



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

DEC 11 2019

Myra Reece
Director of Environmental Affairs
S.C. Dept. of Health & Environmental Control
2600 Bull Street
Columbia, SC 29201

Dear Ms. Reece:

The Environmental Protection Agency (EPA) Region 4 would like to thank you and your staff for participating in the Round 4 State Review Framework (SRF) evaluation of the South Carolina Department of Health and Environmental Control (DHEC) compliance and enforcement program. Region 4 is very appreciative of the cooperation and assistance provided by DHEC during the SRF evaluation, and the straightforward communication and collaboration displayed by your staff in working with us throughout the review process.

Please find enclosed the final Round 4 SRF report summarizing the evaluation of DHEC's Clean Air Act Stationary Source program, Resource Conservation and Recovery Act Subtitle C program and Clean Water Act National Pollutant Discharge Elimination System program for federal fiscal year 2017. The report recognizes that DHEC implements effective compliance and enforcement activities in many of the elements evaluated in the SRF, and it also identifies recommendations for improvement to strengthen performance in specific areas.

Please pass along our thanks to everyone involved for their cooperation in the development of this report. We look forward to continuing the strong partnership that we share with DHEC in our joint efforts to improve the environment for our citizens. If you have questions or concerns regarding the enclosed report, please feel free to contact me directly at (404) 562-8975.

Sincerely,

A handwritten signature in blue ink, reading "Carol L. Kemker", is positioned below the word "Sincerely,".

Carol L. Kemker
Director
Enforcement and Compliance Assurance Division

Enclosure

STATE REVIEW FRAMEWORK

South Carolina

**Clean Air Act, Clean Water Act, &
Resource Conservation & Recovery Act
Implementation in Federal Fiscal Year 2017**

**U.S. Environmental Protection Agency
Region 4**

**Final Report
December 11, 2019**

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](#).

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. In general, each metric is the ratio of the numerator (N) divided by the denominator (D), shown as a percentage in the “relevant metrics” tables below.

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, and 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 is 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

Key Dates:

- August 16, 2018: kick off letter sent to state
- December 3-7, 2018, on-site file review for CWA & RCRA
- December 10-13, 2018, on-site file review for CAA

State and EPA key contacts for review:

	South Carolina Department of Health and Environmental Control (SC DHEC)	EPA Region 4
SRF Coordinator	Rebecca Sproles, SRF Coordinator	William Bush, OEC SRF Coordinator
CAA	Keith Frost, Director Air Compliance Management Division Bureau of Air Quality	Mark Fite, OEC Technical Authority Jacob Carpenter & Carrie Griffith, Air Enforcement & Toxics Branch
CWA	Randy Stewart, Director, Water Pollution Control Division Bureau of Water	Laurie Ireland, OEC Technical Authority Andrea Zimmer, NPDES Permitting & Enforcement Branch
RCRA	Van Keisler, P.G., Director, Compliance and Enforcement Division Bureau of Land and Waste Management	Reggie Barrino, OEC Technical Authority Laurie Benton-DiGaetano, RCRA Hazardous Waste Enforcement and Compliance Branch

Executive Summary

Introduction

Areas of Strong Performance

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

Clean Air Act (CAA)

SC DHEC met the negotiated frequency for inspection of sources, reviewed Title V Annual Compliance Certifications, and included all required elements in their Full Compliance Evaluations (FCEs) and Compliance Monitoring Reports (CMRs).

SC DHEC made accurate compliance determinations for both HPV and non-HPV violations.

Enforcement actions bring sources back into compliance within a specified timeframe, and HPVs are addressed in a timely and appropriate manner.

Clean Water Act (CWA)

SC DHEC met or exceeded National Goals for the entry of key data metrics for major and non-major facilities.

SC DHEC's inspection reports consistently documented accurate compliance determinations.

SC DHEC consistently takes appropriate enforcement responses which promote a return to compliance.

SC DHEC consistently documented the collection of penalties.

Resource Conservation and Recovery Act (RCRA)

SC DHEC's hazardous waste program inspection reports reviewed were complete, provided appropriate documentation to determine compliance at the facility and the timeliness of inspection report completion was well under the 150- day timeline outlined in the Hazardous Waste Civil Enforcement Response Policy (ERP).

SC DHEC made accurate RCRA compliance determinations coming close to the national goal of 100% and exceeded the national average of 84.9% for the percentage of significant noncompliance (SNC) determinations made within 150 days of the first day of the inspection (Day Zero).

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 Air Act (CAA)

Discrepancies between the files and the Integrated Compliance Information System (ICIS) were identified in about half of the files reviewed, and MDRs for high priority violations (HPVs) were often not entered into ICIS within the required timeframe.

Clean Water Act (CWA)

The accuracy of data between files reviewed and data reflected in the national data system needs improvement.

While SC DHEC met some of its FY17 Compliance Monitoring Strategy commitments, it did not meet the commitments for two key areas.

SC DHEC inspection reports were not consistently completed in a timely manner.

The CWA program does not consistently document adequate rationale for the economic benefit component of the penalty.

Resource Conservation and Recovery Act (RCRA)

None.

Clean Air Act Findings

CAA Element 1 – Data

Finding 1-1

Meets or Exceeds Expectations

Summary:

Minimum Data Requirements (MDRs) for compliance monitoring and enforcement were entered timely into ICIS-Air.

Explanation:

Metrics 3b1 (98.8%) and 3b3 (90.1%) indicated that MDRs for compliance monitoring and enforcement activities were usually entered within 60 days.

State Response: SC DHEC agrees with EPA's findings on this metric.

Recommendation:

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
3b1 Timely reporting of compliance monitoring MDRs [GOAL]	100%	82.3%	560	567	98.8%
3b3 Timely reporting of enforcement MDRs [GOAL]	100%	77.6%	136	151	90.1%

Finding 1-2

Area for Attention

Summary:

Stack test MDRs (date and results) were not always entered in ICIS-Air within the required timeframes.

Explanation:

Metric 3b2 (81.2%) indicated that the date and/or results for some stack tests were not entered into ICIS-Air within 120 days. However, EPA believes that this is an issue the state can self-correct.

State Response: SC DHEC BAQ agrees with the finding and has already begun the process to self-correct. Some test reports are extremely complex and require significantly more time to thoroughly review and quality assure the data once received by the BAQ. These instances will necessarily exceed the 120-day goal. The BAQ believes that quality data is important. We will be more responsive in identifying and reviewing test reports that may fit this description to ensure that 120-day goal is met as often as possible.

Recommendation:

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
3b2 Timely reporting of stack test dates and results [GOAL]	100%	67.1%	168	207	81.2%

Finding 1-3

Area for Improvement

Summary:

Discrepancies between the files and ICIS-Air were identified in about half of the files reviewed, and MDRs for high priority violations (HPVs) were often not entered into ICIS-Air within the required timeframe.

Explanation:

File Review Metric 2b indicated that 48.6% (17 of 35) of the files reviewed reflected accurate entry of all MDRs into ICIS-Air. The remaining eighteen files had one or more discrepancies between information in the files and data entered in ICIS-Air. Twelve sources had missing Air Program subparts (e.g. MACT ZZZZ), and ten sources had missing or inaccurate activity or violation data. Incorrect data has the potential to hinder EPA's oversight and targeting efforts and may result in inaccurate information being released to the public. In addition, Metric 3a2 (40%) indicated that some HPV MDRs were entered late into ICIS-Air. Although this metric is right at the national average (40.5%), the national average falls significantly below the national goal of 100%, so it has been included as an area for improvement.

State Response: SC DHEC BAQ agrees with the finding. The BAQ is currently reviewing entries for permitted facilities to ensure that all applicable subparts are entered for facilities. This process is nearly complete. The BAQ is migrating to a new E-Permitting system which, once implemented, will ensure that all subparts are updated as the BAQ determines applicability. The BAQ has updated its process to verify that staff conduct required HPV reviews within 10 days of receipt of the referral, thereby ensuring that HPV MDRs are identified and documented in ICIS-Air in a timely manner. The BAQ will continue to focus on these areas for improvement and work to meet

the January 31, 2020, date to complete a root cause analysis and respond as outlined in the recommendation below.

Recommendation:

Rec #	Due Date	Recommendation
1	04/30/2020	By January 31, 2020, SC DHEC should identify the root causes for late and inaccurate data entry, certify in writing to EPA what measures and/or procedures have been implemented to ensure accurate and timely entry of MDRs into ICIS-Air, and provide to EPA a written description or copy of any such measures or procedures. By April 30, 2020, after the FY19 data is frozen, EPA will review the relevant data metrics to ensure implementation is taking place and timely data entry has improved.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
2b Files reviewed where data are accurately reflected in the national data system [GOAL]	100%	-	17	35	48.6%
3a2 Timely reporting of HPV determinations [GOAL]	100%	40.5%	2	5	40%

CAA Element 2 - Inspections

Finding 2-1

Meets or Exceeds Expectations

Summary:

SC DHEC met the negotiated frequency for inspection of sources, reviewed Title V Annual Compliance Certifications, and included all required elements in their Full Compliance Evaluations (FCEs) and Compliance Monitoring Reports (CMRs).

Explanation:

Metrics 5a (95.3%) and Metric 5b (100%) indicated that SC DHEC provided adequate inspection coverage for major and SM-80 sources during FY17 by ensuring that each major source was inspected at least every 2 years, and each SM-80 source was inspected at least every 5 years. In addition, Metric 5e (99.2%) documented that SC DHEC reviewed Title V annual compliance certifications submitted by major sources and recorded these reviews in ICIS-Air. Finally, Metric 6a (100%) and Metric 6b (96%) confirmed that all elements of an FCE and CMR required by the Clean Air Act Stationary Source Compliance Monitoring Strategy (CMS) Guidance were addressed in facility files reviewed.

State Response: SC DHEC agrees with EPA's findings on this metric.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
5a FCE coverage: majors and mega-sites [GOAL]	100%	88.7%	123	129	95.3%
5b FCE coverage: SM-80s [GOAL]	100%	93.7%	190	190	100%
5e Reviews of Title V annual compliance certifications completed [GOAL]	100%	76.7%	242	244	99.2%
6a Documentation of FCE elements [GOAL]	100%	-	23	23	100%
6b Compliance monitoring reports (CMRs) or facility files reviewed that provide sufficient documentation to determine compliance of the facility [GOAL]	100%	-	24	25	96%

CAA Element 3 - Violations

Finding 3-1

Meets or Exceeds Expectations

Summary:

SC DHEC made accurate compliance determinations for both HPV and non-HPV violations.

Explanation:

Metric 7a indicated that SC DHEC made accurate compliance determinations in all files reviewed (100%). Metric 8c indicated that SC DHEC's HPV determinations for 20 of 21 files reviewed (95.2%) were accurate.

State Response: SC DHEC agrees with EPA's findings on this metric.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
7a Accurate compliance determinations [GOAL]	100%	-	35	35	100%
8c Accuracy of HPV determinations [GOAL]	100%	-	20	21	95.2%

CAA Element 3 - Violations

Finding 3-2

Area for Attention

Summary:

Although a few HPVs were reported with a "day zero" of more than 90 days past the discovery action, these were isolated incidents which the state has self-corrected.

Explanation:

Metric 13 (40%) indicated that 3 of 5 HPVs were not entered into ICIS-Air within 90 days of the discovery action. However, one of these was only 4 days late, and the other two HPVs were associated with a failed stack test.

For stack tests, the results are often not available within 90 days of the test date, making it difficult in these instances for the state to meet the 90-day target timeframe. In addition, the FY18 frozen data and FY19 production data for Metric 13 show results of 92.9% and 100%, respectively, indicating that the state has self-corrected this issue.

State Response: SC DHEC BAQ agrees with the finding. However, as mentioned above, quality assured testing results are not always available within the 90-day target timeframe. The BAQ will continue work toward self-correcting this area for attention by conducting timely HPV reviews and work toward improving our responsiveness in identifying and reviewing test reports that may impact our attainment of this goal.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
13 Timeliness of HPV Identification [GOAL]	100%	87.7%	2	5	40%

CAA Element 4 - Enforcement

Finding 4-1

Meets or Exceeds Expectations

Summary:

Enforcement actions bring sources back into compliance within a specified timeframe, and HPVs are addressed in a timely and appropriate manner.

Explanation:

Metric 9a indicated that 16 of 17 formal enforcement actions reviewed (94.1%) brought sources back into compliance through corrective actions in the order, or compliance was achieved prior to issuance of the order. Metric 10a indicated that all 10 HPVs (100%) were addressed within 180 days or alternatively had a Case Development and Resolution Timeline (CD&RT) in place. Metric 14 indicated that all four CD&RT's (100%) contained the required policy elements for HPVs addressed in FY17. Metric 10b indicated that appropriate enforcement action was taken to address all 10 HPVs (100%) evaluated during the file review.

State Response: SC DHEC agrees with EPA's findings on this metric.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
9a Formal enforcement responses that include required corrective action that will return the facility to compliance in a specified time frame or the facility fixed the problem without a compliance schedule [GOAL]	100%	-	16	17	94.1%
10a Timeliness of addressing HPVs or alternatively having a case development and resolution timeline in place	100%	-	10	10	100%
10b Percent of HPVs that have been addressed or removed consistent with the HPV Policy [GOAL]	100%	-	10	10	100%
14 HPV case development and resolution timeline in place when required that contains required policy elements [GOAL]	100%	-	4	4	100%

CAA Element 5 - Penalties

Finding 5-1

Area for Attention

Summary:

SC DHEC considered gravity when calculating penalties, and in most cases, economic benefit was considered, or a rationale was provided for not including economic benefit in the penalty.

Explanation:

Metric 11a indicated that DHEC documented the consideration of both gravity and economic benefit in 12 of 16 penalty actions reviewed (75%). However, four penalty calculations indicated that the source may have gained some economic benefit, but SC DHEC did not calculate or assess the economic benefit associated with any potential delayed or avoided costs. EPA recommends that the state attempt to calculate the economic benefit where possible and provide a violation-specific rationale when they elect not to assess this part of the penalty (e.g. litigation risk, or it is de minimis, etc.)

The Bureau of Air Quality (BAQ) has developed a Civil Penalty Assessment Guideline (March 14, 2008) which provides for the inclusion of economic benefit in the penalty when deemed appropriate. In addition, BAQ's Penalty Calculation Worksheet has a section for documenting the economic benefit of non-compliance. Given that the policy framework and penalty worksheet are

already in place which would allow the state to self-correct this issue, this element is rated as an area for attention.

State Response: SC DHEC BAQ will continue to evaluate economic benefit in accordance with our Civil Penalty Assessment Guideline and Penalty Calculation Worksheet to work toward self-correcting this area for attention. The BAQ is also evaluating the need for additional training in the implementation of EPA's BEN/ABEL models to be more consistent with EPA expectations.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
11a Penalty calculations reviewed that document gravity and economic benefit [GOAL]	100%	-	12	16	75%

Finding 5-2

Meets or Exceeds Expectations

Summary:

The collection of penalties and any differences between initial and final penalty assessments were adequately documented.

Explanation:

Metric 12a indicated that 14 of 16 penalty calculations reviewed (87.5%) documented the difference between the initial and final penalty assessed. Metric 12b (100%) confirmed that documentation of the collection of 15 penalty payments made by sources was included in the file. In one instance, the source did not pay the penalty, and SC DHEC pursued and won a default judgement against the source in state court. The source has still not paid the penalty.

State Response: SC DHEC BAQ agrees with the finding. The BAQ will continue to utilize our SOP for calculating and documenting penalties and associated payments.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
12a Documentation of rationale for difference between initial penalty calculation and final penalty [GOAL]	100%	-	14	16	87.5%
12b Penalties collected [GOAL]	100%	-	16	16	100%

Clean Water Act Findings

CWA Element 1 - Data

Finding 1-1

Meets or Exceeds Expectations

Summary:

SC DHEC met or exceeded National Goals for the entry of key data metrics for major and non-major facilities.

Explanation:

SC DHEC met or exceeded National Goals for the entry of key Data Metrics (1b5 and 1b6) for major and non-major facilities. For the FY17 period of review, SC DHEC entered 98.8% of their permit limits and 98.9% of DMRs for NPDES major and non-major facilities.

FY17 was the first year DMR data entry for non-major facilities was required by the NPDES electronic reporting rule (NPDES e-Rule). SC DHEC exceeded the national average of 90.6% for Metric 1b6 in FY17.

EPA commends SC DHEC on the increased data entry of Single Event Violations (SEV) since SRF Round 3.

State Response: SC DHEC agrees with EPA's findings on this metric.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
1b5 Completeness of data entry on major and non-major permit limits. [GOAL]	95%	88.1%	395	400	98.8%
1b6 Completeness of data entry on major and non-major discharge monitoring reports. [GOAL]	95%	90.6%	10,707	10,816	99%
7j1 Number of major and non-major facilities with single event violations reported in the review year	-	-	43	-	-

CWA Element 1 - Data

Finding 1-2

Area for Improvement

Summary:

The accuracy of data between files reviewed and data reflected in the national data system needs improvement.

Explanation:

Metric 2b indicated that 48.6% (17/35) of the files reviewed reflected accurate data entry of MDRs for NPDES facilities into ICIS. Discrepancies observed between ICIS and the state's files were related to duplicate entries of inspections and enforcement actions; missing enforcement actions, penalty amounts, or inspections; and inaccurate dates or penalty amounts. While SC DHEC had entered some penalty amounts into ICIS, it was not in the correct location to be displayed to the public via ECHO. During the year of review, SC DHEC was manually entering compliance and enforcement data into ICIS due to limited data flow from the state database to ICIS. SC DHEC is working on processes to address the data inaccuracies in ICIS as well as improve data flow.

It was also observed that there were discrepancies in some of the facility type universes and the number of inspections entered into ICIS versus the number of CMS inspections and facility type universes reported to EPA via the CWA § 106 Grant Workplan. Entry of compliance monitoring activities such as inspections into ICIS are required by the NPDES e-Rule and the EMS.

Data Accuracy is a recurring issue from Rounds 2 and 3. While SC has been working on numerous upgrades to their state database, additional work is needed to ensure data accuracy to meet the SRF national goal. Therefore, this remains an Area for State Improvement in SRF Round 4.

State Response: 1) In some cases, enforcement staff did not populate the appropriate module in ICIS to ensure that penalty amounts were properly uploaded. Enforcement staff have been made aware to double-check ICIS/ECHO to ensure penalty information is entered into the national databases. 2) WPC is working to improve its processes to ensure all information on formal enforcement actions, including SEVs and violations of permit schedules are accurately reflected in ICIS. WPC compliance will review current FY information to ensure it is accurate. Additionally, the BOW has been working diligently in 2019 to “go live” with the e-Permitting data system by 12/16/19 which will flow all permitting, compliance and enforcement data to ICIS/ECHO. BOW believes implementation of this system will ultimately address many of the data inaccuracies identified during SRF Rounds 2,3 and 4. SC DHEC agrees with EPA’s findings and will work to meet the Recommendation deadlines of 1/31/20 and 4/30/20.

Recommendation:

Rec #	Due Date	Recommendation
1	04/30/2020	By January 31, 2020, SC DHEC should reassess their practices and procedures to ensure accurate and complete data entry into ICIS. These practices should also include accurate entry of CMS inspections and facility universes into ICIS. Any revised procedures should be submitted to EPA for review. EPA will review these practices and procedures and monitor the State’s implementation efforts through existing oversight calls and an analysis of the CWA §106 grant workplan commitments. After the FY19 data is frozen, EPA will conduct a data review. If by April 30, 2020, these reviews indicate that the State is entering accurate and complete data into ICIS, the recommendation will be considered completed.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
2b Files reviewed where data are accurately reflected in the national data system [GOAL]	100%	-	17	35	48.6%

CWA Element 2 - Inspections

Finding 2-1**Area for Improvement**

Summary:

While SC DHEC met some of its FY17 CMS commitments, it did not meet the commitments for two key areas.

Explanation:

Element 2 includes metrics that measure planned inspections completed (Metrics 4a1 - 4a10) and inspection coverages (Metrics 5a1, 5b1, and 5b2) for NPDES majors and non-majors. The National Goal for these Metrics is for 100% of state specific CMS Plan commitments to be met. The inspection commitments listed in the table below are from the CWA §106 Workplan End-of-Year (EOY) report for FY17. Based on review of the EOY report, the State met or exceeded some of its CMS inspection commitments for the year, except for its Pretreatment and MS4 related commitments (Metrics 4a1 and 4a9).

For Metric 4a1, the State missed the Pretreatment audit commitments by 10 and the Pretreatment compliance inspections by 16. For Metric 4a9, the State met the Phase I MS4 commitments, but missed the Phase II commitments by 8. In reviewing the subsequent FY18 EOY report, the State also did not meet their Pretreatment or MS4 commitments. The State has indicated this is due to resources and personnel turnover.

As highlighted under Finding 1-2, there are some discrepancies between CMS inspections and permit universes reported in EOY reports and those entered in ICIS. The Region combined NPDES minor individual and general permits inspections and universes into one commitment for FY17. Therefore, separate inspection coverages for Metrics 5b1 and 5b2 could not be ascertained from the FY17 EOY report and are not included in the Metric Table below. Instead, Metric 5b reflects the combined NPDES minor individual and general permit inspection coverage.

Meeting inspection commitments is a recurring issue from Round 3 and remains an Area for State Improvement in SRF Round 4.

State Response: 1) SCDHEC agrees with the finding that it did not meet the FY 17 and FY 18 pretreatment inspection commitments. SCDHEC has begun to address this issue by hiring more compliance staff in the central office to assist with CEI/CSI inspection staff training and CEI/CSI report reviews. This will allow the two designated pretreatment staff to focus more attention on pretreatment audits and inspections. 2) SCDHEC also agrees that it did not meet the Phase II MS4 audit commitments for FY 17 and 18. SC DHEC is focusing more attention on conducting MS4 audits in order to meet these commitments. SCDHEC will work diligently to meet the Recommendation deadlines of 12/31/19 and 7/31/20. SC DHEC believes it is important to note that it met and exceeded five (5) of seven (7) inspection commitments contained in the 106 Workplan.

Recommendation:

Rec #	Due Date	Recommendation
1	07/31/2020	<p>By December 31, 2019, SC DHEC should revise their practices and procedures to ensure that annual CMS commitments will be met. This could include workshare opportunities. Any revised procedures should be submitted to EPA for review. EPA will regularly monitor the State's implementation efforts through existing oversight calls and an analysis of the CWA §106 Grant Workplan FY19 EOY report, FY20 CMS plan progress, and the submitted final FY21 CMS plan. If by July 31, 2020, the FY19 EOY report, FY20 CMS plan progress, and the final FY21 CMS indicate that the state has made sufficient improvements in meeting its CMS commitments, this recommendation will be considered completed.</p>

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
4a1 Number of pretreatment compliance inspections and audits at approved local pretreatment programs. [GOAL]	100% of commitments	-	9	35	25.7%
4a2 Number of inspections at EPA or state Significant Industrial Users that are discharging to non-authorized POTWs. [GOAL]	100% of commitments	-	-	-	-
4a4 Number of CSO inspections. [GOAL]	100% of commitments	-	-	-	-
4a5 Number of SSO inspections. [GOAL]	100% of commitments	-	9	8	112.5%
4a7 Number of Phase I and II MS4 audits or inspections. [GOAL]	100% of commitments	-	7	15	46.7%
4a8 Number of industrial stormwater inspections. [GOAL]	100% of commitments	-	178	178	100%
4a9 Number of Phase I and Phase II construction stormwater inspections. [GOAL]	100% of commitments	-	241	106	227.4%
4a10 Number of comprehensive inspections of large and medium concentrated animal feeding operations (CAFOs) [GOAL]	100% of commitments	-	-	-	-
5a1 Inspection coverage of NPDES majors. [GOAL]	100%	54.2%	83	82	101.2%
5b Inspections coverage of NPDES non-majors (individual and general permits) [GOAL]	100%	-	119	51	233.3%

CWA Element 2 - Inspections

Finding 2-2

Area for Attention

Summary:

Most of SC DHEC's inspection reports generally were well written, complete and provided sufficient documentation to determine compliance.

Explanation:

Metric 6a requires that inspection reports are complete and sufficient to determine compliance at a facility. Approximately 80% (24/30) of SC DHEC's inspection reports and the accompanying cover letter were found to be well written, complete, and sufficient. Field observations and checklists noting compliance issues were also included in inspection reports and/or cover letters, where appropriate.

While the inspection reports and cover letters generally were well-written and included the inspection checklist, two files did not contain the inspection checklist used and included only a brief letter to the facility. The four remaining files contained little to no narrative or observations on the checklist. It was also noted that occasionally the inspector and/or manager signatures were missing and that deficiencies were not always linked to the permit condition or regulatory citation.

It is suggested that SC DHEC update their inspection report templates as necessary to address these observations. The lack of sufficient documentation does not appear to be a systemic issue for SC DHEC. Therefore, this is an Area for State Attention for SRF Round 4.

State Response: 1) WPC is currently working with Bureau of Environmental Health Services (BEHS) inspectors and management to ensure that specific permit and/or regulatory citations are included in inspection reports when violations/deficiencies are identified. Specifically, inspectors are being advised to include a detailed narrative of violations/deficiencies to include permit citations. 2) SC DHEC is currently reviewing the inspection report templates to ensure it includes all necessary information is included.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
6a Inspection reports complete and sufficient to determine compliance at the facility. [GOAL]	100%	-	24	30	80%

CWA Element 2 - Inspections

Finding 2-3

Area for Improvement

Summary:

SC DHEC inspection reports were not consistently completed in a timely manner.

Explanation:

Metric 6b indicated that 10% (3/30) of SC DHEC's inspection reports were completed in a timely manner. The National Goal for this metric is 100% of inspection reports completed in a timely manner. Because the state's Enforcement Manual does not prescribe timeframes for inspection report completion, EPA relied on its EMS which allows for 30 days and 45 days to complete non-sampling and sampling inspection reports, respectively.

The average number of days to complete the inspection reports was 164 days, with a range of 6-310 days. The current process to finalize inspection reports includes a QA/QC review at the state's central office. While this has improved inspection report quality, it has caused a substantial delay in report completion.

Timeliness of inspection reports is a recurring issuing from Round 3 and remains an Area for State Improvement in Round 4.

State Response: Timeliness of inspection report completion is the priority of BOW and BEHS management. This issue is being addressed on two fronts: 1) BOW has created a new training position in WPC for which its main focus will be to create and implement an on-going training program for wastewater inspectors to ensure quality inspections are being conducted and inspection reports are accurate and complete. This position was filled in March 2019; 2) BOW and BEHS has created a work group to review the process by which inspection reports are written, submitted to BOW central office for review/finalization and provided to facilities. The quality of inspection reports, due in part to turnover and inexperienced inspectors and training, has caused a delay in the ability of BOW central office staff to finalize and mail inspection reports to facilities. 2) The current process by which inspection reports are reviewed includes BEHS inspectors drafting inspection reports and submitting them to BOW for a QA/QC review. Many times reports are required to be returned to BEHS inspectors to provide additional information or correct inaccuracies. This creates a delay in finalizing reports and causes them to be untimely. SC DHEC will work to address these issues by the Recommendation deadlines of 12/31/19 and 5/31/2020.

Recommendation:

Rec #	Due Date	Recommendation
1	05/31/2020	By December 31, 2019, SC DHEC should reassess their practices and procedures to ensure the timely completion of inspection reports. SC DHEC also can establish their own timeframes for inspection report completion. Any revised procedures should be submitted to EPA for review. EPA will review these practices and procedures and monitor the state's implementation efforts through existing oversight calls and other periodic data reviews. EPA will also review a random sample of inspection reports for timeliness. If by May 31, 2020, these reviews indicate that the state is timely in completing inspection reports; the recommendation will be considered completed.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
6b Timeliness of inspection report completion [GOAL]	100%	-	3	30	10%

CWA Element 3 - Violations**Finding 3-1**

Meets or Exceeds Expectations

Summary:

SC DHEC's inspection reports consistently documented accurate compliance determinations.

Explanation:

Metric 7e indicated that 86.7% (26/30) of the inspection reports reviewed consistently documented an accurate compliance determination for each facility. The state has developed an inspection report checklist and cover letter that is used effectively for documenting inspection field observations and making clear and accurate compliance determinations.

State Response: SC DHEC agrees with EPA's findings on this metric.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
7e Accuracy of compliance determinations [GOAL]	100%	-	26	30	86.7%

CWA Element 4 - Enforcement

Finding 4-1

Meets or Exceeds Expectations

Summary:

SC DHEC consistently takes appropriate enforcement responses (ERs) which promote a return to compliance (RTC).

Explanation:

The on-site file review indicated that the state consistently takes appropriate ERs which promote a return to compliance. File metric 9a indicated that 31 of the 35 ERs reviewed (88.6%) did return or were expected to return a facility to compliance. File metric 10b indicated that 30 of the 35 files (85.7%) had an appropriate ER.

Data Metric 10a1 is a review indicator and showed that zero of three (0%) major facilities in SNC during FY17 received a timely formal ER. During the file review, it was observed that the state had taken steps in FY18 to address the SNC violations at two of the facilities while the third facility was already under a state Consent Order.

Timely and appropriate ERs which promote a RTC was an Area for State Improvement in Round 3. EPA recognizes the significant progress SC DHEC has made in this area based on the file review. To maintain this progress, it is suggested that the state continue to escalate the ER to a formal enforcement action when warranted and ensure adequate documentation of the chosen ER in the file.

State Response: SCDHEC agrees with EPA's findings on this metric and will work to ensure that major facilities in SNC receive a timely enforcement response.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
9a Percentage of enforcement responses that returned, or will return, a source in violation to compliance [GOAL]	100%	-	31	35	88.6%
10a1 Percentage of major NPDES facilities with formal enforcement action taken in a timely manner in response to SNC violations	-	15.6%	0	3	0%
10b Enforcement responses reviewed that address violations in an appropriate manner [GOAL]	100%	-	30	35	85.7%

CWA Element 5 - Penalties

Finding 5-1

Area for Improvement

Summary:

The CWA program does not consistently document adequate rationale for the economic benefit component in penalty.

Explanation:

Metric 11a indicated that 3 of the 15 files (20%) reviewed contained either economic benefit (EB) calculations, documentation that it was considered, or an adequate rationale for not including EB.

The state's *Uniform Enforcement Policy* outlines criteria to determine civil penalties which includes both gravity and EB. In each penalty file reviewed, SC DHEC used their penalty matrix to determine the gravity component of the penalty calculation. However, for economic benefit, the phrase "none determined" or "not apparent" was often noted on the penalty calculation worksheet without any supporting rationale for why EB was not included or was not appropriate for the violations.

Failure to consider and include EB in penalties is a continuing issue from Round 3. This element will remain an Area for State Improvement in SRF Round 4.

State Response: SC DHEC agrees that a different approach to reviewing the economic benefit of non-compliance is warranted and is developing an updated process for this review, including a more detailed rationale when assessing economic benefit is not warranted. When appropriate and possible, enforcement staff will utilize EPA's BEN model in this review. SC DHEC is currently seeking EPA training on economic benefit and will work to address this issue by the Recommendation deadline of 12/31/19 and 12/31/20.

Recommendation:

Rec #	Due Date	Recommendation
1	12/31/2020	By December 31, 2019, SC DHEC should develop and implement procedures to confirm the state's appropriate documentation of economic benefit in penalty calculations. For verification purposes, one year following the implementation of the procedures, EPA will review a sample of final SC DHEC orders and penalty calculations, including the calculations for the economic benefit of noncompliance. If appropriate improvement is observed upon completion of EPA's review, this recommendation will be considered complete.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
11a Penalty calculations reviewed that document and include gravity and economic benefit [GOAL]	100%	-	3	15	20%

CWA Element 5 - Penalties

Finding 5-2

Area for Attention

Summary:

SC DHEC occasionally documented the rationale for differences between initial penalty calculations and final assessed penalties.

Explanation:

Metric 12a looks at the documentation of the rationale for any difference between initial penalty calculation and the final assessed penalty calculation. Just two of the fifteen penalty files reviewed during the on-site file review contained an initial penalty calculation that differed from the final assessed penalty amount. This is a statistically small sample size for this metric. Per Metric 12a, only one of two files (50%) had documentation explaining the rationale for the difference between initial penalty calculations and final assessed penalties.

Given the small universe and that the SC DHEC met this metric in previous SRF Rounds, this will be an Area for State Attention in Round 4, rather than State Improvement. It is suggested that the state continue to refine its penalty rationale documentation procedures.

State Response: BOW agrees that documentation of the rationale for difference between the initial penalty calculation and final penalty can be clearer on some penalty calculations. BOW is currently reviewing its penalty assessment guidelines and will be revising penalty calculations to reflect these rationales.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
12a Documentation of rationale for difference between initial penalty calculation and final penalty [GOAL]	100%	-	1	2	50%

CWA Element 5 - Penalties

Finding 5-3

Meets or Exceeds Expectations

Summary:

SC DHEC consistently documented the collection of penalties.

Explanation:

Metric 12b indicated that all 15 files reviewed (100%) included adequate documentation of penalty payment collection by SC DHEC.

State Response: SC DHEC agrees with EPA's findings on this metric.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
12b Penalties collected [GOAL]	100%	-	15	15	100%

Resource Conservation and Recovery Act Findings

RCRA Element 1 - Data

Finding 1-1

Meets or Exceeds Expectations

Summary:

SC DHEC's RCRA Minimum Data Requirements for compliance monitoring and enforcement activities were complete in RCRAInfo and ECHO.

Explanation:

Metric 2b measures the data accuracy and completeness in RCRAInfo with information in the facility files. 29 files were selected and reviewed to determine completeness of the minimum data requirements. 89.7% of the selected files were accurately represented in the national RCRA Info and ECHO databases. Data inaccuracies found for 3 of the facility files reviewed were corrected in RCRAInfo shortly after the SRF evaluation.

State Response: SC DHEC agrees with EPA's findings on this metric.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
2b Accurate entry of mandatory data [GOAL]	100%	-	26	29	89.7%

RCRA Element 2 - Inspections

Finding 2-1

Meets or Exceeds Expectations

Summary:

SC DHEC met national goals for both TSDF and LQG inspections.

Explanation:

Metric 5a and 5b measure the percentage of the treatment, storage, and disposal facility (TSDF) and the percentage of large quantity generator (LQG) universes per the most recent final Biennial Report (BR), that had a Compliance Evaluation Inspection (CEI) during the two-year and one-year

periods of review, respectively. SC DHEC met the national goal and exceeded the national average for two-year inspection coverage of TSDFs.

For LQGs, there appears to be a discrepancy in the number of inspections generated as part of the FY 2017 data metrics analysis (DMA). The DMA indicates that only 14.20% of the universe had been inspected (55 of 386 LQGs). However, SC DHEC completed 78 LQG inspections, as certified in the December 13, FY 2017 Grant Workplan RCRA Hazardous Waste Management End of Year Report. A more detailed analysis of the Biennial Report, RCRAInfo, the FY 2017 Grant Workplan, and SC DHEC's internal Inspection Tracking Database Summary revealed that the target LQG universe differs based on the source of information and on generators fluctuating in and out of LQG status during the course of a fiscal year. As such, Region 4 concludes that SC DHEC met the national goal and exceeded the national average for annual LQG inspections. The corrected LQG inspection metric values are reflected in the table below.

State Response: SC DHEC agrees with EPA's findings on this metric.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
5a Two-year inspection coverage of operating TSDFs [GOAL]	100%	88.1%	15	15	100%
5b Annual inspection of LQGs using BR universe [GOAL]	20%	16.1%	78	386	20.2%

RCRA Element 2 - Inspections

Finding 2-2

Meets or Exceeds Expectations

Summary:

SC DHEC's hazardous waste program inspection reports reviewed were complete, provided appropriate documentation to determine compliance at the facility and the timeliness of inspection report completion was well under the 150-day timeline outlined the Hazardous Waste Civil Enforcement Response Policy (ERP).

Explanation:

Building off progress from the prior SRF evaluation, EPA observed significant improvements in the level of detail included in the inspection reports. Following the prior SRF evaluation, SC DHEC revised its RCRA Hazardous Waste Inspection Protocol to include a template for inspectors

to use in developing the report and developed training for inspectors and compliance staff on the hazardous waste inspection process and report writing.

Metric 6a (100%) indicates that all 28 on-site inspection reports reviewed are complete and provide sufficient documentation to determine compliance. Metric 6b measures the percentage of inspection reports reviewed that are completed in a timely manner per the national standard. Twenty-eight (28) inspection reports were evaluated for completeness and sufficiency to determine compliance with RCRA requirements. All inspection reports contained the appropriate description of regulated activity, facility description, observations and potential violations.

State Response: SC DHEC agrees with EPA's findings on this metric.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
6a Inspection reports complete and sufficient to determine compliance [GOAL]	100%	-	28	28	100%
6b Timeliness of inspection report completion [GOAL]	100%	-	28	28	100%

RCRA Element 3 - Violations

Finding 3-1

Meets or Exceeds Expectations

Summary:

SC DHEC made accurate RCRA compliance determinations coming close to the national goal of 100% and exceeded the national average of 84.9% for the percentage of significant noncompliance (SNC) determinations made within 150 days of the first day of the inspection (Day Zero).

Explanation:

EPA observed significant improvements in the appropriateness of SNC determinations compared to the prior SRF evaluation. Shortly after the prior SRF evaluation, SC DHEC revised its RCRA Hazardous Waste Inspection Protocol and the RCRA Hazardous Waste Enforcement Project Management Checklist to include SNC determinations. In addition, enforcement staff received additional training in making SNC determinations and SNC coding procedures in RCRA Info and SC DHEC implemented monthly audits of on-going cases to ensure that SNC designations are entered.

Metric 7a measures whether accurate compliance determinations were made based on a file review of inspection reports and other compliance monitoring activity (i.e., record reviews). The file review indicated that all 29 of the files reviewed (100%) had accurate compliance determinations. Each of the files reviewed had accurate and complete descriptions of the violations observed during the inspection and had adequate documentation to support SC DHEC compliance determinations.

Metric 8b measures the percentage of SNC determinations made within 150 days of the first day of inspection (Day Zero). SC DHEC came close to the national goal of 100% and exceeded the national average for this metric (94.4% vs 84.9%). Metric 8c measures the percentage of files reviewed in which significant noncompliance (SNC) status was appropriately determined during the review period. The file review indicated that 94.4% of the files reviewed had appropriate SNC determinations (17 of 18).

State Response: SC DHEC agrees with EPA's findings on this metric.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
7a Accurate compliance determinations [GOAL]	100%	-	29	29	100%
8b Timeliness of SNC determinations [GOAL]	100%	84.9%	17	18	94.4%
8c Appropriate SNC determinations [GOAL]	100%	-	17	18	94.4%

RCRA Element 4 - Enforcement

Finding 4-1

Meets or Exceeds Expectations

Summary:

SC DHEC consistently issues enforcement responses that have returned or will return a facility in significant noncompliance (SNC) or secondary violation (SV) to compliance.

Explanation:

Metric 9a measures the percentage of enforcement responses that have returned or will return sites in SNC or SV to compliance. A total of 25 files were reviewed that included informal or formal enforcement actions. Twenty-three (23) of twenty-four (24) or 95.8% of the enforcement responses returned the facilities to compliance or were on a compliance schedule to return the facilities back into compliance with the RCRA requirements.

Metric 10a measures the percentage of SNC violations addressed with a formal action or referral during the year reviewed and within 360 days of Day Zero. The data metric indicated that 90% of the FY 2017 cases (18 of 20) met the ERP timeline of 360 days. SC DHEC exceeded both the national goal (80%) and the national average (81.1%) for this metric.

Metric 10b measures the percentage of files with enforcement responses that are appropriate to the violations. A total of 24 files were reviewed with concluded enforcement responses. Twenty-three (23) of twenty-four (24) or 95.8% of the files reviewed contained enforcement responses that were appropriate to the violations.

State Response: SC DHEC agrees with EPA's findings on this metric.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
9a Enforcement that returns sites to compliance [GOAL]	100%	-	23	24	95.8%
10a Timely enforcement taken to address SNC [GOAL]	80%	81.1%	18	20	90%
10b Appropriate enforcement taken to address violations [GOAL]	100%	-	23	24	95.8%

RCRA Element 5 - Penalties

Finding 5-1

Meets or Exceeds Expectations

Summary:

SC DHEC considered gravity and economic benefit when calculating penalties and documented the differences between initial and final penalty assessments.

Explanation:

Metric 11a indicated that SC DHEC considered gravity and economic benefit in 18 of 18 penalty calculations reviewed (100%). SC DHEC typically uses the BEN model to calculate economic benefit. Metric 12a indicated that 17 of 17 penalty calculations reviewed (100%) documented any difference between the initial and the final penalty assessed.

State Response: SC DHEC agrees with EPA's findings on this metric.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
11a Gravity and economic benefit [GOAL]	100%	-	18	18	100%
12a Documentation of rationale for difference between initial penalty calculation and final penalty [GOAL]	100%	-	17	17	100%

RCRA Element 5 - Penalties

Finding 5-2

Meets or Exceeds Expectations

Summary:

SC DHEC included documentation in the files that all final assessed penalties were collected.

Explanation:

Metric 12b assesses the percentage of enforcement files reviewed that document the collection of a penalty. SC DHEC met the national goal of 100% for this metric. There was documentation verifying that SC DHEC had collected penalties assessed in the eighteen (18) final enforcement actions reviewed.

State Response: SC DHEC agrees with EPA's findings on this metric.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
12b Penalty collection [GOAL]	100%	-	18	18	100%