

# **STATE REVIEW FRAMEWORK**

## **Nashville/Davidson County, Tennessee**

### **Clean Air Act Implementation in Federal Fiscal Year 2012**

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

**Final Report  
April 16, 2015**

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# **Executive Summary**

## **Introduction**

EPA Region 4 enforcement staff conducted a State Review Framework (SRF) enforcement program oversight review of the Nashville/Davidson County Metro Public Health Department (MPHD).

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

## **Areas of Strong Performance**

- Enforcement actions bring sources back into compliance within a specified timeframe.
- MPHD considers gravity and economic benefit when calculating penalties, documenting the collection of penalties and any differences between initial and final penalty assessments.

## **Priority Issues to Address**

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

- MPHD needs to improve the accuracy of data reported into the National Data System (formerly Air Facility Subsystem (AFS), but now ICIS-Air). Data discrepancies were identified in all of the files reviewed.
- The review of most Title V Annual Compliance Certifications (ACCs) were not recorded in AFS, and Full Compliance Evaluations (FCEs) and Compliance Monitoring Reports (CMRs) did not always include all required elements.

## **Most Significant CAA Stationary Source Program Issues**

- The accuracy of enforcement and compliance data entered by MPHD in AFS needs improvement. The recommendation for improvement is for MPHD to document efforts to identify and address the causes of inaccurate Minimum Data Requirements (MDR) reporting and make corrections to existing data to address discrepancies identified by EPA. EPA will monitor progress through the annual Data Metrics Analysis (DMA) and other periodic data reviews.
- MPHD needs to ensure that FCEs and CMRs include all required elements and that ACC reviews are documented in ICIS-Air. The recommendation for improvement is for MPHD to submit and implement revised procedures which ensure that ACC reviews are recorded in ICIS-Air and FCEs and CMRs include all required elements. EPA will review sample CMRs provided by MPHD for 6 months to determine the adequacy of the revised procedures.

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## I. Background on the State Review Framework

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

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

Reviews cover:

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

EPA conducts SRF reviews in three phases:

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

EPA builds consultation into the SRF to ensure that EPA and the state or local program understand the causes of issues and agree, to the degree possible, on actions needed to address them. SRF reports capture the agreements developed during the review process in order to facilitate program improvements. EPA also uses the information in the reports to develop a better understanding of enforcement and compliance nationwide, and to identify issues that require a national response. Reports provide factual information. They do not include determinations of overall program adequacy, nor are they used to compare or rank state and local programs.

Each state's programs are reviewed once every five years. Local programs are reviewed less frequently, at the discretion of the EPA Regional office. The first round of SRF reviews began in FY 2004, and the second round began in FY 2009. The third round of reviews began in FY 2013 and will continue through 2017.

## II. SRF Review Process

**Review period:** 2012

**Key dates:** November 15, 2013, letter sent to Local program kicking off the Round 3 review  
December 3 – 5, 2013, on-site file review for CAA

**Local Program and EPA key contacts for review:**

	Nashville MPHD	EPA Region 4
SRF Coordinator	John Finke	Kelly Sisario, OEA Branch Chief
CAA	John Finke	Mark Fite, OEA Technical Authority

### III. SRF Findings

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

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

There are three categories of findings:

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

**Area for State<sup>1</sup> Attention:** An activity, process, or policy that one or more SRF metrics show as a minor problem. Where appropriate, the state or local should correct the issue without additional EPA oversight. EPA may make recommendations to improve performance, but it will not monitor these recommendations for completion between SRF reviews. These areas are not highlighted as significant in an executive summary.

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

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

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

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

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<sup>1</sup> Note that EPA uses a national template for producing consistent reports throughout the country. References to “State” performance or responses throughout the template should be interpreted to apply to the Local Program.

## Clean Air Act Findings

CAA Element 1 — Data																																				
<b>Finding 1-1</b>	<b>Meets or Exceeds Expectations</b>																																			
<b>Summary</b>	MDRs were entered timely into AFS, EPA’s national data system for air enforcement and compliance information.																																			
<b>Explanation</b>	<p>Data Metrics 3a2 and 3b2 indicated that MPH D entered MDR data for high priority violations (HPVs) and stack tests into AFS within the specified timeframe.</p> <p>Data Metric 3b1 indicated that 61.2% of compliance monitoring MDRs (71 of 116) were reported timely into AFS. However, of the 45 late entries, 38 were non-federally reportable minor sources (dry cleaners). If these dry cleaners are excluded from the metric calculation, the revised metric is 91% (71 of 78), which exceeds the national average and approaches the national goal.</p> <p>Data Metric 3b3 indicated that 2 of 3 (66.7%) enforcement related MDRs were entered into AFS within 60 days. The one late entry is considered an isolated incident, so EPA considers that the timeliness of MPH D’s data entry meets expectations.</p>																																			
<b>Relevant metrics</b>	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>3a2 Untimely entry of HPV determinations</td> <td>0</td> <td></td> <td></td> <td></td> <td>0</td> </tr> <tr> <td>3b1 Timely reporting of compliance monitoring MDRs</td> <td>100%</td> <td>80%</td> <td>71</td> <td>116</td> <td>61.2%</td> </tr> <tr> <td>3b2 Timely reporting of stack test dates and results</td> <td>100%</td> <td>73.1%</td> <td>2</td> <td>2</td> <td>100%</td> </tr> <tr> <td>3b3 Timely reporting of enforcement MDRs</td> <td>100%</td> <td>73.7%</td> <td>2</td> <td>3</td> <td>66.7%</td> </tr> </tbody> </table>						Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	3a2 Untimely entry of HPV determinations	0				0	3b1 Timely reporting of compliance monitoring MDRs	100%	80%	71	116	61.2%	3b2 Timely reporting of stack test dates and results	100%	73.1%	2	2	100%	3b3 Timely reporting of enforcement MDRs	100%	73.7%	2	3	66.7%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #																															
3a2 Untimely entry of HPV determinations	0				0																															
3b1 Timely reporting of compliance monitoring MDRs	100%	80%	71	116	61.2%																															
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3b3 Timely reporting of enforcement MDRs	100%	73.7%	2	3	66.7%																															
<b>State response</b>	Entry of data into ICIS-Air will be standardized to occur on the first of each month, if not sooner, to ensure timely entry of data. All inspection and enforcement data is now being entered on or prior to the first of the month following the inspections.																																			
<b>Recommendation</b>																																				



## CAA Element 1 — Data

<b>Finding 1-2</b>	<b>Area for State Improvement</b>																	
<b>Summary</b>	The accuracy of MDR data reported by MPHD into AFS needs improvement. At least one discrepancy between the files and AFS was identified in each of the files reviewed.																	
<b>Explanation</b>	Metric 2b indicated that each of the 15 files reviewed had one or more discrepancies between information in the files and data entered into AFS. The majority of inaccuracies related to facility information (NAICS, name, address, CMS info, pollutants etc.) and missing or inaccurate activity data (e.g. ACCs, NOVs, FCEs, penalties, etc.). Several files also revealed missing or inaccurate air programs or subparts for applicable Maximum Achievable Control Technology (MACT) or New Source Performance Standards (NSPS) regulations in AFS. Finally, two sources had an inaccurate compliance status code. This incorrect data in AFS could potentially hinder EPA’s oversight and targeting efforts and/or result in inaccurate information being released to the public.																	
<b>Relevant metrics</b>	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>2b Accurate MDR data in AFS</td> <td>100%</td> <td></td> <td>0</td> <td>15</td> <td>0%</td> </tr> </tbody> </table>						Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	2b Accurate MDR data in AFS	100%		0	15	0%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #													
2b Accurate MDR data in AFS	100%		0	15	0%													
<b>State response</b>	The discrepancies identified by EPA have been or will be corrected in ICIS-Air.																	
<b>Recommendation</b>	By April 30, 2015, MPHD should provide documentation to EPA concerning efforts to identify and address the causes of inaccurate MDR reporting. MPHD should also make corrections to existing data to address the discrepancies EPA identified and ensure that in the future, MDRs are accurately entered into ICIS-Air. If by June 30, 2015, EPA’s review determines that MPHD’s efforts appear to be adequate to meet the national goal, the recommendation will be considered complete.																	

## CAA Element 2 — Inspections

<b>Finding 2-1</b>	<b>Meets or Exceeds Expectations</b>					
<b>Summary</b>	MPHD met the negotiated frequency for inspection of Major and Synthetic Minor 80% (SM80) sources.					
<b>Explanation</b>	MPHD ensured that each major source was inspected at least once every 2 years, and each SM-80 source was inspected at least once every 5 years. Although Metric 5a indicates that only half of major sources (6 of 12) slated for inspection in FY2012 were inspected, all but one of the sources not inspected are permanently closed. The remaining source had an FCE in FY2011 (3/8/11), so it would not have been due for an FCE until FY2013, and the corrected percentage for major sources inspected is 100%. Similarly, Metric 5b indicates that 83.6% of SM80 sources (46 of 55) slated for inspection in FY2012 were inspected. However, all of the sources that were not inspected are coded as permanently closed in AFS, so the corrected percentage of SM80 sources inspected is 100%.					
<b>Relevant metrics</b>	<b>Metric ID Number and Description</b>	<b>Natl Goal</b>	<b>Natl Avg</b>	<b>State N</b>	<b>State D</b>	<b>State % or #</b>
	5a FCE coverage: majors and mega-sites	100%	90.4%	6	12	50%
	5b FCE coverage: SM-80s	100%	93.4%	46	55	83.6%
<b>State response</b>						
<b>Recommendation</b>						

## CAA Element 2 — Inspections

<b>Finding 2-2</b>	<b>Area for State Improvement</b>																								
<b>Summary</b>	The review of most Title V ACCs was not recorded in AFS, and FCEs and CMRs did not always include all required elements.																								
<b>Explanation</b>	<p>Metric 5e indicates that only 1 of 12 (8.3%) Title V ACCs were reviewed by the local program. The program advises that these reviews were conducted, but they were not recorded in AFS.</p> <p>Metric 6a indicates that 11 of 14 (78.6%) FCEs reviewed included all seven elements required by the <a href="#">Clean Air Act Stationary Source Compliance Monitoring Strategy</a> (CMS Guidance). The remaining three FCEs were missing one of the following elements: assessment of process parameters; visible emissions observations; or review of records &amp; reports.</p> <p>Metric 6b indicates that 9 of 14 (64.3%) CMRs included all seven elements required by the CMS Guidance. The remaining five CMRs were missing one or more of the following required elements: facility information; observations and recommendations; applicable requirements; or a description of compliance monitoring activities conducted by the inspector.</p>																								
<b>Relevant metrics</b>	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>5e Review of Title V annual compliance certifications</td> <td>100%</td> <td>81.8%</td> <td>1</td> <td>12</td> <td>8.3%</td> </tr> <tr> <td>6a Documentation of FCE elements</td> <td>100%</td> <td></td> <td>11</td> <td>14</td> <td>78.6%</td> </tr> <tr> <td>6b Compliance monitoring reports reviewed that provide sufficient documentation to determine facility compliance</td> <td>100%</td> <td></td> <td>9</td> <td>14</td> <td>64.3%</td> </tr> </tbody> </table>	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	5e Review of Title V annual compliance certifications	100%	81.8%	1	12	8.3%	6a Documentation of FCE elements	100%		11	14	78.6%	6b Compliance monitoring reports reviewed that provide sufficient documentation to determine facility compliance	100%		9	14	64.3%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #																				
5e Review of Title V annual compliance certifications	100%	81.8%	1	12	8.3%																				
6a Documentation of FCE elements	100%		11	14	78.6%																				
6b Compliance monitoring reports reviewed that provide sufficient documentation to determine facility compliance	100%		9	14	64.3%																				
<b>State response</b>	<p>All ACC were received and reviewed. Procedures will be developed to ensure more timely entry of ACC review into ICIS-Air. All ACC data is now entered into ICIS-Air as the ACC are received. MPH D has developed a spreadsheet to assist in tracking ACCs and Quarterly/Semi-Annual Reports.</p> <p>Coordinate with inspectors on procedures to completely fill out inspection reports. Develop and implement procedures to review each inspection report received for completeness before entering into AFS. Revise inspection forms to eliminate extraneous or outdated entries and ensure that all CMS required entries are present.</p>																								

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**Recommendation**

By June 30, 2015, MPHD should submit and implement revised procedures to EPA which ensure that ACC reviews are recorded in ICIS-Air and FCEs and CMRs include all elements required by the CMS Guidance. Through December 31, 2015, MPHD should submit sample CMRs to EPA for review. If based on this review EPA determines that the revised procedures are adequate to meet the national goal, the recommendation will be considered completed.

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### CAA Element 3 — Violations

<b>Finding 3-1</b>	<b>Meets or Exceeds Expectations</b>																													
<b>Summary</b>	MPHD made accurate compliance determinations for both HPV and non-HPV violations.																													
<b>Explanation</b>	<p>Metric 7a indicated that MPHD made accurate compliance determinations in 12 of 14 files reviewed (85.7%).</p> <p>Metric 8a indicated that the HPV discovery rate for majors (0%) was below the national average of 4.3%. A low HPV discovery rate is not unusual for small local programs. Although there were no HPV determinations during the review year, Metric 8c indicates that an HPV designated in the prior year and addressed in FY2012 was evaluated during the file review, and EPA confirmed the accuracy of that determination.</p>																													
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Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #																									
7a Accuracy of compliance determinations	100%		12	14	85.7%																									
8a HPV discovery rate at majors		4.3%	0	12	0%																									
8c Accuracy of HPV determinations	100%		1	1	100%																									
<b>State response</b>	<p>All ACC were reviewed. Deviations and missing data were determined to have been minor or had been adequately explained and addressed by the sources. In the future, procedures will be put in place to ensure better documentation of the review process and of any actions taken or determinations made by this department.</p> <p>All ACC data is now entered into ICIS-Air as the ACC are received. MPHD has developed a spreadsheet to assist in tracking ACCs and Quarterly/Semi-Annual Reports.</p>																													
<b>Recommendation</b>																														

## CAA Element 4 — Enforcement

<b>Finding 4-1</b>	<b>Meets or Exceeds Expectations</b>					
<b>Summary</b>	Enforcement actions bring sources back into compliance within a specified timeframe, and HPVs are addressed in a timely and appropriate manner.					
<b>Explanation</b>	<p>Metric 9a indicated that all formal enforcement actions reviewed brought sources back into compliance through corrective actions in the order, or compliance was achieved prior to issuance of the order.</p> <p>Metric 10a indicated that the one HPV concluded in the review year (FY2012) was addressed in 297 days. While this slightly exceeds the specified timeframe of 270 days, this is not considered a significant exceedance. In addition, Metric 10b indicated that appropriate enforcement action was taken to address all HPVs.</p>					
<b>Relevant metrics</b>	<b>Metric ID Number and Description</b>	<b>Natl Goal</b>	<b>Natl Avg</b>	<b>State N</b>	<b>State D</b>	<b>State % or #</b>
	9a Formal enforcement responses that include required corrective action that will return the facility to compliance in a specified timeframe	100%		2	2	100%
	10a Timely action taken to address HPVs		70.5%	0	1	0%
	10b Appropriate enforcement responses for HPVs	100%		1	1	100%
<b>State response</b>						
<b>Recommendation</b>						

## CAA Element 5 — Penalties

<b>Finding 5-1</b>	<b>Meets or Exceeds Expectations</b>					
<b>Summary</b>	MPHD considered gravity and economic benefit when calculating penalties; the collection of penalties and any differences between initial and final penalty assessments was also documented.					
<b>Explanation</b>	Metric 11a indicated that MPHD considered gravity and economic benefit in both penalty calculations reviewed (100%). Metric 12a also indicated that both penalty calculations reviewed (100%) documented any difference between the initial and the final penalty assessed. Finally, Metric 12b confirmed that documentation of all penalty payments made by sources was included in the file.					
<b>Relevant metrics</b>	<b>Metric ID Number and Description</b>	<b>Natl Goal</b>	<b>Natl Avg</b>	<b>State N</b>	<b>State D</b>	<b>State % or #</b>
	11a Penalty calculations include gravity and economic benefit	100%		2	2	100%
	12a Documentation on difference between initial and final penalty	100%		2	2	100%
	12b Penalties collected	100%		2	2	100%
<b>State response</b>						
<b>Recommendation</b>						

# **STATE REVIEW FRAMEWORK**

## **Tennessee**

### **Clean Water Act, Clean Air Act, and Resource Conservation and Recovery Act Implementation in Federal Fiscal Year 2014**

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

**Final Report  
September 29, 2016**



# Executive Summary

## Introduction

EPA Region 4 enforcement staff conducted a State Review Framework (SRF) enforcement program oversight review of the Tennessee Department of Environment and Conservation (TDEC).

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

## Areas of Strong Performance

- CWA data entry into ICIS-NPDES was complete.
- CAA, CWA and RCRA inspection reports were well written and complete.
- TDEC accurately identified CAA and RCRA violations and appropriately addressed the violations with enforcement actions that returned facilities to compliance. RCRA actions were also timely.
- TDEC documented the difference between initial and final penalty calculations in CAA and RCRA. RCRA also documented the calculation of economic benefit in their penalties.

## Priority Issues to Address

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

- TDEC should document the calculation of economic benefit or the rationale for excluding economic benefit of noncompliance in CAA and CWA penalty calculations. CWA should also document the difference between initial and final penalty calculations.
- TDEC should meet grant and inspection coverage commitments in the CWA program.
- CWA enforcement responses should be timely, appropriate to the violation and promote a return to compliance.

## **Most Significant CWA-NPDES Program Issues<sup>1</sup>**

- CWA inspection report findings and cover letters were ambiguous about compliance determinations made during the inspection. In addition, TDEC is not appropriately reporting Significant Non-Compliance and Single Event Violations.
- TDEC should ensure that enforcement responses promote a return to compliance and escalate to formal actions when non-compliance continues.

## **Most Significant CAA Stationary Source Program Issues**

- The accuracy of data reporting into the database of record needs improvement along with the timeliness of data entry.

## **Most Significant RCRA Subtitle C Program Issues**

- TDEC should make timely determinations of Significant Non-Compliance.

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

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# I. Background on the State Review Framework

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

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**Review period:** FY 2014

**Key dates:** August 7, 2015: letter sent to the State kicking off the Round 3 review  
 November 2-6, 2015: onsite file reviews for CWA, RCRA and CAA programs

**State and EPA key contacts for review:**

	Tennessee DEC	EPA Region 4
SRF Coordinator	Chris Moran, Enforcement Coordinator	Kelly Sisario, Enforcement Coordinator
CAA	Kevin McLain, Manager Enforcement Program Division of Air Pollution Control	Mark Fite, Office of Enforcement Coordination Chet Gala, Air, Pesticides & Toxics Management Division
CWA	Jessica Murphy, Manager Compliance & Enforcement Program Division of Water Resources	Ronald Mikulak, Office of Enforcement Coordination Laurie Ireland and Pamela Myers, Water Protection Division
RCRA	Chris Lagan, P.G. Manager, Regulatory Compliance and Enforcement Program Division of Solid Waste Management	Shannon Maher, Office of Enforcement Coordination  Alan Newman, Resource Conservation & Restoration Division

### III. SRF Findings

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

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

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

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

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

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

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

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

## Clean Air Act Findings

CAA Element 1 — Data																	
<b>Finding 1-1</b>	<b>Area for State Improvement</b>																
<b>Summary</b>	The accuracy of MDR data reported by TDEC into AFS needs improvement. Discrepancies between the files and AFS were identified in nearly half of the files reviewed.																
<b>Explanation</b>	Metric 2b indicated that 58.8% (20 of 34) of the files reviewed reflected accurate entry of all MDRs into AFS. The remaining 14 files had one or more discrepancies between information in the files and data entered into AFS. The majority of inaccuracies related to duplicate, inaccurate or missing activity data such as FCEs, NOVs, stack tests, etc. Beginning in FY2015, the Agency transitioned to a new national data system known as ICIS-Air. Historical data from AFS was migrated to the new system. In general, incorrect data in the Agency’s data system could potentially hinder EPA’s oversight and targeting efforts and/or result in inaccurate information being released to the public.																
<b>Relevant metrics</b>	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>2b Accurate MDR data in AFS</td> <td>100%</td> <td></td> <td>20</td> <td>34</td> <td>58.8%</td> </tr> </tbody> </table>					Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	2b Accurate MDR data in AFS	100%		20	34	58.8%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #												
2b Accurate MDR data in AFS	100%		20	34	58.8%												
<b>State response</b>	<p>To correct data and prevent future issues, the Division of Air Pollution Control (APC) is taking the following steps:</p> <ul style="list-style-type: none"> <li>Corrected all 14 errors in ICIS-Air identified during the Round 3 review by February 1, 2016. Will complete review of existing data to address the discrepancies noted by March 31, 2017 as recommended, with the exception of discrepancies due to migration issues that occurred between AFS and ICIS-Air as discussed separately below.</li> <li>Quarterly QA review of the data by the Environmental Consultant 3 in APC’s data entry section will begin October 1, 2016.</li> </ul>																

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	<ul style="list-style-type: none"><li>• Enhanced interactive reports for NOVs issued and HPV determinations. Once an NOV or HPV determination is entered into APC's data management system, it is immediately available in the applicable interactive report. This will allow APC to see, and quickly evaluate, an up-to-date summary of data needed to be transferred to ICIS-Air.</li><li>• Sought EPA guidance on ICIS-Air data entry by participating in all webinars relating to ICIS-Air modules. APC also sought EPA guidance when APC had questions regarding reporting processes. APC has made a concerted effort to examine the reporting processes for accuracy and learn and adapt to the new data system, including working through data migration issues that may have occurred (see example attached). APC is committed to finding and correcting discrepancies caused by data migration on an ongoing basis.</li></ul>
<b>Recommendation</b>	By March 31, 2017, TDEC should make corrections to existing data to address the discrepancies EPA identified and ensure that in the future, MDRs are accurately entered into ICIS-Air. If by September 30, 2017, EPA determines that TDEC's efforts appear to be adequate to meet the national goal, the recommendation will be considered complete.

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## CAA Element 1 — Data

<b>Finding 1-2</b>	<b>Area for State Improvement</b>					
<b>Summary</b>	Whereas MDR data for stack tests were reported timely into AFS, MDR data associated with other areas (HPVs, compliance monitoring, and enforcement actions) were not always reported timely.					
<b>Explanation</b>	Metric 3b2 (93.5%) indicated that TDEC met the national goal in entering MDR data for stack tests into AFS within the specified timeframe. However, Metrics 3a2 (16), 3b1 (81.4%), and 3b3 (77.6%) indicated that HPVs, compliance monitoring activities, and enforcement actions were often not entered into AFS within 60 days, as required by the Information Collection Request (ICR).					
<b>Relevant metrics</b>	<b>Metric ID Number and Description</b>	<b>Natl Goal</b>	<b>Natl Avg</b>	<b>State N</b>	<b>State D</b>	<b>State % or #</b>
	3a2 Untimely entry of HPV determinations	0				16
	3b1 Timely reporting of compliance monitoring MDRs	100%	83.3%	977	1200	81.4%
	3b2 Timely reporting of stack test dates and results	100%	80.8%	101	108	93.5%
	3b3 Timely reporting of enforcement MDRs	100%	77.9%	249	321	77.6%
<b>State response</b>	<p>APC’s data entry section created enhancements for the interactive reports for NOV’s issued and HPV determinations. Once an NOV or HPV determination is entered into APC’s data management system, it is immediately available in the applicable interactive report. This will allow APC to see, and quickly evaluate, an up-to-date summary of data needed to be transferred to ICIS-Air.</p> <p>APC’s Enforcement group notifies the Environmental Specialist 5 and the Environmental Consultant 3 in the data entry section via email of all HPV determinations (starting approximately September 2015) and</p>					

	<p>orders issued (starting approximately October 2015). These notifications help ensure timely data entry into ICIS-Air.</p> <p>APC is in the process of evaluating the causes of untimely MDR reporting as well as its SOPs and other process documents for revision, if necessary, to address identified issues. APC will provide EPA further documentation regarding these causes and any specific revisions to SOPs or other process documents by March 31, 2017 as recommended.</p>
<p><b>Recommendation</b></p>	<p>By March 31, 2017, TDEC should provide documentation to EPA concerning efforts to identify and address the causes of untimely MDR reporting. If by September 30, 2017, EPA determines that TDEC's efforts appear to be adequate to meet the national goal, the recommendation will be considered complete.</p>

## CAA Element 2 — Inspections

<b>Finding 2-1</b>	<b>Meets or Exceeds Expectations</b>					
<b>Summary</b>	TDEC 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).					
<b>Explanation</b>	Metrics 5a and 5b indicated that TDEC provided adequate inspection coverage for the major and SM-80 sources during FY14 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 documented that TDEC reviewed Title V annual compliance certifications submitted by major sources. Finally, Metrics 6a and 6b confirmed that all elements of an FCE and a CMR required by the Clean Air Act Stationary Source Compliance Monitoring Strategy (CMS Guidance) were addressed in most facility files reviewed.					
<b>Relevant metrics</b>	<b>Metric ID Number and Description</b>	<b>Natl Goal</b>	<b>Natl Avg</b>	<b>State N</b>	<b>State D</b>	<b>State % or #</b>
	5a FCE coverage: majors and mega-sites	100%	85.7%	174	178	97.8%
	5b FCE coverage: SM-80s	100%	91.7%	317	317	100%
	5e Review of Title V annual compliance certifications	100%	78.8%	193	210	91.9%
	6a Documentation of FCE elements	100%		30	32	93.8%
	6b Compliance monitoring reports reviewed that provide sufficient documentation to determine facility compliance	100%		32	32	100%
<b>State response</b>						
<b>Recommendation</b>						

### CAA Element 3 — Violations

<b>Finding 3-1</b>	<b>Meets or Exceeds Expectations</b>					
<b>Summary</b>	TDEC made accurate compliance determinations for both HPV and non-HPV violations.					
<b>Explanation</b>	<p>Metric 7a indicated that TDEC made accurate compliance determinations in 31 of 33 files reviewed (93.9%).</p> <p>Metric 8a indicated that the HPV discovery rate for majors (5.2%) was above the national average of 3.1%.</p> <p>Metric 8c confirmed that TDEC’s HPV determinations were accurate for all 23 files reviewed (100%). In one instance, the file indicates that the state classified a stack test failure as an HPV, but this was never entered into AFS. This is being addressed under the recommendation for Finding 1-1.</p>					
<b>Relevant metrics</b>	<b>Metric ID Number and Description</b>	<b>Natl Goal</b>	<b>Natl Avg</b>	<b>State N</b>	<b>State D</b>	<b>State % or #</b>
	7a Accuracy of compliance determinations	100%		31	33	93.9%
	8a HPV discovery rate at majors		3.1%	11	213	5.2%
	8c Accuracy of HPV determinations	100%		23	23	100%
<b>State response</b>						
<b>Recommendation</b>						

**CAA Element 4 — Enforcement**

<b>Finding 4-1</b>	<b>Meets or Exceeds Expectations</b>					
<b>Summary</b>	Enforcement actions bring sources back into compliance within a specified timeframe, and HPVs are addressed in an appropriate manner.					
<b>Explanation</b>	<p>Metric 9a indicated that all formal enforcement actions (100%) reviewed brought sources back into compliance through corrective actions in the order, or compliance was achieved prior to issuance of the order.</p> <p>Metric 10b indicated that appropriate enforcement action was taken to address all HPVs (100%) evaluated during the file review.</p>					
<b>Relevant metrics</b>	<b>Metric ID Number and Description</b>	<b>Natl Goal</b>	<b>Natl Avg</b>	<b>State N</b>	<b>State D</b>	<b>State % or #</b>
	9a Formal enforcement responses that include required corrective action that will return the facility to compliance in a specified timeframe	100%		21	21	100%
	10b Appropriate enforcement responses for HPVs	100%		14	14	100%
<b>State response</b>						
<b>Recommendation</b>						

## CAA Element 4 — Enforcement

<b>Finding 4-2</b>	<b>Area for State Attention</b>																
<b>Summary</b>	About one-fourth of HPVs were not addressed in a timely manner.																
<b>Explanation</b>	Metric 10a indicated that 77.1% of the HPVs (54 of 70) addressed in FY14 were addressed within 270 days, which is above the national average of 73.2%. The length of time taken to address untimely HPV actions ranged from 278 to 1302 days. This is a continuing issue from the Round 2 review, although the State has reduced both the number and percentage of overdue actions. For future HPV cases, the state is encouraged to follow the timelines established in the new HPV policy dated August 25, 2014. If an addressing action cannot be achieved within 180 days of day zero, the state should advise EPA Region 4 that it has a “case-specific development and resolution timeline” as required by the new policy and consult at least quarterly with the region until the HPV is addressed.																
<b>Relevant metrics</b>	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>10a Timely action taken to address HPVs</td> <td>100%</td> <td>73.2%</td> <td>54</td> <td>70</td> <td>77.1%</td> </tr> </tbody> </table>					Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	10a Timely action taken to address HPVs	100%	73.2%	54	70	77.1%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #												
10a Timely action taken to address HPVs	100%	73.2%	54	70	77.1%												
<b>State response</b>	<p>Although this is a continuing issue from Round 2, APC’s percentage of timely actions has improved and is above the national average. APC has increased its staff in the Enforcement section to help resolve delays in addressing violations.</p> <p>APC has implemented the HPV timelines outlined in the 2014 HPV policy and has provided training to all staff members. Also, all unaddressed and unresolved HPVs are discussed monthly with Region 4.</p> <p>APC has changed its procedure and organizational responsibility for making HPV determinations and processing these orders. APC is in the process of revising the SOP to address the timely review of potential violations, issuance of a notice of violation, and referral for enforcement actions. The new SOP should be implemented in 2017 and additional training for staff will be conducted.</p>																

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**Recommendation**

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## CAA Element 5 — Penalties

<b>Finding 5-1</b>	<b>Meets or Exceeds Expectations</b>					
<b>Summary</b>	TDEC documented the differences in initial and final penalty and the collection of penalties in their files and data system.					
<b>Explanation</b>	<p>Metric 12a indicated that 18 of 19 penalty calculations reviewed (94.7%) provided documentation in the file showing the rationale for any difference between the initial and final penalty.</p> <p>Metric 12b confirmed that documentation of penalty payments made by most sources (18 of 19) was included in the state’s data system.</p>					
<b>Relevant metrics</b>	<b>Metric ID Number and Description</b>	<b>Natl Goal</b>	<b>Natl Avg</b>	<b>State N</b>	<b>State D</b>	<b>State % or #</b>
	12a Documentation on difference between initial and final penalty	100%		18	19	94.7%
	12b Penalties collected	100%		18	19	94.7%
<b>State response</b>						
<b>Recommendation</b>						



## CAA Element 5 — Penalties

<b>Finding 5-2</b>	<b>Area for State Improvement</b>																
<b>Summary</b>	TDEC’s penalty documentation does not include adequate documentation of economic benefit calculations.																
<b>Explanation</b>	<p>Metric 11a indicates that 11 of the 19 penalty actions reviewed (57.9%) provided adequate documentation of the State’s consideration of gravity and economic benefit. In some instances, EPA reviewers thought the violations cited probably resulted in some economic benefit, but the file did not contain any economic benefit calculation. In other instances, the state penalty calculation merely showed “\$0” or “NA” for economic benefit, without sufficient rationale for why no economic benefit would have been gained.</p> <p>EPA’s expectation that state and local enforcement agencies document the consideration and assessment of both gravity and economic benefit is outlined in the 1993 Steve Herman memo entitled “Oversight of State and Local Penalty Assessments: Revisions to the Policy Framework from State/EPA Enforcement Agreements.”</p>																
<b>Relevant metrics</b>	<table border="1"> <thead> <tr> <th><b>Metric ID Number and Description</b></th> <th><b>Natl Goal</b></th> <th><b>Natl Avg</b></th> <th><b>State N</b></th> <th><b>State D</b></th> <th><b>State % or #</b></th> </tr> </thead> <tbody> <tr> <td>11a Penalty calculations include gravity and economic benefit</td> <td>100%</td> <td></td> <td>11</td> <td>19</td> <td>57.9%</td> </tr> </tbody> </table>					<b>Metric ID Number and Description</b>	<b>Natl Goal</b>	<b>Natl Avg</b>	<b>State N</b>	<b>State D</b>	<b>State % or #</b>	11a Penalty calculations include gravity and economic benefit	100%		11	19	57.9%
<b>Metric ID Number and Description</b>	<b>Natl Goal</b>	<b>Natl Avg</b>	<b>State N</b>	<b>State D</b>	<b>State % or #</b>												
11a Penalty calculations include gravity and economic benefit	100%		11	19	57.9%												
<b>State response</b>	<p>APC proposes that the explanation text be revised to state: Metric 11a indicates that 11 of the 19 penalty actions reviewed (57.9%) provided adequate documentation of the State’s consideration of gravity and economic benefit. In some instances, EPA reviewers thought the violations cited probably resulted in some minimal economic benefit, but the file did not contain any economic benefit calculation. In other instances, the state penalty calculation merely showed “\$0” or “NA” for economic benefit, without referencing the economic benefit checklist. The economic benefit checklist provides rationale for why no economic benefit would have been gained. EPA requests future economic benefit checklists provide more detail when no economic benefit is assessed.</p>																

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EPA’s expectation that state and local enforcement agencies document the consideration and assessment of both gravity and economic benefit is outlined in the 1993 Steve Herman memo entitled “Oversight of State and Local Penalty Assessments: Revisions to the Policy Framework from State/EPA Enforcement Agreements.”

APC used the same economic benefit checklist in SRF Round 2, and EPA deemed it acceptable. Round 2 CAA Element 11 Finding stated in pertinent part, “In general, TDEC’s penalty documentation includes both gravity and economic benefit calculations.” The Explanation section stated in pertinent part, “... and 15 of the 17 (88%) provided sufficient documentation of economic benefit. ... Therefore, the two files that did not address economic benefit appear to be infrequent instances that do not constitute a pattern of deficiencies or a significant problem.” Of the 19 files reviewed in Round 3, all but one file included the same type of documentation for economic benefit used in Round 2. APC proposes that EPA change this Finding from Area for State Improvement to Area for State Attention as the practice of APC was predominately the same between Round 2 and 3, yet EPA findings between Round 2 and Round 3 appear inconsistent.

As APC understands the 1993 Steve Herman memo and the 1984 policy on civil penalties referenced in the memo, states have the discretion to not seek de minimis economic benefit (less than \$10,000).

While APC is concerned with what appears to be inconsistent standards applied by EPA staff between two different SRF rounds, APC has revised its economic benefit checklists, starting Federal FY16-17, where no economic benefit is assessed to include an additional detailed explanation of APC’s rationale. Additionally, the related penalty memo will address economic benefit by specifically referring to the economic benefit checklist.

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**Recommendation**

By March 31, 2017, TDEC should implement procedures to ensure the appropriate documentation of both gravity and economic benefit in penalty calculations. For verification purposes, for one year following issuance of the final SRF report, EPA will review selected TDEC penalty calculations. If by March 31, 2018, these reviews indicate that the revised procedures are working and the State is documenting the consideration of economic benefit, the recommendation will be considered completed.

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## Clean Water Act Findings

CWA Element 1 — Data						
<b>Finding 1-1</b>	<b>Meets or Exceeds Expectations</b>					
<b>Summary</b>	TDEC exceeded National Goals for the entry of key data metrics for major facilities.					
<b>Explanation</b>	Metrics 1b1 and 1b2 measure TDEC’s data entry of permit limits and DMRs for NPDES major facilities into Integrated Compliance Information System (ICIS), EPA’s national database. TDEC exceeded National Goals and the National Averages for the entry of permit limit data (Metric 1b1) and DMR data (Metric 1b2) for major facilities into ICIS. Issues with Data Metrics (7a1) are discussed in Element 3.					
<b>Relevant metrics</b>	<b>Metric ID Number and Description</b>	<b>Natl Goal</b>	<b>Natl Avg</b>	<b>State N</b>	<b>State D</b>	<b>State % or #</b>
	1b1 Permit limit rate for major facilities	≥95%	91.1%	148	154	96.1%
	1b2 DMR entry rate for major facilities	≥95%	96.6%	4126	4126	100%
<b>State Response</b>	The State strives to maintain 100% correct data entry of permit limits and DMRs for the major facility universe as well as the minor facilities and concurs with this assessment.					
<b>Recommendation</b>						

**CWA Element 1 — Data**

<b>Finding 1-2</b>	<b>Area for State Attention</b>						
<b>Summary</b>	The accuracy of data between files reviewed and data reflected in the national data system had minor discrepancies.						
<b>Explanation</b>	Metric 2b indicated that 75% of the files reviewed reflected accurate data entry into ICIS. The few discrepancies observed between ICIS and the State’s files were relatively minor and were related to inspection dates, Discharge Monitoring Report (DMR) parameters, and enforcement actions. EPA understands that TDEC manually enters DMR and enforcement data into ICIS. The discrepancies do not appear to reflect a systemic problem and were promptly corrected once brought to the state’s attention. Until the flow of data from the state database into ICIS is automated, TDEC should take steps to ensure accurate data entry into ICIS.						
<b>Relevant metrics</b>	<b>Metric ID Number and Description</b>		<b>Natl Goal</b>	<b>Natl Avg</b>	<b>State N</b>	<b>State D</b>	<b>State % or #</b>
	2b Files reviewed where data are accurately reflected in the national data system		100%	--	24	32	75%
<b>State Response</b>	The State does not currently have the electronic data flows in place that would be necessary to ensure that all the data in ICIS matches the data in the state system. As noted above, this data is currently manually entered into two separate databases. The State is working to upgrade our Windsor node and the coding in our database necessary to create electronic data flows between the two systems. During the implementation phase, the State has instituted interim procedures to streamline the data entry process and ensure accuracy. The State has expanded the number of ICIS users during the past two years to include field staff in each office so that the inspector who conducts the inspection is also the person entering the inspection. This should help ensure that the results of the inspection are correctly entered into the system. An additional interim measure that has been initiated to ensure data accuracy in both systems, is a monthly inspection report generated from the central office and sent out to the EFO staff listing any inspections that are not in both databases or appear to be duplicated, so that any reporting errors can be quickly identified and corrected. Once the flows are functional for the inspection module						

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	duplicate entries will be eliminated. The State anticipates having the flows for the inspection module operational by the December 21, 2016, deadline set forth in the e-reporting rule.
<b>Recommendation</b>	

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## CWA Element 2 — Inspections

<b>Finding 2-1</b>	<b>Area for State Improvement</b>					
<b>Summary</b>	TDEC did not meet a couple of its FY14 Compliance Monitoring Strategy (CMS) Plan and CWA §106 Workplan inspection commitments. Exceptions included CSO inspections and inspections of non-majors with general permits.					
<b>Explanation</b>	<p>Element 2 includes metrics that measure planned inspections completed (Metrics 4a1 – 4a10) and inspection coverages (Metrics 5a1, 5b1, and 5b2) for majors and non-majors. The National Goal for this Element is for 100% of state specific CMS Plan commitments to be met.</p> <p>Metrics 4a indicated that TDEC met seven out of eight FY14 inspection commitments. For Metric 4a8 (Industrial Stormwater Inspections) and Metric 4a9 (Phase I &amp; II SW Construction Inspections), TDEC exceeded the inspection commitments by completing 186 and 201 additional inspections, respectively. The inspection commitment not met was Metric 4a4 (CSO Inspections). The CMS requires inspection of 100% of the TN CSO universe (three facilities) every three years. TDEC did not conduct any CSO inspections from FY12-FY14. In FY15, TDEC conducted one CSO inspection.</p> <p>Metric 5 indicated that TDEC met two out of three FY14 inspection coverage commitments for NPDES majors/non-majors. The inspection coverage not met was Metric 5b2 (Inspection coverage of non-majors with general permits). This NPDES non-majors with general permit universe includes municipal and industrial wastewater facilities.</p> <p>Meeting inspection commitments and inspection coverages were an Area for State Attention in Round 2 of the SRF and due to continued commitment shortfalls, is an Area for State Improvement in Round 3.</p>					
<b>Relevant metrics</b>	<b>Metric ID Number and Description</b>	<b>Natl Goal</b>	<b>Natl Avg</b>	<b>State N</b>	<b>State D</b>	<b>State % or #</b>
	4a1 Pretreatment compliance inspections and audits	100% of CMS	--	PAI: 18 PCI: 42	PAI:18 PCI: 41	PAI: 100% PCI: 102%

4a2 SIU inspections for SIUs discharging to non-authorized POTWs	<b>100% of CMS</b>	--	2	2	100%
4a4 Major CSO inspections	<b>100% of CMS</b>	--	0	3	0%
4a5 SSO inspections	<b>100% of CMS</b>	--	3	0	-
4a7 Phase I & II MS4 audits or inspections	<b>100% of CMS</b>	--	16	16	100%
4a8 Industrial stormwater inspections	<b>100% of CMS</b>	--	414	228	180%
4a9 Phase I & II SW construction inspections	<b>100% of CMS</b>	--	1,178	977	120%
4a10 Medium and large NPDES CAFO inspections	<b>100% of CMS</b>	--	6	3	200%
5a1 Inspection coverage of NPDES majors	<b>100% of CMS</b>	--	87	83	105%
5b1 Inspection coverage of NPDES non-majors with individual permits	<b>100% of CMS</b>	--	160	135	118%
5b2 Inspection coverage of NPDES non-majors with general permits	<b>100% of CMS</b>	--	58	77	75%

**State Response**

The State disagrees that inspection coverage is an area in need of State Improvement. The combined sewer overflow (CSO) inspections that were not completed are a very small subset of the universe, as there are only 3 facilities in the entire state. Additionally this item has already been corrected as the two field offices, which have CSO facilities have been instructed to complete at least one CSO inspection every time the facility is inspected which will ensure that 100% of the CSO inspections are completed according to the required time frames. Likewise, staff have been notified and trained in the requirement to conduct SSO inspections. It is very likely that sanitary sewer overflow inspections were conducted as part of normal compliance evaluation inspections but not always identified as a separate inspection. As with the CSO inspections, staff have been trained in the need to perform SSO inspections at a minimum frequency of 10% per year, and in meeting the non-major NPDES with general permits. Neither CSO nor SSO inspections should be below the required frequency going forward. The State believes that through staff training, this area of deficiency has already been addressed. The remainder of the inspection types all met or exceeded the minimum requirements set forth by EPA. The State was obligated to conduct approximately 1,524 total inspections and completed a total of approximately 1,924 inspections, or 126% of our numerical goal. While the State did miss 22 inspections in 2 categories, overall the State did meet its numerical inspection commitment. Therefore,

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	the State requests that this item be changed to area for attention versus area for improvement.
<b>Recommendation</b>	By March 31, 2017, TDEC should implement procedures to ensure that CWA 106 Workplan inspection annual commitments and CMS established inspection frequencies are met and maintained. EPA will review the State's procedures and monitor the State's implementation efforts through existing oversight calls and other periodic data reviews. If by September 30, 2017, these reviews indicate that the state is on target to meet its annual commitments and the CMS inspection frequencies, the recommendation will be considered completed.

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## CWA Element 2 — Inspections

<b>Finding 2-2</b>	<b>Meets or Exceeds Expectations</b>					
<b>Summary</b>	TDEC's inspection reports were well written, complete and provided sufficient documentation to determine compliance.					
<b>Explanation</b>	Metric 6a requires that inspection reports are complete and sufficient to determine compliance at a facility. 100% of TDEC's inspection reports and accompanying cover letter were well written, complete, sufficient and included field observations noting compliance issues, where appropriate.					
<b>Relevant metrics</b>	<b>Metric ID Number and Description</b>	<b>Natl Goal</b>	<b>Natl Avg</b>	<b>State N</b>	<b>State D</b>	<b>State % or #</b>
	6a Inspection reports complete and sufficient to determine compliance at the facility	100%	--	26	26	100%
<b>State Response</b>	The State concurs with this assessment.					
<b>Recommendation</b>						

## CWA Element 2 — Inspections

<b>Finding 2-3</b>	<b>Area for State Attention</b>																	
<b>Summary</b>	TDEC inspection reports were not always completed in a timely manner.																	
<b>Explanation</b>	<p>File Metric 6b indicated that 7 of the 27 (26%) of TDEC’s inspection reports were not completed in a timely manner. Because TDEC’s EMS does not prescribe timeframes for inspection report completion; EPA relied on its NPDES EMS which allows for 30 days and 45 days to complete non-sampling inspection reports and sampling inspection reports, respectively. The average number of days to complete an inspection report was 25 days, with a range of 4-61 days. The seven untimely inspection reports were completed within 41-61 days, which is an improvement from Round 2 of the SRF when the untimely inspection reports took an average of 84 days for completion. TDEC should reassess their practices and procedures to ensure the timely completion of inspection reports. TDEC also has the ability to establish their own timeframes for inspection report completion.</p> <p>Because nearly three-fourths of the reports reviewed were completed in a timely manner pursuant to the EPA’s EMS and the decrease in the number of days needed for completion from Round 2, this does not appear to reflect a systemic problem.</p> <p>Timeliness of inspection reports is a continuing issue from Round 2 of the SRF and remains an Area for State Attention in Round 3.</p>																	
<b>Relevant metrics</b>	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>6b Inspection reports completed within prescribed timeframe</td> <td>100%</td> <td>--</td> <td>20</td> <td>27</td> <td>74%</td> </tr> </tbody> </table>		Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	6b Inspection reports completed within prescribed timeframe	100%	--	20	27	74%				
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #													
6b Inspection reports completed within prescribed timeframe	100%	--	20	27	74%													
<b>State Response</b>	<p>Completion of inspection reports within the required time frame is an item that is currently included in job plans for inspectors and is also included in our guidance documents for staff. Some of the inspection reports that exceeded the time frame were particularly complex audits that required additional time to complete. The State's 106 plan language also includes a provision for the reports to be completed within 45 days. According to the State’s interpretation of that language, the State would have 85% timely</p>																	

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completion of inspections instead of 74%. Additional training will be given to staff who conduct the inspections, to stress the importance of completing the inspection reports on time. The State will also reassess the amount of time prescribed in our guidance documents to ensure that the time-frames are all in agreement and meet EPA’s requirements.

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**Recommendation**

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## CWA Element 3 — Violations

<b>Finding 3-1</b>	<b>Area for State Improvement</b>																	
<b>Summary</b>	Inspection Report findings and cover letters were unclear about the compliance determinations made during the inspection.																	
<b>Explanation</b>	<p>Metric 7e indicated that 35% of the inspection report findings and cover letters were ambiguous about the compliance determination made at each facility. While the inspection reports reviewed would detail deficiencies, it did not explicitly state that the findings were violations. For example, one file noted that deficiencies of permit conditions were observed during the inspection. Instead of clearly indicating the deficiencies were violations, the report mentioned the facility should ensure compliance with their NPDES permit. In instances where SSOs or DMR exceedances were documented, a follow-up NOV was not issued in association with those inspection findings.</p> <p>Due to these observations, this is an Area for State Improvement.</p>																	
<b>Relevant metrics</b>	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>7e Inspection reports reviewed that led to an accurate compliance determination</td> <td>100%</td> <td>--</td> <td>17</td> <td>26</td> <td>65.4%</td> </tr> </tbody> </table>						Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	7e Inspection reports reviewed that led to an accurate compliance determination	100%	--	17	26	65.4%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #													
7e Inspection reports reviewed that led to an accurate compliance determination	100%	--	17	26	65.4%													
<b>State Response</b>	<p>In many of the files reviewed, the inspection report is also the NOV. While not all NOVs contain a heading stating that the inspection is a NOV, the report does contain language identifying that a violation has occurred and needs to be corrected. Going forward, the State will issue guidance to field staff clarifying when to identify letters as NOVs. Previous discussions with EPA in 2011 indicated that it would not be a problem if the title NOV was not used in all circumstances, as long as the violation was identified in the body of the letter. The State will send updated guidance documents to EPA as they are developed. The State anticipates that this will be completed by the end of 2016.</p>																	
<b>Recommendation</b>	<p>By March 31, 2017, TDEC should implement procedures to clarify the compliance status of a facility following inspections. Notice of Violations should be issued for facilities found to be non-compliant during the</p>																	

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inspection. EPA will review the State's procedures and monitor the State's implementation efforts through existing oversight calls and other periodic data reviews. If by September 30, 2017, these reviews indicate that compliance determinations are clearly made and NOVs are issued when appropriate, the recommendation will be considered completed.

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## CWA Element 3 — Violations

<b>Finding 3-2</b>	<b>Area for State Improvement</b>																													
<b>Summary</b>	The State does not identify and properly report Single Event Violations (SEVs) and Significant Noncompliance (SNCs) at major facilities.																													
<b>Explanation</b>	<p>SEVs are one-time or long-term violations, including unauthorized bypasses or discharges, discovered by the permitting authority typically during inspections and not through automated reviews of Discharge Monitoring Reports.</p> <p>Metric 7a1 indicated that TDEC entered only one SEV at a major facility in FY14. One inspection report documented violations, but the file does not indicate that the State entered them as SEVs in ICIS.</p> <p>Metrics 8b1 and 8c indicated that the State did not properly code SEVs into ICIS as required by the ICIS SEV Entry Guidance and did not identify any SEVs as SNC in any of the files reviewed. In each of the nine files reviewed, numerous bypasses and SSOs were documented, but were not identified in ICIS as SEVs or SNC, where appropriate. When SSOs are reported on a DMR, TDEC entered them as a DMR parameter into ICIS.</p> <p>In Spring 2016, EPA Region 4 gave ICIS training to TDEC and discussed solutions for reporting bypasses and SSOs in accordance with the ICIS SEV Entry Guidance.</p>																													
<b>Relevant metrics</b>	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>7a1 Number of major facilities with single event violations</td> <td>N/A</td> <td>--</td> <td></td> <td></td> <td>1</td> </tr> <tr> <td>8b1 Single-event violations accurately identified as SNC or non-SNC</td> <td>100%</td> <td>--</td> <td>0</td> <td>9</td> <td>0%</td> </tr> <tr> <td>8c Percentage of SEVs identified as SNC reported timely at major facilities</td> <td>100%</td> <td>--</td> <td>0</td> <td>7</td> <td>0%</td> </tr> </tbody> </table>						Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	7a1 Number of major facilities with single event violations	N/A	--			1	8b1 Single-event violations accurately identified as SNC or non-SNC	100%	--	0	9	0%	8c Percentage of SEVs identified as SNC reported timely at major facilities	100%	--	0	7	0%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #																									
7a1 Number of major facilities with single event violations	N/A	--			1																									
8b1 Single-event violations accurately identified as SNC or non-SNC	100%	--	0	9	0%																									
8c Percentage of SEVs identified as SNC reported timely at major facilities	100%	--	0	7	0%																									
<b>State Response</b>	The State disagrees in part with this finding. All overflows and bypasses are currently tracked on the DMR form and self-reported by the facility. Additional entry of these overflow and bypass events would constitute an																													

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unreasonable burden on the state and duplicate data already in the system. Current language in the 106 commitment (Item 15) states: "Enter and maintain data in ICIS-NPDES for all Single Event Violations, except those automatically identified by the system (e.g., if DMR data entered, effluent violations need not be identified as SEV)". Based upon TDEC's interpretation of that language, the State was meeting this requirement for both majors and minors in regards to capturing overflows and bypasses in the ICIS system during this review period.

EPA provided the State training during April of 2016 on entry of SEVs. Field office staff also attended this training as they will be doing the SEV entry related to inspections going forward. Following the EPA training in April, SEVs were again discussed at the quarterly May enforcement roundtable with field office staff to ensure that everyone understands how to enter these violations and when they should be entered. As with the inspection report entry, a monthly report on SEVs will be sent to field office managers until data flows are established to ensure that SEVs are properly entered into both the state system and ICIS. Once the data flows are in place to support e-reporting this will help field staff in reducing their data entry burden by eliminating the need for double data entry.

Additionally, the division has held several meetings to update our overflow and bypass language so that more information can be captured in ICIS as well as update the coding as permits are reissued, so that self-reported overflows and bypasses that reach waters of the state are automatically identified as SNC in ICIS and in ECHO. The State believes that these actions will correct any reporting deficiency that may exist.

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**Recommendation**

By March 31, 2017, TDEC should develop and implement procedures to ensure that SEVs are identified and coded accurately into ICIS. EPA will review the State's procedures and monitor the State's implementation efforts through existing oversight calls and other periodic data reviews. If by September 30, 2017, these reviews indicate that SEVs are being identified and coded accurately, the recommendation will be considered completed.

## CWA Element 4 — Enforcement

Finding 4-1	Area for State Improvement
<b>Summary</b>	The State’s Enforcement Responses (ERs) were not always timely or appropriate. Additionally, the State’s ERs did not always achieve a Return to Compliance (RTC).
<b>Explanation</b>	<p>The State’s Enforcement Responses (ERs) were not always timely or appropriate. Additionally, the State’s ERs did not always achieve a Return to Compliance (RTC).</p> <p>Metric 9a indicated that in 10 of 23 files reviewed (44%) the chosen ERs did not return or were not expected to return a facility to compliance. In several instances, an NOV was issued without a deadline for the facility to respond with a corrective action plan and further noncompliance continued, as documented by ICIS. In other files, despite the issuance of an NOV with a deadline for a facility to respond with a corrective action plan, continued noncompliance occurred and an apparent RTC was not achieved.</p> <p>Metric 10a1 indicated that none of the State’s 12 major facilities in SNC had timely ERs.</p> <p>Metric 10b documented that in 50% of the files reviewed, TDEC did not consistently address violations in an appropriate manner. In those 12 files, the ERs were not appropriate because numerous informal enforcement actions were taken and noncompliance appeared to continue without ER escalation to achieve compliance, or the State did not provide written justification for why a formal action was not taken for facilities in SNC.</p> <p>For example, one facility was issued five NOV’s in seven months of SNC violations without any ER escalation or documentation for why formal enforcement action was not taken. Another file reviewed had ten months of Category 1 effluent exceedances without a documented ER or justification for why an enforcement action was not taken. Additionally, multiple files documented informal actions with no apparent RTC or documentation for why formal action was not taken. While issuance of an NOV may be the appropriate initial response to promote compliance, ER escalation is warranted when repeated violations occur to ensure a RTC.</p>



	Timely and appropriate enforcement responses are a continuing issue from Rounds 1 and 2 of the SRF and remains as an Area for State Improvement in Round 3.					
<b>Relevant metrics</b>	<b>Metric ID Number and Description</b>	<b>Natl Goal</b>	<b>Natl Avg</b>	<b>State N</b>	<b>State D</b>	<b>State % or #</b>
	9a Percentage of enforcement responses that return or will return source in violation to compliance	100%	--	10	23	44%
	10a1 Major facilities with timely action as appropriate	≥98%	9%	0	12	0%
	10b Enforcement responses reviewed that address violations in an appropriate manner	100%	--	12	24	50%
<b>State Response</b>	<p>The facilities that were used for the review are generally large wastewater plants or industrial plants. These facilities may continue to have violations while under an order that continue to place them in significant non-compliance (SNC). Corrective actions at these facilities often take several years to complete. Overall the state's SNC compliance rates among major facilities have improved significantly as the SRF dashboard shows. The number of major facilities listed as being in SNC for 2012 and 2013 show that there were 54 and 51 facilities in SNC, while 2014 and 2015 show a dramatic improvement in SNC compliance rates with 29 facilities listed in 2014 and 26 facilities listed in 2015. Therefore the State disagrees with the findings 9(a) and 10(b). Further, the State believes that the improvement shown in the metrics above is attributable to the enforcement actions taken over a period of many years which have resulted in numerous facilities upgrading, expanding, and in some cases building new treatment facilities. Also of note, out of the 26 shown to be in SNC during 2015, 18 of those have either had orders, or are currently under an order. The remainder are in development, or are in negotiations to sign a consent order. Many of the SNC violations occurred during the time that a facility was under an order and required no additional enforcement, as was the case with the examples mentioned above. The facility with numerous NOV's was under an order at the time, and completed the actions in the approved CAP in June of 2016. In other examples where an escalated enforcement response was recommended, the State was already working on new orders which had not been finalized at the time of the SRF inspection. The State will work to further document in writing our rational for enforcement responses going forward. The 44% rating for enforcement does not reflect the improvement</p>					

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shown in major SNC compliance rates over the past few years. The phrase "responses that returned, or will return" a facility to compliance could allow additional consideration for those facilities that are under an order or have an order in development. In the past EPA has taken this into consideration. Another consideration that should be taken into account is the fact that the State does not change permit limits while a facility is under an order as many other states routinely do. Therefore, the compliance rate may appear worse when compared to other states that do allow interim enforcement limits.

The State recognizes that the orders issued have not met the timeliness definition as set forth by EPA. However, the State would like to point out that the overall national average of timely enforcement nationwide was only 4% in 2012 reaching a high of only 14% in 2015, (or 9% according to the chart above), as reported in the EPA ECHO database on the State Review Framework.

The State is working to improve timeliness through ongoing training of staff and streamlining of procedures to initiate enforcement actions within the division. Some of the actions taken to date include a modified LEAN event to identify areas where processes could be shortened and review times decreased, as well as ongoing training initiatives to facilitate staff understanding of enforcement procedures.

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**Recommendation**

By March 31, 2017, TDEC should develop and implement procedures to ensure that ERs are timely and appropriate, achieve a RTC, and are documented in the file. Should TDEC update their EMS, EPA will review and provide comments for consideration. EPA will review these procedures and monitor the State's implementation efforts through existing oversight calls, review of the Quarterly Non-Compliance Report, and other periodic data reviews. If by September 30, 2017, these reviews indicate that the revised procedures appear to result in timely/appropriate enforcement responses that reflect a RTC; the recommendation will be considered completed.

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## CWA Element 5 — Penalties

Finding 5-1	Area for State Improvement												
Summary	The State does not routinely include documentation in the file that demonstrates the consideration of economic benefit (EB).												
Explanation	<p>Metric 11a indicated that two of eight (25%) files reviewed documented the consideration of EB. In six files, TDEC did not mention EB or document the rationale for why EB related to delayed or avoided costs was not included in the penalty calculation worksheet. The State’s “Uniform Guidance for the Calculation of Civil Penalties” makes it clear that to the extent practicable, the EB of noncompliance should be calculated and recovered. TDEC’s Uniform Guidance also states that “to effectively achieve deterrence, any significant economic benefit resulting from the failure to comply with the law should be recovered.” TDEC also developed an EB model based on EPA’s BEN model.</p> <p>In support of considering EB in penalty calculations, EPA guidance (<i>Oversight of State and Local Penalty Assessments: Revisions to the Policy Framework from State/EPA Enforcement Agreements</i>; 1993) notes that to remove economic incentives for noncompliance and establish a firm foundation for deterrence, EPA, the States, and local agencies shall endeavor, through their civil penalty assessment practices, to recoup at least the economic benefit the violator gained through noncompliance.</p> <p>Documentation of economic benefit consideration in penalty calculations is a continuing issue from Rounds 1 and 2 of the SRF and remains as an Area for State Improvement in Round 3.</p>												
Relevant metrics	<table border="1"> <thead> <tr> <th data-bbox="474 1394 1013 1472">Metric ID Number and Description</th> <th data-bbox="1013 1394 1094 1472">Natl Goal</th> <th data-bbox="1094 1394 1192 1472">Natl Avg</th> <th data-bbox="1192 1394 1256 1472">State N</th> <th data-bbox="1256 1394 1321 1472">State D</th> <th data-bbox="1321 1394 1443 1472">State % or #</th> </tr> </thead> <tbody> <tr> <td data-bbox="474 1482 1013 1560">11a Penalty calculations reviewed that consider and include gravity and economic benefit</td> <td data-bbox="1013 1482 1094 1560">100%</td> <td data-bbox="1094 1482 1192 1560">--</td> <td data-bbox="1192 1482 1256 1560">2</td> <td data-bbox="1256 1482 1321 1560">8</td> <td data-bbox="1321 1482 1443 1560">25%</td> </tr> </tbody> </table>	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	11a Penalty calculations reviewed that consider and include gravity and economic benefit	100%	--	2	8	25%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #								
11a Penalty calculations reviewed that consider and include gravity and economic benefit	100%	--	2	8	25%								
State Response	The uniform penalty guidance that the State is using considers both “gravity” and economic benefit in each case. This is documented in the worksheet that the State is currently using. Some of the older worksheets												

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	<p>that were reviewed during the past SRF review period did not have this documentation, as it was still in development at the time. The current worksheet also includes an area to document economic benefit if it is reasonable to do so, and a checklist describing areas where an economic benefit could be assessed as well as a space to document why an economic benefit was not assessed. This is now mandatory for all enforcement staff to fill out. Additional training is being provided to staff to ensure that the economic benefit checklist is filled out appropriately for each case and enforcement staff received training on use of the TN BEN model during a staff meeting in June of 2016. The State will be happy to provide EPA with any orders and penalties that are requested.</p>
<b>Recommendation</b>	<p>By March 31, 2017, TDEC should consistently implement procedures which document the consideration of EB and gravity in their penalty calculations. EPA will monitor the State's efforts through existing oversight calls and other periodic file reviews. For verification purposes, EPA will review finalized TDEC orders and penalty calculations, to assess progress in implementation of these improvements. If by September 30, 2017, these reviews indicate that the State is documenting the consideration of gravity and EB; the recommendation will be considered completed.</p>

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**CWA Element 5 — Penalties**

<b>Finding 5-2</b>	<b>Area for State Improvement</b>					
<b>Summary</b>	The difference and/or the rationale for any differences between initial and final penalties assessed are not consistently documented by the State.					
<b>Explanation</b>	<p>Metric 12a indicated that six of nine (67%) files reviewed documented the difference between the initial and final penalty and/or the rationale for the difference.</p> <p>As described in TN’s “Uniform Guidance for the Calculation of Civil Penalties,” TDEC may assess a civil penalty that consists of an “upfront” cash component and a contingent penalty component subject to injunctive relief conditions outlined in an Order. The Uniform Guidance also states that “the upfront civil penalty should remove any known economic benefit” and should “encourage compliance by having non-compliance cost more than compliance.” Of the three files that did not document the difference and/or the rationale for differences between initial and final penalties assessed, the following observations were noted:</p> <ul style="list-style-type: none"> <li>• No documentation of rationale when the initial penalty calculation worksheet amount does not match the final upfront/contingent penalties documented in the Agreed Order. (3 files)</li> <li>• The final upfront penalty does not recover assessed economic benefit. (2 files)</li> <li>• When an assessed penalty is 100% contingent, the cost of non-compliance is not greater than compliance. (2 files)</li> </ul> <p>Additionally, TDEC entered the total penalty (upfront and contingent) assessed into ICIS, which does not accurately reflect the amount of penalty collected. Subsequent to the file review, TDEC stated they changed their procedures to only enter the upfront penalty amount into ICIS.</p>					
<b>Relevant metrics</b>	<b>Metric ID Number and Description</b>	<b>Natl Goal</b>	<b>Natl Avg</b>	<b>State N</b>	<b>State D</b>	<b>State % or #</b>
	12a Documentation of the difference between initial and final penalty and rationale	100%	--	6	9	67%

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**State Response**

The example case where 100% of the penalty was contingent is unusual and is no longer occurring. All NPDES cases that are currently issued by the State have a percentage of the penalty as an up-front requirement, which covers any economic benefit gained through non-compliance. In cases where the Respondent is offered a SEP to offset a portion of the up-front penalty, the Respondent must still pay any amount of economic benefit in cash and our SEP policy requires the SEP to be at least twice the cost of the offset penalty amount. Our state database also has a separate area to track the amount of money required to be spent on a SEP versus the total amount that was actually spent. This is currently being documented for each order that contains a SEP.

The majority of orders that the State issues include minimum up-front penalties of 15-25% of the total calculated penalty, and recover substantially more than the economic benefit. This guidance will be reiterated and clarified in ongoing training and in any updated guidance documents.

The State was originally instructed to enter the entire amount of the penalty into the PCS/ ICIS system many years ago. Upon learning that EPA would prefer to have only the up-front amount of the penalty entered, the State immediately changed entry procedures to comply with EPA recommendations.

The total penalty amount is a reflection of the amount calculated for all of the violations covered by the order. The up-front amount is the amount that the State initially collects once the order is final. If the Respondent complies with the order then the contingent penalties are not due. However, if the Respondent fails to comply with the contingent requirements, then the amounts automatically become due and payable to the State without the need for additional orders or further legal action.

While this method differs from the way EPA assesses penalties, the State has been advised by the Office of the Attorney General that we cannot issue penalties for stipulated penalties except in an Order by Consent. The current penalty allocation between up-front and contingent penalties provides deterrence for failing to comply with order requirements while still imposing a significant monetary penalty upon the Respondent.

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	<p>The State will be happy to provide EPA with any orders and penalties that are requested.</p>
<b>Recommendation</b>	<p>By March 31, 2017, TDEC should implement procedures to ensure consistency in the use of the Uniform Guidance and that economic benefit is recovered. The state should also ensure that only upfront penalty amounts assessed are entered into ICIS. EPA will review the State's procedures and monitor the State's implementation efforts through existing oversight calls and other periodic data reviews. For verification purposes, EPA will review finalized TDEC orders and penalty calculations to assess progress in implementation of these improvements. If by September 30, 2017, these reviews indicate marked improvement in these areas, the recommendation will be considered completed.</p>

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## CWA Element 5 — Penalties

<b>Finding 5-3</b>	<b>Area for State Attention</b>																	
<b>Summary</b>	The State does not consistently document the collection of penalties.																	
<b>Explanation</b>	<p>Metric 12b indicated that seven of nine (78%) files reviewed documented the collection of upfront penalties within the state database and that contingent penalties milestones were met. Several files reviewed contained Supplemental Environmental Projects (SEPs) that offset the upfront penalties. Of the two files that did not document penalty collection, one was referred to collections following the SRF and the other file had a 100% contingent penalty, but was unclear if the facility met the contingency milestones. Because the majority of the files documented penalty collection, this does not appear to reflect a systemic problem.</p> <p>In instances where SEPs are used to offset a portion of the penalty or where contingent penalties are used, TDEC should implement procedures to ensure proper documentation that SEPs have been completed and contingent milestones have been met.</p>																	
<b>Relevant metrics</b>	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>12b Penalties collected</td> <td>100%</td> <td>--</td> <td>7</td> <td>9</td> <td>78%</td> </tr> </tbody> </table>						Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	12b Penalties collected	100%	--	7	9	78%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #													
12b Penalties collected	100%	--	7	9	78%													
<b>State Response</b>	<p>The State currently uses our database to track collection of penalties. Of the two cases in question, one is currently with collections and the other one has been paid. The SEP documentation was in our database but not necessarily in the paper file as the process is maintained in an electronic format. In an effort to better document completion of items required in orders, we have started including a final report requirement when SEPs are used, and a final report documenting all completed requirements and analyzing the effectiveness of those corrective actions. This will be a standard component of orders going forward that require corrective actions that will take multiple years to complete. See also comments in item 5-2 above.</p>																	
<b>Recommendation</b>																		



## Resource Conservation and Recovery Act Findings

RCRA Element 1 — Data																		
<b>Finding 1-1</b>	<b>Area for State Attention</b>																	
<b>Summary</b>	During the SRF evaluation, the majority of the files reviewed included accurate data.																	
<b>Explanation</b>	During the SRF file review, information in the facility files was checked for accuracy with the information in the national RCRA database, RCRAInfo. The data was found to be accurate in 26 of the 32 files (81.3%). The data inaccuracies found were isolated, like incorrect dates, missing Notices of Violation, or incorrect violation citations. Unlike previous SRF evaluations, the problems did not appear to be systemic and can be monitored at the state level. However, since there has been staff turnover TDEC should consider retraining the employees on their data SOP and RCRAInfo data entry requirements. This element considered an Area for State Attention.																	
<b>Relevant metrics</b>	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>2b Complete and accurate entry of mandatory data</td> <td>n/a</td> <td>n/a</td> <td>26</td> <td>32</td> <td>81.3%</td> </tr> </tbody> </table>						Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	2b Complete and accurate entry of mandatory data	n/a	n/a	26	32	81.3%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #													
2b Complete and accurate entry of mandatory data	n/a	n/a	26	32	81.3%													
<b>State Response</b>	The DSWM concurs that the accuracy rate is unacceptable and that steps need to be taken to improve it. The Division plans on having a retraining session at the Statewide Staff meeting in October 2016 to address the need for staff to input information accurately and completely into RCRAInfo. This will also be addressed at the semi-annual manager’s meeting to be held in August 2016. The Enforcement and Compliance Section will begin randomly cross-checking information in the facility files against the information in RCRAInfo as a Quality Assurance measure. The Division will look at the feasibility of adding a Quality Control step to the Field Office Manager’s job duties. Currently it is difficult to add a centralized system-wide QC check due to system configuration.																	
<b>Recommendation</b>																		

## RCRA Element 2 — Inspections

### Finding 2-1 Meets or Exceeds Expectations

**Summary** Tennessee met national goals for all TSD and LQG inspections.

**Explanation** Element 2 measures three types of required inspection coverage that are outlined in the EPA RCRA Compliance Monitoring Strategy: (1) 100% coverage of operating Treatment Storage Disposal (TSD) facilities over a two-year period, (2) 20% coverage of Large Quantity Generators (LQGs) every year, and (3) 100% coverage of LQGs every five years. In FY 2014, Tennessee met expectations for all inspections in these areas. All 21 operating TSDs were inspected over the two-year time period. The state also had excellent annual LQG inspection coverage (30.7%) that is well above the national goal of 20%.

For the five-year LQG inspection coverage, the initial data metric of 87.8% was below the national goal of 100%. Upon reviewing the facilities that were not inspected during this five-year time frame, it was noted that 28 of the 41 facilities were not LQGs during the entire five years and therefore are not part of the inspection universe. The corrected universe would then be 295 of 308 LQGs that were inspected in the five-year period, which is 95.7% coverage. This LQG inspection coverage is proximate enough to the national goal of 100% coverage to allow for fluctuation of LQG status over the five-year period.

#### Relevant metrics

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
5a Two-year inspection coverage of operating TSDFs	100%	88.4%	21	21	100%
5b Annual inspection coverage of LQGs	20%	20.1%	103	336	44.2%
5c Five-year inspection coverage of LQGs	100%	67.1%	295	336	87.8%
Five-year inspection 5c Corrected of LQGs			295	308	95.7%

#### State Response

EPA's RCRA Compliance Monitoring Strategy requirement for inspection coverage of Large Quantity Generators (LQGs) is 20% coverage every year and 100% coverage every five years. Some Tennessee facilities were not LQGs during the entire 5 year period and after making corrections for this, EPA notes in the State Review Framework (SRF) that during this five-year time frame, 295 facilities were inspected out of a corrected universe of 308 LQG facilities, which is 95.7% coverage. The 95.7% coverage of LQGs is below the national goal of 100% coverage for the five year period. EPA has considered

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this close enough to the national goal that this metric is considered to meet expectations. That said, TDEC feels that this number is too low and has evaluated the program and has taken steps to improve inspection results. Upon investigation, it was determined that the shortage of LQG inspections largely occurred in the Nashville Field Office (NFO) and can be attributed to legacy issues that occurred over several years. Procedural modifications in the way LQG inspections are assigned and monitored have been developed and implemented in the last two years by the manager of the NFO. These operational changes will improve the metrics with the goal of achieving the national target of 100% coverage of LQGs every five years.

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**Recommendation**

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## RCRA Element 2 — Inspections

<b>Finding 2-2</b>	<b>Meets or Exceeds Expectations</b>																		
<b>Summary</b>	The RCRA inspection reports provided sufficient documentation to determine compliance at the facility, and were completed in a timely manner.																		
<b>Explanation</b>	<p>A total of 32 inspection reports were evaluated for completeness and sufficiency to determine compliance with the RCRA requirements. It was found that 100% of the inspection reports met this standard.</p> <p>The <i>Tennessee Division of Solid Waste Management Hazardous Waste Program Enforcement Policy</i> sets forth a 45-day deadline for RCRA inspection report completion. Thirty-one inspections reports (96.9%) inspection reports met this deadline with an average time for report completion at 29 days.</p> <p>The completeness, sufficiency, and timeliness of the RCRA inspection reports meets SRF requirements. The quality of the TDEC RCRA inspection reports reviewed were excellent, with thorough descriptions of facility processes, waste management activities, potential violations and supporting photo documentation.</p>																		
<b>Relevant metrics</b>	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>6a Inspection reports complete and sufficient to determine compliance</td> <td>100%</td> <td>n/a</td> <td>32</td> <td>32</td> <td>100%</td> </tr> <tr> <td>6b Timeliness of inspection report completion</td> <td>100%</td> <td>n/a</td> <td>31</td> <td>32</td> <td>96.9%</td> </tr> </tbody> </table>	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	6a Inspection reports complete and sufficient to determine compliance	100%	n/a	32	32	100%	6b Timeliness of inspection report completion	100%	n/a	31	32	96.9%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #														
6a Inspection reports complete and sufficient to determine compliance	100%	n/a	32	32	100%														
6b Timeliness of inspection report completion	100%	n/a	31	32	96.9%														
<b>State Response</b>	TDEC appreciates EPA’s acknowledgement of the Hazardous Waste Management Program’s efforts to focus on timely and quality reporting.																		
<b>Recommendation</b>																			

## RCRA Element 3 — Violations

<b>Finding 3-1</b>	<b>Meets or Exceeds Expectations</b>																							
<b>Summary</b>	Tennessee makes accurate compliance determinations and the appropriate identification of most SNC facilities.																							
<b>Explanation</b>	<p>File Review Metric 7a assesses 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 96.9% of the files reviewed had accurate compliance determinations (31 of 32 files).</p> <p>The majority of SNCs (90.5%) were identified correctly by the state in the national database and in accordance with the RCRA ERP. Of the 21 SNC-caliber facility files reviewed, there were two facilities that were not identified as SNCs by the state, and violations were addressed through informal rather than formal enforcement actions per the RCRA ERP.</p> <p>The accuracy of the state’s RCRA compliance determinations and the appropriateness of the SNC identifications meet SRF requirements.</p>																							
<b>Relevant metrics</b>	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>7a Accurate compliance determinations</td> <td>100%</td> <td></td> <td>31</td> <td>32</td> <td>96.9%</td> </tr> <tr> <td>8c Appropriate SNC determinations</td> <td>100%</td> <td></td> <td>19</td> <td>21</td> <td>90.5%</td> </tr> </tbody> </table>						Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	7a Accurate compliance determinations	100%		31	32	96.9%	8c Appropriate SNC determinations	100%		19	21	90.5%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #																			
7a Accurate compliance determinations	100%		31	32	96.9%																			
8c Appropriate SNC determinations	100%		19	21	90.5%																			
<b>State Response</b>	<p>As noted above, two cases were addressed through informal rather than formal enforcement actions. TDEC believes that this course of action was appropriate, as described below.</p> <p>Vitran/Central Transport:</p> <ul style="list-style-type: none"> <li>• Vitran Memphis was not a HW transporter, but was shipped 2 trailers of HW in November 2012 from the Missouri Vitran facility, reportedly as a mistake, since there was no paperwork to accompany the shipment. The trailers were stored at the Memphis facility until they could be profiled by and shipped by Vitran to Clean Harbors and Excel in two shipments (one in July of 2013 and the other in September of 2013). The CEI was performed on 11-5-13 (after the waste had been disposed of), but within days after the CEI (11-18-13), Vitran was purchased by Central Transport. The Division decided that since the shipment of HW originated from another state that EPA and the state of Missouri would</li> </ul>																							

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be better able to address the problem at the source. Alan Newman (EPA) was made aware at the time, and a copy of our warning letter was sent to Missouri. In addition, the new owner (Central Transport) gave the Division a copy of procedures that should prevent another similar situation from ever occurring. Since Vitran-Memphis/Central was considered to be an innocent party to Vitran-Missouri's actions, DSWM believes that enforcement action is most appropriately taken against Vitran-Missouri.

Excel:

- Excel is a Treatment Storage and Disposal (TSD) facility that is subject to annual inspections. A CEI was performed on March 26, 2014 which identified violations associated with secondary containment integrity. Then on July 17, 2014 Excel notified the State of the shipment of Hazardous Waste (HW) to a Class 1 (Subtitle D) landfill. Excel immediately cleaned up the HW at the landfill. An NOV was issued on September 4, 2014 for the shipment of HW to a Class 1 landfill. A show cause meeting was held on October 8, 2014 to discuss the violations associated with the March 26, 2014 CEI as well as the September 4, 2014 NOV. The facility submitted information (PE certification) after the October 8, 2014 show cause meeting regarding the structural integrity of the secondary containment and sump structure to support their contention that they were sound and not leaking. The decision was made by the DSWM to not pursue formal enforcement action for the 2014 inspection and September 4, 2014 NOV (for secondary containment structural integrity and for mishandling HW). Instead a warning letter was issued to the facility. Subsequent TDEC/EPA joint inspections identified additional violations; EPA is taking the enforcement lead for these issues.

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**Recommendation**

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## RCRA Element 3 — Violations

<b>Finding 3-2</b>	<b>Area for State Improvement</b>																							
<b>Summary</b>	The timeliness of SNC determinations continues to be an issue for the Tennessee RCRA program.																							
<b>Explanation</b>	<p>The RCRA ERP outlines that 100% of SNC determinations should be entered into RCRAInfo within 150 days of the first day of the inspection (day zero). The data metric that measures this requirement indicated that only 52.3% (11 of the 21) SNCs identified met this criterion in FY2014. The initial metric was 47.8% (11 of 23 SNCs timely), but two of the cases were EPA joint inspections so those SNCs were removed from the metric.</p> <p>As outlined in the <i>Tennessee Division of Solid Waste Management Hazardous Waste Program Enforcement Policy</i>, the TDEC Field Office submits an “Enforcement Action Request” (EAR) to the Division’s Enforcement Section if the potential for a formal enforcement action is identified. Enforcement personnel then evaluate the merits of the case, typically through a show-cause meeting with the facility representatives. If there is a decision to pursue formal enforcement then the facility is identified as a SNC in RCRAInfo.</p> <p>In evaluating the case timelines, EPA observed that in nine of the ten untimely SNCs (90%), the EAR was submitted to the Enforcement Section more than 100 days after the inspection. The Division’s policy states that the field offices should submit an EAR within 75 days of first documenting the violation (inspection reports average 29 days for completion). The delay in EAR submittals was also identified as a factor in late SNC determinations during the SRF Round 2 evaluation. This issue will continue as an “Area for State Improvement” in SRF Round 3.</p>																							
<b>Relevant metrics</b>	<table border="1"> <thead> <tr> <th data-bbox="480 1495 1010 1575">Metric ID Number and Description</th> <th data-bbox="1016 1495 1101 1575">Natl Goal</th> <th data-bbox="1107 1495 1182 1575">Natl Avg</th> <th data-bbox="1188 1495 1230 1575">State N</th> <th data-bbox="1237 1495 1279 1575">State D</th> <th data-bbox="1286 1495 1417 1575">State % or #</th> </tr> </thead> <tbody> <tr> <td data-bbox="480 1583 1010 1612">8b Timeliness of SNC determinations</td> <td data-bbox="1016 1583 1101 1612">100%</td> <td data-bbox="1107 1583 1182 1612"></td> <td data-bbox="1188 1583 1230 1612">11</td> <td data-bbox="1237 1583 1279 1612">23</td> <td data-bbox="1286 1583 1417 1612">47.8%</td> </tr> <tr> <td data-bbox="480 1621 1010 1650">8b Corrected Timeliness of SNC determinations</td> <td data-bbox="1016 1621 1101 1650"></td> <td data-bbox="1107 1621 1182 1650"></td> <td data-bbox="1188 1621 1230 1650">11</td> <td data-bbox="1237 1621 1279 1650">21</td> <td data-bbox="1286 1621 1417 1650">52.3%</td> </tr> </tbody> </table>						Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	8b Timeliness of SNC determinations	100%		11	23	47.8%	8b Corrected Timeliness of SNC determinations			11	21	52.3%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #																			
8b Timeliness of SNC determinations	100%		11	23	47.8%																			
8b Corrected Timeliness of SNC determinations			11	21	52.3%																			
<b>State Response</b>	The Division of Solid Waste Management will add a table for reporting and tracking each Enforcement Action Request (EAR) in the Planning and Reporting Excel spreadsheet for each Field Office. Facility name, inspection date (day zero), NOV issuance date, and EAR submittal date will be required to be entered for all facilities with EARs. This table will																							

	<p>calculate the number of days from the inspection date (day zero) to the NOV issuance date and the EAR submittal date. If 45 days is exceeded from inspection date (day zero) to the NOV issuance date it will be flagged with a NO. If 75 days is exceeded from inspection date (day zero) to the EAR submittal date it will be flagged with a NO. This additional reporting and tracking will reemphasize the importance of meeting these NOV and EAR time limits and will provide management with an easy mechanism to track compliance with the established time limits. Non-compliance with the above timeframes will be discussed with Field Office Managers during formal performance reviews.</p> <p>Additionally, at the August 2016 meeting for all Division of Solid Waste Management managers, a member of the Enforcement and Compliance staff will conduct refresher training on which violations and situations which necessitate the submittal of an EAR.</p>
<p><b>Recommendation</b></p>	<p>EPA will monitor progress on meeting the timelines for SNC entry into RCRAInfo via bimonthly conference calls and RCRAInfo data analyses. Following the finalization of the TDEC Round 3 SRF Report, EPA will close this recommendation after observing four consecutive quarters of performance that meets national goals.</p>



RCRA Element 4 — Enforcement

Finding 4-1	Meets or Exceeds Expectations																													
Summary	TDEC consistently issued timely RCRA enforcement responses that returned violating facilities to compliance.																													
Explanation	<p>A total of 29 files were reviewed that included informal or formal enforcement actions, and of the enforcement actions returned the facilities to compliance with the RCRA requirements.</p> <p>The data metric that measures the timeliness of formal enforcement showed that 94.7% (18 of 19) of the formal enforcement actions met the ERP in FY 2014. The national goal is 80%. This is a significant improvement from previous SRF reviews.</p> <p>Facility noncompliance was documented in the 29 of the files reviewed. In evaluating the enforcement responses taken, 89.7% (26 of 29) cases were addressed with the appropriate enforcement response. The remaining three cases, two facilities were not identified as SNCs and the state addressed the violations through an informal action rather than an appropriate formal enforcement action (referenced in Finding 3-1). In the third case the state did identify the facility as a SNC, but the consent agreement that was negotiated with the facility is not considered formal enforcement since the action did not mandate compliance and is not enforceable.</p> <p>The state met the SRF expectations for the criteria for timely and appropriate enforcement actions that return violators to compliance.</p>																													
Relevant metrics	<table border="1"> <thead> <tr> <th data-bbox="483 1356 1008 1430">Metric ID Number and Description</th> <th data-bbox="1008 1356 1089 1430">Natl Goal</th> <th data-bbox="1089 1356 1182 1430">Natl Avg</th> <th data-bbox="1182 1356 1263 1430">State N</th> <th data-bbox="1263 1356 1344 1430">State D</th> <th data-bbox="1344 1356 1414 1430">State % or #</th> </tr> </thead> <tbody> <tr> <td data-bbox="483 1430 1008 1541">9a Enforcement that returns violators to compliance</td> <td data-bbox="1008 1430 1089 1541">100%</td> <td data-bbox="1089 1430 1182 1541">n/a</td> <td data-bbox="1182 1430 1263 1541">29</td> <td data-bbox="1263 1430 1344 1541">29</td> <td data-bbox="1344 1430 1414 1541">100%</td> </tr> <tr> <td data-bbox="483 1541 1008 1598">10a Timely enforcement taken to address SNC</td> <td data-bbox="1008 1541 1089 1598">80%</td> <td data-bbox="1089 1541 1182 1598">84.3%</td> <td data-bbox="1182 1541 1263 1598">18</td> <td data-bbox="1263 1541 1344 1598">19</td> <td data-bbox="1344 1541 1414 1598">94.7%</td> </tr> <tr> <td data-bbox="483 1598 1008 1675">10b Appropriate enforcement taken to address violations</td> <td data-bbox="1008 1598 1089 1675">100%</td> <td data-bbox="1089 1598 1182 1675">n/a</td> <td data-bbox="1182 1598 1263 1675">26</td> <td data-bbox="1263 1598 1344 1675">29</td> <td data-bbox="1344 1598 1414 1675">89.7%</td> </tr> </tbody> </table>						Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	9a Enforcement that returns violators to compliance	100%	n/a	29	29	100%	10a Timely enforcement taken to address SNC	80%	84.3%	18	19	94.7%	10b Appropriate enforcement taken to address violations	100%	n/a	26	29	89.7%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #																									
9a Enforcement that returns violators to compliance	100%	n/a	29	29	100%																									
10a Timely enforcement taken to address SNC	80%	84.3%	18	19	94.7%																									
10b Appropriate enforcement taken to address violations	100%	n/a	26	29	89.7%																									
State Response	As noted above, two cases were not identified as SNCs and handled through informal rather than formal enforcement action. The rationale for these two decisions is discussed in DSWM’s response in Section 3-1. For the third case, TDEC elected to enter into a Consent Agreement																													

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rather than a Consent Order (while retaining the right to enter into a separate Commissioner or Director’s Order, if necessary) to maintain a cooperative working relationship with the waste generator. The appropriateness of this approach was validated by the completion of the waste disposal effort significantly ahead of schedule.

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Recommendation

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RCRA Element 5 — Penalties

Finding 5-1	Meets or Exceeds Expectations					
Summary	<p>Tennessee has made significant progress on the consideration of the economic benefit of noncompliance into penalty assessments. There was documentation in the files that all final penalties were collected, or that penalty collection was being pursued.</p>					
	<p>One of the objectives of the SRF is to ensure equitable treatment of violators through national policy and guidance, including systematic methods of penalty calculations. As provided in the 1993 EPA <i>“Oversight of State and Local Penalty Assessments: Revisions to the Policy Framework for State/EPA Enforcement Agreements”</i> it is EPA policy not to settle for less than the amount of the economic benefit of noncompliance (EBN) and a gravity portion of the penalty.</p> <p>Following the SRF Round 1 and 2 evaluations, Tennessee made progress on the documentation of EBN considerations. The state incorporated an “Economic Benefit Review Checklist” in the penalty documentation, and if EBN was not pursued a supporting justification was included in the penalty worksheet narrative. There were 17 penalty calculations reviewed and 16 of the cases (94.1%) had the appropriate EBN consideration and documentation included in the file. There was one case where there was a clear economic benefit realized by shipping hazardous wastes to a solid waste landfill, but there was no EBN included in the penalty calculation. EPA encourages TDEC to continue to emphasize the importance of EBN consideration in future penalty assessments. EPA is available to assist in this effort.</p> <p>TDEC does not typically negotiate penalties in RCRA enforcement administrative cases, so there was no requirement for documenting adjustments to penalty calculations in the 17 enforcement cases reviewed.</p> <p>In 94.1% of the penalty files reviewed (16 of 17), there was documentation in the file indicating that final penalties had been collected. There was one case where the respondent had not paid the penalty, and the state is pursuing collection.</p>					
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
	11a Penalty calculations include gravity and economic benefit	100%	N/A	16	17	94.1%

	12a Documentation on difference between initial and final penalty	100%	N/A	N/A	N/A	N/A
	12b Penalties collected	100%	N/A	16	16	100%
State Response	Jackson-Madison County Hospital disposed of empty, used vials and packaging and did not dispose of any actual pharmaceuticals. As the estimated amount of residual waste was miniscule, the economic benefit derived from the hospital's activities was determined to be negligible (as documented in the penalty calculation worksheet).					
Recommendation						

# **STATE REVIEW FRAMEWORK**

## **Shelby County, Tennessee**

### **Clean Air Act Implementation in Federal Fiscal Year 2015**

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

**Final Report  
September 28, 2017**

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# **Executive Summary**

## **Introduction**

EPA Region 4 enforcement staff conducted a State Review Framework (SRF) enforcement program oversight review of the Shelby County Health Department (SCHD).

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

## **Areas of Strong Performance**

- SCHD met the negotiated frequency for inspection of sources for most major and SM-80 sources during the review year.
- Compliance monitoring reports and full compliance evaluations included all elements required by EPA's Compliance Monitoring Strategy (CMS) Guidance.
- SCHD documented any differences in initial and final penalty and maintained documentation of penalty payments made.

## **Priority Issues to Address**

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

- SCHD needs to improve the timeliness and accuracy of data reported into the National Data System (ICIS-Air). Data discrepancies were identified in 45% of the files reviewed, and none of the data reported in FY15 was timely.
- SCHD needs to ensure that all Title V Annual Compliance Certifications (ACCs) are completed and recorded in ICIS-Air.
- SCHD needs to strengthen the enforceability of their formal enforcement actions to ensure that sources are returned to compliance within a specified timeframe.
- SCHD needs to document the consideration of economic benefit in their penalty calculations.

## **Most Significant CAA Stationary Source Program Issues**

- The accuracy and timeliness of enforcement and compliance data entered by SCHD in ICIS-Air needs improvement.
- SCHD's use of a notice of violation (NOV) to assess penalties does not appear to be enforceable in court, and may not return sources to compliance.
- SCHD's penalty assessments did not include the consideration of an economic benefit component.

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# I. Background on the State Review Framework

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

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

Reviews cover:

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

EPA conducts SRF reviews in three phases:

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

EPA builds consultation into the SRF to ensure that EPA and the state or local program understand the causes of issues and agree, to the degree possible, on actions needed to address them. SRF reports capture the agreements developed during the review process in order to facilitate program improvements. EPA also uses the information in the reports to develop a better understanding of enforcement and compliance nationwide, and to identify issues that require a national response. Reports provide factual information. They do not include determinations of overall program adequacy, nor are they used to compare or rank state and local programs.

Each state's programs are reviewed once every five years. Local programs are reviewed less frequently, at the discretion of the EPA Regional office. The first round of SRF reviews began in FY 2004, and the second round began in FY 2009. The third round of reviews began in FY 2013 and will continue through 2017.

## II. SRF Review Process

**Review period:** 2015

**Key dates:** August 16, 2016, letter sent to Local program kicking off the Round 3 review  
October 24 – 26, 2016, on-site file review for CAA

**Local Program and EPA key contacts for review:**

	Shelby County	EPA Region 4
SRF Coordinator	Robert Rogers	Kelly Sisario, OEC
CAA	Bill Smith	Ahmad Dromgoole, OEC
		Mark Fite, OEC
		Chetan Gala, APTMD

### III. SRF Findings

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

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

There are three categories of findings:

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

**Area for State<sup>1</sup> Attention:** An activity, process, or policy that one or more SRF metrics show as a minor problem. Where appropriate, the state or local should correct the issue without additional EPA oversight. EPA may make recommendations to improve performance, but it will not monitor these recommendations for completion between SRF reviews. These areas are not highlighted as significant in an executive summary.

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

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

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

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

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<sup>1</sup> Note that EPA uses a national template for producing consistent reports throughout the country. References to “State” performance or responses throughout the template should be interpreted to apply to the Local Program.

## Clean Air Act Findings

CAA Element 1 — Data																																				
<b>Finding 1-1</b>	<b>Area for State Improvement</b>																																			
<b>Summary</b>	The timeliness and accuracy of minimum data requirement (MDR) data reported by SCHD into ICIS-Air needs improvement. None of the data was entered timely, and discrepancies between the files and ICIS-Air were identified in 45% of the files reviewed.																																			
<b>Explanation</b>	<p>File Review Metric 2b indicated that only 45% (9 of 20) of the files reviewed reflected accurate entry of all MDRs into ICIS-Air. The remaining 11 files had one or more discrepancies between information in the files and data entered into ICIS-Air. For example, six sources had activities missing from or inaccurate in ICIS-Air, such as full compliance evaluations (FCEs), annual compliance certifications, stack tests, or enforcement actions. In addition, five sources had missing or inaccurate air programs or subparts for Maximum Achievable Control Technology (MACT) or other regulations in ICIS-Air. Another eight files had miscellaneous inaccuracies related to facility data.</p> <p>Data Metrics 3a2, 3b1, and 3b3 indicated that none of the MDRs for compliance and enforcement activities were reported into ICIS-Air within 60 days. Data Metric 3b2 indicated that none of the 35 stack tests were entered into ICIS-Air within 120 days.</p> <p>At the beginning of FY2015, EPA transitioned the national database for CAA compliance and enforcement data from the AFS legacy system to ICIS-Air. During the initial transition period in October 2014, historical data was migrated from AFS to ICIS-Air, and no new data could be entered either directly or through electronic data transfer (EDT). Following the migration, “direct reporting agencies” like SCHD could begin accessing the new data system through the web beginning in late November 2014. An analysis of the county’s timeliness data indicates that all of the data was entered into the new system in January 2016.</p>																																			
<b>Relevant metrics</b>	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>2b Accurate MDR data in ICIS-Air</td> <td>100%</td> <td></td> <td>9</td> <td>20</td> <td>45%</td> </tr> <tr> <td>3a2 Timely reporting of HPV determinations</td> <td>100%</td> <td>99.6%</td> <td>0</td> <td>0</td> <td>NA</td> </tr> <tr> <td>3b1 Timely reporting of compliance monitoring MDRs</td> <td>100%</td> <td>64.4%</td> <td>0</td> <td>95</td> <td>0%</td> </tr> <tr> <td>3b2 Timely reporting of stack test MDRs</td> <td>100%</td> <td>65.2%</td> <td>0</td> <td>35</td> <td>0%</td> </tr> </tbody> </table>						Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	2b Accurate MDR data in ICIS-Air	100%		9	20	45%	3a2 Timely reporting of HPV determinations	100%	99.6%	0	0	NA	3b1 Timely reporting of compliance monitoring MDRs	100%	64.4%	0	95	0%	3b2 Timely reporting of stack test MDRs	100%	65.2%	0	35	0%
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3b2 Timely reporting of stack test MDRs	100%	65.2%	0	35	0%																															

		3b3 Timely reporting of enforcement MDRs	100%	56.6%	0	2	0%
<b>State response</b>	<p>The SRF review occurred a short time after EPA had transitioned the National Data System from AIRS-AFS to ICIS-Air. Staff handling data input had received no training on the new system and had not been granted access. The access problem was resolved during the review and staff was given preliminary training on the new system to begin inputting data. In addition to the access problem, it appears some data did not properly transfer from the legacy system to ICIS-Air. SCHD has updated and corrected the information needed for ICIS-Air and has implemented a standard operating procedure (SOP) that allows for the tracking, input and confirmation of data into ICIS-Air.</p>						
<b>Recommendation</b>	<p>By December 31, 2017, SCHD should make corrections to existing data to address discrepancies identified by EPA and take steps to ensure that all MDRs are entered accurately and timely into ICIS-Air. If by December 31, 2018, EPA’s annual data metric analysis and other periodic reviews confirm that SCHD’s efforts appear to be adequate to meet the national goal, the recommendation will be considered complete.</p>						

## CAA Element 2 — Inspections

<b>Finding 2-1</b>	<b>Meets or Exceeds Expectations</b>					
<b>Summary</b>	FCEs and CMRs addressed all required elements.					
<b>Explanation</b>	<p>Metric 6a indicates that 18 of 20 FCEs reviewed (90%) included the seven elements required by the <a href="#">Clean Air Act Stationary Source Compliance Monitoring Strategy</a> (CMS Guidance).</p> <p>Metric 6b indicates that 18 of 20 (90%) CMRs included all seven elements required by the CMS Guidance.</p>					
<b>Relevant metrics</b>	<b>Metric ID Number and Description</b>	<b>Natl Goal</b>	<b>Natl Avg</b>	<b>State N</b>	<b>State D</b>	<b>State % or #</b>
	6a Documentation of FCE elements	100%		18	20	90%
	6b Compliance monitoring reports reviewed that provide sufficient documentation to determine facility compliance	100%		18	20	90%
<b>State response</b>						
<b>Recommendation</b>						

## CAA Element 2 — Inspections

<b>Finding 2-2</b>	<b>Area for State Improvement</b>						
<b>Summary</b>	SCHD should ensure that all Title V Annual Compliance Certification (ACC) reviews are completed and entered into ICIS-Air.						
<b>Explanation</b>	Metric 5e initially indicated that none of the 29 Title V ACCs (0%) were reviewed by the local program and recorded in ICIS-Air. However, EPA reviewers found that SCHD had actually conducted ACC reviews for the 9 Title V sources evaluated during the file review. After the file review, EPA evaluated data in ICIS-Air for all 29 sources with an ACC due in the review year (this information was entered after the data was frozen). The analysis confirmed that 4 sources were not required to submit an ACC. Another 17 of the remaining 25 sources had an ACC review recorded in ICIS-Air, while 8 sources did not. This data results in a revised metric for 5e of 68% (17 of 25). <sup>(1)</sup> While this reflects some improvement in the conduct and recording of ACC reviews, it still represents an area for improvement.						
<b>Relevant metrics</b>	<b>Metric ID Number and Description</b>		<b>Natl Goal</b>	<b>Natl Avg</b>	<b>State N</b>	<b>State D</b>	<b>State % or #</b>
	5e Review of Title V annual compliance certifications		100%		17	25	68% <sup>(1)</sup>
<b>State response</b>	Previously when an ACC was received, inspectors would review it and place it in the file, then acknowledge receipt and review in the annual compliance inspection report. This lead to occasions where an ACC was not picked up for entry into ICIS-Air. ACCs have been added to the SOP and document tracking system. The tracking document identifies the Title V ACC, including date received, date reviewed, compliance status, and any deviations, exceedances or excursions that have occurred during the reporting period. Additionally, as part of quality control, a spreadsheet will be developed that lists all of these documents and is presented to management to verify prior to uploading into ICIS-Air.						
<b>Recommendation</b>	By December 31, 2017, SCHD should take steps to ensure that all ACC reviews for Title V sources are conducted and recorded in ICIS-Air. If by December 31, 2018, EPA’s annual data metric analysis and other periodic reviews confirm that SCHD’s efforts appear to be adequate to meet the national goal, the recommendation will be considered complete.						

## CAA Element 2 — Inspections

<b>Finding 2-3</b>	<b>Meets or Exceeds Expectations</b>																													
<b>Summary</b>	SCHD met the negotiated frequency for inspection of sources for most major and SM-80 sources during the review year.																													
<b>Explanation</b>	<p>Metric 5a indicated that 22 of 29 major sources (75.9%) were inspected at least once every 2 years. Of the 7 sources not inspected, two were permanently closed, bringing the local percentage to 81.5% (22 of 27).<sup>(2)</sup></p> <p>Metric 5b indicated that 60 of 71 (84.5%) SM-80 sources were inspected at least once every 5 years, in accordance with EPA’s CMS Guidance. However, a closer review of the 11 sources that were not inspected indicated that 9 of them were permanently closed, and another is under construction. Adjusting for these sources brings SCHD’s metric to 98.4% (60 of 61).<sup>(3)</sup></p> <p>Metric 5c indicated that SCHD did not inspect any non-SM80 synthetic minors since they follow a traditional CMS plan.</p> <p>A review of FY16 frozen data shows that coverage rates under metrics 5a and 5b have improved to 96.3% and 98.8%, respectively, indicating that the local program continues to provide adequate inspection coverage.</p>																													
<b>Relevant metrics</b>	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>5a FCE coverage: majors and mega-sites</td> <td>100%</td> <td>63.2%</td> <td>22</td> <td>27</td> <td>81.5%<sup>(2)</sup></td> </tr> <tr> <td>5b FCE coverage: SM-80s</td> <td>100%</td> <td>79.5%</td> <td>60</td> <td>61</td> <td>98.4%<sup>(3)</sup></td> </tr> <tr> <td>5c FCE coverage: synthetic minors (non-SM 80s) that are part of CMS plan</td> <td>100%</td> <td>42.6%</td> <td>0</td> <td>0</td> <td>NA</td> </tr> </tbody> </table>						Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	5a FCE coverage: majors and mega-sites	100%	63.2%	22	27	81.5% <sup>(2)</sup>	5b FCE coverage: SM-80s	100%	79.5%	60	61	98.4% <sup>(3)</sup>	5c FCE coverage: synthetic minors (non-SM 80s) that are part of CMS plan	100%	42.6%	0	0	NA
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #																									
5a FCE coverage: majors and mega-sites	100%	63.2%	22	27	81.5% <sup>(2)</sup>																									
5b FCE coverage: SM-80s	100%	79.5%	60	61	98.4% <sup>(3)</sup>																									
5c FCE coverage: synthetic minors (non-SM 80s) that are part of CMS plan	100%	42.6%	0	0	NA																									
<b>State response</b>																														
<b>Recommendation</b>																														



### CAA Element 3 — Violations

<b>Finding 3-1</b>	<b>Area for State Attention</b>																								
<b>Summary</b>	SCHD made accurate compliance determinations in most instances, but some violations were not classified and reported into ICIS-Air.																								
<b>Explanation</b>	<p>Metric 7a indicated that SCHD made accurate compliance determinations in 16 of 20 files reviewed (80%). In one instance, a violation was identified, and an informal action (warning letter) was issued, but the federally reportable violation (FRV) was not recorded in ICIS-Air. In other situations, file reviewers found compliance issues described in an inspection report or other periodic report, but these were not formally classified as a violation, and no enforcement action was taken. Although some FRVs were entered into ICIS-Air, these were entered late. EPA recommends that an improved process for FRV and HPV determination and data entry be developed.</p> <p>Metric 8c confirmed that for all 3 files reviewed with violations identified (100%), SCHD’s determination that these were not HPVs was accurate.</p> <p>Metric 13 indicated that SCHD did not identify any HPVs during the review year.</p>																								
<b>Relevant metrics</b>	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>7a Accuracy of compliance determinations</td> <td>100%</td> <td></td> <td>16</td> <td>20</td> <td>80%</td> </tr> <tr> <td>8c Accuracy of HPV determinations</td> <td>100%</td> <td></td> <td>3</td> <td>3</td> <td>100%</td> </tr> <tr> <td>13 Timeliness of HPV Identification</td> <td>100%</td> <td>82.6%</td> <td>0</td> <td>0</td> <td>NA</td> </tr> </tbody> </table>	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	7a Accuracy of compliance determinations	100%		16	20	80%	8c Accuracy of HPV determinations	100%		3	3	100%	13 Timeliness of HPV Identification	100%	82.6%	0	0	NA
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #																				
7a Accuracy of compliance determinations	100%		16	20	80%																				
8c Accuracy of HPV determinations	100%		3	3	100%																				
13 Timeliness of HPV Identification	100%	82.6%	0	0	NA																				
<b>State response</b>	SCHD updated the Major Source SOP to include two new document tracking forms. The first form includes a decision for enforcement from the Technical Manager and the second form establishes the type of enforcement action including if the action is an FRV or HPV.																								
<b>Recommendation</b>																									

## CAA Element 4 — Enforcement

<b>Finding 4-1</b>	<b>Area for State Improvement</b>																														
<b>Summary</b>	Enforcement actions do not always bring sources back into compliance within a specified timeframe.																														
<b>Explanation</b>	<p>Metric 9a indicated that 3 of 4 formal enforcement actions reviewed (75%) brought sources back into compliance through corrective actions in the order, or compliance was achieved prior to issuance of the order. However, one source did not submit the required permit application or pay the penalty, and the county ultimately closed the case. In addition, reviewers observed that SCHD uses a Notice of Violation (NOV) that includes a penalty assessment, which is essentially a combined informal and formal enforcement action. This document does not appear to include legally enforceable compliance obligations and an applicable schedule, which led EPA to develop a recommendation for this finding.</p> <p>Metrics 10a, 10b &amp; 14 do not apply since SCHD did not have any HPVs during the review year.</p>																														
<b>Relevant metrics</b>	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>9a Formal enforcement responses that include required corrective action that will return the facility to compliance in a specified time frame or the facility fixed the problem without a compliance schedule.</td> <td>100%</td> <td></td> <td>3</td> <td>4</td> <td>75.0%</td> </tr> <tr> <td>10a Timeliness of addressing HPVs or alternatively having a case development and resolution timeline in place.</td> <td>100%</td> <td></td> <td>0</td> <td>0</td> <td>NA</td> </tr> <tr> <td>10b Percent of HPVs that have been have been addressed or removed consistent with the HPV Policy.</td> <td>100%</td> <td></td> <td>0</td> <td>0</td> <td>NA</td> </tr> <tr> <td>14 HPV Case Development and Resolution Timeline in Place When Required that Contains Required Policy Elements</td> <td>100%</td> <td></td> <td>0</td> <td>0</td> <td>NA</td> </tr> </tbody> </table>	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	9a Formal enforcement responses that include required corrective action that will return the facility to compliance in a specified time frame or the facility fixed the problem without a compliance schedule.	100%		3	4	75.0%	10a Timeliness of addressing HPVs or alternatively having a case development and resolution timeline in place.	100%		0	0	NA	10b Percent of HPVs that have been have been addressed or removed consistent with the HPV Policy.	100%		0	0	NA	14 HPV Case Development and Resolution Timeline in Place When Required that Contains Required Policy Elements	100%		0	0	NA
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #																										
9a Formal enforcement responses that include required corrective action that will return the facility to compliance in a specified time frame or the facility fixed the problem without a compliance schedule.	100%		3	4	75.0%																										
10a Timeliness of addressing HPVs or alternatively having a case development and resolution timeline in place.	100%		0	0	NA																										
10b Percent of HPVs that have been have been addressed or removed consistent with the HPV Policy.	100%		0	0	NA																										
14 HPV Case Development and Resolution Timeline in Place When Required that Contains Required Policy Elements	100%		0	0	NA																										
<b>State response</b>	<p>SCHD is adopting two model enforcement documents based on those used in the State of Tennessee’s Air Pollution Control program. These documents are: “Technical Manager’s Order and Assessment of Civil Penalty” and “Technical Manager’s Order and Assessment of Civil Penalty and Imposition of Compliance Schedule”.</p> <ul style="list-style-type: none"> <li>The new enforcement letter contains a line stating economic impact was considered in a penalty assessment.</li> </ul>																														

	<ul style="list-style-type: none"> <li>• The enforcement letter will also all have a reference to our enforcement authority contained in our local codes and contain a deadline for payment of the assessment and or assessment and compliance schedule if that is the case.</li> <li>• Consent Orders will still be utilized where appropriate.</li> <li>• These changes will be incorporated in the Department’s compliance policy manual.</li> </ul>
<b>Recommendation</b>	<p>By December 31, 2017, SCHD should strengthen the enforceability of the NOV currently in use, or consider utilizing another instrument, such as a compliance order, for securing compliance. Revised procedures which formalize these changes should be submitted to EPA for review. If by December 31, 2018, EPA determines that these procedures appear adequate to bring sources back into compliance, the recommendation will be considered complete.</p>

## CAA Element 5 — Penalties

<b>Finding 5-1</b>	<b>Area for State Improvement</b>												
<b>Summary</b>	SCHD utilized a matrix for assessing the gravity portion of penalties, but the consideration or assessment of economic benefit was not documented.												
<b>Explanation</b>	Metric 11a indicated that although SCHD considered gravity in all penalty assessments reviewed, none of these (0%) documented whether economic benefit was considered. EPA acknowledges that SCHD has developed a process for assessing economic benefit in their draft <u>Environmental Penalty Policy</u> dated September 1, 2004. However, this process does not appear to be used consistently.												
<b>Relevant metrics</b>	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>11a Penalty calculations reviewed that document gravity and economic benefit</td> <td>100%</td> <td></td> <td>0</td> <td>4</td> <td>0%</td> </tr> </tbody> </table>	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	11a Penalty calculations reviewed that document gravity and economic benefit	100%		0	4	0%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #								
11a Penalty calculations reviewed that document gravity and economic benefit	100%		0	4	0%								
<b>State response</b>	SCHD does consider economic benefit on each penalty action taken. However, for penalty actions where no economic benefit was identified, this fact has not been stated. The new enforcement letter (referenced in our response to CAA Element 4 above) with a line stating economic impact was considered will be included.												
<b>Recommendation</b>	By December 31, 2017, SCHD should submit revised procedures which ensure that the consideration of economic benefit is documented for all penalty calculations. In addition, sample penalty calculations for actual cases which follow the new procedures should be submitted to EPA for review. If by December 31, 2018, EPA determines that these procedures and their implementation adequately address the necessary penalty documentation, the recommendation will be considered complete.												

**CAA Element 5 — Penalties**

<b>Finding 5-2</b>	<b>Meets or Exceeds Expectations</b>						
<b>Summary</b>	The collection of penalties and any differences between initial and final penalty assessments was documented in facility files.						
<b>Explanation</b>	<p>Metric 12a indicated that all 4 penalty calculations reviewed (100%) documented any difference between the initial and the final penalty assessed, or there was no difference.</p> <p>Metric 12b indicated that for 4 of 4 penalties (100%), documentation of penalty payments made by source was included in the file. In one instance, the source contested the penalty, and SCHD ultimately rescinded their Notice of Violation and penalty assessment, which was documented in a letter to the source.</p>						
<b>Relevant metrics</b>	<b>Metric ID Number and Description</b>		<b>Natl Goal</b>	<b>Natl Avg</b>	<b>State N</b>	<b>State D</b>	<b>State % or #</b>
	12a Documentation of rationale for difference between initial penalty calculation and final penalty		100%		4	4	100%
	12b Penalties collected		100%		4	4	100%
<b>State response</b>							
<b>Recommendation</b>							