD001119593 Westfield Electroplating, Westfield

**Enforcement Files – Western Region**

MAD057988883 Hasbro Games, East Longmeadow  
MAD985290865 Omniglow Corp., West Springfield

**Data Metrics:**

The data metrics used to evaluate MassDEP were provided by EPA HQ in an Excel spreadsheet at the beginning of the evaluation process. Because of the conversion of the RCRA National Database to RCRAInfo - Version 3 during the time of the review, the Region has been unable to track improvements through changes in the metrics during this review.

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**1) Degree to which MassDEP has completed the universe of planned inspections.**

**FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT)**

MassDEP completed all of the planned inspections laid out in the PPA, and required nationally, in FY2005. The inspections include 20% Large Quantity Generator (LQG), the required Treatment, Storage & Disposal Facility (TSDF) inspections, Small Quantity Generator, Very Small Quantity Generator and hazardous waste transporters. MassDEP conducted 150 LQG inspections (27%) and 14 TSDF inspections (100%). MassDEP conducts inspections at all of its operating TSDFs each year, exceeding the commitment to complete this universe in a two-year cycle. The RCRAInfo database shows that MassDEP conducted over 474 inspections in FY2005, more than any other state in New England.

MassDEP has not conducted inspections at all of its LQGs in a five-year period. This requirement was only set out in the national program guidance two years ago. MassDEP has committed to addressing LQGs not inspected in five years or never inspected through the PPA process. Beginning in FY07, MassDEP has proposed a new enforcement strategy that will include inspections at LQGs having received higher-level actions within two years, inspections at LQGs receiving lower-level actions within five years, inspections at new LQGs within three years and inspections at facilities with no identified violations on an 8-year cycle. EPA has approved 1/8 of the LQGs with no violations for FY07.

**CITATION OF INFORMATION REVIEWED FOR THIS ELEMENT:**

RCRA National Program Guidance was used in reviewing this element. Also, EPA reviewed the EPA RCRA data metrics and the RCRAInfo Database.

**RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED:**

MassDEP has committed to inspecting LQGs never inspected and not inspected in five years in FY07.

**2) The degree to which inspection reports and compliance reviews document inspection findings, including accurate description of what was observed to sufficiently identify violations.**

**FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT)**

MassDEP is using various formats to document its inspections. There seems to be little consistency of format even within each Regional Office. During file reviews, the spectrum of documents found to document field activities included: checklist, FIRST Cover Sheet, FIRST Inspection Form, Inspector Report and Memorandum, process-based reports. These documents had varying levels of detail and in some cases no detail regarding observations, records, processes, waste types, waste handling activities and violations.

It was almost impossible to determine whether the inspection had covered the requirements expected to be reviewed during a full RCRA inspection (CEI or MMD as reported by MassDEP in the RCRA national database).



MassDEP inspections are not copying records or other documents in the field and they rarely use photographs to document violations. MassDEP relies heavily on the enforcement action as documentation of evidentiary facts.

Six of 31 files reviewed had information including processes, waste generation and violation detail. For the remaining files, it was difficult to determine whether the inspection had covered all the requirements expected to be reviewed during a full RCRA inspection (coded as a compliance evaluation inspection (SEI) or a detailed multimedia inspection with SEI (MMD) by MassDEP in the RCRA national database).

In several files, the violation cited in the enforcement action was too general to know how the facility had deviated from the requirement. An example is failure to comply with training requirements, but not citing which one. In many files the location of accumulation areas, numbers and volumes of containers, or the types of hazardous waste generated were not noted. There was no description of whether or how detailed a record review was conducted in many cases. One file showed a prior training violation, but the report did not state whether training records were reviewed in the most recent inspection. Some records violations are not specified. For example, the report stated “copy 6 of some manifests was missing,” but the specific manifest numbers were not noted. Files contained general statements like “the labels on some waste oil drums did not include the word ‘toxic’,” but did not state how many drums were improperly labeled. Another report states that the company should be registered as a small quantity generator of hazardous waste, but does not state why. In some cases the Notice of Noncompliance gives detail about a violation that can not be found anywhere else in the file. For example, one NON noted that delineations were faded and that raw materials stored on shelves could not be distinguished from hazardous waste accumulations, but this was not documented anywhere else in the file.

Accurate and detailed report writing is a critical element of a good enforcement program. Documentation of activities and observations in the field are critical to ensuring that evidence is collected to support all violations so that a resulting enforcement action is not called into question. Adequate documentation is also essential in sustaining the quality and completeness of a full program inspection particularly in a State that conducts multi-media inspections. Quality documentation also supports future inspections or other activities at the site.

**CITATION OF INFORMATION REVIEWED FOR THIS ELEMENT:**

EPA used the RCRA Basic Inspector Manual in reviewing this element. The Region also reviewed 20 inspection files and 11 enforcement files during the review. Inspection documentation was reviewed for all files, including enforcement files. Files were randomly selected for RCRA activities conducted in each of MassDEP’s regional offices.

**RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED:**

MassDEP has committed to assess its field documentation for RCRA and set up procedures

to ensure that the minimum elements required for conducting a full RCRA inspection, including the minimum evidentiary elements to support any violations observed at the time of the inspection, are documented for every full inspection. The proposed procedures should be submitted to EPA and instituted throughout Regional Offices. MassDEP should report progress on implementing these procedures by September 30, 2007.

**3) The degree to which inspection reports are completed in a timely manner, including timely identification of violations.**

**FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT)**

It appears as though MassDEP is completing some level of documentation well within the required time frames. Some forms of documentation were not dated, but in most files both the field documentation and the enforcement action (which usually sets out the detail of the violations) were issued before the requirement for the inspection report to be completed. There was no evidence in the files that violations had not been identified within the required time frame.

**CITATION OF INFORMATION REVIEWED FOR THIS ELEMENT:**

EPA used the EPA's Hazardous Waste Civil Enforcement Response Policy (2003) and MassDEP's Enforcement Response Guidance (1997) in reviewing this element. The Region also reviewed 20 inspection files and 11 enforcement files during the review. Inspection documentation was reviewed for all files, including enforcement files. Files were randomly selected for RCRA activities conducted in each of MassDEP's regional offices.

**RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED:**

Once MassDEP has incorporated the recommendations in Element 2, MassDEP has committed to date each report to reflect that the report is completed contemporaneously with the inspection and that the facts and evidence have been documented before initiating an enforcement action. MassDEP should report progress on implementing these procedures by September 30, 2007.

**4) The degree to which significant violations and supporting information are accurately identified and reported to EPA national database in a timely manner.**

**FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT)**

The EPA metric for MassDEP's SNC identification rate is 2.8%, with a national average of 3.6%. The State Review Framework recommends discussion with the state when this average is below half of the national average. It is not. MassDEP conducted more physical inspections than any other New England state in FY2005. Some of these inspections were sector-based, tips/complaints, or "presence inspections." Although these inspections are an important part of MassDEP's overall integrated strategy, they sometimes result in lower-level

enforcement<sup>2</sup> thereby driving down the overall SNC identification rate. MassDEP is identifying SNCs and taking higher-level enforcement<sup>3</sup> in those instances. They are also issuing lower-level enforcement actions for any other violations identified. Both lower and higher-level enforcement actions are considered formal actions under the MassDEP Enforcement Response Guidance.

MassDEP has entered Day 0 for violation determination as the date of inspections for lower-level enforcement, but the date the Notice of Enforcement Conference is entered for higher-level enforcement actions. MassDEP routinely conducts enforcement conferences or show cause meetings to discuss conditions for returning to compliance and to determine if the criteria for higher-level enforcement are met. It has been MassDEP policy that the company be notified of its violations prior to the issuance of a formal action. The Notice of Enforcement Conference is the initial notification to a company when a higher-level enforcement is contemplated.

There is discrepancy between the Facility Master File (FMF), MassDEP's database, and RCRAInfo with respect to HLEs. 17 higher-level enforcement actions were entered into FMF, but were not in RCRAInfo. For the most part this can be attributed to a misunderstanding on reporting of activities that are beyond the scope of the EPA's minimum mandatory requirements. There are also some minor discrepancies related to capturing and reporting single media statistics from multi-media cases.

**CITATION OF INFORMATION REVIEWED FOR THIS ELEMENT:**

EPA used the EPA's Hazardous Waste Civil Enforcement Response Policy (2003) and MassDEP's Enforcement Response Guidance (1997) in reviewing this element. EPA also reviewed the EPA data metrics, EPA's RCRAInfo database and FMF. The information was corroborated in the file review.

**RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED:**

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<sup>2</sup>Lower-level enforcement usually consists of a Notice of Noncompliance or a Field Notice of Noncompliance. A Notice of Noncompliance is defined in MassDEP's Enforcement Response Guidance Policy as written notice given to a regulated entity by MassDEP which says that the regulated entity has failed to comply on any specified occasions with one or more requirements

<sup>3</sup>Higher-level enforcement is defined in MassDEP's Enforcement Response Guidance Policy as an enforcement response with consequences more severe than those resulting from a Notice of Noncompliance, and includes administrative orders, Penalty Assessment Notices, administrative consent orders (with or without penalties), Notices of Response Action, permit and license sanctions, and civil and criminal judicial prosecution.

MassDEP has committed to enter the accurate violation determination date regardless of the level of enforcement and does not have to identify significant noncompliance in the national database until 150 days after the violation determination date. MassDEP has also committed to working with EPA to resolve any confusion about entering formal actions for cases issued into RCRAInfo and has already prepared a list of those facilities that are in FMF, but not in RCRAInfo so that its data leads can begin to correct discrepancies. Standard operating procedures will be instituted to ensure data accuracy in the future. MassDEP should report progress on implementing these procedures by September 30, 2007.

**5) The degree to which enforcement actions include required corrective or complying actions that will return facilities to compliance in a specific time frame.**

**FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT)**

All enforcement actions reviewed, whether higher or lower-level, clearly identify complying actions and set out time frames for return to compliance. Enforcement actions in all files reviewed identified corrective actions required, the regulatory citation and a date for return to compliance. In most cases, MassDEP either conducts a follow-up inspection or issues a compliance letter based on submittals from the company. A discussion of penalties associated with formal actions can be found in Element 7.

**CITATION OF INFORMATION REVIEWED FOR THIS ELEMENT:**

The Region reviewed 20 inspection files and 11 enforcement files during the review. Inspection documentation was reviewed for all files, including enforcement files. Files were randomly selected for RCRA activities conducted in each of MassDEP's regional offices.

**RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED:**

None

**6) The degree to which MassDEP takes timely enforcement actions, in accordance with RCRA policy.**

**FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT)**

MassDEP is routinely issuing enforcement actions in a timely manner. Of the 31 files reviewed, 25 had some type of resulting enforcement and all but one were issued in a timely manner. Seven files reviewed were for higher-level actions. The only action that did not fall within the required time frame was a lower-level action that was issued in 158 days rather than 150. Compliance is verified either by a site visit or submittal from the company. Compliance letters

are routinely sent documenting that a company has returned to compliance.

**CITATION OF INFORMATION REVIEWED FOR THIS ELEMENT:**

EPA used the EPA's Hazardous Waste Civil Enforcement Response Policy (2003) and MassDEP's Enforcement Response Guidance (1997). The Region reviewed 20 inspection files and 11 enforcement files during the review. Inspection documentation was reviewed for all files, including enforcement files. Files were randomly selected for RCRA activities conducted in each of MassDEPs regional offices.

**RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED:**

None

**7) The degree to which MassDEP includes both gravity and economic benefit calculation for all penalties, appropriately using BEN model or consistent state policy.**

**FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT)**

MassDEP issued penalties in all higher-level enforcement actions reviewed. The files reviewed showed penalties ranging from \$2,545 to \$32,725.

MassDEP's penalty statute requires notification to the company prior to issuance of a penalty in all instances other than violations which result in a release, discharge or disposal without approval, conducting an activity that required MassDEP approval without prior approval, or failure to report unauthorized disposal of hazardous waste. MassDEP's statute also allows for issuance of a penalty when there is a history of noncompliance. History of noncompliance is defined by either a prior NON for the same violation within five years or two NONs for different violations within four years. In addition, MassDEP's penalty statute allows multi-day penalties only in instances where there has been prior notification of a violation and documentation of continuation of that violation from the time of notification. Prior to the Oil Spill Act of 2004, MassDEP penalties were capped at \$25,000 for both gravity and economic benefit. In files reviewed, economic benefit was only calculated for avoided fees when a company had acted out of status, and no multi-day penalties were noted. There was no information in any files that would have indicated that either economic benefit or multi-day penalties should have been assessed but was not (e.g., no illegal disposal or waste determination violations.) The ability to include a full economic benefit calculation in addition to the gravity penalty should allow MassDEP to take a closer look at the economic implications of RCRA violations.

Case fact sheets and penalty calculation sheet were in the file for each higher-level enforcement action. MassDEP has a Regional Enforcement Review Committee in each Regional Office that reviews cases for consistency and determines appropriate settlement amounts. Cases that are referred to the Massachusetts Attorney General's Office and cases

with administrative penalties of greater than \$40,000 are review by a Case Screening Committee comprised of members of various MassDEP Offices and the Office of Attorney General.

MassDEP has developed a penalty matrix for instances of acting out of status. This policy guides MassDEP staff in calculating penalties for different levels of violation such as a small quantity generator acting as a large quantity generator or a large quantity generator acting as a storage facility.

Documentation of final settlement amount is done in some instances by including a copy of RERC meeting notes on the particular case in the file, but is very often done with notes in margins or no explanation of final settlement amounts. This was of particular concern for cases in which part or all of a penalty was suspended. MassDEP should include a final settlement justification in the case file.

MassDEP's automated penalty calculation sheets are an excellent tool that MassDEP has developed to drive quality and consistency, and to facilitate documentation of penalty rationale for inspectors. The penalty calculation sheets have a column for each violation cited and a line item for each element of the gravity penalty, as well as multi-day and economic benefit considerations. The automated system may be overridden, if necessary. MassDEP continues to refine and improve this system. Printouts from the automated system were included in each higher-level enforcement file.

#### **CITATION OF INFORMATION REVIEWED FOR THIS ELEMENT:**

EPA reviewed 310 Code of Massachusetts Regulations (CMR) 5.00 Civil Administrative Penalty Regulations. The Region also reviewed 20 inspection files and 11 enforcement files during the review. Inspection documentation was reviewed for all files, including enforcement files. Files were randomly selected for RCRA activities conducted in each of MassDEP's regional offices.

#### **RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED:**

MassDEP has committed to adding a line-item in its penalty calculation sheet to show that economic benefit has been considered, but does not apply, and to include a final settlement justification in the case file. MassDEP should report progress on implementing these procedures by September 30, 2007.

**8) The degree to which penalties in final enforcement actions include economic benefit and gravity in accordance with applicable penalty policies.**

#### **FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT)**

MassDEP routinely holds enforcement conferences with potential violators before it issues

any higher-level enforcement action. In most cases, there is no initial action. A final order is issued as a result of the enforcement conference. A discussion of penalty assessment for enforcement actions can be found in the Element 7 discussion.

MassDEP collected penalties for all higher-level enforcement actions in which a penalty was assessed. The documentation of the collection of penalties was again inconsistent. Some files included a copy of the check sent by the respondent. MassDEP staff referenced a database that tracks the payment of the penalty that is used by Regional managers to ensure all penalties have been paid.

Although EPA's data metrics show MassDEP's performance in this element is just below the national average, MassDEP's data from their FMF shows a higher rate of higher-level actions that included penalties (94%) than that reflected in RCRAInfo (73%).

**CITATION OF INFORMATION REVIEWED FOR THIS ELEMENT:**

EPA reviewed 310 Code of Massachusetts Regulations (CMR) 5.00 Civil Administrative Penalty Regulations. Information reviewed also included the EPA data metrics, EPA's RCRAInfo database and FMF. The information was also corroborated by file reviews.

**RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED:**

MassDEP has committed to include either a copy of a check or a hard copy of the relevant page(s) of the penalty payment tracking system in the file. MassDEP has conducted a qualitative analysis of discrepancies between OTIS, RCRAInfo and FMF and has sent requests for data correction to its Regional Offices. MassDEP should report progress on implementing these procedures by September 30, 2007.

**9) The degree to which enforcement commitments in the PPA/PPG/categorical grants are met and any products or projects are completed.**

**FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT)**

In FY2005, MassDEP's PPA Compliance Strategy commitments included conducting inspections and reporting to the national database. There were no other compliance/enforcement related projects included in the PPA Compliance Strategy.

MassDEP conducted more physical inspections than any other state in Region 1, going far beyond the inspection commitments in the PPA. The RCRAInfo database shows 474 for MassDEP in FY2005. MassDEP's database shows an even greater number of inspections completed.

EPA will continue to work with MassDEP to ensure data quality for reporting to RCRAInfo. It is important to note that for this element and other elements, some data reporting issues are

ones that do not represent complete deficiencies or failure to provide information, but rather are elements under which MassDEP has met the national average or mandatory requirement, but is actually doing more than has been recognized.

**CITATION OF INFORMATION REVIEWED FOR THIS ELEMENT:**

The information used to evaluate this element included the Compliance Strategy to the Performance Partnership Agreement, and the RCRAInfo database.

**RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED:**

As discussed in Elements 4, 8, 10, 11 and 12, MassDEP and EPA will address database issues that affect their commitment to enter data into RCRAInfo.

**10) The degree to which the Minimum Data Requirements are timely.**

**FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT)**

MassDEP has done a good job at entering most of its inspections and enforcement milestones in the national database. The designation of SNCs and their entry into the national database has been an area that has been inconsistent due in large part to the restrictions of the MassDEP statutes and in small part to confusion over when and how the information should be entered to satisfy the MassDEP's statutory restrictions.

EPA has agreed that MassDEP should designate SNC when it has reviewed all information relevant to the violation after the enforcement conference. EPA will continue to work with MassDEP to satisfy both the needs of the national program and the constraints of MassDEP's Enforcement Response Guidance to be sure that data is entered in a timely manner.

**CITATION OF INFORMATION REVIEWED FOR THIS ELEMENT:**

Information reviewed included the EPA data metrics, EPA's RCRAInfo database and FMF. The information was also corroborated by file reviews.

**RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED:**

EPA will clarify the SNC requirements with MassDEP and continue to work with MassDEP to address them.

**11) The degree to which the Minimum Data Requirements are accurate.**

**FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT)**

Two files reviewed did not have a return to compliance date in RCRAInfo, one file did not



have the enforcement action entered into RCRAInfo and one file had neither the violation nor the enforcement action entered. All other information, including dates of inspections, violation determination date, enforcement and return to compliance dates, violations and enforcement type and SNC determinations were consistent with information in the files. MassDEP has a large number of facilities with open violations in the RCRAInfo database. MassDEP has done some preliminary work to determine that many of these facilities are in the system because of data entry problems (failure to go back into the system to enter return to compliance.) EPA will provide MassDEP with a list of facilities that have remained in noncompliance so that they can correct any data problems. Significant noncompliance cases that remain in noncompliance are regularly reviewed with MassDEP, and the Region has always been satisfied that cases are being actively worked on or returned to compliance.

MassDEP routinely conducts enforcement conferences, or show cause meetings, to determine if the criteria for higher-level enforcement are met. MassDEP makes a SNC determination when this meeting has been completed and a final decision on potential violations has been made. The Region has agreed that making the SNC determination after all of the information from the enforcement conference has been reviewed, and reporting it as such in RCRAInfo, is appropriate.

**CITATION OF INFORMATION REVIEWED FOR THIS ELEMENT:**

Information reviewed included the EPA data metrics, EPA’s RCRAInfo database and FMF. The information was also corroborated by file reviews. Each file reviewed was compared to the RCRAInfo report for that facility to verify accuracy of information.

**RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED:**

EPA will continue to work with MassDEP to ensure data quality for reporting to RCRAInfo.

**12) The degree to which the Minimum Data Requirement are complete.**

**FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT)**

MassDEP is completing each of the minimum data elements as set out nationally.

There is discrepancy between the Facility Master File, MassDEP’s database, and RCRAInfo. For the most part this can be attributed to a misunderstanding on reporting of activities that are beyond the scope of the EPA’s minimum mandatory requirements. There are also some discrepancies related to capturing and reporting single media statistics from multi-media cases. Finally, some differences in statistics can be attributed to the use of different terminology. For instance, MassDEP does not issue “informal” enforcement actions. Any enforcement action issued by MassDEP is considered a formal action. Formal enforcement actions are either designated as a Lower-level Enforcement Action (Notices of Noncompliance) or a Higher-level Enforcement Action (an Order, Consent Agreement,

and/or Penalty Assessment Notice.)

Some of the minimum data elements with the largest discrepancies include the LQG universe and the number of facilities in violation. Massachusetts has made a concerted effort to characterize its LQG universe accurately. MassDEP has created several spreadsheets for the Region to represent the true LQG universe of facilities that submitted the 2003 BRS and were still LQGs in FY2005. The Region has agreed that “one-time generators,” such as remediation sites, could be excluded from the universe. MassDEP and Region 1 are currently working on verification of the most recent LQG universe.

The RCRAInfo - Version 3 conversion has delayed some of the progress in correcting data inconsistencies. The new RCRAInfo system is an opportunity for Region 1 to initiate discussions and offer training on the database that will possibly address some of the database issues.

**CITATION OF INFORMATION REVIEWED FOR THIS ELEMENT:**

Information reviewed included the EPA data metrics, EPA’s RCRAInfo database and FMF.

**RECOMMENDATIONS IF CORRECTIVE ACTION IS NEEDED:**

Region 1 will continue to offer guidance to MassDEP to clarify data and allow MassDEP to get recognition for the full breadth of its RCRA program. MassDEP has committed to work with EPA and create SOPs, where necessary, to resolve data inconsistencies such as number of facilities in violation. MassDEP should report progress on implementing these procedures by September 30, 2007.

## **Element 13 Alternative Compliance Programs**

### **FINDINGS (INCLUDING SUCCESSFUL PERFORMANCE AND AREAS FOR IMPROVEMENT):**

On April 14, 2005, MassDEP submitted a request to Region 1 asking for “credit” to support work associated with its Environmental Results Program (ERP). MassDEP believed that EPA should provide credit for its compliance assurance activities at 600 dry cleaners, which the state maintains have a combined “environmental footprint” comparable to 19 Air major operating permit sources and 23 RCRA large quantity generators. The attached “ERP Matrix” describes in detail MassDEP’s dry cleaner ERP and the environmental footprint calculated by MassDEP.

After reviewing all of MassDEP’s submissions, and extensive discussion with MassDEP and OECA, Region I determined that MassDEP should receive both recognition credit and resource flexibility credit for the MassDEP dry cleaner ERP. That decision was relayed to MassDEP in a July 19, 2006 letter from Robert Varney to Robert Golledge. (Attached)

Region 1 did not adopt a specific formula for determining credit; rather it evaluated the totality of MassDEP’s compliance and enforcement program, including the dry cleaner ERP and PPA commitments. The credit review was informed by the SRF review as they were done simultaneously.

### **CITATION OF INFORMATION REVIEWED FOR THIS ELEMENT:**

April 14, 2005, MassDEP request for ERP credit, and supplements dated September 30, 2005, December 5, 2005, and April 19, 2006

Addendum I: MassDEP ERP Dry Cleaner Program Description (“ERP Credit Matrix”) (Attached)

Resolution of Outstanding Core Program Adequacy Concerns; MassDEP Status Report Updated June 9, 2006

MassDEP FY06 PPA Air Commitments

July 19, 2006 letter from Robert Varney to Robert Golledge granting MassDEP recognition and resource flexibility credit

Although not reviewed for the ERP credit decision, MassDEP’s response to the above letter is relevant to the ongoing discussions related to an “environmental footprint.” That response was in an August 4, 2006 letter from Robert Golledge to Marcus Peacock.

## **OECA Review of the Region 1 CWA NPDES Program in Massachusetts**

EPA Region 1 has the authority to manage the CWA NPDES program in Massachusetts, which includes the permitting and enforcement programs. Although MassDEP has its own state authorities over surface water discharges, Region 1 has the primary responsibility for this program in Massachusetts. The following is OECA's SRF report of Region 1's CWA NPDES program in Massachusetts.

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**Program Evaluated for Region 1 CWA/NPDES Program in  
Massachusetts**

**Review Place and Date**

Region 1 Office, Boston, Massachusetts

*October 3 to 5, 2006*

**EPA Evaluators:**

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**Overview and Summary**

**Review Process**

The review team conducted the on-site review of the Region 1 direct implementation of the Massachusetts NPDES compliance and enforcement programs on October 3 to 5, 2006 in the Region 1 offices in Boston, Massachusetts. This review is based on FY

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2005 data, which was the most complete year of data available at the time of the review.

This is a State Review Framework review of Region 1's NPDES direct implementation of the program in Massachusetts. The review is being conducted under the same implementation process that is specified for reviewing a state's programs. The same implementation guide, file selection protocol, and metrics are used for this review.

OECA and Region 1 began planning for the review in August 2006 with initial discussions between the OECA and Region 1 Office of Environmental Stewardship (OES) managers and staff. The team worked with two Units in the Office: the Water Technical Unit and the Regulatory Legal Unit. The Water Technical Unit is responsible for compliance monitoring, conducting inspections and managing enforcement actions. When violations are detected (through either DMR reporting or inspection reports) the inspectors and legal staff work together to assess the findings and recommend the appropriate enforcement response.

The first step was to identify the universe of inspection and enforcement files to use in selecting the files for the on-site review. The team downloaded the data metrics and underlying data from the OTIS web site in order to analyze the data and to select the files to be reviewed. The team also used data from ICIS and PCS in order to have the complete list of enforcement actions conducted by the Region in Massachusetts and New Hampshire in FY 2005. After analyzing the data and preparing the list of files for review, the OECA team prepared a list of issues and conducted a conference call on September 26, 2006 with the Region to discuss those issues. A formal introduction letter was sent to the Region on September 28 that presented the data metrics, identified the files for inspection, and outlined the main data issues. An entrance meeting was conducted with Region 1 OES managers and staff at the beginning of the visit on October 3<sup>rd</sup> and an exit meeting was conducted at the end of the visit on October 5<sup>th</sup> to provide the review team's initial findings based on the data analysis and file reviews.

Although the Massachusetts Department of Environmental Protection (DEP) is not authorized to run the NPDES program, the state conducts its own NPDES program and shares the inspection work with Region 1. This division of labor is described further in findings of the report below in the discussion under Element 2. Region 1 reviewed NPDES inspections carried out by Mass DEP.

**File Selection for Massachusetts**

The universe of water sources in Massachusetts during FY 2005 was 663 sources consisting of 129 NPDES major sources, 196 non-major NPDES sources, and 338 other sources. There were 163 files in the universe for FY 2005: 107 inspection files and 56 enforcement actions. Since this was fewer than 300 files, the review team needed to review between 15 and 30 files. In order to have a good sample of files to

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review, the team selected 22 inspection files and 13 enforcement action files for a total of 35. To be representative and to address data issues, the team selected files for the following categories: major sources, non-major sources, wet weather (storm water and CAFOs), and municipal sources. The files were selected randomly within each of these categories. No additional files were selected because of specific issues identified in the preliminary data analysis. However, after the initial files were selected, additional files were selected because the review team learned from the Region that most of their enforcement actions were not represented in the list. It was determined that this happened because those cases were not represented in OTIS. This is explained in Element 10. The final list includes files from the revised list.

### **Summary of Findings**

The Region 1 Office of Environmental Stewardship conducts an active NPDES program in Massachusetts. The following report describes the findings for Elements 1 through 12 of the State Review Framework and the metrics for each of those elements. This section summarizes the main findings of the reports.

- Region 1 works well with the Massachusetts DEP. Although the program is not authorized to Massachusetts, Mass DEP does conduct a large number of inspections. Inspection coverage by Region 1 and Mass DEP of the NPDES majors and non-majors is below the national average.
- Inspection reporting is usually timely but there are notable exceptions that skew the data. Two-thirds of the inspection reports are completed in less than 30 days. The average number of days to complete a report for Massachusetts is 53 days, but the median is 22 days.
- Inspection report writing is inconsistent. The majority of reports contain the 3560 form and supporting photographs. A number of them contain narrative summary, but not if there are no potential violations.
- Enforcement actions are appropriate, the orders are well written, and the penalty policy is followed. However, some of the administrative orders were pushing the legal envelope for violations of water-quality-based copper limitations. There should be other solutions to this complex problem.
- Timeliness of enforcement actions is an issue for the work in Massachusetts.
- A number of non-major sources in Massachusetts (444) are identified in the ICIS/PCS database as never being inspected, although it is not clear that all of these permittees merit a comprehensive inspection.
- Single Event Violations are not being entered into the ICIS/PCS database.

### **Overarching Finding**

An initial, overarching finding from the review relates to the condition and location of the inspection and enforcement files. The review team provided the Region with a list of files more than two weeks in advance of the review and they were unable to readily identify the location of and access the files for the review. The files are kept by the

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inspectors or attorneys who worked on those activities and not in a central filing system. The Region has a central filing system for permits, but that is kept by a different office on a different floor in the building. Compliance information (i.e., inspection reports) is not routinely kept with the permits file. There is a historic central enforcement filing system maintained by a contractor, but this file room has been traditionally reserved for finalized enforcement cases that are held prior to forwarding to an off-site records center. The Regional enforcement staff uses the filing system to a limited extent and finds it more convenient to keep active enforcement files at their desk. The problem is that files are scattered and difficult to locate. Moreover, there is no central historical compliance and enforcement file for many of the permitted facilities. Without the extended historic records, it was difficult to see the whole compliance history in the files. The OTIS facility reports were helpful in assessing some of the compliance history. In addition the Regional inspectors and attorneys were available to discuss the details of the specific files, which was very helpful. The main issues in the condition of the enforcement and compliance files relate to retaining institutional knowledge required for understanding the compliance and enforcement history of each facility. The Region needs to address this issue.

**Recommendations if corrective action is needed:**

***Region 1 should develop a plan for organizing and maintaining the historical compliance and enforcement files to ensure that they have the requisite documentation. Files should contain historical records for a facility so that Regional inspectors and managers have ready access to these materials.***

See Region 1 Action Items A, C and D, attached.



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**Findings on Region 1 Direct Implementation of  
CWA/NPDES Program Massachusetts**

**Section 1: Review of State Inspection Implementation**

**1. Degree to which state program has completed the universe of planned inspections/evaluations (covering core requirements and federal, state, and regional priorities).**

Findings:

There are 663 water sources in Massachusetts in FY 2005: 129 major NPDES sources, 196 non-major NPDES sources, and 338 sources other than NPDES.

Metric 1a -- 59.7% of all major CWA NPDES sources in Massachusetts (77 of 129 major sources) were inspected by EPA Region 1 and the Massachusetts DEP in FY 2005. 7.8% of the majors (10) were inspected by EPA Region 1 and 51.9% (67) were inspected by Mass DEP. The total EPA/State inspection coverage is less than the national average of 67.7% and the national goal of 100%.

Metric 1b -- 13.3% of non-major CWA NPDES sources in Massachusetts (26 of 196) were inspected by EPA Region 1 and the Massachusetts DEP in FY 2005. 4.1% (6) of non-major sources were inspected by EPA Region 1 and 9.2% (18) were inspected by Mass DEP. There is an informal benchmark of 20% minors to be inspected per year (one inspection within a permit cycle). Region 1's performance with this metric is not consistent with its performance in New Hampshire where 52.2% of the non-major NPDES sources were inspected in FY 2005.

Metric 1c -- 8.3% (28 of 338) of the non-NPDES sources were inspected in FY 2005, all of which were Region 1 inspections.

Metric r -- In FY 2005, Region 1 and Massachusetts conducted 77 major source inspections and 26 non-major inspections. This exceeded the Region's Annual Commitment System (ACS) commitment to conduct 70 major sources inspections in FY 2005 in Massachusetts. There were no FY 2005 commitments to non-major source inspections in FY 2005.

Based on the data in PCS for Massachusetts, out of 851 non-majors, there are 444 that are listed as never having been inspected. Of these 444, about 9% (39) are listed in PCS with the most recent 12 quarters in non-compliance, which may not be the case. The OTIS reports for each of the 39 facilities for the most recent 12 quarters indicate that non-compliance is mostly attributed to reportable noncompliance (RNC) and to a much lesser extent to non receipt of DMRs, effluent violations, and compliance violations. The Region indicates that the remaining 405 minors are either minor

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permittees that hold a general permit or facilities for which the Region has taken formal or informal enforcement actions in the past and has assigned an NPDES number to properly account for the action.

The breakdown of total quarters of non-compliance for these 39 sources is:

<b>Compliance Codes as Listed in OTIS</b>	<b>Description of Compliance Codes</b>	<b>Percentage</b>
N	Reportable noncompliance (RNC)	85.8%
D	SNC for reporting violation - non-receipt of DMR	9.6%
E	SNC for effluent violations of monthly average limits (TRC and chronic)	2.2%
R	Compliance - an enforcement action has been issued, and the facility has completed all requirements of the action	2.0%
P	Compliance - an enforcement action has been issued, and facility compliance with the action is pending final completion.	0.4%
S	SNC - compliance schedule violation - not following schedule	0%
X	SNC for effluent violations of non-monthly average limits (TRC and chronic)	0%
T	SNC for compliance schedule reporting violation	0%
C	Compliance - manual override of noncompliance by state or EPA region.	0%

Below is a breakout of the 444 facilities by the types of facilities:

<b>Non-Majors in MA Never Inspected</b>		
<b>Permit Types</b>		<b>Number in PCS</b>
1	General (G)	237
2	Standard Individual (O)	61
3	Unpermitted (U)	59
4	Pretreatment (P)	55
5	Stormwater (S)	16
6	Stormwater General	14
7	Sludge Only (L)	2
	Total	444

The information on the sources that appear to not have been inspected was discussed

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with the Region during the on-site review. Possible explanation for this are: 1) some of the facilities may have been inspected by Mass DEP and not reported in PCS: 2) the lack of an inspection frequency policy for some of these facility types may be an issue. In addition, there may be facts about these types of facilities that EPA is not aware of. It is not clear that this indicates that there is a problem. It would, however, be a useful line of inquiry as a follow-up to the review.

The State of Massachusetts is not authorized to run the NPDES program. It is clear, however, from the data that the Mass DEP manages an active NPDES program. EPA and Mass DEP work in concert and have developed a good working relationship that follows an established division of labor. The state has its own authorities over surface water discharges, which are parallel with EPA's authorities. Mass DEP's Bureau of Waste Prevention has responsibility for municipal treatment facilities. The Bureau of Resource Protection is responsible for municipal treatment facilities and sanitary wastewater discharges users while EPA takes responsibility for municipalities, stormwater, and some industrial users. This is further described in the Region's State Review Framework report of the Mass DEP. In terms of permitting, Region 1 completes the permit writing and issuance with the cooperation of the State. In general, NPDES inspections in Massachusetts are conducted in coordination with the state and EPA. Based on the inspections reviewed for this report, the Region concentrated inspections on major sources, municipal systems and storm water facilities, with a few industrial inspections.

Citation of information reviewed for this criterion: ***CWA EMS, ICIS, and PCS***

***Recommendations if corrective action is needed:***

***Region 1 should assess the situation for the 444 minors that appear to have never been inspected. By November 30, 2007, the Region will provide a detailed discussion of this finding as well as a plan to inspect holders of general permits.***

**2. Degree to which inspection/evaluations reports document inspection findings, including accurate identification of violations.**

Findings:

22 inspection files were reviewed. 20 files were from the list of 21 inspection only files and 2 were from the list of enforcement files. The one inspection file that did not contain an inspection report was a storm water case, which did not actually have an inspection, but was entered incorrectly as such into PCS. The two inspection reports from enforcement files were Pretreatment Compliance Inspections conducted by the Massachusetts DEP. The Region mainly identifies NPDES enforcement actions through DMR reporting into PCS. An example would be actions based on DMR reporting violations of the water-quality based copper limitations contained in municipal

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NPDES permits.

Metric 2a – 64% (14 of 22) of the inspection files reviewed contained adequate inspection documentation. The files with complete documentation were well organized and contained the form 3560 coversheets, narratives of findings, and supporting photographs. Findings from the inspection and potential violations were documented in the inspection reports. The files that contained these items were considered to be complete. The other 36% of the files reviewed were considered to be incomplete because they were missing items including the 3560 forms, the required narrative report, or a supervisor's signature. Storm water inspections tended to be well documented and included photographs. The two pretreatment inspection reports were also thorough and well documented.

The Region's inspection reports contain only the form 3560 to document the inspection when no major issues were identified. Some of the 3560 inspection forms contained brief descriptions of equipment problems written in summary form narrative reports specify findings from the inspections and do not explicitly identify violations or make SNC determinations. Those determinations are made by the enforcement attorney in consultation with the inspector. The Region routinely follows-up on SNC determinations that are identified by DMRs and reported in PCS. EPA policy is that routine CEI inspections at NPDES permit holders are conducted to maintain inspection presence and for case support, and to determine compliance. Ideally a narrative report documenting all findings should be prepared and attached to the 3560 so later inspectors could have a sense of the nature of the facility before an inspection.

Inspections at storm water sites and pretreatment facilities document findings that often lead to a determination of violations and enforcement response. The determination of violations and SNC is made based on follow-up meetings between the Region's enforcement attorneys and the inspectors. This system appears to work well, and it is clear that the violations are properly identified and appropriate action is taken. What is not in the files is a specific document stating that a determination was made and subsequently not entered into ICIS-NPDES. This makes it difficult to specify the date when an SNC determination was made. It also makes it difficult to follow-up on Single Event Violations (SEVs) and to enter them into the database. It should be noted that without a wet weather SNC definition, these violations are not SNC, but they need to be entered and tracked as single event violations.

Although the Region maintains its own, internal SSO Tracking system, the Region is not entering SEVs into the PCS/ICIS-NPDES and this is a problem area that needs to be addressed. Two of the enforcement files documented actions for sanitary sewer overflow violations. These violations were not detected through inspections, or through DMR reporting, but rather by citizen complaint, and should have been entered into PCS/ICIS-NPDES.

Citation of information reviewed for this criterion: ***CWA EMS, ICIS, PCS, and File***

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**Reviews**

**Recommendations if corrective action is needed:**

***Region 1 needs to ensure that inspection reports are complete. One way to do this is to prepare a plan for maintaining information in the inspection files in order to have complete reports (i.e., the form 3560 and the requisite narrative reports). In the long run, the files should contain the historic record of the facility and to assure that future inspectors can easily find inspection reports, notes to the file and other files information. This will help inspectors to understand the compliance history of a facility.***

See Region 1 Action Items C, D, and E.

***Region 1 needs to document when a violation and SNC are determined based on the findings in an inspection report. Violations identified through the SSO Tracking system and CEIs need to be entered into ICIS. . This will help establish the date SNC is identified and aid in reporting these violations, including SEVs, into the database. The Region should develop an SOP for doing this. The Region indicates that they will identify SNC for SSOs, CSOs, stormwater and CAFOs upon finalization of the Wet-Weather SNC Policy.***

See Region 1 Action Item H

**3. Degree to which inspection reports are completed in a timely manner, including timely identification of violations.**

Findings:

Metric 3a – 64% (14 of 22) files were completed in a timely manner.

Two-thirds (14 of 22) of the inspection reports reviewed were completed within 30 days, which is the Region's standard. Nine of these reports were completed in 15 days or less, some in one or two days. Four inspection reports were completed in about 50 days. Three of the inspection reports took more than 120 days. The median number of days to complete an inspection report is 18 days. On average, the number of days for the inspection report was 53 days, longer than the 30 day standard.

The Region's inspection reports do not specifically identify violations, but they do contain findings that point towards potential violations. Routine CEI inspections at NPDES permit holders are conducted to determine compliance, maintain inspection presence and for case support. Violations at these facilities are usually identified through DMRs reported into PCS, now ICIS-NPDES. Violations identified through CEIs at these sources are Single Event Violations and are not reported to PCS or ICIS-NPDES by the Region. Ten of the 22 inspection reports, while not specifically identifying violations, did document and identify problems areas at those facilities that

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potentially could be violations.

Identification of violations is not a problem for the Region; however, there was no documentation in the files, other than that enforcement response to document the decision that violations occurred. It would be good practice for the Region to begin documenting these decisions in the files. This will help inspectors and compliance officers in the future to understand the compliance history of those facilities. Moreover, the Region adhering to the timeliness criteria is an area of concern.

Citation of information reviewed for this criterion: ***CWA EMS, File Reviews***

***Recommendations if corrective action is needed:***

***Region 1 should develop an SOP or a system to track the process for conducting inspections, completing inspection reports, and documenting determinations of violations. It is important to identify SNCs and SEVs as quickly as possible in order to adhere to the timeliness criteria for issuing enforcement actions. In the long run, the files should contain the historic record of the facility to ensure that future inspectors can easily find inspection reports, notes to the file and other files information. This will help inspectors to understand the compliance history of a facility. The Region should implement procedures and management controls to improve the 53 day average for completing reports.***

See Region 1 Action Items B, E, F and G

**Section 2: Review of State Enforcement Activity**

**4. Degree to which significant violations are reported to EPA in a timely and accurate manner.**

Findings:

Metric 4a – No single event violators are listed in the data metrics for Region 1 or Massachusetts.

While not every single event violation (SEV) is SNC, they should still be noted in the data systems. SEVs are violations of the CWA's NPDES requirements that are documented during a compliance inspection, reported by the facility, or determined through other compliance monitoring methods by the permitting authority. They are required to be entered into the national system (PCS or ICIS-NPDES) for all NPDES major permittees. Additional guidance, "Final Single Event Violation Data Entry Guide for PCS" was issued in June 2006, which should help the Region deal with this issue. (OECA also, strongly encourages the entry of single event violations at non-major facilities; however, at this time, this requirement is pending the issuance of the ICIS-

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NPDES Policy Statement.) SEV tracking is important to forming an historic electronic record of inspection and compliance determinations. Tracking inspection results can impact future enforcement decisions, particularly when a permittee continues to exhibit the same violation over the course of several years. Electronic documentation of violations also improves the accuracy of public information.

Among the files reviewed, the review team found at least 15 instances where SEVs were identified, but were not entered into PCS. The Region is properly identifying violations based on the inspection reports, mainly from inspections at storm water sites and pretreatment plants. Some SEVs are also identified based on CEIs at DMR reporting facilities. The Region maintains its own database for tracking SSO occurrences.

Metric 4b – There is a 34.1% (44) SNC identification rate for major permittees in Massachusetts, which is above the national average of 18.6%. Most of the violations found at major sources are identified through DMR reporting. The DMRs document various types of violations such as effluent violations, late DMR submissions, etc. Depending on the nature of the single event violations identified through inspections, entry of SEVs into PCS may raise the state's SNC rate for majors. Violations are often properly and accurately identified through inspections; however they are not being entered into the national database as single event violations. Violations identified through any inspection are single event violators that should be routinely reported to PCS.

Metric 4d – This metric is the percentage of SNC determinations that are accurately reported. None of the inspection reports in the files reviewed led to a SNC determination. 73% (16 of 22) of the inspection reports reviewed were individually-permitted sites, where SNC could be determined through DMR reporting. CEI inspections at these sources are not routinely used to make SNC determinations because the inspection would be to follow-up on DMR findings, but the Region should be using them to help make determinations of violations and SNC determinations. Inspections at other types of sources, such as storm water, do not lead to SNC determinations because there is presently no wet weather SNC definition.

Citation of information reviewed for this criterion: **CWA EMS**

***Recommendations if corrective action is needed:***

***The Region needs to begin entering single event violations into ICIS-NPDES as soon as possible. They should also be using CEIs to identify SNC. The Region should submit a timetable to OECA on when this will occur and when OECA can assess Regional implementation of this recommendation.***

See Region 1 Action Items B and E

***Information currently available only in the Region's CSO-SSO database***

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*needs to be entered into the national data system so that it will be accessible by OECA and the public. The new 3560 form (distributed in January 2006) contains a list of single event violations to facilitate data entry.*

See Region 1 Action Item H.

**5. Degree to which state enforcement actions require complying action that will return facilities to compliance in a specific time frame.**

Findings:

Thirteen enforcement files were reviewed for this element. One of the files was for an action based on the Metropolitan District Commission ([Boston Harbor](#)) case. Since this is based on a longstanding consent decree, it was not considered to be a concluded case for purposes of this review. This action represented one of a great many continuing court rulings and does not address a specific enforcement action. Thus, only 12 concluded actions were used to calculate the enforcement related file review metrics.

Metric 5a – 58% (7 of 12) of the enforcement action files reviewed contained return to compliance schedules. Of the other actions reviewed, one of them for a stormwater action was an order to comply before the violation has occurred. This appears to have been an anomalous action, and is not contemplated by the authorities of the CWA which require the finding of a violation before the issuance of a ‘return to compliance’ order. This action was discussed with OECA’s Water Enforcement Division, which indicates that while not a standard procedure is acceptable in certain instances.

Metric 5b – None of the files reviewed contained informal actions.

Citation of information reviewed for this criterion: **CWA EMS, Expedited Settlement Policy, Section 309(a) of the CWA, CWA Penalty Policy.**

**Recommendations if corrective action is needed:**

***None.***

**6. Degree to which the state takes enforcement actions, in accordance with national enforcement response policies relating to specific media, in a timely and appropriate manner.**

Findings:

Metric 6a – 18.6% (24 of 129) facilities did not have timely enforcement actions in FY 2005, which is twice the national average of 9.1%. This means that 24 facilities had at least two consecutive quarters on the QNCR with unresolved SNC violations at the



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same pipe and parameter or a currently open compliance schedule violation and no formal action. Part of the reason for the high rate of facilities without timely action may be due to the Region entering some cases only into ICIS, and not into PCS which is the database used to derive the metrics. Of the cases reviewed, 21 existed only in ICIS. This issue is discussed in further detail under metric 10.

The Region is aware that it carries a number of sources on the QNCR and Watch List. A quarterly Watch List report that explains what is happening to get them off the list is prepared. The Region meets inspection commitments in the Annual Commitment System (ACS), but notes that they lack the resources to complete all of the follow-up actions in a timely manner. The Region indicates that they only take formal enforcement actions to address this non compliance. These actions are more complicated than informal actions and take more time to complete. A number of these actions are at storm water sites. The storm water actions are a national priority, and they tend to be addressed before some of the DMR driven actions. Also, the Region has lost staff, especially inspectors in the last couple of years (one experienced inspector was deployed in the National Guard during 2005), which impedes their ability to complete all of the formal actions in a timely manner. Some of this SNC can be dealt with using informal actions, per OECA policy on addressing SNC. The Region is aware of this and has initiated a work group to explore how best to use informal actions to address the less complicated SNC problems.

Metric 6b – During FY 2005, there were 56 completed enforcement actions, which indicates a high level of enforcement activity.

Metric 6c – 50% (6 of 12) of the enforcement actions reviewed in the files were appropriate.

The administrative orders were well written and appropriate with the exception of one set of six orders. These orders did not appropriately address copper violations because they did not require final compliance with the permit's water-quality based effluent limit for copper. While the Region was able to explain the technical difficulties associated with achieving compliance with extremely stringent copper water quality standards (likely physically impossible in the near term), its chosen solution was not suitable. It would have been preferable for Region 1 to have either (a) sought headquarters approval for similarly conditioned "no-action assurances" or (b) issued compliance orders with a distant compliance date in anticipation of the creation of a technical solution some years from today. It would also be possible for such long schedules to be met if there were changes to the water quality standards in the interim, although the schedules could not use this as a stated basis.

Citation of information reviewed for this criterion: CWA EMS

**Recommendations if corrective action is needed:**

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***OECA recommends that Region 1 should no longer use the practice of issuing compliance orders that do not require compliance. In all six of the problematic orders, permit appeal legal/resource pressures adversely affected the enforcement choices. The Region should work with WED to agree on a more appropriate response to this type of issue. Region 1 disagrees with OECA on this recommendation. The Region 1 response is that:***

*The report recommends that Region 1 cease issuing administrative orders that do not specifically require final compliance with the permittee's water-quality-based effluent limits for copper. The Region has grappled with the issue of very stringent water-quality-based copper limits for a number of years and has found its approach to be appropriate and effective. We have found that the copper limitations are so stringent that technologies are not currently available to meet the limits. Our approach has allowed the Region to have a tiered compliance approach. We require facilities to enhance operation and maintenance, improve corrosion control, to implement pretreatment programs and maximize treatment to reduce levels of copper in the discharge. Although total compliance may not be achievable at this time, this approach has been successful in maximizing pollutant reduction pending the development of new treatment technologies.*

***This issue was discussed with OECA's Water Enforcement Division, which still does not agree with Region 1's approach to the problem. WED will discuss this issue further with Region 1 will resolve the issue by December 1, 2007.***

***Region 1 should continue to improve its timeliness of addressing SNC. The work group already in place to look at this issue should be encouraged. The group should share its findings and implementation schedule to OECA for review and comment.***

See Region 1 Action Item K

**7. Degree to which the State includes both gravity and economic benefit calculations for all penalties.**

Findings:

Metric 7a – Two of the enforcement files reviewed were penalty orders. The other 10 files were compliance orders without penalties. Both of the penalty orders were properly calculated and contained the gravity and economic benefit calculations.

One of the penalty orders was for \$60,000 and was approved by OECA. This action also included a SEP. The other order reviewed was for \$27,000. This penalty was

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calculated based on an annual periodic penalty factor instead of using a monthly penalty factor, which appears to be an open issue at the policy level. This issue was discussed with OECA's Water Enforcement Division, which indicates that there is no problem in this use of the penalty policy.

Citation of information reviewed for this criterion: **CWA Civil Penalty Policy, SEP Policy and BEN Model**

**Recommendations if corrective action is needed:**

***None***

- 8. Degree to which final enforcement actions (settlements or judicial results) take appropriate action to collect economic benefit and gravity portions of a penalty, in accordance with penalty policy considerations.**

Findings:

Metric 8a – The data metric, based on information in PCS, indicates that there were no actions with penalties. This is not correct since we reviewed two files where the actions had penalties. This may be because penalty data is not a required reporting element in PCS. The Region only enters penalty data into ICIS, not PCS.

Metric 8b – The data metrics show that the Region assessed penalties for no enforcement actions in FY 2005. This is not accurate since the files indicate that the Region regularly assesses penalties as part of their enforcement actions.

Metric 8c – As noted in Element 7, penalties are properly calculated and documented in the files. What is not indicated in the files is whether the penalties are actually collected. The Region states that penalty information is sent to the financial office in Cincinnati, Ohio for collection. The files contain no documentation that the penalties have been collected. However, the Region indicates that their Finance Office tracks payment of penalties. This information is readily available when needed by case teams.

Citation of information reviewed for this criterion: **CWA Civil Penalty and BEN Model**

**Recommendations if corrective action is needed:**

***Reporting penalties into ICIS-NPDES is not a requirement, but OECA suggest that Region 1 begin to report them in order to show the complete picture of their enforcement activities. The Region will enter penalty information into ICIS as it has in the past.***

**Section 3: Review of Performance Partnership Agreement or State/EPA Agreement**

- 9. Enforcement commitments in the PPA/SEA (written agreements to deliver product/project at a specified time), if they exist, are met and any products or projects are complete. For Regions the MOAs for FY 2004 and the Annual Commitment System since FY 2005.**

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Findings:

Metric 9a -- In FY2005, Region 1 committed to conducting 70 inspections at major sources in Massachusetts. During the year, 77 inspections were conducted. As noted in Element 1, 67 of these inspections were conducted by Mass DEP and 10 by the Region.

Citation of information reviewed for this criterion: **FY 2004 MOA Guidance and the FY 2005 National Program Guidance**

**Recommendations if corrective action is needed:**

**None**

**Section 4: Review of Database Integrity**

**10. Degree to which the Minimum Data Requirements are timely.**

Findings:

Metric 10b – During the on-site review, the team used the PCS data shown in OTIS facility reports for each of the sources used in the file reviews. The data in the files were compared with the data in the reports. This included the dates for inspections and the enforcement actions, as well as the types of actions. There were two instances where the Region did not report inspections in a timely manner -- one took 186 days and another 90 days for the data to be entered into ICIS. These appear to be the exception and not the rule. On the whole, the data in the OTIS reports corresponds with the data in the files, indicating that data requirements are reported timely into PCS.

Citation of information reviewed for this criterion: **PCS, OTIS, File Reviews**

**Recommendations if corrective action is needed:**

**None**

**11. Degree to which the Minimum Data Requirements are accurate.**

Findings:

Metric 11a – The data metrics show that no actions are linked in PCS. This is required information, and can be accomplished through the use of the EVTP field (a WENDB required element) in PCS and other means in ICIS-NPDES. Without this data, OECA cannot determine with any certainty why an action was taken. In addition, if the action includes a compliance schedule, it is impossible to tell which monitoring periods,

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parameters, or events are associated with the compliance schedule if EVTP and other applicable fields (EVMD, EVPR, EVSC, EVSD, etc.) are not entered. Linking an action to a violation has the additional benefit of resolving RNC/SNC at the violation level, and may result in fewer facilities on the Watch List.

As described under metric 4, reporting of single event violation data entry has been identified as an issue with regard to inspection findings, particularly for storm water, pretreatment, CSOs, and SSOs.

In preparation for the on-site review, a discrepancy between the actions reported in PCS and those reported in ICIS was discovered. While actions are required to be entered into both systems, there was one action that was only listed in PCS, and 21 actions that were only listed in ICIS. The Region recognizes this issue, and has already taken steps to remedy the situation. Because Massachusetts data is now in ICIS-NPDES, the Region will need to ensure that the NPDES actions in ICIS are appropriately linked to NPDES permits migrated from PCS.

The following specific problems were identified in the enforcement and inspection files:

- Five of the enforcement files identified single event violations that were not reported into PCS. In addition, several of these files were missing SNC designations.
- Three of the actions (Masonic Nursing Home, Metropolitan District Commission, and Newton) were not properly linked to permits in PCS and ICIS.
- One facility, Pimental Farm, had closed but still has outstanding compliance schedule violations that need to be resolved in PCS/ ICIS-NPDES.

Citation of information reviewed for this criterion: **PCS, OTIS, File Reviews**

***Recommendations if corrective action is needed:***

***The Region should develop an SOP or management process to assure that actions in ICIS-NPDES are appropriately linked to NPDES facility or permit violations, that all violation are entered in the data systems, and that inspections are reported in the data systems in a timely manner. The Region should submit a timetable to OECA on when this will occur and when OECA can assess Regional implementation of this recommendation.***

See Region 1 Action Items I, J, K, and L

**12. Degree to which the Minimum Data Requirements are complete, unless otherwise negotiated by the Region and State or prescribed by a national initiative.**

Findings:

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Region 1 is responsible for entering all data in ICIS – NPDES for Massachusetts. The state does not submit all data but have sent in data for State enforcement actions, which were not entered into ICIS/NPDES. (State SRF review) Although Massachusetts receives 106 grants funding from EPA, they do not currently do any data entry into PCS or ICIS-NPDES. Massachusetts DEP should begin to enter their data and it would be appropriate to use 106 grant funds to cover this activity.

Metric 12b indicates that Region 1 has correctly coded limits at only about 80% of major facilities in Massachusetts, compared to the national goal of 95%. Region 1 indicates to the review team that those NPDES facilities whose final limits end date did not coincide with the NPDES permit expiration date were considered as having been incorrectly coded. The practical implications of this “coding error” in PCS were minimal since permits that were administratively continued due to a timely reapplication would still be measured against their final limits, even after the permit expiration date. However, under ICIS, a facility’s final limits end date not only needs to be the same as the NPDES permit expiration date, but it must also occur on the last day of a month. If this does not occur, problems may occur in the printing of Discharge Monitoring Reports. The Water Technical Unit has already discussed this issue with the Region’s Office of Ecosystem Protection, which is responsible for issuing NPDES permits to ensure that the wherever possible the effective date of all reissued NPDES permits is the first day of the month and that permits expire on the last day of the month. These changes are expected to improve the Regions correctly coded permits metric performance.

Metric 12 f indicates that Region 1 is not tracking informal actions for majors in Massachusetts in PCS as required by the PCS Policy Statement. The Region sends out 308 letters, which are tracked as “informal actions” in PCS, and should be entered into PCS and/or ICIS-NPDES in order to be counted under 12f. Other examples of actions tracked under 12f are:

- 03 - Warning Letter
- 05 - Phone Call
- 07 - Pre-enforcement Meeting
- 10 - 308 Letter
- 15 - Written Information Request
- 20 - Notice of Violation (NOV)
- 30 - Agency Enforcement Review \*
- 31 - Referred to DOJ \*
- 32 - Referred to State AG \*
- 70 - QNCR Comment \*

\* These codes refer to enforcement sensitive data.

The non compliance rates for non majors under metric 12 g1 and 12 g2 are very high. This data suggests that Massachusetts may have a significantly more serious noncompliance problem with non-major NPDES permitted facilities compared to majors.

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This might not be surprising given the historical focus on tracking and addressing significant non-compliance (SNC) for majors. Considering that 60% of standard/individual permittees are non-majors in Massachusetts, Region 1 needs to obtain a better understanding of non-major non-compliance. Increased attention to non-major DMR and non-compliance data will lead to a more accurate annual non-compliance reports and will allow for better inspection targeting and priority decisions under the NPDES program. Region 1 indicated to the review team that the data metric for non-majors is reportable non-compliance and is more encompassing than the significant non-compliance metric for majors. The Region also recognizes that a significant portion of minor non-compliance is related to non-reporting and is placing more emphasis on minor NPDES data quality.

Metric 12I indicates that the Region is not reporting penalty data to PCS. Although this is not a required field, Region should inform OECA of any penalty data that was not reported to PCS or ICIS.

Citation of information reviewed for this criterion: **PCS, OTIS**

***Recommendations if corrective action is needed:***

***Region 1 should analyze why the non compliance rates in metric 12 g1 and g2 are so high and report on this to OECA.***

See Region Action Item I and M.

***The Region needs to improve its rate for “correctly coded limits” and begin tracking the items referred to as “informal actions” (described above) in the national data system. If resources are an issue in implementing these recommendations, the Region may consider asking the State to assume some data entry responsibilities.***

See Region 1 Action Items I and N.

***The Region should work with Massachusetts DEP to include data entry for enforcement actions into ICIS/NPES as part of the 106 grant work plans.***

See Region 1 Action Item J