

STATE REVIEW FRAMEWORK

Massachusetts

Clean Air Act and Resource Conservation and Recovery Act Implementation in Federal Fiscal Year 2014

**U.S. Environmental Protection Agency
Region 1, Boston**

**Final Report
December 10, 2015**

Executive Summary

Introduction

EPA Region 1 enforcement staff conducted a State Review Framework (SRF) enforcement program oversight review of the Massachusetts Department of Environmental Protection (MassDEP.)

EPA bases SRF findings on data and file review metrics, and conversations with program management and staff. EPA will track recommended actions from the review in the SRF Tracker and publish reports and recommendations on EPA's ECHO web site.

Areas of Strong Performance

- MassDEP has taken advantage of CMS flexibilities in both the Clean Air Act (CAA) and Resource Conservation and Recovery Act (RCRA) programs, and did an excellent job ensuring inspection coverage of CMS sources.
- For both RCRA and CAA programs, MassDEP does a good job identifying violations through inspections/report reviews and taking timely and appropriate enforcement actions to address these violations.
- MassDEP does a good job assessing CAA and RCRA penalties for significant violations, and where applicable, includes gravity and economic benefit components.

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I. Background on the State Review Framework

The State Review Framework (SRF) is designed to ensure that EPA conducts nationally consistent oversight. It reviews the following local, state, and EPA compliance and enforcement programs:

- Clean Air Act Stationary Sources (Title V)
- Resource Conservation and Recovery Act Subtitle C

Reviews cover:

- **Data** — completeness, accuracy, and timeliness of data entry into national data systems
- **Inspections** — meeting inspection and coverage commitments, inspection report quality, and report timeliness
- **Violations** — identification of violations, determination of significant noncompliance (SNC) for the RCRA program and high priority violators (HPV) for the CAA program, and accuracy of compliance determinations
- **Enforcement** — timeliness and appropriateness, returning facilities to compliance
- **Penalties** — calculation including gravity and economic benefit components, assessment, and collection

EPA conducts SRF reviews in three phases:

- Analyzing information from the national data systems in the form of data metrics
- Reviewing facility files and compiling file metrics
- Development of findings and recommendations

EPA builds consultation into the SRF to ensure that EPA and the state understand the causes of issues and agree, to the degree possible, on actions needed to address them. SRF reports capture the agreements developed during the review process in order to facilitate program improvements. EPA also uses the information in the reports to develop a better understanding of enforcement and compliance nationwide, and to identify issues that require a national response.

Reports provide factual information. They do not include determinations of overall program adequacy, nor are they used to compare or rank state programs.

Each state's programs are reviewed once every five years. The first round of SRF reviews began in FY 2004. The third round of reviews began in FY 2013 and will continue through FY 2017.

II. SRF Review Process

Review period: 2014

Key dates: File Reviews

March 27, 2015 – MassDEP Northeast Regional Office

March 31, 2015 – MassDEP Central Regional Office

April 14, 2015 – MassDEP Western Regional Office

April 23, 2015 – MassDEP Southeast Regional Office

State and EPA key contacts for review:

Clean Air Act

Christine Sansevero, EPA Air, (617) 918-1699

Laurel Carlson, MassDEP Air, (617) 348-4095

Resource Conservation and Recovery Act

Lisa Papetti, EPA RCRA, (617) 918-1756

Laurel Carlson, MassDEP RCRA, (617) 348-4095

State Review Framework

James Chow, EPA, (617) 918-1394

Lucy Casella, EPA, (617) 918-1759

III. SRF Findings

Findings represent EPA's conclusions regarding state performance and are based on findings made during the data and/or file reviews and may also be informed by:

- Annual data metric reviews conducted since the state's last SRF review
- Follow-up conversations with state agency personnel
- Review of previous SRF reports, Memoranda of Agreement, or other data sources
- Additional information collected to determine an issue's severity and root causes

There are three categories of findings:

Meets or Exceeds Expectations: The SRF was established to define a base level or floor for enforcement program performance. This rating describes a situation where the base level is met and no performance deficiency is identified, or a state performs above national program expectations.

Area for State Attention: An activity, process, or policy that one or more SRF metrics show as a minor problem. Where appropriate, the state should correct the issue without additional EPA oversight. EPA may make recommendations to improve performance, but it will not monitor these recommendations for completion between SRF reviews. These areas are not highlighted as significant in an executive summary.

Area for State Improvement: An activity, process, or policy that one or more SRF metrics show as a significant problem that the agency is required to address. Recommendations should address root causes. These recommendations must have well-defined timelines and milestones for completion, and EPA will monitor them for completion between SRF reviews in the SRF Tracker.

Whenever a metric indicates a major performance issue, EPA will write up a finding of Area for State Improvement, regardless of other metric values pertaining to a particular element.

The relevant SRF metrics are listed within each finding. The following information is provided for each metric:

- **Metric ID Number and Description:** The metric's SRF identification number and a description of what the metric measures.
- **Natl Goal:** The national goal, if applicable, of the metric, or the CMS commitment that the state has made.
- **Natl Avg:** The national average across all states, territories, and the District of Columbia.
- **State N:** For metrics expressed as percentages, the numerator.
- **State D:** The denominator.
- **State % or #:** The percentage, or if the metric is expressed as a whole number, the count.

Clean Air Act Findings

CAA Element 1 — Data																																																
Finding 1-1	Meets or Exceeds Expectations																																															
Summary	MassDEP did an excellent job entering data into AFS and ensuring that facility data, compliance monitoring data, and enforcement data was accurately entered in a timely way.																																															
Explanation	<p>Of the five data metrics that set a national goal, MassDEP meets the national goal in three of the metrics and exceeds the national average in all five areas. For the two data metrics that were slightly less than the national goal, MassDEP was able to explain exactly why the data was not counted. For the “timely reporting of compliance monitoring MDRs,” a batch upload to AFS occurred before all the monthly state data had been entered in the state database. MassDEP discovered the actions through a quality control check of the data and manually uploaded them to AFS. For the “violations reported per informal enforcement action,” half of the not-counted actions were entered and resolved on the same day. The remaining updates were uploaded to AFS on October 1, 2014. Therefore, in sum, MassDEP should have had a state percentage of 100% for these two metrics as well.</p> <p>In addition, EPA reviewed 32 of MassDEP’s files and found the MDR data entry to be accurate.</p>																																															
Relevant metrics	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>2b Accurate MDR data in AFS</td> <td>100</td> <td></td> <td>32</td> <td>32</td> <td>100%</td> </tr> <tr> <td>3b1 Timely reporting of compliance monitoring MDRs</td> <td>100</td> <td>83.30</td> <td>326</td> <td>345</td> <td>94.5%</td> </tr> <tr> <td>3b2 Timely reporting of stack test dates and results</td> <td>100</td> <td>80.80</td> <td>123</td> <td>123</td> <td>100%</td> </tr> <tr> <td>3b3 Timely reporting of enforcement MDRs</td> <td>100</td> <td>77.90</td> <td>116</td> <td>116</td> <td>100%</td> </tr> <tr> <td>7b1 Violations reported per informal actions</td> <td>100</td> <td>65.60</td> <td>58</td> <td>74</td> <td>78.40%</td> </tr> <tr> <td>7b3 Violations reported per HPV identified</td> <td>100</td> <td>63.20</td> <td>7</td> <td>7</td> <td>100%</td> </tr> </tbody> </table>						Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	2b Accurate MDR data in AFS	100		32	32	100%	3b1 Timely reporting of compliance monitoring MDRs	100	83.30	326	345	94.5%	3b2 Timely reporting of stack test dates and results	100	80.80	123	123	100%	3b3 Timely reporting of enforcement MDRs	100	77.90	116	116	100%	7b1 Violations reported per informal actions	100	65.60	58	74	78.40%	7b3 Violations reported per HPV identified	100	63.20	7	7	100%
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State response	No additional comment.																																															
Recommendation	None.																																															

CAA Element 2 — Inspections

Finding 2-1	Meets or Exceeds Expectations																																				
Summary	MassDEP did an excellent job ensuring inspection coverage of CMS sources.																																				
Explanation	<p>MassDEP has an alternative CMS plan. Under this plan, in FY14, MassDEP committed to inspect 53 Title V major sources and 21 SM-80 sources. In addition MassDEP committed to inspect 100 smaller sources (24 SM<80s and 76 minor sources). MassDEP met all of its inspection commitments under the CMS. Note that MassDEP has a very large universe of synthetic minors (non SM-80s) and minor sources. For this analysis (see table below), the denominator is the number of CMS synthetic minors and minors that MassDEP committed to inspect as opposed to the full AFS universe of non-SM-80s and minor sources. Regarding the values displayed on ECHO for synthetic minors (non-SM80) and minors, the denominator includes the entire universe of synthetic minors and minor sources. However, it should only include those sources that were part of the alternative CMS plan for FY 2014 and where an FCE was expected to be completed by September 30, 2014.</p> <p>Regarding reviews of Title V annual certifications, while MassDEP has 134 Title V facilities, only 129 had been issued Title V permits in FY14. Therefore, MassDEP reviewed all the Title V annual compliance certifications it received in FY14 and metric 5e should be 100%.</p>																																				
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State response	No additional comment.																																				
Recommendation	None.																																				

CAA Element 2 — Inspections

Finding 2-2	Area for State Attention						
Summary	Of the inspection reports reviewed, most all reports were well-written, comprehensive reports that contained accurate compliance determinations. However, the file review revealed some minor issues associated the reports.						
Explanation	<p>MassDEP has a standard inspection report format, which is based on the CMS requirements for compliance monitoring reports. This report format helps ensure that the inspection report contains all of the recommended elements of a Clean Air Act inspection. The file review revealed that not all inspectors are using this standard format. While most reports contained extensive detail about the process description and observations, a few reports were not as descriptive, particularly those that strayed from the standard format.</p> <p>In addition, a few inspection reports were written several months after the inspection and some reports did not contain the date the inspection report was written. In some cases, the inspectors were waiting for additional information before finalizing the report.</p> <p>Finally, as part of the file review, EPA reviewed a number of off-site FCEs. MassDEP uses a checklist to document off-site FCEs. Inspectors complete their review of all relevant records/reports and fill out this check list to documents the review. However, the check list does not include a section for written comments or observations that inspectors might make as a result of their review. This would be especially helpful if/when the inspector’s review reveals areas of concern that require enforcement follow-up either informally or formally.</p>						
Relevant metrics	Metric ID Number and Description		Natl Goal	Natl Avg	State N	State D	State % or #
	6a Documentation of FCE elements		100		22	25	88.0%
	6b Compliance monitoring reports reviewed that provide sufficient documentation to determine facility compliance		100		20	23	87.0%
State response	<p>MassDEP will address EPA comments by:</p> <ol style="list-style-type: none"> 1. modifying the FCE review checklist to include a section for compliance staff to record observations and comments; and 2. Sending a memo out to all compliance staff reminding them to utilize the inspection report templates and to complete inspection reports in a timely manner. 						

Recommendation

- 1) EPA recommends that MassDEP send a directive (within 30 days after completion of the SRF Report) to its regional staff conducting inspections informing/reminding them to use the standard inspection template in lieu of individual templates. Each report must be dated.
 - 2) EPA recommends that MassDEP's regional staff conducting inspections complete their inspection reports within 30 days of the inspection even if they are awaiting additional information. Inspectors can document their review of any additional information in a dated memo to the file.
 - 3) EPA recommends that MassDEP update its checklist for off-site FCEs to include a narrative section and encourage regional staff conducting inspections to summarize their observations of their review in this new section.
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CAA Element 3 — Violations

Finding 3-1	Meets or Exceeds Expectations					
Summary	MassDEP does an excellent job identifying violations and HPVs.					
Explanation	Based on the information from the file review, MassDEP appeared to make accurate compliance determinations in 29 out of 29 cases. Of the five HPV files reviewed, all five appeared to make accurate compliance determinations.					
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
	8a HPV discovery rate at majors		3.10%	7	140	5%
	7a Accuracy of compliance determinations	100		29	29	100%
	8c Accuracy of HPV determinations	100		5	5	100%
State response	No additional comment.					
Recommendation	None.					

CAA Element 4 — Enforcement

Finding 4-1	Meets or Exceeds Expectations																								
Summary	MassDEP does an excellent job taking enforcement action, requiring complying actions, and returning facilities to compliance in a timely way.																								
Explanation	Based on the information from the file review, MassDEP appeared to take appropriate action in 15 out of 15 formal enforcement actions and in five out of the five HPVs. MassDEP has a well-developed procedure for engaging with violators, being clear about expectations and timeframes, and resolving enforcement promptly. Of the six HPVs identified in FY14, all but one were addressed within the timeframes specified by the HPV policy. MassDEP could not address this HPV within the timeframe because it was waiting for testing to take place.																								
Relevant metrics	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>9a Formal enforcement responses that include required corrective action that will return the facility to compliance in a specified timeframe</td> <td>100</td> <td></td> <td>15</td> <td>15</td> <td>100%</td> </tr> <tr> <td>10b Appropriate enforcement responses for HPVs</td> <td>100</td> <td></td> <td>5</td> <td>5</td> <td>100%</td> </tr> <tr> <td>10a Timely action taken to address HPVs</td> <td></td> <td>73.20</td> <td>5</td> <td>6</td> <td>83.30%</td> </tr> </tbody> </table>	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	9a Formal enforcement responses that include required corrective action that will return the facility to compliance in a specified timeframe	100		15	15	100%	10b Appropriate enforcement responses for HPVs	100		5	5	100%	10a Timely action taken to address HPVs		73.20	5	6	83.30%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #																				
9a Formal enforcement responses that include required corrective action that will return the facility to compliance in a specified timeframe	100		15	15	100%																				
10b Appropriate enforcement responses for HPVs	100		5	5	100%																				
10a Timely action taken to address HPVs		73.20	5	6	83.30%																				
State response	No additional comment.																								
Recommendation	None.																								

CAA Element 5 — Penalties

Finding 5-1	Area for State Attention						
Summary	MassDEP does a good job assessing penalties that include gravity and economic benefit. However, MassDEP doesn't always provide a detailed economic benefit calculation.						
Explanation	<p>Based on information from the file review, MassDEP has a well-developed procedure for calculating penalties. MassDEP's "PenCalc" tool includes detailed sections on gravity and economic benefit. The economic benefit section allows an inspector to include the value of the economic benefit as well as an explanation of how it was calculated (or determined to be insignificant). It appears that MassDEP inspectors are not making full use of this utility of PenCalc.</p> <p>In addition, because MassDEP issues orders on consent, there is often little difference between the initial and final penalty. However, when there are differences, MassDEP does not always document how it arrived at the final penalty. MassDEP has issued guidance to staff regarding how to document these differences in PenCalc. It does not appear that MassDEP staff are fully implementing this guidance.</p>						
Relevant metrics	Metric ID Number and Description		Natl Goal	Natl Avg	State N	State D	State % or #
	11a Penalty calculations include gravity and economic benefit		100		14	14	100%
	12a Documentation on difference between initial and final penalty		100		11	13	84.60%
State response	MassDEP issued new guidance to staff on penalty documentation early in FFY14. Based on the findings of the SRF, this guidance will be reissued. MassDEP will also include training on the procedure for documenting penalty changes in periodic PenCalc Training.						
Recommendation	EPA recommends that MassDEP send a directive (within 30 days after completion of the SRF Report) to its regional staff conducting inspections informing/reminding them to make full use of the tools within PenCalc to document economic benefit determinations as well as any differences between proposed and final penalties.						

CAA Element 5 — Penalties

Finding 5-2	Area for State Attention												
Summary	MassDEP does an excellent job ensuring that penalties are collected. However, the file review revealed some minor issues associated with reporting penalties to EPA data systems.												
Explanation	<p>MassDEP has a multi-media program meaning that its inspectors review compliance with CAA, RCRA, and industrial wastewater requirements. As a result, many of MassDEP's enforcement actions are multi-media actions. The file review revealed that MassDEP sometimes reports the total combined penalty to both the CAA and RCRA databases or sometimes reports the total combined penalty only to one database.</p> <p>In addition, MassDEP has a practice of sometimes suspending a portion of the penalty provided that a violator does not violate any provision of the order within one year of the effective date of the order. However, in some cases with suspended penalties, the file review revealed that MassDEP reports the full proposed penalty rather than reduced assessed penalty.</p>												
Relevant metrics	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>12b Penalties collected</td> <td>100</td> <td></td> <td>13</td> <td>13</td> <td>100%</td> </tr> </tbody> </table>	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	12b Penalties collected	100		13	13	100%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #								
12b Penalties collected	100		13	13	100%								
State response	The procedure for reporting penalties has been modified so that only the cash assessed portion of the penalty attributed to air violations will be reported into ICIS-Air.												
Recommendation	As a result of the SRF file review, MassDEP has changed its procedure to report only the cash-assessed CAA portion of any multi-media penalty action to ICIS-Air. EPA recommends that MassDEP continue this new procedure.												

Resource Conservation and Recovery Act Findings

RCRA Element 1 — Data

Finding 1-1	Area for State Attention																		
Summary	MassDEP has done a good job at getting most of its data into the RCRAInfo system. There were a few instances of minor data inconsistencies and there is a backlog of secondary violators that have not been returned to compliance.																		
Explanation	<p>MassDEP had only very minor data inconsistencies as identified in the file review, mostly associated with the entry of penalty amount collected in multi-media actions. There were four cases in which a RCRA portion of a penalty was not in the system, or a penalty for another media was in RCRAInfo or a combined penalty was in both National databases. There was one file that did not have a return to compliance date in RCRAInfo and one that did not have the informal action in RCRAInfo.</p> <p>A large percentage of the long-standing secondary violators are in the system because data was not updated or was not completely updated. For example, there were several instances in which the company had returned to compliance, but the return to compliance date was not entered into the database or the return to compliance date was missed for one of several violations.</p>																		
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Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #														
2a Long-standing secondary violators					130														
2b Complete and accurate entry of mandatory data	100%		25	31	80.6%														
State response	<p>MassDEP will address EPA comments by:</p> <ol style="list-style-type: none"> 1. Modifying the procedure for reporting penalties to RCRAInfo so that only the cash assessed portion of the penalty attributed to RCRA violations will be reported. 2. Periodically review the unaddressed secondary violators in order to resolve outstanding cases in a timely manner. 																		
Recommendation	1) EPA recommends that MassDEP flow only CAA penalties to CAA actions in ICIS-Air and RCRA penalties to RCRA actions																		

in RCRAInfo especially when the enforcement action addresses violations of both programs.

- 2) Similarly, EPA recommends that if MassDEP suspends penalties, it only report the reduced assessed penalty to EPA data systems. If MassDEP collects the suspended or stipulated penalties, they should be reported as separate actions.
 - 3) MassDEP should run a RCRAInfo report of unaddressed secondary violators every year so that they can be resolved in a timely manner and to avoid an increasing backlog.
-

RCRA Element 2 — Inspections

Finding 2-1 Meets or Exceeds Expectations

Summary MassDEP has taken advantage of LQG flexibility that is offered through the RCRA CMS. MassDEP completed all of its mandatory inspections with the exception of one TSD inspection that was not completed in the two-year cycle due to an oversight.

Explanation MassDEP has taken advantage of LQG flexibility for the past several years. MassDEP has identified small quantity generators that are: high risk, repeat violators or acting out of status. MassDEP has found a higher level of non-compliance at the flex facilities. The reduction in LQG inspections and LQG five-year coverage as a result of LQG flexibility is reflected in the data. Overall, MassDEP inspected 232 facilities in FY14, significantly more than any other state in Region I.

MassDEP inspects all of the state-regulated universe of TSDs every year, which is a state mandate and more frequent than what the RCRA CMS requires. There are two TSDs that have not been inspected in the two-year cycle covered by this review. The first facility, a BIF regulated by EPA that is not included in the MassDEP universe, is no longer operating, but has not been certified closed. The second facility is a large quantity generator with 90-day storage area. The last inspection at this facility was in September of 2012 and the failure to inspect since that date was an oversight by the state. The facility is scheduled to be inspected in FY15.

Relevant metrics

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
5a Two-year inspection coverage of operating TSDs	100%	88.4%	10	11	90.9%
5b Annual inspection coverage of LQGs	20%	20.1%	56	406	13.4%
5c Five-year inspection coverage of LQGs	100%	67.1%	280	406	69%
5d Five-year inspection coverage of active SQGs		10%	350	2503	14%
5e1 Five-year inspection coverage of active conditionally exempt SQGs					308

State response	No additional comment.
Recommendation	None.

RCRA Element 2 — Inspections

Finding 2-2	Area for State Attention																		
Summary	Most inspection reports are written with sufficient detail to determine compliance and are written in a very timely manner.																		
Explanation	<p>Two of 32 inspection reports in the files were not dated, so there was no way to tell if the report had been completed in a timely manner. Three of 32 files did not have sufficient detail that included facility identification, process information or violations.</p> <p>Most inspection reports reviewed during the file review included facility information, sufficient detail to identify violations and sometimes photos or records to substantiate violations. There was a significant improvement in the level of detail of inspection documentation since the last review. All of the regional offices use a version of a standard format for documenting inspections, however, there are still several different formats used by some field staff in documenting inspections. The files that included reports with insufficient detail, were completed using a different format.</p>																		
Relevant metrics	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>6a Inspection reports complete and sufficient to determine compliance</td> <td>100%</td> <td></td> <td>29</td> <td>32</td> <td>90.6%</td> </tr> <tr> <td>6b Timeliness of inspection report completion</td> <td>100%</td> <td></td> <td>30</td> <td>32</td> <td>93.8%</td> </tr> </tbody> </table>	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	6a Inspection reports complete and sufficient to determine compliance	100%		29	32	90.6%	6b Timeliness of inspection report completion	100%		30	32	93.8%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #														
6a Inspection reports complete and sufficient to determine compliance	100%		29	32	90.6%														
6b Timeliness of inspection report completion	100%		30	32	93.8%														
State response	MassDEP will address EPA comments by sending a memo out to all compliance staff reminding them to utilize the inspection report templates and to complete inspection reports in a timely manner.																		
Recommendation	1) EPA recommends that MassDEP send a directive (within 30 days after completion of the SRF Report) to its regional staff conducting inspections informing/reminding them to use the																		

standard inspection template in lieu of individual templates.
Each report must be dated.

- 2) EPA recommends that MassDEP's regional staff conducting inspections complete their inspection reports within 30 days of the inspection even if they are awaiting additional information. Inspectors can document their review of any additional information in a dated memo to the file.
-

RCRA Element 3 — Violations

Finding 3-1	Meets or Exceeds Expectations					
Summary	MassDEP does a good job of identifying violations at a high percentage of inspections and identifying SNCs, when appropriate.					
Explanation	MassDEP exceeds the national average in both identification of violations and identification of SNCs. The file reviews were consistent with the statistics indicated by the data metrics. The review of the files also showed that compliance determinations and SNC determinations were being conducted appropriately.					
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
	7b Violations found during inspections <input type="checkbox"/>		36.7%	105	232	45.3%
	8a SNC identification rate		2%	19	232	8.2%
	7a Accurate compliance determinations	100%		30	30	100%
	8c Appropriate SNC determinations	100%		20	20	100%
State response	No additional comment.					
Recommendation	None.					

RCRA Element 3 — Violations

Finding 3-1	Meets or Exceeds Expectations																	
Summary	Most SNCs were identified within 150 days of Day Zero.																	
Explanation	<p>The data metric shows that the SNC dates were not all within 150 days of day zero. MassDEP negotiates and issues Administrative Consent Orders for most of its cases. These actions are unilateral and MassDEP has found that its practice of issuing Consent Orders avoids appeals and lengthy litigation. There has been a long-standing agreement between Region I and MassDEP that cases are not entered as SNC until the Consent Order is finalized since the specifics of violations may not be final until the Consent Order is issued. The cases in which SNCs were not identified within the timeframe were for multi-media violations which can result in protracted evidence collection and/or negotiations. Considering these facts, MassDEP still identifies most SNCs well within the timeframes.</p>																	
Relevant metrics	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>8b Timeliness of SNC determinations</td> <td>100%</td> <td>85.2%</td> <td>19</td> <td>23</td> <td>82.6%</td> </tr> </tbody> </table>						Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	8b Timeliness of SNC determinations	100%	85.2%	19	23	82.6%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #													
8b Timeliness of SNC determinations	100%	85.2%	19	23	82.6%													
State response	No additional comment.																	
Recommendation	None.																	

RCRA Element 4 — Enforcement

Finding 4-1	Meets or Exceeds Expectations																							
Summary	MassDEP took appropriate action for all of the cases reviewed and brought actions that returned facilities to compliance.																							
Explanation	<p>The file review showed that MassDEP is bringing actions for cases that represent RCRA significant noncompliance. Since MassDEP often issues multi-media enforcement actions, there were also cases reviewed for which lower-level RCRA violations were included in a formal enforcement action for another media.</p> <p>MassDEP set compliance measures and timeframes for return to compliance in its actions and often re-inspects a facility to confirm return to compliance.</p>																							
Relevant metrics	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>9a Enforcement that returns violators to compliance</td> <td></td> <td></td> <td>28</td> <td>28</td> <td>100%</td> </tr> <tr> <td>10b appropriate enforcement taken to address violations</td> <td></td> <td></td> <td>28</td> <td>28</td> <td>100%</td> </tr> </tbody> </table>					Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	9a Enforcement that returns violators to compliance			28	28	100%	10b appropriate enforcement taken to address violations			28	28	100%	
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #																			
9a Enforcement that returns violators to compliance			28	28	100%																			
10b appropriate enforcement taken to address violations			28	28	100%																			
State response	No additional comment.																							
Recommendation	None.																							

RCRA Element 4 — Enforcement

Finding 4-2	Meets or Exceeds Expectations																	
Summary	Most MassDEP RCRA enforcement actions were issued within 360 days of Day Zero.																	
Explanation	MassDEP reviewed each of the cases listed in metric 10(a) and provided supporting information to EPA for the reason that it exceeded 360 days. Of the six SNCs not addressed in a timely manner, two were addressed within weeks of day 360 and four included extenuating circumstances including delays in negotiating a SEP, inadequate submittals from the company, and delays due to industrial wastewater violations in the same action. Also, since MassDEP is issuing Administrative Consent Orders in most cases, rather than an initial and final action, most matters are addressed and fully resolved in a very timely fashion.																	
Relevant metrics	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>10a Timely enforcement taken to address SNC</td> <td>80%</td> <td>84.3%</td> <td>18</td> <td>24</td> <td>75%</td> </tr> </tbody> </table>						Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	10a Timely enforcement taken to address SNC	80%	84.3%	18	24	75%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #													
10a Timely enforcement taken to address SNC	80%	84.3%	18	24	75%													
State response	No additional comment.																	
Recommendation	None.																	

RCRA Element 5 — Penalties

Finding 5-1	Meets or Exceeds Expectations					
Summary	MassDEP is assessing penalties for significant violations that include a gravity and economic benefit component, where applicable.					
Explanation	The file review showed that MassDEP is assessing and collecting penalties and economic benefit for cases where there is significant noncompliance. Penalties are consistent with MassDEP's policies and consider economic benefit, when appropriate. Documentation that penalties were collected was present in all files reviewed. The entry of the penalty amount into RCRAInfo is an issue addressed in Element 1.					
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
	11a Penalty calculations include gravity and economic benefit	100%		19	19	100%
	12b Penalties collected	100%		19	19	100%
State response	No additional comment.					
Recommendation	None.					

RCRA Element 5 — Penalties

Finding 5-2	Area for State Attention																	
Summary	MassDEP did not always provide clear documentation of how it arrived at an amount for economic benefit and initial/final gravity amounts.																	
Explanation	MassDEP is assessing penalties and economic benefit for significant violations. Many of MassDEP's formal actions are for violations in more than one media. MassDEP's cases and penalty assessments are presented before a Regional Enforcement Review Committee (RERC.) In most cases reviewed during the file review, there were memos or fact sheets that clearly justified changes in penalties and how the case team arrived at a number for economic benefit. In some cases the reductions were numerically represented, but there was no explanation as to why they had been made.																	
Relevant metrics	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>12a Documentation on difference between initial and final penalty</td> <td>100 %</td> <td></td> <td>16</td> <td>19</td> <td>84.2 %</td> </tr> </tbody> </table>						Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	12a Documentation on difference between initial and final penalty	100 %		16	19	84.2 %
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #													
12a Documentation on difference between initial and final penalty	100 %		16	19	84.2 %													
State response	MassDEP issued new guidance to staff on penalty documentation early in FFY14. Based on the findings of the SRF, this guidance will be reissued. MassDEP will also include training on the procedure for documenting penalty changes in periodic PenCalc Training.																	
Recommendation	EPA recommends that MassDEP send a directive (within 30 days after completion of the SRF Report) to its regional staff conducting inspections informing/reminding them to make full use of the tools within PenCalc to document economic benefit determinations as well as any differences between proposed and final penalties.																	

Appendix

[The following information has been furnished by MassDEP.]

MassDEP General Program Overview

MassDEP's organizational structure related to compliance and enforcement is composed of the Commissioner's Office, the Bureaus of Air and Waste (formerly Waste Prevention), Water Resources (formerly Resource Protection) and Waste Site Clean-up, the Offices of General Counsel, Enforcement, and Research and Standards, four regional offices and the Wall Experiment Station (laboratory). The Bureau of Air and Waste (BAW) is responsible for implementing state and federal programs regarding air quality, hazardous waste, industrial waste water (compliance & enforcement only), toxics, underground storage tanks and solid waste management and recycling. The Bureau of Water Resources (BWR) is responsible for implementing programs regarding drinking water, stormwater, wastewater, industrial waste water (permitting), wetlands and waterways. The Bureau of Waste Site Clean-up (BWSC) is responsible to manage the assessment and clean-up of releases of hazardous waste and waste oil.

Overall management of compliance and enforcement is the responsibility of the Deputy Commissioner for Operations and Environmental Compliance. Implementing compliance assurance activities including conducting inspections, providing technical assistance, and taking appropriate enforcement actions are largely, but not solely, a function of the regional offices. In addition to the regional enforcement, the Environmental Strike Force (ESF), which is headquartered in Boston and has investigators in each Region, coordinates and supports programs across the Department to properly identify and develop a civil and criminal cases for referral to and prosecution by the Attorney General's Office (AGO). ESF also develops and initiates select Bureau based administrative enforcement action out of the Boston office. Cases are identified for referral to AGO through a longstanding and formal bi-monthly meeting called the Case Screening Committee (CSC), which is comprised of ESF senior staff, other Department enforcement leads, and AGO enforcement chiefs. CSC is a complement to the well-established Regional Enforcement Review Committee (RERC), that meets regularly in each region, and that reviews all cases for a consistent approach to policy application, enforcement, and referral to CSC. In addition to coordination and partnership with the criminal and civil divisions of the AGO, ESF works closely with local police departments, develops cases for prosecution by local District Attorneys, and performs joint investigations with the EPA Criminal Investigative Division (CID). Other MassDEP enforcement staff also coordinate compliance and enforcement related activities with municipal agencies, including Departments of Public Works, Boards of Health and Conservation Commissions.

In the mid-1990s, MassDEP re-organized its EPA delegated compliance and enforcement programs, making them fully multi-media. As a result, MassDEP inspectors are no longer single media inspectors (CAA, RCRA, etc.) Instead they conduct multi-media or FIRST (Facility-Wide Inspections to Reduce the Source of Toxics) inspections where appropriate. When carrying out an inspection, a multi-media inspector assesses the compliance of a facility with all applicable statutes and regulations. All inspection documents and any subsequent enforcement documents address all applicable statutes and regulations. MassDEP usually addresses all violations at a facility through a single enforcement action that includes violations under all of the specific statutes and regulations involved. While the state review framework (SRF) does not usually evaluate the benefits of a multi-media compliance program as part of this review, MassDEP believes that multi-media inspections help prevent inter-media transfer of pollutants and provides opportunities to promote MassDEP's Toxic Use Reduction requirements.

In FY14, Massachusetts was operating under an approved Alternative Compliance Monitoring Strategy (ACMS). This plan revised the inspection schedule for Major and Synthetic Minor Air sources as well as Large Quantity Generators (LQGs) where there were no violations warranting administrative or civil orders or penalties, or criminal penalties (orders or penalties) or designation as a High Priority Violator (HPV) or Significant Non-Compliance (SNC) at their last inspection or report review. This allowed MassDEP to shift effort to multi-media inspections of 100 smaller Minor or Synthetic Minor Air sources which are also Small Quantity Generators or Very Small Quantity Generators of Hazardous waste. While the Air Title V Major, Air Synthetic Minor 80% (SM80) and RCRA LQG facilities have been routinely inspected for many years, the vast majority of the smaller Air and RCRA facilities are visited relatively rarely. Yet past experience has demonstrated that these smaller sources may be missing appropriate permits and registrations, may not be controlling emissions or managing waste adequately, or may not be conducting proper monitoring or record-keeping. When taken as a group, improper environmental management at small facilities can have a significant cumulative impact on environmental quality. Smaller sources also can have harmful impacts, particularly if the facilities are located in densely populated or environmentally sensitive areas.

Inspections were targeted for three groups:

- Potential High Risk sources including: sources subject to national emission standards for hazardous air pollutant (NESHAP); sources with actual emissions of volatile organic compounds (VOC) of greater than 10 tons per year; sources in North American Industry Classification (NAIC) codes known to use highly toxic substances; and sources with older add-on air pollution control equipment.
- Potentially under regulated facilities including sources that may be reporting high RCRA waste amounts but low air emissions and vice versa.
- Potential "Outside the System" facilities and sources that may have been built and begun operating in recent years without permits.

The Compliance Monitoring Strategy (CMS) fields in EPA’s Air Facility System (AFS) were updated to include these sources for FY14 and compliance and enforcement actions taken for these sources were reported to EPA’s AFS and RCRAInfo systems. Some of these sources may be on the list for file review in this round of the SRF.

Finally, in addition to reporting the performed actions at the ACMS sources in the appropriate federal data systems, MassDEP is tracking each Full Compliance Evaluation (FCE) or Compliance Evaluation Inspection (CEI) and its outcome, including whether or not the compliance evaluation resulted in enforcement. If enforcement was taken the tracking includes an assessment of whether the corrective action resulted in the facility such as: decreasing emissions to the air; obtaining the required approvals and/ or installing emission control equipment; or improving recordkeeping, monitoring, or reporting. The findings are prepared in a report to EPA (FY13-14 results are available at this time)

Resources

In 2002 MassDEP had 1210 Full Time Equivalent (FTE) s. By FY 2014, that number was reduced to less than 800. During this time period, MassDEP’s responsibilities have increased significantly with the implementation of many new requirements such as the transition of the federal UST requirements from the State Fire Marshal to MassDEP and the passage of the Global Warming Solutions Act. A summary of the budget and resource trend is as follows:

MassDEP State Budget		
Fiscal Year	Funding (in millions)	FTE
FY05	\$52	853
FY09	\$58.7	1004
FY14	\$ 56	780

With staff and budget reductions of this magnitude, all activities have been cut significantly. The ACMS adopted by Massachusetts and approved by EPA is one measure implemented to maintain and improve environmental oversight in face of shrinking resources.

The Department is facing further staff reductions in 2015 that will result in the loss of some of our more senior and experienced staff. We expect this reduction will have a significant impact on our compliance and enforcement program. The FY16-17 inspection planning effort will need to include a review of all programs for their sustainability and focus on the activities that provide the biggest environmental return for the investment.

Finally, we expect the 2015 staff reductions to allow us to backfill some critical positions. Any new staff hired will need training in the federal programs we implement and enforce. In the next year we foresee a significant need for additional EPA training in Air and RCRA to sustain a high quality compliance assessment field presence.

FY 14 Performed Actions and FTE breakout

There are nearly 25,000 individual facilities subject to air pollution, hazardous waste, toxic use reduction, underground storage tank or industrial wastewater regulations.

In FY14, BAW conducted inspections of approximately 850 individual facilities subject to Air Pollution, Hazardous Waste, Toxic Use Reduction/TRI or Industrial Wastewater regulations. At these facilities BAW conducted 1305 air, hazardous waste, toxic use reduction/TRI, or industrial wastewater media related inspections. Some of these inspections were “single media” and others were “multi-media”. The inspector checks all of the regulatory programs to which the facility is subject during a multi-media inspection. Since the last SRF BAW became responsible for implementation of the Underground Storage Tank (UST) Program. There were 184 UST inspections FY14 mostly performed by the same staff as the traditional single or multi-media BWP program inspections.

In FY14, BAW had 29 FTEs assigned to air pollution, hazardous waste, toxic use reduction, industrial wastewater and UST compliance and enforcement in our four regional offices. In addition to the regional component of the Compliance & Enforcement program, BAW’s Boston staff (5 FTEs) reviewed approximately 9,000 reports submitted by regulated entities regarding compliance and/or emissions from air, industrial wastewater, hazardous waste, and toxics use reduction as well as process facility registration for upwards of 11,000 UST facilities (active and closed).

Data System Architecture/Reporting

In 2009, and again in 2011 there were issues with electronic reporting nodes that link MassDEP’s and EPA’s data systems, so that the data contained in EPA’s data systems was frequently out of date. Since then, work has proceeded attempting to resolve these issues (with varying degrees of success), and to ensure that the Massachusetts data flows into EPA’s data systems more smoothly.

A significant amount of effort since 2011 has resulted in improved data flows for RCRA and Air. One of the most significant improvements however, can be traced to changes in the way the EPA systems recognize Massachusetts ACMS. In 2013, EPA modified the SRF data query to match the query with state ACMS schedule. This corrected a major problem that was caused when trying to compare the state ACMS to the national “default” inspection frequency with the result being numbers that indicated a failure of the state to fulfill its compliance inspection commitments. For FY14 as with previous years, MassDEP has met the targets established in the annual Performance Partnership Agreement under the ACMS and now the SRF Query in EPA’s ECHO system reflects this accomplishment.

STATE REVIEW FRAMEWORK

US EPA Region 1 Direct Implementation of NPDES in the State of Massachusetts

Clean Water Act Implementation in Federal Fiscal Year 2014

**U.S. Environmental Protection Agency
Headquarters, Washington, D.C.**

**Final Report
August 22, 2016**

Executive Summary

Introduction

EPA Headquarters enforcement staff conducted a State Review Framework (SRF) enforcement program oversight review of the EPA Region 1 NPDES program for the State of Massachusetts. The period under review was FY2014.

EPA bases SRF findings on data and file review metrics, and conversations with program management and staff. EPA will track recommended actions from the review in the SRF Tracker and publish reports and recommendations on EPA's ECHO web site.

Summary

Region 1 directly implements the NPDES program in Massachusetts which has a significant universe of NPDES sources. Region 1 has piloted innovative approaches to automating the response to non-reporting violations at the more than 1000 permittees that submit Discharge Monitoring Reports.

Inspections and Violation Identification

MassDEP conducts about as many inspections as Region 1, which, combined with regional efforts, exceeded NPDES Compliance Monitoring Strategy (CMS) inspection coverage goals for NPDES majors and non-majors with individual permits. However, the state does not routinely provide the necessary information – i.e., inspection reports -- from these inspections to Region 1. The region requested and received inspection reports from MassDEP for SRF review purposes. These were generally incomplete and not sufficient to make compliance determinations. This issue is the primary cause of the identified Areas for Regional Improvement in three areas in this and previous SRF reviews: data (Element 1), inspection quality (Element 2) and, violation identification (Element 3).

Also, many sectors, such as wet-weather, CAFOs, and industrial dischargers, received fewer inspections than called for in the CMS.

Enforcement

Review of 35 facility files showed 51% percent of violations that did not receive an enforcement response. About 35% were majors in SNC or non-majors with Category 1 violations. However, the vast majority of the unaddressed violations were concentrated at just three of the 35 facilities reviewed.

While overall trends in facilities in SNC and Category 1 noncompliance appears to be declining, it is still above the national average and the level of enforcement activity in response to violations at non-majors is very low.

Recommendations

These issues are complex and longstanding. The region will develop a long-term improvement plan and OECA monitor progress in these areas through regular meetings, and review of data and files.

Areas of Strong Performance

- Region 1 has committed to lead in implementation of electronic reporting through NetDMR. Currently, over 85% of Massachusetts NPDES facilities are using NetDMR. Approximately 400 facilities subject to the Multi-sector General Permit are now reporting through NetDMR.
- Region 1 has moved to electronic file rooms for NPDES permit reports, enforcement reports, and enforcement documents such as inspection reports, internal correspondence and official actions. This streamlines FOIA and discovery responses, facilitates sharing of files between technical and legal staff and allowed Region 1 to provide several hundred documents to the SRF reviewers electronically through Sharepoint.
- In FY14, Region 1 negotiated ten administrative consent orders in Massachusetts, primarily to municipalities in support of the national municipal strategy. These municipal orders together required over \$100 million in injunctive relief. In FY14, the region filed three construction stormwater cases in Massachusetts and referred two industrial stormwater cases for judicial action against facilities in Massachusetts.
- According to data metrics compiled from ICIS, Region 1 is entering permit limit and DMR data.
- The program met or exceeded most of its inspection coverage commitments.
- Enforcement responses generally are expected to return sources in violation back to compliance.
- Region 1 is generally documenting penalty calculations, changes and collections.

Priority Issues to Address

The following are the top-priority issues affecting the Region's program performance:

- Region 1 does not generally take appropriate enforcement actions, particularly for non-reporting violations. A majority of the unaddressed SNC occurred at a small number of facilities with numerous violations.
- Region 1 does not generally take timely enforcement.
- The state of Massachusetts conducts inspections to meet coverage goals, but generally does not provide inspection documentation to the region. Inspection reports reviewed lacked documentation to assess inspection quality or to support compliance determinations
- Compliance Monitoring Strategy (CMS) commitments for storm water inspections are significantly lower than the CMS goals.

Most Significant SRF CWA-NPDES Program Issues¹

- Region 1 does not generally take timely or appropriate enforcement actions on NPDES violations, particularly non-reporting.
- The state generally does not provide inspection documentation to the region. State inspection reports reviewed lacked documentation to assess inspection quality or to support compliance determinations.
- Compliance Monitoring Strategy (CMS) commitments made by Region 1 for storm water inspections are less than CMS goals.

¹ EPA's "National Strategy for Improving Oversight of State Enforcement Performance" identifies the following as significant recurrent issues: "Widespread and persistent data inaccuracy and incompleteness, which make it hard to identify when serious problems exist or to track state actions; routine failure of states to identify and report significant noncompliance; routine failure of states to take timely or appropriate enforcement actions to return violating facilities to compliance, potentially allowing pollution to continue unabated; failure of states to take appropriate penalty actions, which results in ineffective deterrence for noncompliance and an unlevel playing field for companies that do comply; use of enforcement orders to circumvent standards or to extend permits without appropriate notice and comment; and failure to inspect and enforce in some regulated sectors."

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I. CWA-NPDES Integrated SRF and PQR Review

[This section will be updated upon completion of the 2015 Permit Quality Review report]

II. CWA-NPDES Permit Quality Review

[This section will be updated upon completion of the 2015 Permit Quality Review report]

III. Background on the State Review Framework

The State Review Framework (SRF) is designed to ensure that EPA conducts nationally consistent oversight. It reviews the following local, state, and EPA compliance and enforcement programs:

- Clean Water Act National Pollutant Discharge Elimination System
- Clean Air Act Stationary Sources (Title V)
- Resource Conservation and Recovery Act Subtitle C

Reviews cover:

- **Data** — completeness, accuracy, and timeliness of data entry into national data systems
- **Inspections** — meeting inspection and coverage commitments, inspection report quality, and report timeliness
- **Violations** — identification of violations, determination of significant noncompliance (SNC) for the CWA and RCRA programs and high priority violators (HPV) for the CAA program, and accuracy of compliance determinations
- **Enforcement** — timeliness and appropriateness, returning facilities to compliance
- **Penalties** — calculation including gravity and economic benefit components, assessment, and collection

EPA conducts SRF reviews in three phases:

- Analyzing information from the national data systems in the form of data metrics
- Reviewing facility files and compiling file metrics
- Development of findings and recommendations

EPA builds consultation into the SRF to ensure that EPA and the state or implementing region understand the causes of issues and agree, to the degree possible, on actions needed to address them. SRF reports capture the agreements developed during the review process in order to facilitate program improvements. EPA also uses the information in the reports to develop a better understanding of enforcement and compliance nationwide, and to identify issues that require a national response.

Reports provide factual information. They do not include determinations of overall program adequacy, nor are they used to compare or rank state programs.

EPA reviews the NPDES programs once every five years. The first round of SRF reviews began in FY 2004. The third round of reviews began in FY 2013 and will continue through FY 2017.

The Region 1 and state relationship on enforcement under the Clean Water Act NPDES program

The Massachusetts Department of Environmental Protection (MassDEP) is not authorized to implement the Clean Water Act NPDES program and, as a result, Region 1 has Direct Implementation (DI) authority for the NPDES program in Massachusetts. MassDEP, however, has state authority over surface water discharges that parallel the Federal authorities. MassDEP conducts water, municipal and wet weather inspections and takes water enforcement actions under state authorities. Region 1 enters Massachusetts state inspection data into ICIS-NPDES when MassDEP provides the Region with its inspection reports (3560 forms). The EPA-MassDEP Performance Partnership Agreement (PPA) does not contain any specific numerical water inspection or enforcement targets, though it does require the state to submit an inspection plan to Region 1.

Regional organizational structure and responsibilities

The NPDES responsibilities are handled by four offices within EPA's Region 1. Permits are issued by the Office of Environmental Protection (OEP) with legal support from the Office of Regional Counsel. The Office of Environmental Stewardship (OES) handles inspections with some support from OEP for pre-treatment inspections and from the Office of Environmental Measurement and Evaluation (OEME) for sampling and other inspections. OES employs both technical and legal experts, who develop and settle enforcement cases. OES data staff code Massachusetts permits into ICIS-NPDES and enter Massachusetts discharge monitoring report data, enforcement milestones, and report receipt dates.

IV. SRF Review Process

Review period: FY2014

Key dates:

- Data Metric Analysis (DMA) and File Selection list sent to the region:
 - CWA: April 9, 2015 (DMA); April 21, 2015 (File Selection).
 - CWA: April 9, 2015 (Metric 4a Table)
- Remote file review conducted
 - CWA: April 24, 2015 – June 30, 2015
- Technical Draft Report sent to region
 - CWA: August 25, 2015
- Official Draft
 - CWA: March 25, 2016
- Report finalized
 - CWA: August 22, 2016

State and EPA key contacts for review:

- Denny Dart: Region 1 Chief, Water Technical Enforcement Unit
- Lucy Casella: Region 1 Coordinator
- Elizabeth Walsh: SRF Reviewer
- Martha Segall: SRF Reviewer
- Michael Mason: SRF Reviewer
- Cassandra Rice: SRF Reviewer
- Jonathan Pettit: SRF Reviewer

V. SRF Findings

Findings represent EPA's conclusions regarding state performance and are based on findings made during the data and/or file reviews and may also be informed by:

- Annual data metric reviews conducted since the state's last SRF review
- Follow-up conversations with state agency personnel
- Review of previous SRF reports, Memoranda of Agreement, or other data sources
- Additional information collected to determine an issue's severity and root causes

There are three categories of findings:

Meets or Exceeds Expectations: The SRF was established to define a base level or floor for enforcement program performance. This rating describes a situation where the base level is met and no performance deficiency is identified, or a state performs above national program expectations.

Area for State Attention: An activity, process, or policy that one or more SRF metrics show as a minor problem. Where appropriate, the state or implementing region should correct the issue without additional oversight. EPA reviewers may make recommendations to improve performance, but it will not monitor these recommendations for completion between SRF reviews. These areas are not highlighted as significant in an executive summary.

Area for State Improvement: An activity, process, or policy that one or more SRF metrics show as a significant problem that the agency is required to address. Recommendations should address root causes. These recommendations must have well-defined timelines and milestones for completion, and the EPA reviewers will monitor them for completion between SRF reviews in the SRF Tracker.

Whenever a metric indicates a major performance issue, the EPA reviewers will write up a finding of Area for State Improvement, regardless of other metric values pertaining to a particular element.

The relevant SRF metrics are listed within each finding. The following information is provided for each metric:

- **Metric ID Number and Description:** The metric's SRF identification number and a description of what the metric measures.
- **Natl Goal:** The national goal, if applicable, of the metric, or the CMS commitment that the state has made.
- **Natl Avg:** The national average across all states, territories, and the District of Columbia.
- **State N:** For metrics expressed as percentages, the numerator.
- **State D:** The denominator.
- **State % or #:** The percentage, or if the metric is expressed as a whole number, the count.

Clean Water Act Findings

CWA Element 1 — Data						
Finding 1-1	Meets or Exceeds Expectations					
Summary	According to data metrics results compiled from ICIS, Region 1 is entering permit limits and DMR data in almost all cases.					
Explanation	<p>Metric 1b1, of the 122 major facilities in Massachusetts, 113 had permit limits entered into ICIS (93%).</p> <p>Metric 1b2 calculates the percentage of facilities that report timely self-monitoring results for wastewater required by National Pollutant Discharge Elimination System (NPDES) permits. Of the 3,283 facilities self-reporting, only 11 did not do so in a timely manner.</p>					
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	Region N	Region D	Region % or #
	1b1 Permit limit rate for major facilities	>=95%	69%	113	122	93%
	1b2 DMR entry rate for major facilities	>=95%	99%	3272	3283	99%
Regional response						
Recommendation						

CWA Element 1 — Data

Finding 1-2	Area for Regional Improvement																	
Summary	Region 1 is not consistently entering complete inspection data into ICIS-NPDES.																	
Explanation	<p>Because R1’s CMS commitments are met through a combination of EPA and state inspections, we evaluated the accuracy of the data in ICIS regarding both. During the review of the facility files, of the 35 files reviewed, 19 had all minimum data requirements (MDRs) accurately reflected in ICIS.</p> <p>Of the 15 files that did not have information accurately reported in ICIS, OECA reviewers found 8 (24%) inspection reports where the state conducted inspections but the inspection reports were incomplete or not provided to the region for data entry. All inspections completed by Region 1 accurately identified SEVs and SNC and the information was accurately entered into ICIS. Missing or inaccurate data was associated with state inspections. The <i>NPDES Enforcement Management System (EMS) Chapter 5, section A</i> states “<i>an inspection report is complete when it contains all the inspector’s observations, the analytical results, a completed form 3560-3, and evidence of peer/management review and signature of reviewer.</i>”</p> <p>In 7 (21%) other instances, there were minor inconsistencies found in the inspection reports in the enforcement files. These included discrepancies in the facility description information such as the lack of an address, latitude/longitude, dates, etc.</p>																	
Relevant metrics	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>Region N</th> <th>Region D</th> <th>Region % or #</th> </tr> </thead> <tbody> <tr> <td>2b Files reviewed where data are accurately reflected in the national data system</td> <td>100%</td> <td></td> <td>19</td> <td>35</td> <td>54%</td> </tr> </tbody> </table>						Metric ID Number and Description	Natl Goal	Natl Avg	Region N	Region D	Region % or #	2b Files reviewed where data are accurately reflected in the national data system	100%		19	35	54%
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2b Files reviewed where data are accurately reflected in the national data system	100%		19	35	54%													
Regional response																		
Recommendation	Same as recommendation 2-2.																	

CWA Element 2 — Inspections

Finding 2-1	Area for Regional Attention
Summary	The combined regional and state inspections met or exceeded its inspection coverage commitment in the Massachusetts CMS plan for major NPDES facilities and non-majors with individual permits. However MS4, inspection coverage did not meet CMS commitments.
Explanation	<p>Major and non-major individual permittees:</p> <p>Agencies are required to inspect 100% of their major permittees every two years and 100% of their non-major individual permittees every five years.</p> <p>Combined, Region 1 and MassDEP inspected 163% of major NPDES facilities (5a1). They also completed 160% of NPDES non-majors with individual permits. (5b1). The combined total of EPA and state inspections for traditional permittees significantly exceeded commitments and CMS goals.</p> <p>Other NPDES universes:</p> <p>OECA notes that Region 1 CMS commitments to conduct audits or inspections for certain universes were lower than goals established by the CMS policy. However, SRF evaluates performance against CMS commitments so the calculations below are based on regional commitments rather than CMS goals.</p> <p>The Region committed to two and completed 4 SSO audits in Massachusetts.</p> <p>The Region committed to 15 construction stormwater Phase I inspections and conducted 17. The NPDES CMS has a goal for annual inspections of 10% of the Phase I and 5% for of the Phase II Construction Site universe. In FY 2014, Region 1 committed to inspect less than 1%.</p> <p>The Region committed to completing 12 MS4 inspections and completed seven. (The reviewers did not include MS4 Recon inspections in the count.)</p> <p>Region 1 committed to 12 industrial stormwater inspections and completed 15 in FY14.</p>

Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	Region N	Region D	Region % or #
	4a1 Pretreatment compliance inspections and audits	100% of CMS		1	0	-
	4a2 Significant Industrial User inspections for SIUs discharging to non-authorized POTWs	100% of CMS		3	0	
	4a4 Major CSO inspections	100% of CMS		1	0	-
	4a5 SSO inspections	100% of CMS		4	2	200%
	4a7 Phase I & II MS4 audits or inspections	100% of CMS		7	12	58%
	4a8 Industrial stormwater inspections	100% of CMS		15	12	125%
	4a9 Phase I and II stormwater construction inspections	100% of CMS		15	15	100%
	4a10 Medium and large NPDES CAFO inspections	100% of CMS		0	0	-
	5a1 Inspection coverage of NPDES majors	100% of CMS		72	44	163%
	5b1 Inspection coverage of NPDES non-majors with individual permits	100% of CMS		37	23	160%
5b2 Inspection coverage of NPDES non-majors with general permits	100% of CMS		6	0		
Regional response	Because of limited resources, Region 1 is not able to meet the CMS goals. We are considering the Region 6 approach to MS4 which uses Offsite Desk Audits to review MS4 compliance.					
Recommendation						

CWA Element 2 — Inspections

Finding 2-2	Area for Regional Improvement
Summary	<p>Reports from inspections completed by the region were generally sufficient to make a compliance determination. The region does not routinely receive state inspection reports from the state but obtained them for the purposes of this SRF review. The state inspection reports reviewed were lacking documentation to support compliance determinations and were not completed in a timely manner.</p>
Explanation	<p>Region 1 develops its CMS based on a combination of EPA and state inspections. MassDEP conducts a nearly half (46%) of the inspections in the state. Region 1 does not routinely receive inspection reports from the state but obtained them for the purposes of this SRF review</p> <p>Thirteen of the 23 (57%) inspection reports completed generally provided sufficient documentation to make a compliance determination at the facility. These were generally regional inspections. In the 10 instances where the state completed the inspection, reviewers found that generally there was an incomplete or missing 3560 inspection form, no checklists, and/or little or no narrative of observations during the inspection (see The <i>NPDES Enforcement Management System (EMS)</i> Chapter 5, section A citation in Finding 1-2) and in 2 instances, no state inspection report was provided to the Region.</p> <p>Only 65% of the inspection reports were completed within the prescribed timeframe. The national goal is 100%. On average, inspection reports took 66 days to complete. Three inspections reports took over 100 days to complete. The NPDES Enforcement Management System (EMS) recommends completion of inspection reports within 30-days of for non-sampling inspections.</p> <p>Where inspections conducted by MassDEP are used to fulfill CMS commitments, Region 1 must ensure that they are conducted according to EPA NPDES Inspection Manual guidelines, and that inspection reports from those inspections are timely, complete and sufficient to determine compliance.</p>

Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	Region/ State N	Region/ State D	Region/ State % or #
	6a Inspection reports complete and sufficient to determine compliance at the facility	100%		13	23	57%
	6b Inspection reports completed within prescribed timeframe	100%		15	23	65%
Regional response	Region 1 is working with Massachusetts to address the concerns.					
Recommendation	<p>NOTE: This recommendation addresses findings 1-2, 2-2, and 3-1.</p> <ol style="list-style-type: none"> By September 30, 2016, Region 1 will submit to OECA for review a plan, negotiated with the State of Massachusetts, for improving the timeliness and completeness of inspection reports from inspections used to meet CMS commitments, and violation identification and data entry associated with those inspections. The plan will include: <ul style="list-style-type: none"> Process for annual coordination between Massachusetts and Region 1 to identify CMS inspections. Expectations for inspection report completeness, timely completion, and timely transmission to Region 1. The process for timely review of state inspection reports by Region 1, making compliance determinations, coordination with the state on enforcement, and entry of relevant inspection, violation and state enforcement data. Steps the Region will take if unable to reach agreement with the state to provide timely and complete inspection reports. OECA will continue to monitor progress toward the completion of the plan. Monitoring frequency will be established based on key milestones established in the plan. 					

CWA Element 3 — Violations

Finding 3-1	Area for Regional Improvement																																									
Summary	<p>Approximately one-quarter of inspection reports do not necessarily lead to accurate compliance determinations.</p> <p>Region 1 is not accurately identifying SEVs as SNC.</p>																																									
Explanation	<p>Massachusetts is above the national average for major facilities with DMR violations as noted by metric 7d1. The SNC rate in Massachusetts appears to be on par with the national average (31% vs 34%).</p> <p>OECA reviewers found 6 instances (out of 23 files) in state inspection reports where there was insufficient detail to determine whether a compliance determination was made.</p> <p>During the review, OECA found 3 instances out of 5 files reviewed where SEV were not accurately identified as SNC.</p> <p>Only one of seven files reviewed contained information in ICIS that identified single event violations (SEVs) as SNC that was reported timely at major facilities. Regional offices are required to report SEVs as indicated in the <i>Single Event Violations - Data Entry Requirements Memo to EPA Regions</i> (October 15, 2008).</p> <p>In previous SRF reviews, it was noted that the region was not receiving the information from the state on completed inspections so the required information could be appropriately entered into ICIS.</p>																																									
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Regional response	Region 1 has been deploying data staff in implementation of NetDMR, rather than entry of single event violations into ICIS. We hope to turn																																									

	attention to SEV entry in FY17 once we have the majority of our permittees reporting electronically.					
Recommendation	Same as recommendation 2-2.					
CWA Element 4 — Enforcement						
Finding 4-1	Meets or Exceeds Expectations					
Summary	Enforcement responses generally are expected to return sources in violation back to compliance.					
Explanation	Metric 9a evaluates the percentage of enforcement response that promote the facility to return to compliance. Of the 14 enforcement actions reviewed under this metric, 13 met these requirements.					
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	Region N	Region D	Region % or #
	9a Percentage of enforcement responses that return or will return source in violation to compliance	100%		13	14	93%
Regional response						
Recommendation						

CWA Element 4 — Enforcement

Finding 4-2	Area for Regional Improvement																							
Summary	<p>Region 1 did not respond with appropriate enforcement to a significant proportion of violations. Region 1 does not generally take appropriate enforcement actions, particularly for non-reporting violations.</p>																							
Explanation	<p>Metric 10a1 is a data metric that measures the timeliness of enforcement responses at major facilities with SNC. This metric shows that Region 1 took timely enforcement at only 4 of 18 major facilities with SNC violations.</p> <p>Metric 10b is a file metric that evaluates whether appropriate enforcement action was taken in response to violations. The 35 facility files reviewed contained 84 violations. Region 1 did not take appropriate enforcement action in response to 31 (37%) of these violations.</p> <p>A significant percentage of the unaddressed violations were reporting violations. The region has been testing an automated response to late reporting which may reduce the number of reporting violations in the future. OECA will monitor the results of this effort.</p> <p>The majority of unaddressed violations occurred at a single facility with ongoing effluent violations. Since the date of the on-site review, the region has issued an Administrative Order to this facility addressing all outstanding violations.</p> <p>Also since the on-site review, the region as assigned additional legal resources to focus on DMR violations in each state in the region.</p> <p>According to ECHO data, about 31% of majors and 35% of non-majors were in SNC/Category 1 in 2014, about 10 and 15 percent above the national average, respectively. These percentages have been declining each of the last three years.</p>																							
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Metric ID Number and Description	Natl Goal	Natl Avg	Region N	Region D	Region % or #																			
10a1 Major facilities with timely action	>=98%	29%	3	17	18%																			
10b Enforcement responses reviewed that address violations in an appropriate manner	100%		31	84	37%																			

Regional response One of the three facilities with multiple violations had received orders in 2008 and 2009. This facility was referred to Department of Justice in 2013 and the case had not yet settled in 2014. Another facility is a small school with copper violations of a permit limit 1000 times more stringent than the drinking water maximum contaminant level. The state is considering a site specific water quality standard for the stream near the school. Because of limited staff resources, Region 1 must regularly triage the facilities in violation, taking action on the worst cases first. To address non-reporting violations, Region 1 has been testing automated communication approaches that will require less staff time.

Recommendation Region 1 will continue to implement the automated communication approaches to reduce non-reporting violations.

At six months and one year from the finalization of this report, OECA will review Region 1 enforcement responses to determine if violations are being addressed with appropriate enforcement. If so, this recommendation will be considered complete.

CWA Element 5 — Penalties

Finding 5-1 **Meets or Exceeds Expectations**

Summary Region 1 is documenting penalty calculations, changes and collections.

Explanation The region is documenting essential information with regard to its penalties. Of the 3 penalties reviewed, the region had documentation showing payment and a rationale for reduction in the penalty amount, where applicable.

Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	Region N	Region D	Region % or #
	12a Documentation of the difference between initial and final penalty and rationale	100%		2	2	100%
12b Penalties collected	100%		3	3	100%	

Regional response

Recommendation

CWA Element 5 — Penalties

Finding 5-2	Area for Regional Attention					
Summary	Region 1 is generally documenting gravity and economic benefit calculations.					
Explanation	Region 1 is generally documenting gravity and economic benefit calculations. In one instance the file reviewed did not contain information that economic benefit was considered in the penalty.					
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	Region N	Region D	Region % or #
	11a Penalty calculations reviewed that consider and include gravity and economic benefit	100%		3	4	75%
Regional response	The case which did not include gravity and economic benefit calculations was an expedited settlement for a construction stormwater case. The case team used the penalty form approved by EPA headquarters for regional use.					
Recommendation						