



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

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ATLANTA, GEORGIA 30303-8960

Mr. Tony Hatton
Commissioner
Kentucky Department of Environmental Protection
300 Sower Blvd
Frankfort, Kentucky 40601

Dear Mr. Hatton:

The Environmental Protection Agency Region 4 would like to thank you and your staff for participating in the Round 4 State Review Framework (SRF) evaluation of the Kentucky Department of Environmental Protection (KDEP) compliance and enforcement program. Region 4 is very appreciative of the cooperation and assistance provided by KDEP 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 KDEP'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 2018. The report recognizes that KDEP has implements effective compliance and enforcement activities in many of the elements evaluated in the SRF and shown improvement in multiple areas. Additionally, the final Round 4 SRF report 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 KDEP 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,

Carol L. Kemker
Director
Enforcement and Compliance Assurance Division

Enclosure

STATE REVIEW FRAMEWORK

Kentucky

**Clean Air Act, Clean Water Act, &
Resource Conservation & Recovery Act
Implementation in Federal Fiscal Year 2018**

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

**Final Report
September 21, 2020**

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, the 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 the 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 the 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 the EPA and program contact information, metric values, performance findings and explanations, program responses, and the 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 the 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:

- April 29, 2019: kick off letter sent to state
- August 12-16, 2019, on-site file review for CWA
- August 19-22, 2019, on-site file review for CAA
- August 26-30, 2019, on-site file review for RCRA

State and the EPA key contacts for review:

	Kentucky Department for Environmental Protection (KDEP)	EPA Region 4
SRF Coordinator	Mark Cleland, Environmental Scientist Consultant Senior	Bryan Myers, SRF Coordinator
CAA	Mark Cleland, Environmental Scientist Consultant Senior	Mark Fite, Policy, Oversight & Liaison Office David Lloyd, Air Enforcement Branch Andrew Mills, Air Enforcement Branch
CWA	Mark Cleland, Environmental Scientist Consultant Senior	Laurie Ireland, Policy, Oversight & Liaison Office Andrea Zimmer, Water Enforcement Branch
RCRA	Mark Cleland, Environmental Scientist Consultant Senior	Reggie Barrino, Policy, Oversight & Liaison Office Alan Newman, Chemical Safety & Land Enforcement 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)

Minimum Data Requirements (MDRs) for High Priority Violations (HPVs), compliance monitoring and enforcement actions are entered timely and accurately into ICIS-Air.

KDEP met the negotiated frequency for inspection of sources and included all required elements in their Full Compliance Evaluations (FCEs) and Compliance Monitoring Reports (CMRs).

KDEP made accurate compliance determinations for both HPV and non-HPV violations, and HPVs were entered into ICIS-Air within 90 days of the discovery action.

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

The collection of penalties was adequately documented in state files.

Clean Water Act (CWA)

KDEP exceeded the National Goals for the entry of key data metrics for major and non-major facilities.

KDEP's inspection reports were well written, complete, provided sufficient documentation to determine compliance, and were timely.

KDEP's inspection reports consistently documented accurate compliance determinations.

Resource Conservation and Recovery Act (RCRA)

KDEP exceeded the national goals for both treatment, storage, and disposal facility (TSDF) and large quantity generator (LQG) inspections. The EPA commends KDEP on its LQG inspection coverage.

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

KDEP'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).

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

The complete and accurate reporting of MDRs and the timely reporting of stack tests needs improvement.

The accuracy and timeliness of stack tests and the accuracy of Federally Reportable Violations (FRVs) or enforcement actions reported into ICIS-Air needs improvement.

Clean Water Act

None.

Resource Conservation and Recovery Act

None.

Clean Air Act Findings

CAA Element 1 - Data

Finding 1-1

Meets or Exceeds Expectations

Summary:

MDRs for HPVs, compliance monitoring and enforcement actions were entered timely into ICIS-Air.

Explanation:

Data Metrics 3a2, 3b1, and 3b3 indicated that KDEP entered MDR data for HPVs, compliance monitoring and enforcement actions into ICIS-Air within the specified timeframe of 60-days.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
3a2 Timely reporting of HPV determinations [GOAL]	100%	44.9%	4	4	100%
3b1 Timely reporting of compliance monitoring MDRs [GOAL]	100%	85.2%	615	674	91.2%
3b3 Timely reporting of enforcement MDRs [GOAL]	100%	71.8%	51	53	96.2%

State Response:

CAA Element 1 - Data

Finding 1-2

Area for Improvement

Summary:

The complete and accurate reporting of MDRs and the timely reporting of stack tests needs improvement.

The accuracy and timeliness of stack tests and the accuracy of FRVs or enforcement actions reported into ICIS-Air needs improvement.

Explanation:

Metric 2b indicated that 19 of the 34 files reviewed (55.9%) had all MDRs reported accurately into ICIS-Air. The remaining 15 files had one or more discrepancies identified. The majority of discrepancies related to missing or inaccurate stack test results, FRVs, or enforcement actions. In addition, Metric 3b2 indicated that half of the stack tests results (33 of 66) were not entered into ICIS-Air within the established timeframe of 120 days.

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%		19	34	55.9%
3b2 Timely reporting of stack test dates and results [GOAL]	100%	65.1%	33	66	50%

State Response: KDEP stack tests are extensively reviewed before the final compliance status is reported to ICIS. Many EPA regulations allow sources 60 days from the date of the test to submit the test report and this makes it difficult for KDEP to adequately review and report the results by the 120-day expectation.

KDEP has continued to implemented process and procedural changes to report results as “pending” earlier in the process but the final results of the test are not input to our database until after a thorough review. An increase in testing volume and unusually high turnover rate for staff during the evaluation period also contributed to extended timeframe noted in this round. The current staff levels and process changes should be adequate to approach the 120-day expectation. However, KDEP recommends that the metric be re-evaluated to consider the need for thorough engineering review of test result data prior to entry into the national database as balanced against the 120-day expectation.

Recommendation:

Rec #	Due Date	Recommendation
1	03/31/2021	By December 31, 2020, KDEP should identify the root causes for late and/or inaccurate reporting of stack tests and FRVs, and provide to the EPA a written description of what measures and/or procedures have been implemented to ensure accurate and timely entry of MDRs into ICIS-Air. By March 31, 2021, after the FY20 data is frozen, the EPA will review the relevant data metrics and a sample of facility files. If the data is found to be timely and accurate in the national database, this recommendation will be closed.

CAA Element 2 - Inspections

Finding 2-1

Meets or Exceeds Expectations

Summary:

KDEP met the negotiated frequency for inspection of sources and included all required elements in their FCEs and CMRs.

Explanation:

Metrics 5a and 5b indicated that KDEP provided adequate inspection coverage for major and SM-80 sources during FY2018 by ensuring that most major sources were inspected at least every 2 years, and each SM-80 source was inspected at least every 5 years. In addition, Metrics 6a and 6b 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.

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%	88.1%	158	172	91.9%
5b FCE coverage: SM-80s [GOAL]	100%	93.7%	110	112	98.2%
6a Documentation of FCE elements [GOAL]	100%		25	26	96.2%
6b CMRs or facility files reviewed that provide sufficient documentation to determine compliance of the facility [GOAL]	100%		26	26	100%

State Response:

CAA Element 2 - Inspections

Finding 2-2

Area for Attention

Summary:

KDEP should ensure that all Title V Annual Compliance Certification (ACC) reviews are completed and entered into ICIS-Air.

Explanation:

Metric 5e indicated that 184 of 224 Title V ACCs (82.1%) were reviewed by the KDEP and recorded in ICIS-Air. A review of subsequent year (FY19) frozen data indicates some improvement in this metric (86.2%), suggesting that KDEP can self-correct this issue.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
5e Reviews of Title V annual compliance certifications completed [GOAL]	100%	82.5%	184	224	82.1%

State Response: KDEP acknowledges the finding and has identified this as partially a training issue for new staff regarding the importance of the TV ACC review inspection and partially the result of state database coding errors that prevented a full dataset from uploading to ICIS-Air. A systematic training program for air inspectors has been implemented since the review period that will address the training deficiency. Data coding issues will be addressed through standard operating procedure document updates. KDEP agrees this issue can be self-corrected.

CAA Element 3 - Violations

Finding 3-1

Meets or Exceeds Expectations

Summary:

KDEP made accurate compliance determinations for both HPV) and non-HPVs, and HPVs were entered into the national database within 90 days of the discovery action.

Explanation:

Metric 7a indicated that KDEP made accurate compliance determinations in 30 of 32 files reviewed (93.8%). Metric 8c indicated that KDEP's HPV determinations for all 17 files reviewed with violations (100%) were accurate. Metric 13 (100%) indicated that all four HPVs reported were entered into ICIS-Air within 90 days of the discovery action.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
7a Accurate compliance determinations [GOAL]	100%		30	32	93.8%
13 Timeliness of HPV Identification [GOAL]	100%	89.5%	4	4	100%
8c Accuracy of HPV determinations [GOAL]	100%		17	17	100%

State Response:**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 an appropriate manner.

Explanation:

Metric 9a indicated that 10 of 11 formal enforcement actions reviewed (90.9%) brought sources back into compliance through corrective actions in the order, or compliance was achieved prior to issuance of the order. Metric 14 indicated that all three 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 seven HPVs (100%) evaluated during the file review.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
14 HPV case development and resolution timeline in place when required that contains required policy elements [GOAL]	100%		3	3	100%
10b Percent of HPVs that have been addressed or removed consistent with the HPV Policy [GOAL]	100%		7	7	100%
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%		10	11	90.9%

State Response:

CAA Element 4 - Enforcement

Finding 4-2

Meets or Exceeds Expectations

Summary:

HPVs were addressed within 180 days or a Case Development and Resolution Timeline (CDRT) was discussed with EPA.

Explanation:

Metric 10a indicated that all 7 HPVs (7100%) were addressed within 180 days or alternatively had a CDRT in place.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
10a Timeliness of addressing HPVs or alternatively having a case development and resolution timeline in place	100%		7	7	100%

State Response:

CAA Element 5 - Penalties

Finding 5-1

Meets or Exceeds Expectations

Summary:

The collection of penalties was adequately documented in state files.

Explanation:

Metric 12b (100%) confirmed that documentation of the collection of seven penalty payments made by sources was included in the file.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
12b Penalties collected [GOAL]	100%		7	7	100%

State Response:

CAA Element 5 - Penalties

Finding 5-2

Area for Attention

Summary:

KDEP 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. In addition, differences between initial and final penalty assessments was adequately documented.

Explanation:

In 2018 the KDEP began piloting a Penalty Calculation Tool and user’s guide to describe a consistent method for calculating civil penalties for violations of environmental statutes and regulations within the Commonwealth of Kentucky. The tool provides a mechanism for documenting the gravity and economic benefit components of KDEP’s penalty calculations. The degree to which the State documents gravity and economic benefit in penalty calculations was an issue raised during the SRF Round 3 evaluation. The EPA subsequently closed the SRF Round 3 Outstanding Recommendation in the Spring of 2019, after reviewing the Penalty Calculation Tool and determining KDEP had made significant improvement in their penalty documentation procedures, as well as their commitment to continuous improvement in implementation of the tool, particularly with respect to addressing economic benefit.

It has been determined that although the SRF Round 4 evaluation did not allow the EPA to fully evaluate KDEP’s complete implementation of the Penalty Calculation Tool, due to implementation beginning in late 2018, KDEP continues to make considerable progress in satisfying the intent of national EPA policy "Oversight of State and Local Penalty Assessments: Revisions to the Policy Framework for State/EPA Enforcement Agreements." Metric 11a indicated that KDEP considered gravity and economic benefit in 4 of 7 penalty calculations reviewed (57.1%). Metric 12a indicated that 7 of 7 penalty calculations reviewed (100%) documented any difference between the initial and the final penalty assessed. The EPA is therefore recommending that this element be considered an Area of Attention, and that KDEP continues its progress in refining, documenting and implementing its penalty calculation process. The EPA will periodically review the State’s penalty documentation to ensure that such progress continues.

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%		4	7	57.1%
12a Documentation of rationale for difference between initial penalty calculation and final penalty [GOAL]	100%		7	7	100%

State Response:

Clean Water Act Findings

CWA Element 1 - Data

Finding 1-1

Meets or Exceeds Expectations

Summary:

KDEP exceeded the National Goals for the entry of key data into the national database for NPDES major and non-major facilities.

Explanation:

KDEP exceeded the National Goals and national averages for the entry of key Data Metrics (1b5 and 1b6) for major and non-major facilities. For the FY18 period of review, KDEP entered 100% of their permit limits and 95.9% of DMRs for NPDES major and non-major facilities.

The EPA commends KDEP on their continued data entry of Single Event Violations.

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%	90.6%	1430	1430	100%
1b6 Completeness of data entry on major and non-major discharge monitoring reports. [GOAL]	95%	93.3%	30344	31617	95.9%
7j1 Number of major and non-major facilities with single-event violations reported in the review year	-	-	829		

State Response:

CWA Element 1 - Data

Finding 1-2

Area for Attention

Summary:

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

Explanation:

Metric 2b indicated that 71.7% (33/46) of the files reviewed reflected accurate data entry of MDR for NPDES facilities into the ICIS. Minor discrepancies observed between ICIS and the State's files were related to missing inspections or Notices of Violations stemming from inspections and inaccurate dates for enforcement actions. KDEP promptly corrected these discrepancies once brought to the State's attention.

Data Accuracy was an Area for State Improvement in Round 3. KDEP has improved their data accuracy since then. The minor discrepancies observed were not systemic and the State can address without EPA oversight. Therefore, this is an Area for State Attention in SRF Round 4.

To maintain this progress, the Region will continue to share and discuss the SRF Annual Data Metrics Analysis (ADMA) during the annual meeting conducted by the ECAD Division Director. This process provides heightened attention to addressing accurate data entry of the MDR.

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%	-	33	46	71.7%

State Response: KY continues to address inspection data issues within KY's ARM database so that data is corrected before it uploads to ICIS. The field operations SOP has a "Data Validation" step that helps to identify data needing correction before an ICIS upload. Also, if the "Data Validation" step is missed, KY's database has audit features that will notify KY personnel of a data failure so information can be corrected before it uploads to ICIS. In addition, when the state's IT HelpDesk receives a request to change "locked" data in the ARM database, the IT personnel contacts appropriate DOW personnel to ensure that the ARM database and the ICIS data base are both reviewed and corrected as may be warranted".

CWA Element 2 - Inspections

Finding 2-1

Meets or Exceeds Expectations

Summary:

KDEP met its FY18 CMS commitments.

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 FY18 inspection commitments listed in the table below are from the CWA §106 Workplan end of year (EOY) report.

Based on review of the KDEP CWA §106 Workplan EOY report, the State met its CMS inspection commitments in FY18. The Region combined the NPDES minor individual and general permits inspections and universes into one commitment for FY18. Therefore, separate inspection coverages for Metrics 5b1 and 5b2 could not be ascertained from the FY18 CWA §106 Workplan EOY report.

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	-	35	35	100%
4a2 Number of inspections at the EPA or state Significant Industrial Users that are discharging to non-authorized POTWs. [GOAL]	100% of commitments	-	-	-	n/a
4a4 Number of CSO inspections. [GOAL]	100% of commitments	-	5	5	100%
4a5 Number of SSO inspections. [GOAL]	100% of commitments	-	27	27	100%
4a7 Number of Phase I and II MS4 audits or inspections. [GOAL]	100% of commitments	-	24	24	100%
4a8 Number of industrial stormwater inspections. [GOAL]	100% of commitments	-	120	120	100%
4a9 Number of Phase I and Phase II construction stormwater inspections. [GOAL]	100% of commitments	-	232	232	100%
4a10 Number of comprehensive inspections of large and medium concentrated animal feeding operations (CAFOs) [GOAL]	100% of commitments	-	1	1	100%
5a1 Inspection coverage of NPDES majors. [GOAL]	100%	-	74	74	100%
5b Inspections coverage of NPDES non-majors (individual and general permits) [GOAL]	100%	-	444	444	100%

State Response:

CWA Element 2 - Inspections

Finding 2-2

Meets or Exceeds Expectations

Summary:

KDEP's inspection reports were well written, complete, provided sufficient documentation to determine compliance, and were timely.

Explanation:

Metric 6a requires that inspection reports are complete and sufficient to determine compliance at a facility. Approximately 87.5% (84/96) of KDEP's inspection reports were found to be well written, complete, and sufficient. Field observations noting compliance issues were also included in inspection reports and/or cover letters, where appropriate.

Metric 6b indicated that 87.5% (84/96) of KDEP'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, the 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 15 days, with a range of 1-66 days.

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%	-	84	96	87.5%

State Response:

CWA Element 3 - Violations

Finding 3-1

Meets or Exceeds Expectations

Summary:

KDEP's inspection reports consistently documented accurate compliance determinations.

Explanation:

Metric 7e indicated that 87.1% (81/93) of the inspection reports reviewed consistently documented an accurate compliance determination for each facility. KDEP's inspection report and cover letter is used effectively for documenting inspection field observations and making clear and accurate compliance determinations.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
7e Accuracy of compliance determinations [GOAL]	100%	-	81	93	87.1%

State Response:

CWA Element 4 - Enforcement

Finding 4-1

Area for Attention

Summary:

The State generally 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 39 of the 48 ERs reviewed (81.3%) returned or were expected to return a facility to compliance. File metric 10b indicated that 40 of the 48 files (83.3%) had an appropriate ER.

Data Metric 10a1 indicated that four of eight (50%) major facilities in SNC during FY18 received a timely formal ER. During the onsite file review, two of the major facilities in SNC without a timely response were reviewed. It was observed that the State had taken steps (one informal action; one formal action) in FY18 to address the SNC violations at those facilities.

Timely and appropriate ERs which promote a RTC was an Area for State Improvement in Round 3. EPA commends KDEP on the substantial progress made in this area as evident by the file review. To maintain this progress, it is suggested that they continue to escalate the ER when warranted and ensure adequate documentation of the chosen ER in the file.

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%	-	39	48	81.3%
10a1 Percentage of major NPDES facilities with formal enforcement action taken in a timely manner in response to SNC violations	98%	15.6%	4	8	50%
10b Enforcement responses reviewed that address violations in an appropriate manner [GOAL]	100%	-	40	48	83.3%

State Response:

CWA Element 5 - Penalties

Finding 5-1

Area for Attention

Summary:

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

Explanation:

In 2018 the KDEP began piloting a Penalty Calculation Tool and user’s guide to describe a consistent method for calculating civil penalties for violations of environmental statutes and regulations within the Commonwealth of Kentucky. The tool provides a mechanism for documenting the gravity and economic benefit components of KDEP’s penalty calculations.

The documented calculation of gravity and economic benefit in penalty calculations was an issue raised during the SRF Round 3 evaluation, and a recommendation was included in the report for

KDEP to develop standard procedures to ensure appropriate penalty calculations. In response, KDEP developed a Penalty Calculation Tool which the EPA reviewed in Spring 2019. Based on the review of the new tool, the EPA verified as complete the SRF Round 3 Recommendation, determining KDEP had made significant improvement in their penalty documentation procedures and is committed to continuous improvement in implementation of the tool, particularly with respect to addressing economic benefit.

Metric 11a indicated that 12 of the 25 files (48%) 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, KDEP 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.

Given that the SRF Round 4 evaluation is based on FY18 data, and KDEP implementation of the Penalty calculation Tool did not begin until late FY2018, EPA concedes that this metric does not fully capture the progress and latest performance of KDEP. Based on ongoing communication the EPA has found that KDEP continues to make considerable progress in satisfying the intent of EPA’s national policy "Oversight of State and Local Penalty Assessments: Revisions to the Policy Framework for State/EPA Enforcement Agreements."

The EPA is therefore recommending that this element be considered an Area of Attention, and that KDEP continue its progress in refining, documenting and implementing its penalty calculation process. The EPA will periodically review the State’s penalty documentation to ensure that such progress continues.

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%	-	12	25	48%

State Response: Kentucky has been working on improving staff understanding of economic benefit calculations and assessment. U.S. EPA Region 4 was scheduled to do an economic benefit training in May 2020, but the training has been postponed due to the COVID-19 pandemic.

CWA Element 5 - Penalties

Finding 5-2

Meets or Exceeds Expectations

Summary:

KDEP consistently documented any differences between the initial penalty calculation and the final assessed penalty as well as the collection of penalties.

Explanation:

Metric 12a indicated that 4 of 4 files (100%) reviewed included adequate documentation of differences between the initial penalty calculation and the final assessed penalty.

Metric 12b indicated that 25 of 25 files (100%) reviewed included adequate documentation of penalty payment collection by KDEP.

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%	-	4	4	100%
12b Penalties collected [GOAL]	100%	-	25	25	100%

State Response:

Resource Conservation and Recovery Act Findings

RCRA Element 1 - Data

Finding 1-1

Area for Attention

Summary:

Minor discrepancies were identified between the data in several of the facility files and the data reflected in the national data system.

Explanation:

Metric 2b measures the data accuracy and completeness in RCRAInfo with information in the facility files. Thirty-three files were selected and reviewed to determine completeness of the minimum data requirements. The data was found to be accurate in 24 of the 33 files (72.7%). KDEP indicated that the minor data discrepancies would be addressed by conducting an internal audit to identify the problem and employing corrective and preventive actions to ensure and sustain data quality.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
2b Accurate entry of mandatory data [GOAL]	100%		24	33	72.7%

State Response:

RCRA Element 2 - Inspections

Finding 2-1

Meets or Exceeds Expectations

Summary:

KDEP exceeded the national goals for both TSDf and LQG inspections. The EPA commends KDEP on its LQG inspection coverage.

Explanation:

Metric 5a and 5b measure the percentage of the TSDf and the percentage of LQG universes that had a CEI during the two-year and one-year periods of review, respectively. KDEP met the national goals and exceeded the national averages for both the annual inspection coverage for LQGs and the two-year inspection coverage of TSDfs. KDEP has excellent annual LQG

inspection coverage (47.6%) that is more twice the national goal of 20%, outlined in the EPA RCRA Compliance Monitoring Strategy (CMS).

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%	85%	12	12	100%
5b1 Annual inspection coverage of LQGs using RCRAInfo universe [GOAL]	20%	9.9%	161	338	47.6%

State Response:

RCRA Element 2 - Inspections

Finding 2-2

Meets or Exceeds Expectations

Summary:

KDEP'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.

Explanation:

Metric 6a measures the percentage of on-site inspection reports reviewed that are complete and provide sufficient documentation to determine compliance. All thirty onsite inspection reports reviewed were complete and provided 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. All 30 onsite inspection reports reviewed were completed in a timely manner per the national standard.

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%		30	30	100%
6b Timeliness of inspection report completion [GOAL]	100%		30	30	100%

State Response:

RCRA Element 3 - Violations

Finding 3-1

Meets or Exceeds Expectations

Summary:

KDEP made accurate RCRA compliance determinations. In addition, SNC determinations were timely and appropriate.

Explanation:

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 31 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 KDEP's compliance determinations.

Metric 8b measures the percentage of SNC determinations made within 150 days of the first day of inspection (Day Zero). KDEP met the national goal of 100% and exceeded the national average for this metric (100% vs 76.5%).

Metric 8c measures the percentage of files reviewed in which SNC status was appropriately determined during the review period. The file review indicated that 100% of the files reviewed had appropriate SNC determinations.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
7a Accurate compliance determinations [GOAL]	100%		31	31	100%
8b Timeliness of SNC determinations [GOAL]	100%	76.5%	7	7	100%
8c Appropriate SNC determinations [GOAL]	100%		22	22	100%

State Response:

RCRA Element 4 - Enforcement

Finding 4-1

Meets or Exceeds Expectations

Summary:

KDEP consistently issues enforcement responses that have returned or will return a facility in SNC or 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 26 files were reviewed that included informal or formal enforcement actions. Twenty-five of 26 (96.2%) 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 88% of the FY 2018 cases (7 of 8) met the ERP timeline of 360 days. KDEP exceeded both the national goal (80%) and the national average (87.7%) for this metric.

Metric 10b measures the percentage of files with enforcement responses that are appropriate to the violations. A total of 26 files were reviewed with concluded enforcement responses. All 26 (100%) of the files reviewed contained enforcement responses that were appropriate to the violations.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
10a Timely enforcement taken to address SNC [GOAL]	100%	87.7%	7	8	88%
10b Appropriate enforcement taken to address violations [GOAL]	100%		26	26	100%
9a Enforcement that returns sites to compliance [GOAL]	100%		25	26	96.2%

State Response:

RCRA Element 5 - Penalties

Finding 5-1

Area for Attention

Summary:

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

Explanation:

In 2018 KDEP began piloting a Penalty Calculation Tool and user's guide to describe a consistent method for calculating civil penalties for violations of environmental statutes and regulations within the Commonwealth of Kentucky. The tool provides a mechanism for documenting the gravity and economic benefit components of KDEP's penalty calculations.

The degree to which the State documents gravity and economic benefit in penalty calculations was an issue raised during the SRF Round 3 evaluation. The EPA subsequently closed the SRF Round 3 Outstanding Recommendation in the Spring of 2019, after reviewing the Penalty Calculation Tool and determining KDEP had made significant improvement in their penalty documentation procedures, as well as their commitment to continuous improvement in implementation of the tool, particularly with respect to addressing economic benefit.

It has been determined that although the SRF Round 4 evaluation did not allow the EPA to fully evaluate KDEP's complete implementation of the Penalty Calculation Tool, due to implementation beginning in late 2018, KDEP continues to make considerable progress in satisfying the intent of national EPA policy Oversight of State and Local Penalty Assessments: Revisions to the Policy Framework for State/EPA Enforcement Agreements.

Metric 11a indicated that KDEP considered gravity and economic benefit in three of nine penalty calculations reviewed (33.3%). Metric 12a indicated that both penalty calculations reviewed (100%) documented any difference between the initial and the final penalty assessed.

The EPA is therefore recommending that this element be considered an Area of Attention, and that KDEP continues its progress in refining, documenting and implementing its penalty calculation process. The EPA will periodically review the State’s penalty documentation to ensure that such progress continues.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
11a Gravity and economic benefit [GOAL]	100%		3	9	33.3%
12a Documentation of rationale for difference between initial penalty calculation and final penalty [GOAL]	100%		2	2	100%

State Response: Kentucky has been working on improving staff understanding of economic benefit calculations and assessment. The U.S. EPA Region 4 was scheduled to do an economic benefit training in May 2020, but the training has been postponed due to the COVID-19 pandemic.

RCRA Element 5 - Penalties

Finding 5-2

Meets or Exceeds Expectations

Summary:

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

Explanation:

Metric 12b measures the percentage of enforcement files reviewed that document the collection of a penalty. KDEP met the national goal of 100% for this metric. There was documentation verifying that KDEP had collected penalties assessed in the nine final enforcement actions reviewed.

Relevant metrics:

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State %
12b Penalty collection [GOAL]	100%		9	9	100%

State Response: