

STATE REVIEW FRAMEWORK

US EPA Region 1 Direct Implementation of NPDES in Massachusetts

**Clean Water Act
Implementation in Federal Fiscal Year 2019**

U.S. Environmental Protection Agency

**Final Report
August 26, 2021**

I. Introduction

A. Overview of the State Review Framework

The State Review Framework (SRF) is a key mechanism for EPA oversight, providing a nationally consistent process for reviewing the performance of state delegated compliance and enforcement programs under three core federal statutes: Clean Air Act, Clean Water Act, and Resource Conservation and Recovery Act. Through SRF, EPA periodically reviews such programs using a standardized set of metrics to evaluate their performance against performance standards laid out in federal statute, EPA regulations, policy, and guidance. When states do not achieve standards, the EPA will work with them to improve performance.

Established in 2004, the review was developed jointly by EPA and Environmental Council of the States (ECOS) in response to calls both inside and outside the agency for improved, more consistent oversight of state delegated programs. The goals of the review that were agreed upon at its formation remain relevant and unchanged today:

1. Ensure delegated and EPA-run programs meet federal policy and baseline performance standards
2. Promote fair and consistent enforcement necessary to protect human health and the environment
3. Promote equitable treatment and level interstate playing field for business
4. Provide transparency with publicly available data and reports

B. The Review Process

The review is conducted on a rolling five-year cycle such that all programs are reviewed approximately once every five years. The EPA evaluates programs on a one-year period of performance, typically the one-year prior to review, using a standard set of metrics to make findings on performance in five areas (elements) around which the report is organized: data, inspections, violations, enforcement, and penalties. Wherever program performance is found to deviate significantly from federal policy or standards, the EPA will issue recommendations for corrective action which are monitored by EPA until completed and program performance improves.

The SRF is currently in its 4th Round (FY2018-2022) of reviews, preceded by Round 3 (FY2012-2017), Round 2 (2008-2011), and Round 1 (FY2004-2007). Additional information and final reports can be found at the EPA website under [State Review Framework](#).

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II. Navigating the Report

The final report contains the results and relevant information from the review including EPA and program contact information, metric values, performance findings and explanations, program

responses, and EPA recommendations for corrective action where any significant deficiencies in performance were found.

A. Metrics

There are two general types of metrics used to assess program performance. The first are **data metrics**, which reflect verified inspection and enforcement data from the national data systems of each media, or statute. The second, and generally more significant, are **file metrics**, which are derived from the review of individual facility files in order to determine if the program is performing their compliance and enforcement responsibilities adequately.

Other information considered by EPA to make performance findings in addition to the metrics includes results from previous SRF reviews, data metrics from the years in-between reviews, multi-year metric trends.

B. Performance Findings

The EPA makes findings on performance in five program areas:

- **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, accuracy of compliance determinations, and determination of significant noncompliance (SNC) or high priority violators (HPV)
- **Enforcement** - timeliness and appropriateness of enforcement, returning facilities to compliance
- **Penalties** - calculation including gravity and economic benefit components, assessment, and collection

Though performance generally varies across a spectrum, for the purposes of conducting a standardized review, SRF categorizes performance into three findings levels:

Meets or Exceeds: No issues are found. Base standards of performance are met or exceeded.

Area for Attention: Minor issues are found. One or more metrics indicates performance issues related to quality, process, or policy. The implementing agency is considered able to correct the issue without additional EPA oversight.

Area for Improvement: Significant issues are found. One or more metrics indicates routine and/or widespread performance issues related to quality, process, or policy. A recommendation for corrective action is issued which contains specific actions and schedule for completion. The EPA monitors implementation until completion.

C. Recommendations for Corrective Action

Whenever the EPA makes a finding on performance of *Area for Improvement*, the EPA will include a recommendation for corrective action, or recommendation, in the report. The purpose of recommendations are to address significant performance issues and bring program performance back in line with federal policy and standards. All recommendations should include specific actions and a schedule for completion, and their implementation is monitored by the EPA until completion.

III. Review Process Information

Clean Water Act (CWA)

Data metric analysis: December 17, 2020

File selection list: December 22, 2020

File Review Worksheet: July 20, 2021

Draft Report: July 22, 2021

Final Report: August 26, 2021

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Executive Summary

Areas of Strong Performance

The following are aspects of the program that, according to the review, are being implemented at a high level:

Clean Water Act (CWA)

- Permit and effluent limit data entry rates exceed the national goal.
- Inspection coverage and off site activities meet expectations for inspection and off site monitoring commitments listed in the Region's Compliance Monitoring Strategy Plan (CMS Plan).
- Inspection report quality and timeliness meet SRF program expectations.
- Compliance determinations are well documented in files reviewed.
- All enforcement actions reviewed promote return to compliance.
- All penalties reviewed document both economic benefit and gravity, changes to penalties, and collection of penalties.

Priority Issues to Address

The following are aspects of the program that, according to the review, are not meeting federal standards and should be prioritized for management attention:

Clean Water Act (CWA)

- An appreciable number of files reviewed (13) did not have data accurately reflected in the national database.

Comparison between Round 3 and Round 4 Areas of Improvement Metric Findings

Metric	Round 3 Finding Level FY 2012	Round 4 Finding Level FY 2019
2b: Files reviewed where data are accurately reflected in the national data system	Area for Improvement	Area for Improvement
6a: Inspection reports complete and sufficient to determine compliance at the facility	Area for Improvement	Meets or Exceeds Expectations
6b: Timeliness of inspection report completion	Area for Improvement	Meets or Exceeds Expectations
7e: Accuracy of compliance determinations	Area for Improvement	Meets or Exceeds Expectations
10b: Enforcement responses reviewed that address violations in an appropriate manner	Area for Improvement	Area for Attention

Clean Water Act Findings

CWA Element 1 - Data

Finding 1-1

Meets or Exceeds Expectations

Recurring Issue:

No

Summary:

Permit and effluent limit data entry rates exceed the national goal.

Explanation:

Permit limits are the maximum amount of a pollutant that the facility may release according to its permit and discharge monitoring reports (DMRs) record the actual pollutant amounts released. These two pieces of information are minimum data requirements for both major and non-major facilities. Exceedance of permit limits indicates that a violation occurred on a discharge monitoring report. Region 1 entered 206 of the 213 permit limits (96.7%) required for NPDES permits in ICIS. The Region entered 5,364 of 5,387 (99.6%) of the discharge monitoring data. Performance meets and exceeds the national goal of $\geq 95\%$.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	Region N	Region D	Region Total
1b5 Completeness of data entry on major and non-major permit limits. [GOAL]	95%	98.6%	206	213	96.7%
1b6 Completeness of data entry on major and non-major discharge monitoring reports. [GOAL]	95%	97%	5,364	5,387	99.6%

Regional Response:

The seven permits without limits are correctly coded. These are CSO and pump station permits which do not have limits for any pollutant so there are no limits to code in ICIS. These permits do require reporting and as EPA builds the tools for electronic reporting under the E-Rule, we will be able to add a DMR for electronic reporting by this group of permittees. We hope that by 2025, these permits will not show up as lacking limits in the Data Metrics Analysis.

CWA Element 1 - Data

Finding 1-2

Area for Improvement

Recurring Issue:

Recurring from Rounds 2 and 3

Summary:

Thirteen files reviewed did not have data accurately reflected in the national database.

Explanation:

Eighteen of 31 files reviewed had accurate data reported in ICIS. Several single event violations listed in inspection reports were not reported in the data system of record. Single event violations listed in inspection reports are not well documented in ICIS in 8 files reviewed. Minor data accuracy issues that occurred in one file include: an inaccurate enforcement action date, inaccurate permit schedule violations, and an inaccurately reported inspection. Some files show updates after the data were frozen. Two files reviewed show changes to data on violations after the data were frozen based on comparison of information in frozen file selection data to information in detailed facility reports that update on a weekly basis.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	Region N	Region D	Region Total
7j1 Number of major and non-major facilities with single-event violations reported in the review year.			0		0
2b Files reviewed where data are accurately reflected in the national data system [GOAL]	100%		18	31	58.1%

Regional Response:

In response to the recommendation language, we will propose to enter verified non-DMR violations into ICIS as SEVs whether they were discovered on inspections or through offsite compliance monitoring activities. OECA and regional managers consistently discourage inspectors from making compliance determinations in inspection reports. For this reason, the Region water enforcement program has two post-inspection documents: the inspection report, and a compliance determination memo. These compliance determination memos spell out the violations and will inform the entry of Single Event Violations in ICIS. See proposed edits to the recommendations, below.

Recommendation:

Rec #	Due Date	Recommendation
1	10/31/2021	Region 1 will develop a plan that documents the process and timeframe in which non-DMR violation data is entered into ICIS.
2	10/31/2022	EPA HQ will use the file selection tool to select six FY 2022 inspection reports and compliance determination memos for review of single event violation data entry. This recommendation will be complete when the Region correctly enters single event violations in ICIS for greater than 70% of the selected files.

CWA Element 2 - Inspections

Finding 2-1

Meets or Exceeds Expectations

Recurring Issue:

No

Summary:

Inspection coverage and offsite activities met performance expectations for the commitments listed in the Region's Compliance Monitoring Strategy Plan (CMS Plan). Stormwater construction and MS4 inspection coverage targets in the Region's CMS plan were not met. Inspection report quality and timeliness met SRF program expectations.

Explanation:

Region 1 established inspection commitments for inspecting both major and non-major facilities in its FY 2019 CMS Plan. The Region committed to inspect 15 major facilities and 8 non-major facilities. Actual performance exceeds this commitment with 20 inspections performed at major facilities and 48 non-major facility inspections. Region 1 inspected 14 non-major individual permit

facilities and 34 non-major general permit facilities. Inspection coverage for the non-major universe is 48/8= 600% of the Region's initial target, while inspection coverage at majors is 133% of the target for inspections. The region met and exceeded commitments for pretreatment, significant industrial user, combined sewer overflows, sanitary sewer overflows, stormwater industrial, and biosolids inspections. The region committed to conduct 10 MS4 inspections and 51 off site desk audits. The Region completed 2 of the 10 MS4 audit inspections listed in the Region CMS plan, and greatly exceeded its commitment to perform 51 off site audits with 236 off site audits performed. Stormwater construction inspection coverage is slightly below the region's commitment in its CMS plan with 18 of 20 stormwater construction inspections performed. Inspection report quality and timeliness are excellent. All thirteen inspection reports reviewed are complete and sufficient to determine compliance at the facility. Twelve of the 13 inspection reports meet the 60 day EPA policy for inspection report completion. One report was completed close to the timeliness policy in 68 days. Average inspection report completion timeliness is 35 days.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	Region N	Region D	Region Total
4a1 Number of pretreatment compliance inspections and audits at approved local pretreatment programs. [GOAL]	100% of commitments		2	0	200%
4a2 Number of inspections at EPA or state Significant Industrial Users that are discharging to non-authorized POTWs. [GOAL]	100% of commitments		6	5	120%
4a4 Number of CSO inspections. [GOAL]	100% of commitments		7	0	700%
4a5 Number of SSO inspections. [GOAL]	100% of commitments		6	0	600%
4a7 Number of Phase I and II MS4 audits or inspections. [GOAL]	100% of commitments		238	61	390.2%
4a8 Number of industrial stormwater inspections. [GOAL]	100% of commitments		25	15	166.7%
4a9 Number of Phase I and Phase II construction stormwater inspections. [GOAL]	100% of commitments		18	20	90%

Metric ID Number and Description	Natl Goal	Natl Avg	Region N	Region D	Region Total
4a10 Number of comprehensive inspections of large and medium concentrated animal feeding operations (CAFOs) [GOAL]	100% of commitments		0	0	0
4a11 Number of sludge/biosolids inspections at each major POTW. [GOAL]	100% of commitments		12	12	100%
5a1 Inspection coverage of NPDES majors. [GOAL]	100% of commitments	3.6%	20	15	133.3%
5b Inspections coverage of NPDES non-majors (individual and general permits) [GOAL]	100% of commitments		48	8	600%
6a Inspection reports complete and sufficient to determine compliance at the facility. [GOAL]	100%		13	13	100%
6b Timeliness of inspection report completion [GOAL]	100%		11	13	84.6%

Region 1 Response:

We agree with the findings.

CWA Element 3 - Violations

Finding 3-1

Meets or Exceeds Expectations

Recurring Issue:

No

Summary:

Compliance determinations are well documented in files reviewed.

Explanation:

All 13 inspection reports reviewed show clear compliance determinations. Zero single event violations were reported in ICIS. Several single event violations appear in inspection reports reviewed. This issue is addressed under Finding 1-2 as a data reporting issue. Overall noncompliance at major and non-major facilities in Massachusetts is 13.2% with 544 of 4,110 facilities in noncompliance. Serious noncompliance violations, known as significant non-compliance (SNC), occur at 312 of 4,103 (7.6%) of water facilities regulated under the National Pollutant Discharge Elimination System (NPDES).

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	Region N	Region D	Region Total
7e Accuracy of compliance determinations [GOAL]	100%		13	13	100%
7j1 Number of major and non-major facilities with single-event violations reported in the review year.			0		0
7k1 Major and non-major facilities in noncompliance.		12.8%	544	4,110	13.2%
8a3 Percentage of major facilities in SNC and non-major facilities Category I noncompliance during the reporting year.		7.4%	312	4,103	7.6%

Regional Response:

We agree with the findings.

CWA Element 4 - Enforcement

Finding 4-1

Meets or Exceeds Expectations

Recurring Issue:

No

Summary:

All enforcement actions reviewed promote return to compliance. Many of the major facilities in significant noncompliance have enforcement actions in 2019 or are under long term orders.

Explanation:

EPA reviewed 22 enforcement actions taken in FY 2019. All 22 formal enforcement actions reviewed promote, or will promote, return to compliance. Region 1 took a formal enforcement action at 6 out of 8 major facilities in significant noncompliance in the review year, the subsequent fiscal year, or prior years that will promote return to compliance. Two of these formal enforcement actions occurred in FY 2019, and four other actions taken in other years will address significant noncompliance.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	Region N	Region D	Region Total
9a Percentage of enforcement responses that returned, or will return, a source in violation to compliance [GOAL]	100%		22	22	100%

Regional Response:

We agree with the findings.

CWA Element 4 - Enforcement

Finding 4-2

Area for Attention

Recurring Issue:

No

Summary:

Seventy-five percent of major facilities in significant noncompliance are addressed through formal enforcement. Eighty-three percent of facilities reviewed had appropriate enforcement action taken.

Explanation:

All of the enforcement actions taken by Region 1 in FY 2019 were an appropriate formal enforcement response for violations reviewed. Five files reviewed indicate that some actions are not timely responses to violations. Region 1 took formal enforcement to address two major facilities in significant noncompliance in FY 2019. Four additional actions taken addressed SNC outside the review year through long term consent orders. Two major facilities in significant noncompliance did not have formal enforcement taken within two quarters as recommended in the NPDES Enforcement Management System. One major facility with chronic discharge monitoring

report violations had no enforcement taken in FY 2019. No action was taken in 2019 to resolve longstanding discharge monitoring report violations at a non-major facility occurring since 2005; the Region has since taken action in FY 2021 to address these violations. One non-major facility with chronic discharge monitoring report violations for more than one year received formal enforcement in FY 2019.

While the timeliness of formal enforcement actions taken in response to SNC violations has improved significantly since the last Round 3 SRF review, the rate (as observed in the indicator 10a1 below) is still slightly below performance expectations.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	Region N	Region D	Region Total
10a1 Percentage of major NPDES facilities with formal enforcement action taken in a timely manner in response to SNC violations		2.7%	6	8	75%
10b Enforcement responses reviewed that address violations in an appropriate manner [GOAL]	100%		25	30	83.3%

Regional Response:

We agree with the findings.

CWA Element 5 - Penalties

Finding 5-1

Meets or Exceeds Expectations

Recurring Issue:

No

Summary:

All penalties reviewed document both economic benefit and gravity, changes to penalties, and collection of penalties.

Explanation:

EPA reviewed 10 penalty files and found documentation of penalty collection in each file. Four penalties reviewed document economic benefit and gravity and six files had expedited settlement

agreements for which no economic benefit is calculated. Two penalties show changes between the initial and final penalty which resulted in a lower penalty assessed than initially proposed. Both penalties with changes show documentation of the Region's rationale for changes to the penalties.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	Region N	Region D	Region Total
11a Penalty calculations reviewed that document and include gravity and economic benefit [GOAL]	100%		4	4	100%
12a Documentation of rationale for difference between initial penalty calculation and final penalty [GOAL]	100%		2	2	100%
12b Penalties collected [GOAL]	100%		10	10	100%

Regional Response:

We agree with the findings.

*Note: this report will be updated following completion of CAA and RCRA SRF reviews in subsequent fiscal years.