

**March 15, 2011**

**North Carolina Department  
of Environment and Natural Resources**

**Final State Review Framework Report – Round 2  
Table of Contents**

- I. EXECUTIVE SUMMARY**
- II. BACKGROUND INFORMATION ON STATE PROGRAM  
AND REVIEW PROCESS**
- III. STATUS OF OUTSTANDING RECOMMENDATIONS  
FROM PREVIOUS REVIEWS**
- IV. FINDINGS and RECOMMENDATIONS**
- V. ELEMENT 13**
- VI. APPENDICES:**
  - a. Status of Recommendations from Previous Reviews**
  - b. Official Data Pull**
  - c. Preliminary Data Analysis & File Selection**
  - d. File Review Analysis**
  - e. Correspondence**

## I. EXECUTIVE SUMMARY

In the summer of 2009, the Environmental Protection Agency (EPA) initiated the second State Review Framework (SRF) evaluation of the North Carolina Department of Environment and Natural Resources (NCDENR). The SRF is a program designed to ensure EPA conducts oversight of state compliance and enforcement programs for the Resource Conservation & Recovery Act (RCRA) Subtitle C program, the Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) program and the Clean Air Act (CAA) Stationary Source program in a nationally consistent and efficient manner. The first SRF evaluation at NCDENR took place in 2005 based on FY2004 data. The second SRF evaluation is based on FY2008 compliance and enforcement activities.

SRF evaluations look at twelve program elements covering: data (completeness, timeliness, and quality); inspections (coverage and quality); identification of violations, enforcement actions (appropriateness and timeliness); and, penalties (calculation, assessment and collection). Reviews are conducted in three phases, including (1) analyzing information from the national data systems, (2) reviewing a limited set of state files, and (3) development of findings and recommendations. Considerable consultation is built into the process, to ensure EPA and the state understand the causes of issues, and to seek agreement on identifying the actions needed to address problems. The SRF Reports generated by the reviews are designed to capture the information and agreements developed during the review process in order to facilitate program improvements. The reports are designed to provide factual information and do not make determinations of program adequacy. EPA also uses the information in the reports to draw a “national picture” of enforcement and compliance, and to identify any issues that require a national response. SRF Reports are not used to compare or rank state programs.

### A. Significant Cross-Media Issues

The primary cross-media issue identified in the SRF evaluation involved the calculation and documentation of economic benefit in penalty calculations. North Carolina does not consistently calculate and recover the economic benefit of noncompliance in penalties for enforcement actions. The BEN model is not used consistently across the programs, and in many instances there is no documentation that economic benefit was considered in the penalty calculations. This is an ongoing issue that was identified in Round 1 of the SRF.

For each media, there were also data accuracy issues identified in the SRF evaluation. While the issues identified were not cross-media in function, the report does indicate that there is area for improvement with data accuracy within each program.

### B. CAA Program

- Meets SRF Program Requirements – There were seven CAA elements that met the SRF program requirements:
  - Element 1 - Data Completeness
  - Element 4 - Completion of Commitments
  - Element 5 - Inspection Coverage

- Element 7 - Identification of Alleged Violations
- Element 8 - Identification of SNC and HPV
- Element 9 - Enforcement Actions Promote Return to Compliance
- Element 10 - Timely and Appropriate Action
- Area for State Attention – There were four CAA elements identified for state attention:
  - Element 3 - Timeliness of Data Entry
  - Element 6 - Quality of Inspection or Compliance Evaluation Reports
  - Element 11 - Penalty Calculation Method
  - Element 12 - Final Penalty Assessment and Collection
- Area for State Improvement - There was one CAA Elements where a recommendation for state improvement was identified in the SRF evaluation:
  - Element 2 - Data Accuracy

Continuing CAA Problems from Round 1 - At the conclusion of the SRF Round 1 evaluation, the actions and milestones for the implementation of the ten CAA SRF recommendations which resulted from that Round were agreed upon between the NCDNER and EPA. While the recommendations from Round 1 have been implemented and significant progress has been made, the Round 2 evaluation indicated that five of the elements identified with problems during Round 1 still had some areas for attention or improvement. These ongoing concerns are discussed in further detail below in the Findings portion of the report.

## C. CWA Program

- Meets SRF Program Requirements – There were three CWA Elements that met the SRF program requirements in the SRF evaluation:
  - Element 3 - Timeliness of Data Entry
  - Element 5 - Inspection Coverage
  - Element 12 - Final Penalty Assessment and Collection
- Area for State Attention – There were three CWA Elements where an area for state attention was identified in the SRF evaluation:
  - Element 1 - Data Completeness
  - Element 7 - Identification of Alleged Violations
  - Element 8 - Identification of SNC and HPV
- Area for State Improvement - There were six CWA Elements where a recommendation for state improvement was identified in the SRF evaluation:
  - Element 2 - Data Accuracy
  - Element 4 - Completion of Commitments
  - Element 6 - Quality of Inspection or Compliance Evaluation Reports
  - Element 9 - Enforcement Actions Promote Return to Compliance
  - Element 10 - Timely and Appropriate Action
  - Element 11 - Penalty Calculation Method

- Continuing CWA Problems from Round 1 - At the conclusion of the SRF Round 1 evaluation, the actions and milestones for the implementation of the ten CWA SRF recommendations which resulted from that Round were agreed upon between the NCDNER and EPA. While the recommendations from Round 1 have been implemented and significant progress has been made, the Round 2 evaluation indicated that four of the elements identified with problems during Round 1 still had some areas for attention or improvement. These ongoing concerns are discussed in further detail below in the Findings portion of the report.

## D. RCRA Program

- Meets SRF Program Requirements – There were nine RCRA Elements that met the SRF program requirements in the SRF evaluation:
  - Element 1 - Data Completeness
  - Element 3 - Timeliness of Data Entry
  - Element 4 - Completion of Commitments
  - Element 5 - Inspection Coverage
  - Element 6 - Quality of Inspection or Compliance Evaluation Reports
  - Element 7 - Identification of Alleged Violations
  - Element 8 - Identification of SNC and HPV
  - Element 9 - Enforcement Actions Promote Return to Compliance
  - Element 12 - Final Penalty Assessment and Collection
- Area for State Attention – There was one RCRA Element where an area for state attention was identified in the SRF evaluation:
  - Element 10 - Timely and Appropriate Action
- Area for State Improvement - There were two RCRA Elements where a recommendation for state improvement was identified in the SRF evaluation:
  - Element 2 - Data Accuracy
  - Element 11 - Penalty Calculation Method
- Continuing RCRA Problems from Round 1 - At the conclusion of the SRF Round 1 evaluation, the actions and milestones for the implementation of the seven RCRA SRF recommendations which resulted from that Round were agreed upon between the NCDNER and EPA. While the recommendations from Round 1 have been implemented and significant progress has been made, the Round 2 evaluation indicated that the one element regarding the calculation and recovery of economic benefit has been identified as an area for improvement. This ongoing concern is discussed in further detail below in the Findings portion of the report.

## II. BACKGROUND INFORMATION ON STATE PROGRAM AND REVIEW PROCESS

### A. General Program Overview

#### Agency Structure

NCDENR is the lead stewardship agency for the preservation and protection of the state's natural resources. Environmental regulatory programs are administered through eight of the department's divisions and offices.

**Division of Water Quality (DWQ):** DWQ issues permits, monitors permit compliance, evaluates water quality and is the state's enforcement agency for violators of water and groundwater quality regulations. The Division also assists publicly-owned and municipal wastewater and water treatment plants through technical aid and financing.

**Division of Air Quality (DAQ):** The Division of Air Quality regulates air quality through technical assistance to industries and enforcement of state and federal air pollution standards. The division issues permits, establishes ambient air quality standards, monitors the air quality of the state and operates a vehicle inspection/maintenance program.

**Division of Waste Management (DWM):** DWM regulates the management of hazardous and solid wastes in North Carolina; its Superfund Section evaluates uncontrolled hazardous waste sites.

**Division of Environmental Assistance and Outreach:** The Division of Environmental Assistance and Outreach offers technical assistance and grants for businesses, industries and governments. Its staff also provides permit information and assistance on cost-effective ways to meet environmental regulations, particularly for small businesses.

**Division of Water Resources:** The Division of Water Resources is responsible for state water supply planning, drought management, funding of water resource projects and approval of interbasin transfers. The Division maintains a network of groundwater monitors and has undertaken an effort to develop water supply models for each of the state's river basins.

**Division of Land Resources:** The Division of Land Resources protects the state's mineral and land resources through programs to monitor dam safety, to regulate mining and reclaim abandoned mines, to control sediment and erosion, and to survey its land and resources.

**Division of Coastal Management:** The Division of Coastal Management, implements a permitting program for development in environmentally sensitive areas within the 20 coastal counties. The Division works closely with local governments to strengthen the use of land use planning as a tool for protecting coastal resources and encouraging economic development. The Division also funds beach and waterfront access projects and manages the state's coastal

reserves. The system of coastal reserves includes several National Estuarine Research Reserve sites.

**Division of Environmental Health:** The Division of Environmental Health implements the requirements of the Safe Drinking Water Act; monitors environmental hazards, including shellfish and recreational water quality; and provides technical assistance for onsite wastewater treatment systems.

### **Compliance/Enforcement Program Structure**

NCDENR's central office is located in Raleigh, and there are seven DENR Regional Offices which perform the department's duties on a local level. The Divisions listed above conduct compliance assurance and enforcement activities; there is no centralized multimedia enforcement office at NCDENR. The state's central office in Raleigh is largely responsible for policy decisions, guidelines, regulatory interpretations, and formal enforcement actions, while the regional offices conduct compliance assurance activities and informal enforcement actions (e.g., notices of violation).

### **Roles and Responsibilities**

Enforcement processes in NCDENR begin with the discovery of a violation. This discovery may be through an inspection of the regulated site by a regional office inspector or it may come from routine monitoring reports that the responsible party (RP) is required to submit on a schedule. NCDENR also responds to citizen complaints. Complaints are referred to the appropriate program staff for investigation; if the investigation finds that a violation occurred, enforcement action follows. When a violation is discovered, the inspector will consult with the supervisor to decide the next step of enforcement. Most programs have an enforcement coordinator in the central office in Raleigh who will work with the regional office staff to begin the enforcement process.

Depending on the nature of the violation, enforcement options may include a notice of deficiency (NOD), notice of violation (NOV), administrative order by consent (AOC), or a unilateral compliance order. Both a NOD and a NOV identify any corrective action that the violator is required to take and set a deadline for compliance. First time violators usually receive an NOV; there may be no further enforcement action if the violator promptly corrects the violation. Failure to meet a compliance deadline generally results in a civil penalty assessment. Other factors that may lead to a civil penalty or increase the amount of the penalty include the degree of harm resulting from the violation and the past compliance history of the violator. Most programs have the authority to use temporary restraining orders or injunctions to compel compliance if issuance of an NOV and request for corrective action has not been effective.

Although the enforcement process varies somewhat among the different programs, generally enforcement staff typically prepare an enforcement package that goes through management review within the Division. In some programs, the Attorney General's Office is actively involved in drafting civil penalty assessments; in others, the civil penalty assessment is developed within the program and the Attorney General's Office becomes involved if there is an

appeal of the penalty or a request for judicial collection of the penalty once appeals have been exhausted. All requests for injunctive relief go to the Attorney General's Office. If the enforcement case merits a request for injunctive relief to stop an ongoing violation or to compel corrective action, the Attorney General's Office files suit in Superior Court to request the appropriate court order.

When an RP receives an enforcement action, they have several options available. The RP may pay the penalty, request a reduced penalty through informal settlement or remission, or the RP may appeal the decision to the Office of Administrative Hearings (OAH). If an appeal is to be filed with the OAH, it must be done before the thirty days are up. If there is a hearing, the Administrative Law Judge will make a recommendation to the final agency decision maker (typically the Secretary of Environment and Natural Resources or one of the regulatory commissions organized under NCDENR). This decision can be appealed through Superior Court, Court of Appeals, or on to State Supreme Court.

### **Local Agencies Included/Excluded from Review**

There are three local agencies in North Carolina delegated below the state level to conduct work in the air programs evaluated under the SRF: Mecklenburg County Department of Environmental Protection, Western North Carolina Regional Air Pollution Control Agency, and Forsyth County Environmental Affairs Department. A review of the Forsyth County local program was conducted during Round 1, and the other two local programs are slated for independent reviews in a subsequent SRF review cycle. As a result, no local agencies were included in the SRF Round 2 review of the state program.

### **Resources**

The resource information below was provided voluntarily by NCDENR, and was not verified by EPA for the SRF Report. The information represents the Full Time Equivalent (FTE) positions for the implementation of the state's compliance and enforcement programs reviewed under the SRF:

**CAA Resources** - The DAQ maintains approximately 66 FTEs available to implement the state's compliance monitoring and enforcement program. These FTEs are composed of staff from the regional and central offices. The duties of the regional staff include, but are not limited to, conducting compliance evaluations (i.e., inspections), responding to complaints, attending source tests, reviewing reports and notifications, determining compliance status, issuing NOV's and developing enforcement cases, and entering compliance and enforcement activities into the database. The duties of the central office staff include, but are not limited to, reviewing source test reports, COMS/CEMs reports, and enforcement cases. The DAQ maintains approximately 56 FTEs for compliance and enforcement activities in the regional offices and approximately 10 FTEs in the central office.

The current State budget crisis has resulted in resource constraints that make hiring staff to fill vacancies difficult. The DAQ management carefully evaluates all vacancies on a case-by-case basis. Some vacant positions have been permanently eliminated. Despite these challenges,

the DAQ continues to meet its compliance goals and to maintain a successful and effective enforcement program.

**CWA Resources** – There are 68.5 FTEs available to implement the state’s NPDES Wastewater, NPDES Stormwater, and CAFO compliance monitoring and enforcement program. The FTE are distributed by Regional Offices as follows: Asheville region 7.0 FTEs; Fayetteville region 9.8 FTEs; Mooresville region 7.0 FTEs; Raleigh region 13.0 FTEs; Washington region 10.0 FTEs; Wilmington region 7.0 FTEs; Winston-Salem region 9.1 FTEs.

State resources have begun to decline, which is beginning to impact the work output. With the current state of the economy, we are unable to fill vacant staff positions due to a hiring freeze that is currently in place. Note, the hiring freeze has been in place since January 2009; NCDWQ has approximately 35 vacant positions.

**RCRA Resources** - There are currently 21 FTE in the RCRA Subtitle C program, with 16 FTE located in the regional offices (includes home-based staff).

### **Staffing / Training**

**CAA** - As noted above, DAQ management carefully evaluates all vacancies on a case-by-case basis. Some vacant positions have been permanently eliminated. The DAQ follows the guidance provided by DENR in recruiting and selecting qualified staff. A copy of DENR’s policy can be found at <http://www.osp.state.nc.us/manuals/plans/denr.pdf>. In addition, the DAQ is committed to create and to provide a learning oriented environment to develop knowledge, skills, and abilities of employees. All new hires joining the DAQ are provided with an employee orientation to facilitate settling in and to help them with core knowledge and skills to carry out the duties required. The DAQ has developed a training matrix ([http://daq.state.nc.us/employee/training/DAQ-Training\\_Matrix.pdf](http://daq.state.nc.us/employee/training/DAQ-Training_Matrix.pdf)) that outlines the minimal training requirements for each specific position. While the DAQ provides employees with directions, resources, and guidance on training and development, employees have the responsibility for their own learning and applying what is learned to their work.

**CWA (North Carolina DWQ Hiring Program)** - North Carolina employs a merit-based recruitment and selection plan. This plan evolved from Senate Bill 886 that was passed by the North Carolina Legislature in 1997. The purpose of the merit-based recruitment and selection plan is to fill positions subject to the State Personnel Act from among the most qualified individuals based on the requirements of the job. The individual selected for the position must be chosen from the pool of the most qualified candidates. The Department of Environment and Natural Resources recognizes that staff retention continues to be an ongoing problem. With turnover rates above 10%, the Division has embarked on an effort to review its policies and practices in the context of staff retention and recruitment. Although recruitment efforts have been launched, staff retention efforts have been slow to begin. The Department sponsored a retention study approximately 10 years ago that provides important considerations in addressing this problem.

At present, the economic recession has resulted in 13 positions being abolished at the beginning of State fiscal year 2010 to help balance the budget. Additional cuts of 3%, 5%, and 7% have been prepared as possible reductions in the fiscal year 2011 budget. In addition, \$712,012 in reversions have been frozen to return to the state coffers at the end of this fiscal year. Moreover, a hiring freeze has been in place since January 2009, which has adversely impacted both morale and the ability to deliver programs in a timely manner. This freeze extends to federally-funded positions, as the state responds to the change in EPA's policy to limit carry forward of unspent §106 funds, which had previously been used to supplement a dwindling operations budget. All in all, the Division continues to struggle mightily to fill vacant positions. These vacancies have impacted the Division's work.

**RCRA** - The Hazardous Waste Section (HWS) is fully staffed.

### **Data Reporting Systems/Architecture**

**CAA** - The DAQ uses a J2EE/Oracle based internet-enabled enterprise application and database system, called IBEAM for all its enforcement and compliance data. A summary of the architecture of IBEAM can be found at <http://portal.ncdenr.org/web/its/ibeamarch>. A user group composed of DAQ staff and IT personnel worked for many years developing compliance and enforcement modules in IBEAM for housing data that is reported to the EPA national data system. The user group also developed QA/QC rules to ensure that the data is entered into IBEAM accurately and in a timely manner. Compliance and enforcement data meeting the EPA's MDRs are downloaded from IBEAM and fed to AFS once per month.

**CWA Basinwide Information Management System (BIMS)** - The BIMS application system development effort started in late 1998. This work effort converted and integrated scores of diverse application systems across the organization into one consolidated data repository and user interface. BIMS provides the NCDENR DWQ user communities with a tool that facilitates a cohesive working environment across unique, but related, operational areas. All BIMS users share a common interface and a central, integrated database. The BIMS is customized to support the business conducted by 400 DWQ end users and 100 municipalities across North Carolina. Additional internal and external users are continuously being added. BIMS architecture includes JAVA, Struts, EJB, and DB2. Data is entered into BIMS daily by various users. Weekly data is extracted from BIMS, manually reviewed, and subsequently uploaded to EPA's PCS system.

**RCRA** - The HWS serves as the Implementer of Record for the national database and enters all North Carolina handler, permitting, compliance and enforcement, and corrective action activities into RCRAInfo within 30 days of an occurrence of an activity. The entering of data into the national database allows EPA instant access to data elements that are required by EPA.

## **B. Major State Priorities and Accomplishments**

The SRF is designed to evaluate specific compliance and enforcement elements, and there may be state priorities and accomplishments that are not captured in the SRF findings. EPA acknowledges the efforts by North Carolina that contribute to the mutual goals of ensuring compliance and promoting environmental stewardship. The following North Carolina priorities

and accomplishments were provided by the state. However, the information has not been verified by EPA and may reflect activities that were not ongoing during the time period of the SRF review (FY2008):

**CAA Priorities** - The following are the compliance and enforcement priorities for NCDENR's DAQ:

- Responding to complaints from the public. Complaints should be addressed as soon as practically possible. Most of the complaints involve open burning, and consequently, the DAQ has a strong open burning investigation and enforcement program.
- Inspecting permitted facilities.
  - Conducting inspections or full compliance evaluations (FCEs) and on-site visits at all Title V facilities and all synthetic minor facilities annually.
  - Conducting inspections at all true minor permitted facilities every two years.
  - Meeting the EPA's Compliance Monitoring Strategy.
- Maintaining a strong, fair, effective, and transparent enforcement program.
  - Developing written guidelines that outline appropriate enforcement actions. The written guidance is routinely reviewed and updated so that it reflects the current policies and procedures of NCDENR and the DAQ.
  - Reinforcing the written guidelines through regular meetings with regional and central office permitting and compliance staff.
  - Providing updates of enforcement activities on the DAQ's website and to the public.

**CWA Priorities** - In line with EPA's goals and objectives, the Division of Water Quality seeks to protect and enhance water quality where it is adversely affected by pollution. The Division will accomplish this by operating effective planning and monitoring programs, operating effective and efficient permitting and compliance programs, effectively planning and implementing funding to achieve the core goals and effectively managing and leading staff to ensure the Division is capable of fulfilling its mission.

**RCRA Priorities** - During FY2008, the North Carolina HWS continued to demonstrate its commitment to protecting human health and the environment through a holistic approach to compliance and enforcement. This was accomplished with a proactive compliance and monitoring program that focused on EPA national and state priorities. The following EPA national priorities/sectors were incorporated in the HWS's FY2008 work plan: never inspected generators; facilities that were the subject of citizens complaint; non-notifier facilities that were believed to have generated hazardous waste; and recalcitrant or repeat violators. The Mercury Switch Removal Program and the Hazardous Waste Transfer Facilities Project were two state initiatives that were implemented in FY2008 (both of which were mandated by the state legislature in 2007).

**CAA Accomplishments** – The DAQ’s compliance and enforcement program covers both permitted facilities and non-permitted entities. The DAQ’s spends a great deal of its time and resources on compliance and enforcement of non-permitted entities, and none of this effort is reflected in the SRF. The DAQ’s compliance and enforcement accomplishments for FFY2008 are listed below:

**Permitted facilities**

- Observed 154 source tests
- Conducted 2,306 inspections
- Issued 466 notices of violations
- Assessed 95 civil penalty assessments, totaling \$333,165.
- Issued four (4) Special Orders by Consent, requiring \$74,500 in upfront penalties

**Non-permitted entities**

- Received 1,215 complaints, including complaints regarding odors, open burning, fugitive dust, and visible emissions.
- Conducted 707 onsite investigations
- Issued 633 notices of violations
- Assessed 201 civil penalty assessments, totaling \$423,3

**CWA Accomplishments** - The following are the compliance and enforcement accomplishments provided by NCDENR’s DWQ:

**Enhanced Sewer System Overflow Enforcement Strategy** - The Division of Water Quality has encouraged a greater focus by local governments on the management of their sanitary sewer collection systems through the adoption of a new enforcement policy on overflows. Building on the state’s model Collection System Permitting program that requires operations and maintenance programs for all sewer lines and pump stations as well as a commitment to capital improvements for the system as a whole, the DWQ tightened enforcement on sanitary sewer overflows, or SSOs. Beginning June 1, 2007, the issuance of Notices of Violations was considered for any reportable SSO – those that are 1,000 gallons or more or any spill that reaches surface waters. Beginning December 1, 2007, many violations that result in NOV’s will bring civil penalties as well. The goal of the initiative is to focus increased attention by the owners on the operation and management of their collection systems and reduce wastewater overflows to streams and rivers.

**Inspections Conducted and Penalties Assessed** - Inspections conducted 7,721; Compliance Evaluation Inspections 2,389; other inspection types 5,332; Civil penalty assessments issued 649; Total penalties (including enforcement costs) \$1,384,927. Note: Includes NPDES WW, NPDES SW, CAFOs, and collection systems.

**RCRA Accomplishments** - The following compliance and enforcement accomplishment was provided by NCDENR’s DWM:

**Hazardous Waste Transfer Facility Project** - The hazardous waste transfer facilities project was initiated in response to North Carolina House Bill 36, which was passed into law on

June 26, 2007. House Bill 36 established requirements for Hazardous Waste Transfer facilities storing hazardous waste in vehicles or containers for more than 24 hours but less than 10 days. Since the Bill was passed, Hazardous Waste Section (HWS) staff has been working to develop rules for the new law. In FY2008, the HWS Compliance Branch conducted surveys at 35 facilities that transfer hazardous waste.

During FY2008, North Carolina’s RCRA Compliance and Enforcement program ensured the safe management of 31,000 gallons and 667 tons of hazardous waste that otherwise may have been mismanaged. The compliance and enforcement activities also ensured that 2,719 individuals that could have been adversely impacted were protected against the risks of exposure to hazardous waste. More than 30 facilities conducted clean-ups with “no further action required” achieved.

**Element 13**

NCDENR has provided descriptions of compliance assistance programs that are being implemented the Department. Details on these projects are provided in Section V of this report.

**C. Process for SRF Review**

The North Carolina SRF Round 2 was initiated with an August 4, 2009, kick-off letter to the NCDENR Secretary from the EPA Region 4 Regional Counsel and Director of the Office of Environmental Accountability (OEA). On November 19, 2009, the Preliminary Data Analysis and File Selections for all three media were sent to the state. The onsite file reviews for each media took place during the weeks of December 7-11, 2009 and December 14-18, 2009, at the individual NCDENR Division offices in Raleigh, North Carolina. The fiscal year of the NCDENR SRF review was FY2008.

State and EPA Region 4 Contacts:

	<b>North Carolina</b>	<b>EPA Region 4</b>
SRF Coordinators	Robin Smith Assistant Secretary for the Environment	Shannon Maher – OEA (SRF Coordinator) Steve Hitte – Chief, Analysis Section, OEA
CAA	Michael Pjetraj –DAQ Betty Gatano – DAQ	Mark Fite – OEA Wendell Reed & Nicole Radford - Air, Pesticides & Toxics Management Division
CWA	Vanessa Manuel – Division of Water Quality	Shelia Hollimon – OEA Araceli Bonilla – Water Protection Division
RCRA	Elizabeth Cannon - Division of Waste Management (DWM) Helen Cotton – DWM Michael Williford – DWM	Connie Raines – OEA Lornette Harvey – OEA (on detail)

### III. OUTSTANDING STATUS OF RECOMMENDATIONS FROM PREVIOUS REVIEWS

In Round 1 of the SRF, there were a total of 27 recommendations that were identified. From the Round 2 evaluation, it was verified that 17 of the 27 recommendations had been implemented successfully. However, the Round 2 evaluation identified ten recommendations that still have some areas for state attention or improvement (five in CAA, four in CWA, and one in RCRA). These are discussed in more detail in the specific elements in the Findings section below.

### IV. FINDINGS

The findings for the NCDENR Round 2 SRF evaluation are listed below, by media, for Elements 1 through 12. For each Element, a finding is made in one of the four following categories:

- “Meets SRF Program Requirements” – This indicates that no issues were identified for that element.
- “Area for State Attention” – The SRF data metrics and/or the file reviews indicate that activities, processes, or policies are being implemented with minor deficiencies that would benefit from state attention in order to strengthen its performance, but are not significant enough to require EPA to identify and track state actions to correct. This can describe a situation where a state is implementing either EPA or state policy in a manner that requires self-correction to resolve concerns identified during the review. These are single or infrequent instances that do not constitute a pattern of deficiencies or a significant problem. These are minor issues that the State should self-correct without additional EPA oversight. However, the State is expected to improve and maintain a high level of performance.
- “Area for State Improvement” – The SRF data metrics and/or the file reviews indicate that activities, processes, or policies that are being implemented by the state have problems that need to be addressed and that are significant enough to require follow-up EPA oversight. This can describe a situation where a state is implementing either EPA or state policy in a manner requiring EPA attention. For example, these would be areas where the metrics indicate that the State is not meeting its commitments, there is a pattern of incorrect implementation in updating compliance data in the data systems, there are incomplete or incorrect inspection reports, and/or there is ineffective enforcement response. These would be significant issues and not merely random occurrences. Recommendations are required for these problems, and should have well-defined timelines and milestones for completion. The recommendations will be monitored in the SRF Tracker.
- “Good Practice” – The SRF data metrics and/or the file reviews indicate that activities, processes, or policies are being implemented exceptionally well and the State is expected to maintain at a high level of performance. This may include specific innovative and noteworthy activities, processes, or policies that have the potential to be replicated by

other states and that can be highlighted as a practice for other states to emulate. No further action is required by either EPA or the State.

**CAA Program**

<b>CAA Element 1 – Data Completeness</b>	
<b>Degree to which the Minimum Data Requirements are complete.</b>	
Finding:	In general, North Carolina has ensured that all Minimum Data Requirements (MDRs) were entered into the Air Facility Subsystem (AFS).
Is this finding a(n) (select one):	<input checked="" type="checkbox"/> Meets SRF Program Requirements <input type="checkbox"/> Area for State Attention <input type="checkbox"/> Area for State Improvement – Recommendations Required <input type="checkbox"/> Good Practice
Explanation:	<p>In the Preliminary Data Analysis (PDA), DAQ was at or near the national goal of 100% for Data Metrics 1h1, 1h2, and 1h3, which measure completeness in reporting of HPV-related minimum data requirements (MDRs). In addition, for 100% of its NSPS and MACT sources, the State ensured that the applicable subpart was reported into AFS (Metrics 1c4 and 1c6). For Data Metric 1c5, 50% of the State’s NESHAP sources (3 out of 6) did not have the applicable subpart coded into AFS. Further review indicates that each of these sources received a full compliance evaluation (FCE) after 10/1/05, triggering the requirement to report the NESHAP subpart. However, no further action is needed since all three sources are either shut down or no longer subject to a NESHAP subpart.</p> <p>Data Metrics 1i1 and 1i2 measure the number of formal enforcement actions and the number of sources associated with those actions. During the review, EPA discovered three additional formal enforcement actions which were not entered into AFS. These missing enforcement actions were associated with high priority violations (HPVs). DAQ and EPA have monthly calls to discuss and track HPVs, and these three cases were included in those discussions, but they were inadvertently omitted from AFS. Since Region 4 handles all HPV-related data entry on behalf of DAQ, EPA has entered the missing enforcement actions into AFS.</p> <p>During the course of EPA’s discussions with the State concerning the entry of enforcement actions into AFS, the State advised that their current data system cannot upload all required enforcement action data into AFS. This was not identified as an issue during the SRF review, but would be a problem in the future should they encounter a non-HPV violation that is considered a Federally Reportable Violation (FRV). Because of confusion on the part of many State and local programs concerning what constitutes an FRV, EPA’s Office of Enforcement and Compliance Assurance (OECA) issued a clarification memo on March 22, 2010, which establishes two tiers of FRVs. The memo expresses an expectation that authorized programs “would prioritize their efforts to first focus on complete, timely and</p>

	accurate reporting of Tier I violations and enforcement actions.” In addition to HPV violations, Tier I violations include other emissions or significant procedural violations. With this in mind, and as resources allow, DAQ has already begun developing the capability for entering FRVs into AFS consistent with EPA’s clarification of the FRV policy. It is anticipated that these changes will be complete within six months.		
Metric(s) and Quantitative Value:	<u>Data Metric</u>	<u>Goal</u>	<u>State</u>
	1c4 - % NSPS Facilities with subprogram designation:	100%	100%
	1c5 -% NESHAP facilities with subprogram designation	100%	50.0%
	1c6 - - % MACT facilities with subprogram designation	100%	100%
	1h1 - HPV Day Zero Pathway Discovery date: Percent DZs reported after 10/1/05 with discovery	100%	96.2%
	1h2 - HPV Day Zero Pathway Violating Pollutants: Percent DZs reported after 10/1/05	100%	100%
	1h3 - Percent DZs reported after 10/1/05 with HPV Violation Type Code	100%	100%
	1i1 – Formal Action: Number Issued (1 FY)	NA	30 (revised)
	1i2 – Formal Action: Number of Sources (1 FY)	NA	28 (revised)
State Response:	The DAQ has begun developing the capability for entering FRVs into AFS. Compliance staff from DAQ are working with IT staff to update the data feed to AFS to include penalty and collection information for all FRVs. This task is expected to be completed within six months. For Data Metric 1c, 50% of the State’s NESHAP sources (3 out of 6) did not have the applicable subpart coded into AFS. Further review indicates that each of these sources received a full compliance evaluation (FCE) after 10/1/05. Therefore, this was designated as an area for State attention, but no further action is needed since all three sources are either shut down or no longer subject to a NESHAP subpart. The sources were shut down prior to the requirement to include subparts.		
Action(s):	No formal recommendations are being tracked for this element.		

<b>CAA Element 2 – Data Accuracy</b>	
<b>Degree to which data reported into the national system is accurately entered and maintained (example, correct codes used, dates are correct, etc.).</b>	
Finding	The majority of data reported into the national system appears to be accurately entered and maintained. However, stack test results are not always accurately entered and maintained in AFS.

<p>Is this finding a(n) (select one):</p>	<p> <input type="checkbox"/> Meets SRF Program Requirements  <input type="checkbox"/> Area for State Attention  <input checked="" type="checkbox"/> Area for State Improvement – Recommendations Required  <input type="checkbox"/> Good Practice         </p>
<p>Explanation:</p>	<p>Because HPV facilities are only a subset of violating facilities, Data Metric 2a, which measures the percentage of noncompliant sources that are HPVs, provides a strong indication of whether the State is accurately reporting the compliance status of sources. The national goal for this metric is <math>\leq 50\%</math>. DAQ's value of 34.9% meets the national goal.</p> <p>Data Metric 2b1 measures the percentage of stack tests without a pass or fail result code reported into AFS. The national goal for this metric is 0%, which means that all stack tests entered into AFS are expected to have a result reported (i.e. pass or fail). Over one-fourth (25.8%) of the stack tests conducted in the State in FY2008 had a missing or incorrect results code. In their response to the data metrics, DAQ advised that two of their regional offices used outdated codes in the State data system, resulting in the missing data in AFS. The State made changes to their data system, brought on line in the spring of 2009, which they hoped would correct the problem. However, the problem is getting worse, with 69% of stack tests missing a pass or fail result in FY2009, and 100% with missing results in FY2010, and this occurred across all seven state regional offices. Furthermore, the accuracy of stack test data in AFS was also identified as a concern during the Round 1 review. Further discussions with the State revealed that after a test is performed, DAQ initially enters each stack test into AFS with a result code of 01, which means "action achieved." The State indicates that a second entry with a pass or fail result code is made when the review of the test is complete, but this is not confirmed by the FY09 and FY10 data in AFS. Therefore, this is an area for state improvement, and the recommendation is outlined below.</p> <p>Twenty of the 40 files reviewed (50%) documented all MDRs being reported accurately into AFS. The remaining 20 files had one or more discrepancies identified. Nineteen of these revealed miscellaneous differences between AFS and the files such as name, address, SIC, pollutants, FCE date, etc. Three files revealed an incorrect HPV or compliance status in AFS. Five files showed a discrepancy in the NSPS or MACT applicability of the source. Two files indicated a formal and/or informal enforcement action was taken, but was not reported in AFS, and one source that had an FCE reported in AFS was missing the inspection report in the files. The HPV issue is being addressed by EPA under Element 8, and the state is in the process of addressing the other discrepancies. Although these issues are primarily isolated, non-systemic occurrences that do not represent a pattern, because of the number files with problems and the nature of the discrepancies, this is designated as an area for state improvement, and the recommendation is outlined below.</p>

<p>Metric(s) and Quantitative Value:</p>	<p><u>Data Metric</u>                  2a – # of HPVs / # of NC sources                  2b1 - % Stack Tests without Pass/Fail result                  2b2 - No. of Stack Test Failures</p>	<p><u>National Goal</u>                  ≤ 50%                  0%                  -</p>	<p><u>State</u>                  34.9%                  25.8%                  2</p>
<p>State Response:</p>	<p><u>File Review Metric</u> <span style="float: right;"><u>State</u></span>                  2c - % files with MDR data accurate in AFS - 50%</p> <p>The DAQ’s data system was updated in 2009 to include all source tests and their results. The updates were made in conjunction with guidance from the EPA. Currently, NC DAQ enters 2 actions per test – the 1<sup>st</sup> action (action type 23 or TR) indicates that a test occurred and has a “01” (action achieved) result code. We have suggested that the EPA ignore this action since it does not have a CMS compliant result code. However, this action does satisfy the requirement that all tests be reported within 60 days. The 2<sup>nd</sup> action (action type 59) is added once we finish the source test report review and indicate compliance or violation. The 2<sup>nd</sup> source test action contains the “PP” (pass) or “FF” (fail) result code. The facility has 30 days to submit the test and then the DAQ schedules review of the test in 90 days. Therefore this action may not be added for 120 days.</p> <p>The EPA has suggested that we add an action for the source test at the time of the test with a result code “99” (results pending). Then once the test is evaluated, change the result code from “99” to “PP” or “FF”. While we do not believe this most accurately represents how tests are scheduled, observed, and reviewed, we believe there is a mutually acceptable way to report and interpret the data.</p> <p>NC DAQ is committed to revising procedures again with EPA collaboratively. However, be aware that any programming modifications that will allow our upload to meet these changed requirements will require adequate time to go through DENR Information Technology processes. Additionally, there is an issue with correcting historic data that may make corrections very difficult due to the nature of the AFS batch file upload. However we are committed to analyzing potential solutions to correct historical data.</p>		
<p>Action(s):</p>	<p>By July 31, 2011, DAQ should revise their procedures for stack test data management to ensure that Pass/Fail/Pending codes (PP/FF/99) for all stack tests are reported in the AFS results code field, and pending codes are updated within 120 days of the stack test date. A draft of these revised procedures should be submitted to EPA (AEEB) for review by June 30, 2011. In addition, by June 30, 2011, DAQ, in consultation with Region 4’s AEEB, should correct in AFS the missing results codes for FY2008 and FY2009 and the other inaccurate data identified during the review. Region 4’s AEEB will monitor the required data corrections.</p>		

<b>CAA Element 3 - Timeliness of Data Entry</b>	
<b>Degree to which the Minimum Data Requirements are timely.</b>	
Finding:	The timeliness of data entry for enforcement, compliance monitoring, and HPV-related MDRs exceeded the national averages, but fell short of the national goal.
Is this finding a(n) (select one):	<input type="checkbox"/> Meets SRF Program Requirements <input checked="" type="checkbox"/> Area for State Attention <input type="checkbox"/> Area for State Improvement – Recommendations Required <input type="checkbox"/> Good Practice
Explanation:	<p>North Carolina’s performance in FY2008 for timely entry of enforcement, compliance monitoring, and HPV related MDRs exceeded the national average by a significant amount, although they fell short of the national goal of 100%. With respect to HPV data entry (Data Metric 3a), over one fourth of the HPVs (7 of 26) were entered after 60 days. Four of these (15%) were only entered 5 to 10 days late. However, the remaining three actions (12%) were entered over 90 days from day zero, and two of these were entered more than 300 days after day zero. Although EPA has agreed to enter HPV data into AFS on behalf of the State, it is important to note that three of the late HPVs were first discussed with EPA at least 60 days or more after day zero. Timeliness of HPV reporting was identified as an area of concern during the Round 1 SRF, and the State and EPA increased the frequency of enforcement conference calls to address the problem. The calls have resulted in a significant improvement from 16.7% timely in Round 1 to 73.1% timely in Round 2. Therefore this remains an area for attention during the data verification component of the monthly HPV calls between EPA and the State.</p> <p>About 12% (172 of 1402) of the compliance monitoring MDRs (Data Metric 3b1) were entered after 60 days. An analysis of the data indicates that about one third of these late actions were in a single regional office (LCON 7), and more than half of those related to stack tests at a single facility. This regional office was also identified as having problems with properly coding stack test results under Data Metric 2b1. Implementation of the recommendation under Element 2 is expected to address these concerns.</p> <p>Data Metric 3b2 indicates that 11.6% of enforcement related MDRs (31 of 267) were entered after 60 days. Most of the late actions (90%) were NOVs, and the timeliness of NOV reporting was also identified as a concern in the Round 1 SRF review because it impacted the timeliness of reporting HPV actions. Three of the late actions identified under Data Metric 3b2 were at sources which also had late HPV actions under Data Metric 3a. Since timeliness of NOV reporting continues to be a problem and there may still be correlation between late HPV reporting and late NOV reporting, this has been identified as an area for state attention. The DAQ has agreed to establish performance expectations for staff and has</p>

	developed computer implemented business rules to require the addition of NOV's into AFS in a timely fashion.																
Metric(s) and Quantitative Value:	<table border="1"> <thead> <tr> <th>Data Metric</th> <th>National Goal</th> <th>National Average</th> <th>State</th> </tr> </thead> <tbody> <tr> <td>3a - % HPV's entered in ≤ 60 days</td> <td>100%</td> <td>33.0%</td> <td>73.1%</td> </tr> <tr> <td>3b1 - % CM MDR's entered in ≤ 60 days</td> <td>100%</td> <td>59.1%</td> <td>88.0%</td> </tr> <tr> <td>3b2 - % Enf. MDR's entered in ≤ 60 days</td> <td>100%</td> <td>70.3%</td> <td>88.4%</td> </tr> </tbody> </table>	Data Metric	National Goal	National Average	State	3a - % HPV's entered in ≤ 60 days	100%	33.0%	73.1%	3b1 - % CM MDR's entered in ≤ 60 days	100%	59.1%	88.0%	3b2 - % Enf. MDR's entered in ≤ 60 days	100%	70.3%	88.4%
Data Metric	National Goal	National Average	State														
3a - % HPV's entered in ≤ 60 days	100%	33.0%	73.1%														
3b1 - % CM MDR's entered in ≤ 60 days	100%	59.1%	88.0%														
3b2 - % Enf. MDR's entered in ≤ 60 days	100%	70.3%	88.4%														
State Response:	The DAQ has added behavioral requirements and computer implemented business rules to require the addition of NOV's in a timely fashion. The DAQ will proceed with adding late NOV's when warranted by the circumstances. We will also continue pursuing personnel actions up to and including staff dismissal if work requirements are not met.																
Action(s):	No formal recommendations are being tracked for this element.																

<b>CAA Element 4 - Completion of Commitments.</b>							
<b>Degree to which all enforcement/compliance commitments in relevant agreements (i.e., PPAs, PPGs, categorical grants, CMS plans, authorization agreements, etc.) are met and any products or projects are completed.</b>							
Finding:	All enforcement and compliance commitments have been met.						
Is this finding a(n) (select one):	<input checked="" type="checkbox"/> Meets SRF Program Requirements <input type="checkbox"/> Area for State Attention <input type="checkbox"/> Area for State Improvement – Recommendations Required <input type="checkbox"/> Good Practice						
Explanation:	DAQ, which follows a traditional Compliance Monitoring Strategy plan, completed all planned evaluations (further discussion is presented under Element 5). In addition, the State met all of its enforcement and compliance commitments (100%) under the FY2008 Air Planning Agreement with EPA Region 4.						
Metric(s) and Quantitative Value:	<table border="1"> <thead> <tr> <th>File Review</th> <th>State</th> </tr> </thead> <tbody> <tr> <td>4a - Planned evaluations completed for year of review pursuant to CMS plan</td> <td>(see Element 5)</td> </tr> <tr> <td>4b – Planned commitments completed</td> <td>100%</td> </tr> </tbody> </table> (See the Metric 4B table in the appendix for a more detailed analysis)	File Review	State	4a - Planned evaluations completed for year of review pursuant to CMS plan	(see Element 5)	4b – Planned commitments completed	100%
File Review	State						
4a - Planned evaluations completed for year of review pursuant to CMS plan	(see Element 5)						
4b – Planned commitments completed	100%						
State Response:	No comments.						
Action(s):	No further action is needed.						

<b>CAA Element 5 – Inspection Coverage</b>				
<b>Degree to which state completed the universe of planned inspections/compliance evaluations (addressing core requirements and federal, state and regional priorities).</b>				
Finding:	North Carolina met its annual inspection and compliance evaluation commitments.			
Is this finding a(n) (select one):	<input checked="" type="checkbox"/> Meets SRF Program Requirements <input type="checkbox"/> Area for State Attention <input type="checkbox"/> Area for State Improvement – Recommendations Required <input type="checkbox"/> Good Practice			
Explanation:	North Carolina follows a traditional CMS plan. However, the State set an internal goal of conducting FCEs at 100% of Title V and Synthetic Minor sources in FY08. The State includes all Synthetic Minor sources (not just SM80's) in their inspection commitment. Based on the Preliminary Data Analysis, DAQ completed FCEs at 100% of its Major and SM80 sources during the relevant CMS timeframe and reviewed 100% of the self certifications submitted. Therefore, the State met all SRF program requirements for this element.			
Metric(s) and Quantitative Value:	<u>Data Metrics</u>	<u>National Goal</u>	<u>National Average</u>	<u>State</u>
	5a1 - FCE coverage Majors (CMS cycle)	100%	60.0%	100%
	5a2 - FCE coverage All Majors (last 2 FY)	100%	81.8%	98.0%
	5b1 - FCE coverage SM80 (CMS cycle)	20-100%	70.3%	100%
	5b2 - FCE coverage CMS SM80 (last 5 FY)	100%	100%	100%
	5c - FCE/PCE coverage All SMs (last 5 FY)	NA	80.4%	98%
	5d - FCE/PCE coverage other minors (5 FY)	NA	30.5%	90.6%
	5g - Review of Self Certifications completed	100%	93.2%	100%
State Response:	No comments.			
Action(s):	No further action is needed.			

<b>CAA Element 6 – Quality of Inspection or Compliance Evaluation Reports</b>	
<b>Degree to which inspection or compliance evaluation reports properly document observations, are completed in a timely manner, and include accurate description of observations.</b>	
Finding:	In general, compliance monitoring reports (CMRs) properly document observations, are completed in a timely manner, and include an accurate description of observations. However, some CMRs lacked sufficient detail on compliance history or applicable requirements.

<p>Is this finding a(n) (select one):</p>	<p> <input type="checkbox"/> Meets SRF Program Requirements  <input checked="" type="checkbox"/> Area for State Attention  <input type="checkbox"/> Area for State Improvement – Recommendations Required  <input type="checkbox"/> Good Practice         </p>
<p>Explanation:</p>	<p>File Metric 6b evaluates whether all applicable elements of an FCE have been addressed. Based on the file review, 90% of the files reviewed (36 of 40) had documentation in the files to show that they contained all of the elements of the FCE, per the Compliance Monitoring Strategy (CMS). Four files had one or more missing elements. For example, one file was missing the annual compliance certification because the district office purged the file when the facility closed. Another source involved a joint inspection with EPA in which the State’s inspection report was called a “partial compliance evaluation,” but the State claimed credit for a full compliance evaluation (FCE). The inspection report was very brief, primarily referencing an attached draft of EPA’s inspection report. Another inspection report did not include a recent HPV in the compliance history, and it was not descriptive of applicable requirements. Finally, one facility’s inspection report did not analyze the source’s compliance with applicable MACT subparts S &amp; MM, nor were operating parameter observations recorded with sufficient detail in the report. However, these are unique circumstances which do not appear to reflect a pattern requiring a recommendation, so this is noted as an area for State attention. Most reports were completed within a month of the inspection, so the state was deemed to be completing inspection reports in a timely manner.</p> <p>For File Metric 6c, 88% of the files reviewed (35 of 40) contained all of the CMR requirements listed in the CMS, providing sufficient documentation to determine compliance at the facility. Five files reviewed were missing an adequate enforcement and compliance history in the inspection report or the files. Four of these files were also missing other information such as a list of applicable requirements from the permit or an inventory of regulated units. Since the completeness of inspection reports was also identified as an issue during the Round 1 SRF review, this element is designated as an area for state attention. Although the State advised that inspectors are given verbal guidance concerning the required elements in an inspection report, DAQ has agreed to develop written guidance to clarify these expectations.</p> <p>As an additional resource, EPA has compiled example CMRs to assist inspectors in efficiently writing high quality and complete inspection reports. These sample reports are available at <a href="http://www.epa-otis.gov/srf/srf_compliance_monitoring_reports.html">www.epa-otis.gov/srf/srf_compliance_monitoring_reports.html</a>.</p>

Metric(s) and Quantitative Value:	File Review Metric	State
	6a – Number of FCEs reviewed	40
	6b – % FCEs that meet definition	90%
	6c – % CMRs sufficient for compliance determination	88%
State Response:	DAQ will develop written guidance on inspection report contents.	
Action(s):	No formal recommendations are being tracked for this element.	

**CAA Element 7 – Identification of Alleged Violations.**

**Degree to which compliance determinations are accurately made and promptly reported in the national database based upon compliance monitoring report observations and other compliance monitoring information (e.g., facility-reported information).**

**Finding:** In general, compliance determinations are accurately made and promptly reported into AFS based on inspection reports and other compliance monitoring information.

**Is this finding a(n) (select one):**

- Meets SRF Program Requirements
- Area for State Attention
- Area for State Improvement – Recommendations Required
- Good Practice

**Explanation:** File Metric 7a indicates that 97.5% of the CMRs reviewed (39 of 40) led to an accurate compliance determination. For one source, the compliance status was questioned by the file reviewer since the inspection report did not evaluate the compliance of applicable MACT subparts and lacked specific observations concerning operating parameters. It does not appear that the missing information actually interfered with making an accurate compliance determination, and this is an isolated occurrence. Therefore, no further action is necessary.

With respect to File Metric 7b, 100% of files reviewed with non-HPV violations (9 of 9) were reported timely into AFS. In addition, Data Metrics 7c1 and 7c2 are designed to measure the compliance status reporting of the State program, and both metrics exceed the national goal. Therefore, this element meets SRF program requirements.

Metric(s) and Quantitative Value:	File Review Metrics	State		
	7a - % CMRs leading to accurate compliance determination	97.5%		
	7b - % non-HPVs with timely compliance determination in AFS	100%		
	Data Metrics	National Goal	National Average	State
	7c1 - % facilities in noncompliance with FCE, stack test, or enforcement (1 FY)	>10.5%	20.9%	26.5%
	7c2 - % facilities with failed stack test and have noncompliance status (1 FY)	>21.0%	42.0%	100%

State Response:	No comments.
Action(s):	No further action is needed.

<b>CAA Element 8 - Identification of SNC and HPV</b>	
<b>Degree to which the state accurately identifies significant noncompliance/high priority violations and enters information into the national system in a timely manner.</b>	
Finding:	In general, High Priority Violations (HPVs) are accurately identified, although two actions reviewed were not accurately identified as HPVs.
Is this finding a(n) (select one):	<input checked="" type="checkbox"/> Meets SRF Program Requirements <input type="checkbox"/> Area for State Attention <input type="checkbox"/> Area for State Improvement – Recommendations Required <input type="checkbox"/> Good Practice
Explanation:	<p>DAQ exceeded the national goal for all but one of the data metrics in this element. With respect to Data Metric 8e, the PDA revealed that none of the failed stack tests (0 of 2) during the previous 24-month period resulted in the designation of an HPV. To evaluate this further, two sources with failed stack tests were selected for supplemental file reviews. In both instances, the State issued an NOV for a procedural violation and placed the source in violation in AFS. However, since no emission limit was actually exceeded, and the sources were SMS, these violations were appropriately determined not to be HPVs.</p> <p>Files were reviewed to further verify the accuracy of HPV identification. For File Metric 8f, 91% of files reviewed (20 of 22) were accurately determined to be HPVs. Two of the files reviewed revealed violations that should have been coded as HPVs. The first source was late in conducting a stack test required under a State enforcement agreement, which qualifies as an HPV under general criteria 4. The State issued a demand letter assessing stipulated penalties for the violation, and although EPA and the State recognized the violation as an HPV, it was not flagged as such in AFS. The State issued an NOV to the second source for exceeding an emission limit under MACT Subpart M, which would qualify as an HPV under general criteria 2. Although the State classified the source as “in violation,” and the case was tracked as an HPV in discussions with EPA, it was never coded in AFS as an HPV. Within two months of issuing the NOV, the State determined that no excess emission had occurred, so no enforcement action was taken. Since EPA and the State jointly determine HPVs, and EPA enters the HPVs into AFS, these are considered unique, isolated instances and are not expected to reoccur. Therefore, there are no issues identified and this element meets SRF criteria. However, EPA’s HPV policy is currently under revision, and it is EPA’s expectation that once the new policy comes out, the State will take on greater responsibility for the determination and tracking of HPVs.</p> <p>EPA’s Office of Enforcement and Compliance Assurance (OECA) advised</p>

	that the logic and wording of Data Metric 8d are incorrect, so this metric was not evaluated.		
Metric(s) and Quantitative Value:	<u>Data Metrics</u>	<u>National Goal</u>	<u>State</u>
	8a – HPV discovery rate – Majors sources	>4.1%	6.8%
	8b – HPV discovery rate – SM sources	>0.4%	0.5%
	8c – % formal actions with prior HPV – Majors (1 yr)	>37.3%	100%
	8d – % informal enforcement actions with prior HPV – Majors (1 yr)	metric not evaluated	
	8e - % sources with failed stack test actions that received HPV listing – Majors and Synthetic Minors	>22.2%	0.0%
	<u>File Review Metrics</u>		<u>State</u>
	8f - % accurate HPV determinations		91%
State Response:			
Action(s):	No further action is needed.		

<b>CAA Element 9 - Enforcement Actions Promote Return to Compliance</b>		
<b>Degree to which state enforcement actions include required corrective action (i.e., injunctive relief or other complying actions) that will return facilities to compliance in a specific time frame.</b>		
Finding:	Enforcement actions include corrective actions that return facilities to compliance in a specific time frame, or facilities are brought back into compliance prior to issuance of a final enforcement order.	
Is this finding a(n) (select one):	<input checked="" type="checkbox"/> Meets SRF Program Requirements <input type="checkbox"/> Area for State Attention <input type="checkbox"/> Area for State Improvement – Recommendations Required <input type="checkbox"/> Good Practice	
Explanation:	All enforcement action files reviewed (18 of 18) returned the source to compliance. Most enforcement actions were penalty only actions, but the files documented that the facility had returned to compliance prior to issuance of the order.	
Metric(s) and Quantitative Value:	<u>File Review</u>	<u>State</u>
	9a – number of enforcement actions reviewed	18
	9b - % enforcement actions returning source to compliance	100%
State Response:	No comments.	
Action(s):	No further action is needed.	

<b>CAA Element 10 - Timely and Appropriate Action</b>			
<b>Degree to which a state takes timely and appropriate enforcement actions in accordance with policy relating to specific media.</b>			
Finding:	NCDENR takes timely and appropriate enforcement action in accordance with EPA policy to address High Priority Violations (HPVs) through the issuance of formal enforcement actions.		
Is this finding a(n) (select one):	<input checked="" type="checkbox"/> Meets SRF Program Requirements <input type="checkbox"/> Area for State Attention <input type="checkbox"/> Area for State Improvement – Recommendations Required <input type="checkbox"/> Good Practice		
Explanation:	<p>The State’s performance for Data Metric 10a (2 of 70 or 2.9%) is significantly better than the national average, indicating that over the last two years, DAQ has generally resolved high priority violations in a timely manner. In addition, File Metric 10c indicates that 100% of HPVs (14 of 14) were appropriately addressed with a formal enforcement response.</p> <p>Files were reviewed to further evaluate the degree to which the State takes timely and appropriate action to address HPVs. Based on the file review, 86% of the HPVs reviewed (12 of 14) were addressed in a timely manner. The two HPV enforcement actions which exceeded EPA’s timeliness criteria of 270 days were addressed within 60 days of day 270, both due to unique circumstances. The first source failed a stack test on their solid waste incinerator for which DAQ issued an NOV. Because a compliance schedule involving injunctive relief was necessary to bring the source back into compliance, the State issued a Special Order by Consent (SOC), which required approval by the Attorney General’s office and a 30- day public notice and comment period. Though the terms of the SOC were agreed to and it went to public comment prior to day 270, the SOC was not finalized until day 329. In accordance with the HPV policy, the State kept EPA apprised on the progress of the case during the monthly HPV calls. For the second case, after being cited by the State for the violation late in 2006, the facility changed ownership in 2007. The State addressed the violation through an assessed penalty against the new owner around day 321, but the company filed a petition appealing the action. This action should have stopped the HPV “clock,” however it was never entered into AFS. Following protracted negotiations, including informal mediation, a settlement agreement was signed, and the case was resolved by payment of a penalty on day 559. Due to the unique circumstances of these two cases, neither provides any indication that the State was not diligent in resolving the HPV. Therefore, no further action is necessary.</p>		
Metric(s) and Quantitative Value:	Data Metrics	National Avg.	State
	10a - % HPVs not timely (2 FY)	37.2%	2.9%
	File Review Metrics		State
	10b - % timely HPV enforcement actions		86%
	10c - % HPVs appropriately addressed		100%

State Response:	No comments.
Action(s):	No further action is needed.

<b>CAA Element 11 - Penalty Calculation Method</b>	
<b>Degree to which State documents in its files that initial penalty calculation includes both gravity and economic benefit calculations, appropriately using the BEN model or other method that produces results consistent with national policy.</b>	
Finding:	In general, North Carolina documents initial penalty calculations that include both gravity and economic benefit, with a few exceptions.
Is this finding a(n) (select one):	<input type="checkbox"/> Meets SRF Program Requirements <input checked="" type="checkbox"/> Area for State Attention <input type="checkbox"/> Area for State Improvement – Recommendations Required <input type="checkbox"/> Good Practice
Explanation:	<p>Based on File Metric 11a, 83% of enforcement actions reviewed (15 of 18) provided sufficient documentation of the appropriate gravity and economic benefit components of the penalty. The State has developed a “penalty tree” which standardizes the gravity portion of the penalty and adjustment factors which may be applied. All 18 of the files reviewed provided sufficient documentation of the gravity portion of the penalty.</p> <p>With respect to economic benefit calculations, the State indicated that there was little or no economic benefit related to the violation for 13 of the 18 enforcement actions reviewed. Two of the remaining five enforcement actions had significant economic benefit realized due to either delayed or avoided costs, and DAQ utilized EPA’s BEN model to calculate the economic benefit portion of the penalty. However, the remaining three of the 18 files reviewed (17%) indicated that the State’s consideration and documentation of economic benefit was inadequate. In one case, the source failed to obtain a Title 5 permit after exceeding their synthetic minor permit limit for styrene. The State made no attempt to calculate economic benefit where there were significant costs associated with obtaining a Title 5 permit which the source delayed or avoided. Another file documented that the source was cited for inoperable pollution control equipment, but the State indicated that the economic benefit was “unknown.” Finally, another file indicated that a source that was cited for opacity violations had “saved some money” by utilizing a poorer quality fuel, but these savings were not quantified and included in the final penalty.</p> <p>Since the Round 1 SRF review in which EPA identified insufficient penalty documentation as a concern, DAQ has achieved significant improvements with respect to penalty calculations: Guidance has been developed for calculating both gravity and economic benefit; documentation of both the gravity and economic benefit portion of penalties was found in most files; and the BEN model was utilized in some instances to estimate economic benefit. However, this is identified as an area for state attention to ensure</p>

	that DAQ calculates and documents economic benefit in all circumstances in which a source may have saved or avoided significant costs through non-compliance.
Metric(s) and Quantitative Value:	File Review <span style="float: right;">State</span> 11a - % penalty calculations that consider <span style="float: right;">83%</span> & include gravity and economic benefit
State Response:	The DAQ considers economic benefit when our evaluation deems it appropriate. Guidance on when to consider economic benefit in penalty calculation is outlined in the “Economic Benefits Determination” section (dated 08/01/08) of our “Enforcement Handbook.” We follow our guidance, which may differ from EPA’s guidance, when determining the economic benefit of a violation.
Action(s):	No formal recommendations being tracked for this element.

<b>CAA Element 12 - Final Penalty Assessment and Collection</b>	
<b>Degree to which differences between initial and final penalty are documented in the file along with a demonstration in the file that the final penalty was collected.</b>	
Finding:	North Carolina assessed penalties for all HPVs actions, and the State routinely maintained documentation that the final penalty was collected. However, in a few instances, the State did not document the difference between initial and final penalty, including a rationale for why all of the economic benefit is not always recovered by the final assessed penalty.
Is this finding a(n) (select one):	<input type="checkbox"/> Meets SRF Program Requirements <input checked="" type="checkbox"/> Area for State Attention <input type="checkbox"/> Area for State Improvement – Recommendations Required <input type="checkbox"/> Good Practice
Explanation:	<p>The State exceeded the national goal for Data Metric 12b by assessing penalties for 100% of its HPVs during the review period. In addition, File Metric 12d indicates that 100% of the files reviewed (18 of 18) documented collection of the assessed penalty.</p> <p>For File Metric 12c, 83% of files reviewed (15 of 18) provided documentation of the difference between the initial penalty assessed and the final penalty paid. In most cases (14 files), there was no difference between the initial penalty calculated and the final penalty. In one instance, the source requested "remission" of the penalty, and the State cited one of five remission factors for agreeing to reduce the penalty. However, in the final order for the remaining three cases, the State agreed to a penalty lower than the initial assessed penalty, but no documentation of the rationale for reducing the penalty was included in the files. Although in each of these cases the source contested the penalty assessment and additional negotiations ensued, it is important for the State to document its rationale for agreeing to a reduced penalty, such as ability to pay or litigation risk, etc. DAQ’s Settlement Offer Guidance (6/10/98, p. 6) requires that a “pending settlement memo” be included in the case file to document “reasons considered in accepting or rejecting the offer.” In addition, EPA’s</p>

	<p>guidance entitled “Oversight of State and Local Penalty Assessments: Revisions to the Policy Framework from State/EPA Enforcement Agreements” stresses the importance of maintaining documentation in cases where penalties have been adjusted downward to support defensibility in court, enhance the agency’s negotiating posture, and lead to greater consistency.</p> <p>For two of three cases mentioned above, the State appropriately documented the gravity and economic benefit for each case, but the assessment of the penalty initially sent to the source did not appear to include both components. Both the above-referenced EPA guidance and DAQ’s own Economic Benefit Determination guidance (8/1/08) specify that penalties should include the economic benefit <i>plus</i> gravity. In addition, the final assessed penalty did not recover 100% of the economic benefit calculated for these two cases, but EPA’s guidance emphasizes that penalties should recoup at least the economic benefit a violator gains through noncompliance. Since similar concerns about penalty assessment and documentation were raised in the Round 1 SRF report, this is designated as an area for state attention. Similar concerns about penalty assessment and documentation were raised in the Round 1 SRF report. However, DAQ has already developed new guidance addressing penalty assessment and documentation, but it needs to be implemented on a consistent basis.</p>																		
<p>Metric(s) and Quantitative Value:</p>	<table border="1"> <thead> <tr> <th data-bbox="440 1039 1027 1073">Data Metrics</th> <th data-bbox="1027 1039 1321 1073">National Goal</th> <th data-bbox="1321 1039 1416 1073">State</th> </tr> </thead> <tbody> <tr> <td data-bbox="440 1073 1027 1106">12a – Actions with penalties</td> <td data-bbox="1027 1073 1321 1106">NA</td> <td data-bbox="1321 1073 1416 1106">27</td> </tr> <tr> <td data-bbox="440 1106 1027 1140">12b - % HPV actions with penalty</td> <td data-bbox="1027 1106 1321 1140">≥ 80%</td> <td data-bbox="1321 1106 1416 1140">100%</td> </tr> <tr> <th colspan="2" data-bbox="440 1182 1321 1215">File Review Metrics</th> <th data-bbox="1321 1182 1416 1215">State</th> </tr> <tr> <td colspan="2" data-bbox="440 1215 1321 1287">12c - % actions documenting difference between initial &amp; final penalties</td> <td data-bbox="1321 1215 1416 1287">83%</td> </tr> <tr> <td colspan="2" data-bbox="440 1287 1321 1320">12d - % files that document collection of penalty</td> <td data-bbox="1321 1287 1416 1320">100%</td> </tr> </tbody> </table>	Data Metrics	National Goal	State	12a – Actions with penalties	NA	27	12b - % HPV actions with penalty	≥ 80%	100%	File Review Metrics		State	12c - % actions documenting difference between initial & final penalties		83%	12d - % files that document collection of penalty		100%
Data Metrics	National Goal	State																	
12a – Actions with penalties	NA	27																	
12b - % HPV actions with penalty	≥ 80%	100%																	
File Review Metrics		State																	
12c - % actions documenting difference between initial & final penalties		83%																	
12d - % files that document collection of penalty		100%																	
<p>State Response:</p>	<p>No revised protocol is needed for our penalty reduction. The DAQ assesses penalties that are fair, consistent, and effective. The low rate of recidivism is indicative of the success of our penalty assessment philosophy.</p> <p>When a penalty is assessed, the violator has the option of requesting remission or filing a contested case. The Director rarely remits the assessment amount. In FFY2010, the Director remitted less than 10% of cases assessed. In the few cases where the Director has determined that a reduction in penalty is warranted, the Director follows the requirements in North Carolina General Statutes (N.C.G.S.) 143B.282.1(c), which allow for remissions of a civil penalty only when one or more of the following five factors applies:</p> <ul style="list-style-type: none"> <li>• one or more of the civil penalty assessment factors in N.C.G.S 143B 282.1(b) were wrongfully applied to the detriment of the petitioner</li> <li>• the violator promptly abated continuing environmental damage</li> </ul>																		

	<p>resulting from the violation</p> <ul style="list-style-type: none"> <li>• the violation was inadvertent or a result of an accident</li> <li>• the violator had not been assessed civil penalties for any previous violations;</li> <li>• payment of the civil penalty will prevent payment for the remaining necessary remedial actions.</li> </ul> <p>The rationale for reduction of penalties in contested cases differs than in remission. The DAQ has established guidance for settlement offers (dated 06/10/1998), and the Director follows these guidelines when considering a reduction in penalty for a contested case.</p> <p>The DAQ has established guidance for reduction of penalty via remission and contested cases, and no additional protocols are needed.</p>
Action(s):	No formal recommendations being tracked for this element.

**CWA Program**

<b>CWA Element 1 – Data Completeness</b>	
<b>Degree to which the Minimum Data Requirements (MDRs) are complete.</b>	
Finding:	Upon examination of the MDRs in PCS for North Carolina, it was determined that the majority of data is complete.
Is this finding a(n) (select one):	<input type="checkbox"/> Meets SRF Program Requirements <input checked="" type="checkbox"/> Area for State Attention <input type="checkbox"/> Area for State Improvement – Recommendations Required <input type="checkbox"/> Good Practice
Explanation:	<p>CWA Element 1 evaluates the completeness of 40 data metrics. Three of the 40 metrics have national performance goals:</p> <p>Data Metric 1b1: % of NPDES major facilities with individual permits that have permit limits in PCS. The national performance goal for this metric is &gt;=95%.</p> <p>Data Metric 1b2: % of outfalls for which Discharge Monitoring Report (DMR) data is entered in the national database. The national performance goal for this metric is &gt;=95%.</p> <p>Data Metric 1b3: % of NPDES major facilities with individual permits that have DMR data in PCS. The national performance goal for this metric is &gt;=95%.</p> <p>Upon reviewing and responding to EPA’s FY 2008 Official Data Set (ODS) for Data Metric 1b1 during September 2009, North Carolina indicated that the data in PCS (OTIS) could not be verified. Two-hundred and one facilities (93.5%) had permit limits initially entered into PCS. When EPA</p>

	<p>did a data pull of FY 2008 data from PCS in January 2010, the State had entered all limits into PCS. Since the 13 facilities which were initially missing permit limits are not considered a systemic problem this is an area for state attention.</p> <p>For the remaining 39 data metrics in the ODS, North Carolina originally noted 20 discrepancies. Upon further analyses, EPA concluded that nine of the 20 data metrics with discrepancies are insignificant as the differences in the reported numbers is 10% or less and can be attributed to the natural fluctuations in data. The remaining 11 data metrics were considered minor because the State and EPA used different definitions. Examples include:</p> <p>For Data Metric 1g, the Plain Language Guidance (PLG) includes both penalty assessed and penalty collected descriptions. This resulted in confusion as to what was being counted for Data Metrics 1g2, 1g4, and 1g5. Once the State used the same definitions as EPA, no major penalty differences were noted.</p> <p>For Data Metrics 1e &amp; 1f, the State used the Enforcement Management System definition of formal enforcement action which does not include penalty only actions and noted 8 discrepancies in the Official Data Set. For reporting purposes only, OTIS includes penalty only actions as formal actions. Once the State used the same formal action definition as EPA, there were no major discrepancies noted for Data Metrics 1e &amp; 1f.</p> <p>Data completeness was an issue in Round 1, however, EPA did not find a repeat of these same issues. As an example, the Round 1 report did note the low number of enforcement actions linked to violations at major facilities. Upon review of the ODS, this number is 100% which is a significant improvement over the Round 1 Finding.</p>			
<p>Metric(s) and Quantitative Value</p>	<p>Data Metrics</p>	<p>National Goal</p>	<p>Data (from ODS)</p>	<p>Data PCS Pull January 2010</p>
<p>State Response:</p>	<p>No comments on the findings.</p>			
<p>Action(s):</p>	<p>No formal recommendation is being tracked for this element.</p>			

<p><b>CWA Element 2 – Data Accuracy</b></p>	
<p><b>Degree to which data reported into the national system is accurately entered and maintained (example, correct codes used, dates are correct, etc.).</b></p>	
<p>Finding:</p>	<p>Generally, data reported into PCS is accurately entered and maintained, but data is not accurately entered for violations and NOV's of Whole Effluent Toxicity (WET) requirements.</p>

<p>Is this finding a(n) (select one):</p>	<p><input type="checkbox"/> Meets SRF Program Requirements  <input type="checkbox"/> Area for State Attention  <input checked="" type="checkbox"/> Area for State Improvement – Recommendations Required  <input type="checkbox"/> Good Practice</p>												
<p>Explanation:</p>	<p>Data Metric 2a reports the percent of enforcement actions linked to violations for major facilities. EPA has set a national goal of &gt;=80%. North Carolina’s data metrics indicate 100% of enforcement actions were linked to violations.</p> <p>For File Metric 2b, files were reviewed to further examine the accuracy of data between the information in the file and system data. Data accuracy is vital because of the uses of the data between EPA and the public. For example, DMR reports that are missing in the data system can lead to erroneous noncompliance rates within a community.</p> <p>Of the 26 files randomly selected for this review, 17 files (65%) showed data being accurately reported. For six files, one or more data elements were misreported in PCS. Some of the misreported data (such as inspection and NOV dates) occurred because PCS cannot accept two of the same activities that occur on the same date. For example, there were several instances where the State issued two penalty actions on the same date. PCS could only accept one of the penalty actions. Sometimes, NOV dates were entered when mailed instead of the date the NOV was signed. These misreported errors are not considered a systemic problem.</p> <p>Three of 26 files included missing data for violations and NOVs of WET. Specifically, WET NOVs are not in PCS and North Carolina is coding WET limits as “monitor only” and not including the toxicity limits. Upon further EPA analysis, PCS does not include any data for additional testing which is done after a failure has occurred. The missing data discrepancies are a systemic problem related to the WET program and is an area for state improvement.</p>												
<p>Metric(s) and Quantitative Value:</p>	<table border="0"> <tr> <td style="border-bottom: 1px solid black;"><u>Data Metric</u></td> <td style="border-bottom: 1px solid black; text-align: center;"><u>National Goal</u></td> <td style="border-bottom: 1px solid black; text-align: center;"><u>State</u></td> </tr> <tr> <td>2a - % of actions linked to violations for major facilities</td> <td style="text-align: center;">80 %</td> <td style="text-align: center;">100%</td> </tr> <tr> <td style="border-bottom: 1px solid black;"><u>File Metric</u></td> <td style="border-bottom: 1px solid black; text-align: center;"><u>National Goal</u></td> <td style="border-bottom: 1px solid black; text-align: center;"><u>State</u></td> </tr> <tr> <td>2b - % files reviewed where data is accurately reflected in the data system</td> <td style="text-align: center;">-</td> <td style="text-align: center;">65%</td> </tr> </table>	<u>Data Metric</u>	<u>National Goal</u>	<u>State</u>	2a - % of actions linked to violations for major facilities	80 %	100%	<u>File Metric</u>	<u>National Goal</u>	<u>State</u>	2b - % files reviewed where data is accurately reflected in the data system	-	65%
<u>Data Metric</u>	<u>National Goal</u>	<u>State</u>											
2a - % of actions linked to violations for major facilities	80 %	100%											
<u>File Metric</u>	<u>National Goal</u>	<u>State</u>											
2b - % files reviewed where data is accurately reflected in the data system	-	65%											
<p>State Response:</p>	<p>The findings are correct. However, the uniqueness of Whole Effluent Toxicity limits (pass/fail rather than numerical limits), has resulted in data processing and system upload challenges.</p>												

Action(s):	<p>Within three months of the date of the Final SRF Report, North Carolina should properly code into PCS all WET limits and specifically include toxicity limits. Immediately, North Carolina should ensure that any new facilities that require WET limits are properly coded into PCS.</p> <p>Immediately, North Carolina should begin entering all WET data into PCS, including but not limited to any additional tests that are conducted following a failure. Region 4's Clean Water Enforcement Branch (CWEB) will continue to monitor the required level of WET data entry into PCS and discuss results with North Carolina during routine quarterly Watch List meetings. EPA's WET Coordinator will determine when this action is completed. North Carolina should utilize the current standard operating procedures, or update as necessary, to ensure accurate entry of all required data into PCS.</p>
------------	---

<b>CWA Element 3 - Timeliness of Data Entry</b>			
<b>Degree to which the Minimum Data Requirements are timely.</b>			
Finding	The minimum data requirements are generally timely.		
Is this finding a(n) (select one):	<input checked="" type="checkbox"/> Meets SRF Program Requirements <input type="checkbox"/> Area for State Attention <input type="checkbox"/> Area for State Improvement – Recommendations Required <input type="checkbox"/> Good Practice		
Explanation:	<p>Timely entry of data into Federal data systems is important to EPA's mission. The Agency must ensure that the most up-to-date and reliable information is available to regulators and to the public. For example, untimely permit schedule violations could mislead the public to think a system had not resolved permit schedule violations although compliance was actually achieved.</p> <p>Twenty-nine (94%) of the required frozen and production data elements from ODS were timely. Upon further examination of two data metrics that were not timely, the differences in the reported numbers are 10% or less and are attributed to the timing of data retrievals. The timeliness of these two data metrics does not indicate a systemic issue and is not a concern.</p>		
Metric(s) and Quantitative Value	Data Metric	Frozen Data	Production Data
	1b4 – Manual override of RNC/SNC	2.6% (1/39)	5.1% (2/39)
	7b - Facilities with unresolved permit schedule violations	50% (6/12)	41.7% (5/12)
State Response	No comments on the findings.		
Action(s):	No further action needed.		

<b>CWA Element 4 - Completion of Commitments.</b>									
<b>Degree to which all enforcement/compliance commitments in relevant agreements (i.e., PPAs, PPGs, categorical grants, CMS plans, authorization agreements, etc.) are met and any products or projects are completed.</b>									
Finding:	North Carolina met most compliance and enforcement commitments in their FY2008 CWA §106 Grant Workplan. However, three planned inspection grant commitments were not met.								
Is this finding a(n) (select one):	<input type="checkbox"/> Meets SRF Program Requirements <input type="checkbox"/> Area for State Attention <input checked="" type="checkbox"/> Area for State Improvement – Recommendations Required <input type="checkbox"/> Good Practice								
Explanation:	<p>The compliance and enforcement tasks of North Carolina’s FY 2008 CWA §106 Grant Workplan include: planned inspections; data management; reporting and enforcement; pretreatment facilities; and policy, strategy and management for the fiscal year. North Carolina’s FY2008 Grant Workplan contained 24 tasks for the above compliance and enforcement requirements (for details see attached North Carolina’s FY 2008 CWA §106 Grant Workplan).</p> <p>Task 1 of the Grant Workplan, Conducting and Planning Inspections includes 11 planned inspection commitments. Three (27%) of the planned inspection commitments for Task 1a in the Grant Workplan were not met:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="text-align: right; border-bottom: 1px solid black;"><u>Inspection Commitment Not Met</u></th> </tr> </thead> <tbody> <tr> <td>1) Storm water (SW) - Construction</td> <td style="text-align: right;">858 out of 1200</td> </tr> <tr> <td>2) MS4 – Phase I</td> <td style="text-align: right;">0 out of 1</td> </tr> <tr> <td>3) MS4 – Phase II</td> <td style="text-align: right;">14 out of 20</td> </tr> </tbody> </table> <p>States are expected to meet 100% of grant commitments, so this is an area for state improvement.</p> <p>For Metric 4b, twenty-three (95.8%) planned tasks of the Grant Workplan were met.</p>		<u>Inspection Commitment Not Met</u>	1) Storm water (SW) - Construction	858 out of 1200	2) MS4 – Phase I	0 out of 1	3) MS4 – Phase II	14 out of 20
	<u>Inspection Commitment Not Met</u>								
1) Storm water (SW) - Construction	858 out of 1200								
2) MS4 – Phase I	0 out of 1								
3) MS4 – Phase II	14 out of 20								
Metric(s) and Quantitative Value:	<p><u>Metric</u></p> <p>4a – Planned inspections completed: <span style="float: right;">72.7%</span>            (8 of 11)</p> <p>4b – Planned commitments complete: <span style="float: right;">95.8 %</span>            (23 of 24)</p> <p>(For more details, see attached North Carolina FY2008 CWA §106 Grant Workplan)</p>								
State Response:	No comments on the findings.								

Action(s):	North Carolina should promptly take actions to fulfill the commitments in the CWA §106 Grant Workplan including the completion of all inspection commitments. Beginning in FY 2011, North Carolina should meet all §106 workplan commitments by September 30 of the fiscal year. EPA Region 4 Clean Water Enforcement Branch will continue to monitor progress of this recommendation through the annual CWA §106 grant review process.
------------	---

**CWA Element 5 – Inspection Coverage**

**Degree to which state completed the universe of planned inspections/compliance evaluations (addressing core requirements).**

Finding:	North Carolina met the core inspection requirements in their FY2008 CWA §106 Grant Workplan.
----------	--

Is this finding a(n) (select one):	<input checked="" type="checkbox"/> Meets SRF Program Requirements <input type="checkbox"/> Area for State Attention <input type="checkbox"/> Area for State Improvement – Recommendations Required <input type="checkbox"/> Good Practice
------------------------------------	---

Explanation:	<p>Element 5 measures the degree that core inspection coverage is completed. In the OECA FY2008 National Program Managers (NPM) Guidance, there is a national goal of 100% annual inspection coverage of all major NPDES facilities, or equivalent coverage of a combination of major and priority minor facilities. Per the CWA Compliance Monitoring Strategy (CMS), dated October 17, 2007, the regions and states may negotiate alternative inspection plans to the inspection requirements in the annual NPM Guidance. In their FY2008 CWA §106 Grant Workplan, EPA and North Carolina committed to inspect 50% of their NPDES majors (115 major facility inspections) and 20% of their NPDES minor municipal and non-municipal facilities (217 non-major individual permit inspections) as well as other inspection commitments discussed in Element 4. This meets the alternative inspection plan requirements of the CMS.</p> <p>During the end-of-year grant workplan review, the region confirmed that North Carolina met their FY2008 core inspection commitments, and in fact, the core inspection commitments were substantially exceeded based on the CMS alternative plan.</p>
--------------	---

Metric(s) and Quantitative Value:	Data Metrics	Grant Workplan Goal	Data Metrics
	5a - Inspection Coverage - Majors		50% (115 majors)
5b1- Inspection Coverage - Non-major individual permits		20% (217 non-majors)	49.7% (540 non-majors)
5b2- Inspection Coverage – non-major general permits		177	824

State Response:	No comments on the findings.
Action(s):	No further action is needed.

<b>CWA Element 6 – Quality of Inspection or Compliance Evaluation Reports</b>	
<b>Degree to which inspection or compliance evaluation reports properly document observations, are completed in a timely manner, and include accurate description of observations.</b>	
Finding	North Carolina’s inspection reports were determined to be complete. However, in a few instances, the reports lacked the necessary documentation so proper compliance determinations could be drawn. The review identified issues with the timeliness of completing inspection reports.
Is this finding a(n) (select one):	<input type="checkbox"/> Meets SRF Program Requirements <input type="checkbox"/> Area for State Attention <input checked="" type="checkbox"/> Area for State Improvement – Recommendations Required <input type="checkbox"/> Good Practice
Explanation:	<p>Twenty-two inspection reports were reviewed under this element, which evaluates the completeness of the inspection reports. Of the inspection reports reviewed, 95.5% (21 of 22) of the reports contained most of the critical information found on the SRF inspection checklist that was used for the review.</p> <p>North Carolina is thorough in the documentation of inspection observations and findings so proper compliance determinations could be drawn for 82% (18 of 22) of inspection reports, Metric 6c. The reasons the remaining four reports did not have sufficient documentation such that proper compliance determination could be drawn were:</p> <ol style="list-style-type: none"> <li>1) Inspection report or transmittal letter discussed deficiencies and requested additional information, but one report did not include a reason for the request and three reports cited deficiencies that did not relate to the permit; and</li> <li>2) Narratives or supporting evidence was insufficient to make compliance determinations (one report) For example, North Carolina should consider including more comprehensive narrative inspector observations and documentation, general discussions and/or descriptions of field activities in all inspection reports. Comprehensive narrative descriptions should be adequately included in inspection reports to allow proper compliance determinations to occur, so this is an area of state attention.</li> </ol> <p>As to the timeliness of completing inspection reports, the SRF CWA File Review Plain Language Guide (PLG) states that the timeline for completing inspection reports should be the timeline in the state-specific Enforcement Management System (EMS). North Carolina’s EMS has an inspection report completion timeline of 30 days of the inspection date (or receipt of</p>

	<p>lab results, if sampling is involved).</p> <p>The results of comparing the 22 inspection reports reviewed to this timeframe showed:</p> <ul style="list-style-type: none"> <li>• 13 of 22 inspection reports reviewed (59%) were completed within 30 days</li> <li>• 8 inspection reports were completed within 3 months</li> <li>• 1 inspection report was completed within 6 months</li> </ul> <p>This is an area for state improvement.</p>										
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">File Metric</th> <th style="text-align: right;">State</th> </tr> </thead> <tbody> <tr> <td>6a – inspection reports reviewed</td> <td style="text-align: right;">22</td> </tr> <tr> <td>6b - % of inspection reports that were complete (21 of 22)</td> <td style="text-align: right;">96%</td> </tr> <tr> <td>6c - % reports reviewed with sufficient documentation for an accurate compliance determination (18 of 22)</td> <td style="text-align: right;">82%</td> </tr> <tr> <td>6d - % inspection reports reviewed that were timely (13 of 22)</td> <td style="text-align: right;">59%</td> </tr> </tbody> </table>	File Metric	State	6a – inspection reports reviewed	22	6b - % of inspection reports that were complete (21 of 22)	96%	6c - % reports reviewed with sufficient documentation for an accurate compliance determination (18 of 22)	82%	6d - % inspection reports reviewed that were timely (13 of 22)	59%
File Metric	State										
6a – inspection reports reviewed	22										
6b - % of inspection reports that were complete (21 of 22)	96%										
6c - % reports reviewed with sufficient documentation for an accurate compliance determination (18 of 22)	82%										
6d - % inspection reports reviewed that were timely (13 of 22)	59%										
State Response:	No comments on the findings.										
Action(s):	Within four months of the date of the Final SRF Report, North Carolina should develop and implement a final action plan to ensure timely completion of inspection reports. North Carolina should submit to EPA for review the draft action plan and implementation strategy.										

<b>CWA Element 7 – Identification of Alleged Violations.</b>	
<b>Degree to which compliance determinations are accurately made and promptly reported in the national database based upon compliance monitoring report observations and other compliance monitoring information (e.g., facility-reported information).</b>	
Finding:	North Carolina accurately makes compliance determinations as well as identifies and reports single event violations (SEVs).
Is this finding a(n) (select one):	<input type="checkbox"/> Meets SRF Program Requirements <input checked="" type="checkbox"/> Area for State Attention <input type="checkbox"/> Area for State Improvement – Recommendations Required <input type="checkbox"/> Good Practice
Explanation:	<p>Data Metrics 7a1 tracks SEVs for active majors and Data Metric 7a2 tracks SEVs for non-majors (reported in PCS or ICIS-NPDES). SEVs are one-time or long-term violations discovered by the State typically during inspections (and not through automated reviews of Discharge Monitoring Reports). North Carolina entered 18 SEVs in FY2008 for Data Metric 7a1 and 177 SEVs for Data Metric 7a2. This is a significant improvement over Round 1 SRF Findings.</p> <p>Data Metrics 7b and 7c report, respectively, the percent of facilities with unresolved compliance schedule violations at the end FY2008, and the percent of facilities with unresolved permit schedule violations at the end of the FY 2008. With respect to Data Metric 7b, North Carolina’s data shows 6 of 12 permittees (50.0%) with unresolved compliance schedule violations.</p>

	<p>Since this is above the national average of 33.2%, all six files were reviewed to see if the compliance violation had been resolved but not updated in PCS. In 3 of 6 files, documentation existed showing that the violation had been addressed but not updated in PCS and 3 files indeed had unresolved compliance schedule problems. Although the timeliness issue for Data Metric 7b is also discussed in Element 3, there is no national goal for accuracy of compliance schedule information in PCS. The State has now updated the system. Since Data Metric 7b is well above the national average, this is an area for state attention. Data Metric 7c, shows one permittee with unresolved permit schedule milestones due in FY 2008. This is an EPA lead facility and is outside the scope of the review.</p> <p>Data Metric 7d reports the percent of major facilities with DMR violations in PCS. For North Carolina, 111 of 214 major facilities (51.9%) have DMR violations reported to the national database. Data Metric 7d is below the national average of 54.8% and there is no national goal, this meets SRF requirements.</p> <p>Five facility files were examined to see if violations that appear on DMRs are correctly recorded in PCS. For four facilities, all violations were found and PCS was coded correctly. For the fifth facility, there was a total residual chlorine (TRC) DMR violation that was generated in the state system, but was manually corrected by the State before the violation was reflected in PCS. Upon further evaluation, the need for this correction was a result of North Carolina’s new TRC standard. The data system is not updated to reflect the revised standard. North Carolina may want to ensure that the revised standard is reflected in the state data system even though no actions are required by EPA.</p> <p>File Review Metric 7e measures the percent of inspection reports reviewed that led to accurate compliance determinations. According to the File Metric Worksheet for 7e, evaluations must also consider whether the report was signed by management or senior enforcement officers. As discussed in Element 6, 22 inspection reports were reviewed. Twenty-one (95.5%) inspection reports included evidence that accurate compliance determinations were made and were signed by appropriate officials.</p>														
<p>Metric(s) and Quantitative Value:</p>	<table border="1"> <thead> <tr> <th data-bbox="436 1507 1161 1539">Data Metrics</th> <th data-bbox="1161 1507 1416 1539">State Frozen Data</th> </tr> </thead> <tbody> <tr> <td data-bbox="436 1539 1161 1575">7a1 - # single event violations (SEVs) at active majors</td> <td data-bbox="1161 1539 1416 1575">18</td> </tr> <tr> <td data-bbox="436 1575 1161 1610">7a2 - # single event violations (SEVs) at non-majors</td> <td data-bbox="1161 1575 1416 1610">177</td> </tr> <tr> <td data-bbox="436 1610 1161 1646">7b - % facilities with unresolved compliance schedule violations</td> <td data-bbox="1161 1610 1416 1646">50%</td> </tr> <tr> <td data-bbox="436 1646 1161 1682">7c - % facilities with unresolved permit schedule violations</td> <td data-bbox="1161 1646 1416 1682">N/A</td> </tr> <tr> <td data-bbox="436 1682 1161 1717">7d - Major facilities with DMR violations</td> <td data-bbox="1161 1682 1416 1717">51.9%</td> </tr> <tr> <td data-bbox="436 1717 1161 1793">File metric 7e - % inspection reports reviewed that led to an accurate compliance determination (21 of 22)</td> <td data-bbox="1161 1717 1416 1793">95.5%</td> </tr> </tbody> </table>	Data Metrics	State Frozen Data	7a1 - # single event violations (SEVs) at active majors	18	7a2 - # single event violations (SEVs) at non-majors	177	7b - % facilities with unresolved compliance schedule violations	50%	7c - % facilities with unresolved permit schedule violations	N/A	7d - Major facilities with DMR violations	51.9%	File metric 7e - % inspection reports reviewed that led to an accurate compliance determination (21 of 22)	95.5%
Data Metrics	State Frozen Data														
7a1 - # single event violations (SEVs) at active majors	18														
7a2 - # single event violations (SEVs) at non-majors	177														
7b - % facilities with unresolved compliance schedule violations	50%														
7c - % facilities with unresolved permit schedule violations	N/A														
7d - Major facilities with DMR violations	51.9%														
File metric 7e - % inspection reports reviewed that led to an accurate compliance determination (21 of 22)	95.5%														

State Response:	For data metric 7c, percent facilities with unresolved permit schedule violations, it should be corrected to reflect 0% rather than 100% as the permit in question is an EPA permit. This is noted within the explanation section above, but not correctly reflected in the metric and quantitative value section. For data metric 7b, after uploading omitted compliance schedule data to PCS, the percent of permittees with unresolved compliance schedule violations was reduced from 50 to 25%. With the corrected data, the state’s data is below the national average. The state would like the data correction noted like data metric 1b1 (CWA Element 1) in the metric and quantitative value section.
Action(s):	No formal recommendation is being tracked for this element.

<b>CWA Element 8 – Identification of SNC and HPV</b>	
<b>Degree to which the state accurately identifies significant noncompliance/high priority violations and enters information into the national system in a timely manner.</b>	
Finding	North Carolina generally identifies and adequately reports SNCs into the national database.
Is this finding a(n) (select one):	<input type="checkbox"/> Meets SRF Program Requirements <input checked="" type="checkbox"/> Area for State Attention <input type="checkbox"/> Area for State Improvement – Recommendations Required <input type="checkbox"/> Good Practice
Explanation:	<p>Element 8 addresses: (1) the accurate identification of SNCs and (2) the timely entry of SEVs that are SNCs into PCS.</p> <p><u>(1) Accurate identification of SNCs</u>            Data Metric 8a1, active major facilities in SNC during the reporting year, lists 38 facilities as SNC during FY 2008. For Data Metric 8a2, percent of active major facilities in SNC during the reporting year, the metric shows 17.8% (38/214). The national average is 23.5%. North Carolina’s SNC percentage is below the national average and is at 17%.</p> <p>To verify the accuracy of SNC data in PCS, eight SNC facility files were evaluated during the SRF review process to see if the SNC designations were supported by the files. Of the eight facility files reviewed: six facilities were confirmed as SNCs; one facility had DMR data found in files notwithstanding that PCS showed them as DMR non-receipt; and one facility SNC was invalidated due to a lab error. Since 25% of the files reviewed (2 of 8) did not support the SNC designations in PCS this is an area for state attention.</p> <p><u>(2) Accurate identification of SEVs as SNC &amp; Timely entry of SEVs that are SNCs into PCS</u>            As discussed in Element 7, North Carolina reports SEVs into PCS. Of the three SEVs evaluated, all were properly identified as non-SNCs. Thus, timely entry of SEV that are SNCs into PCS could not be evaluated.</p>

Metric(s) and Quantitative Value	<u>Data Metric</u>	<u>National Average</u>	<u>State</u>
	8a1 - Number of major facilities in SNC		38
	8a2 - % active major facilities in SNC	23.5%	17.8%
	<u>File Metric</u>		<u>State</u>
	8b - % SEVs that are accurately reported as SNCs or non-SNCs		100%
	8c - % SEVs that are SNCs timely reported in PCS		N/A
State Response	No comments on the findings.		
Action(s):	No formal recommendation is being tracked for this element.		

<b>CWA Element 9 - Enforcement Actions Promote Return to Compliance</b>	
Degree to which state enforcement actions include required corrective action (i.e., injunctive relief or other complying actions) that will return facilities to compliance in a specific time frame.	
Finding	North Carolina's enforcement actions generally do not include complying or corrective action that will return facilities to compliance in a specified time frame.
Is this finding a(n) (select one):	<input type="checkbox"/> Meets SRF Program Requirements <input type="checkbox"/> Area for State Attention <input checked="" type="checkbox"/> Area for State Improvement – Recommendations Required <input type="checkbox"/> Good Practice
Explanation:	<p>As referenced in the 1989 National EMS, formal enforcement “requires actions to achieve compliance, specifies a timetable, contains consequences for noncompliance that are independently enforceable without having to prove the original violation, and subjects the person to adverse legal consequences for noncompliance.”</p> <p>North Carolina has a number of administrative enforcement responses, including Notice of Violations (NOVs), Civil Penalty Assessment (CPA)/Fast Track, Special Orders, and Special Orders by Consent (SOCs). Special Orders and SOC's may be considered ‘formal’ enforcement actions and these orders require corrective action that will return facilities to compliance within a specified timeframe. The CPA and NOVs are considered informal enforcement actions and do not include injunctive relief, a return to compliance schedule, and other formal action components.</p> <p>According to North Carolina’s Administrative Code, dated August 3, 1992, the Environmental Management Commission (EMC) may issue Special Orders “without the consent of the person” affected. However, this authority has not been delegated to the Director of the Division of Water Quality. The EMC has delegated to the Director of the Division of Water Quality the authority to take final action on most SOC's. In addition, the permittee must request a Water Quality SOC, demonstrate that the NPDES violations are not due to improper operation, management or maintenance, and meet other conditions set forth in the code.</p>

	<p>Although North Carolina has the option of utilizing SOCs or Special Orders to address significant non-compliance and return facilities to compliance, the state typically chooses the informal route. In FY 2009, North Carolina issued 2 formal actions that were SOCs and 107 informal actions at major facilities. In the same year the Commission issued no Special Orders. North Carolina’s rare use of formal actions and preference to use informal actions that do not include injunctive relief, a return to compliance schedule, and other formal action components is an area for state improvement. For File Metric 9a, EPA reviewed a total of 26 enforcement actions, 14 NOVs, 12 CPAs. All were informal enforcement actions.</p> <p>File Metric 9b is the percentage of the SNC enforcement actions reviewed that returned or will return the facility to compliance for major facilities. Five SNC enforcement actions, 3 NOVs and 2 CPAs, were reviewed for FY 2008. None of the enforcement actions reviewed contained requirements that have returned or will return the source to compliance. It is EPA’s expectation that ongoing SNC violations will be subject to a formal enforcement action which contains requirements that will or have already returned the facility to compliance. This is an area for state improvement.</p> <p>File Metric 9c is the percentage of non-SNCs enforcement actions reviewed that returned or will return the facility to compliance. Twenty-one non-SNC enforcement actions, 11 NOVs and 10 CPAs were reviewed. Six of the 21 (29%) enforcement actions reviewed had compliance schedules that have or will return the non-SNC facility to compliance. The other 15 enforcement actions taken at non-SNC facilities did not have compliance schedules. It is expected that enforcement actions should result in a facility’s return to compliance. The high percent of enforcement actions reviewed that did not require the facility to return to compliance is an area for state improvement.</p> <p>Based on File Metrics 9b and 9c discussions above, North Carolina generally does not include complying or corrective actions that will return facilities to compliance in a specific time frame in their enforcement actions. North Carolina’s Round 1 SRF report recommended that “a return to compliance date should be specified in the orders”. This further supports the designation of this element as an area for state improvement.</p>								
<p>Metric(s) and Quantitative Value</p>	<table border="1"> <thead> <tr> <th data-bbox="428 1543 1279 1581">File Metric</th> <th data-bbox="1279 1543 1432 1581">Results</th> </tr> </thead> <tbody> <tr> <td data-bbox="428 1581 1279 1619">Metric 9a – # of Enforcement Actions Reviewed</td> <td data-bbox="1279 1581 1432 1619">26</td> </tr> <tr> <td data-bbox="428 1619 1279 1692">Metric 9b - % of Enforcement Responses that have or will return SNC to compliance (0/5)</td> <td data-bbox="1279 1619 1432 1692">0%</td> </tr> <tr> <td data-bbox="428 1692 1279 1766">Metric 9c - % of Enforcement Responses that have or will return non-SNC to compliance (6/21)</td> <td data-bbox="1279 1692 1432 1766">29%</td> </tr> </tbody> </table>	File Metric	Results	Metric 9a – # of Enforcement Actions Reviewed	26	Metric 9b - % of Enforcement Responses that have or will return SNC to compliance (0/5)	0%	Metric 9c - % of Enforcement Responses that have or will return non-SNC to compliance (6/21)	29%
File Metric	Results								
Metric 9a – # of Enforcement Actions Reviewed	26								
Metric 9b - % of Enforcement Responses that have or will return SNC to compliance (0/5)	0%								
Metric 9c - % of Enforcement Responses that have or will return non-SNC to compliance (6/21)	29%								
<p>State Response</p>	<p>No comments on the findings.</p>								

Action(s):	North Carolina should immediately utilize formal enforcement actions to address SNCs and other violations, as appropriate. These actions should include injunctive relief, compliance schedules, and other conditions of formal enforcement that are incorporated into administrative consent or unilateral orders. Region CWEB will monitor and take necessary action, as appropriate, to ensure formal enforcement actions are used to address SNCs and other violations. Quarterly, EPA and North Carolina will discuss enforcement activity during Watch List meetings. EPA will determine when North Carolina has sufficiently met this SRF requirement.
------------	---

**CWA Element 10 - Timely and Appropriate Action**

**Degree to which a state takes timely and appropriate enforcement actions in accordance with policy relating to specific media.**

Finding:	North Carolina does not take appropriate enforcement action for their SNCs and generally does not take timely enforcement action for SNCs in accordance with the NPDES Enforcement Management System (EMS).
Is this finding a(n) (select one):	<input type="checkbox"/> Meets SRF Program Requirements <input type="checkbox"/> Area for State Attention <input checked="" type="checkbox"/> Area for State Improvement – Recommendations Required <input type="checkbox"/> Good Practice
Explanation:	<p>The 1989 National EMS and the May 29, 2008, memo <i>Clarification of NPDES EMS Guidance on Timely and Appropriate Response to Significant Noncompliance</i> defines timely and appropriate enforcement response for SNC violations at major facilities. These documents state that timely action is where a formal enforcement action is taken within 60 days of the SNC violation appearing on a 2<sup>nd</sup> quarterly non-compliance report (QNCR). Formal enforcement is defined in Element 9.</p> <p>Data Metric 10a, major facilities without timely action, shows 15.4% (33 of 214) SNCs with untimely enforcement action. The national goal for this data metric is less than 2%. Since North Carolina substantially exceeds this timeliness goal although under the national average of 16.5%, this is an area for state improvement.</p> <p>File Metric 10b is used to assess the accuracy of data metric 10a. Five files with SNCs at major sources were reviewed. Only 60% (3 of 5) showed a timely enforcement action. This supports the data in metric 10a and the need for state improvement.</p> <p>File Metric 10c assesses whether the enforcement action taken for a SNC is appropriate, meaning the action requires the facility to come into compliance on a schedule and the action meets other formal enforcement criteria discussed in Element 9. None of the 5 files reviewed contained a formal enforcement action for major SNCs. Per the PLG, <i>in the rare instance when formal enforcement action is not taken, the State is expected to have a written record that clearly justifies why the alternative action</i></p>

	<p><i>(informal action or permit modification)</i> was more appropriate. Although actions were taken for the 5 files reviewed, North Carolina’s files did not include justifications for any informal or alternative action that was taken. Since North Carolina must ensure that SNCs are addressed according to the NPDES EMS Guidance on Timely and Appropriate Response, this is an area for state improvement.</p> <p>File Metric 10d assesses whether the enforcement action taken for a non-SNC is appropriate. North Carolina’s EMS includes an NPDES Enforcement Response Guide that discusses the full range of enforcement responses from informal actions (warning letter, Notice of Violation, Civil Penalty Assessment) and formal actions for noncompliance. EPA uses the State guide to evaluate non-SNC violations and pays particular attention to repeat or multiple violations of the same nature. Eleven of 13 (84.6%) enforcement responses appropriately addressed non-SNCs.</p> <p>File Metric 10e examines the timeliness of enforcement for non-SNCs. Since there is no EPA guidance for timeliness of enforcement for non-SNCs and North Carolina did not include timeframes for “obvious noncompliance” in the State EMS, File Metric 10e was not evaluated.</p>																					
<p>Metric(s) and Quantitative Value:</p>	<table border="1"> <thead> <tr> <th>Data Metric</th> <th>National goal</th> <th>State</th> </tr> </thead> <tbody> <tr> <td>10a - Major facilities without timely action</td> <td>&lt;2%</td> <td>15.4%</td> </tr> <tr> <td colspan="2"><u>File Metric</u></td> <td><u>State</u></td> </tr> <tr> <td>10b - % timely SNC enforcement responses (3 of 5)</td> <td></td> <td>60%</td> </tr> <tr> <td>10c - % of enforcement responses that appropriately address SNC violations (0 of 5)</td> <td></td> <td>0 %</td> </tr> <tr> <td>10d - % of enforcement responses that appropriately address non-SNC violations (11 of 13)</td> <td></td> <td>85 %</td> </tr> <tr> <td>10e - % timely non-SNC enforcement responses</td> <td></td> <td>N/A</td> </tr> </tbody> </table>	Data Metric	National goal	State	10a - Major facilities without timely action	<2%	15.4%	<u>File Metric</u>		<u>State</u>	10b - % timely SNC enforcement responses (3 of 5)		60%	10c - % of enforcement responses that appropriately address SNC violations (0 of 5)		0 %	10d - % of enforcement responses that appropriately address non-SNC violations (11 of 13)		85 %	10e - % timely non-SNC enforcement responses		N/A
Data Metric	National goal	State																				
10a - Major facilities without timely action	<2%	15.4%																				
<u>File Metric</u>		<u>State</u>																				
10b - % timely SNC enforcement responses (3 of 5)		60%																				
10c - % of enforcement responses that appropriately address SNC violations (0 of 5)		0 %																				
10d - % of enforcement responses that appropriately address non-SNC violations (11 of 13)		85 %																				
10e - % timely non-SNC enforcement responses		N/A																				
<p>State Response:</p>	<p>The state requests the analysis used to develop the &lt;2% national performance goal.</p>																					
<p>Action(s):</p>	<p>Within four months of the date of the Final SRF Report, North Carolina, in consultation with EPA Region 4 Clean Water Act Enforcement Branch, should:</p> <ol style="list-style-type: none"> <li>(1) Modify the EMS to reflect the need to address SNCs through formal enforcement.</li> <li>(2) Ensure that appropriate and timely enforcement is used to address SNCs in accordance with the NPDES EMS.</li> </ol> <p>EPA Region 4 Clean Water Enforcement Branch will evaluate the number of formal enforcement responses executed and timeliness of SNCs through the quarterly CWA Watch List review process and will discuss with the State the causes and recommended solutions to improve SNC timely and appropriate enforcement response during the Quarterly Watch List Meeting.</p>																					

<b>CWA Element 11 - Penalty Calculation Method</b>					
<b>Degree to which state documents in its files that initial penalty calculation includes both gravity and economic benefit calculations, appropriately using the BEN model or other method that produces results consistent with national policy.</b>					
Finding	North Carolina does not document the gravity and economic benefit components consistent with EPA's penalty policy.				
Is this finding a(n) (select one):	<input type="checkbox"/> Meets SRF Program Requirements <input type="checkbox"/> Area for State Attention <input checked="" type="checkbox"/> Area for State Improvement – Recommendations Required <input type="checkbox"/> Good Practice				
Explanation:	<p>Element 11 examines the State documentation of their penalty calculations. Specifically, the metric is determining if the state penalty includes a gravity component of the penalty, and where appropriate, economic benefit. North Carolina General Statute GS 143B-282.1(b) requires the program to consider both the economic benefit and gravity in penalty calculations.</p> <p>North Carolina did not include economic benefit or gravity calculation sheets for any of the 12 files reviewed. Therefore, EPA cannot determine if the economic benefit and gravity portion of the penalties are assessed or recovered nor was there any evidence that the BEN model or equivalent is used or was used appropriately. This is a continuing issue from Round 1 of the SRF, and is an area for state improvement.</p>				
Metric(s) and Quantitative Value:	<table border="1"> <thead> <tr> <th>File Metric</th> <th>State</th> </tr> </thead> <tbody> <tr> <td>11a - % of penalty calculations reviewed that consider and include where appropriate gravity and economic benefit, consistent with national policy (0 of 12)</td> <td>0%</td> </tr> </tbody> </table>	File Metric	State	11a - % of penalty calculations reviewed that consider and include where appropriate gravity and economic benefit, consistent with national policy (0 of 12)	0%
File Metric	State				
11a - % of penalty calculations reviewed that consider and include where appropriate gravity and economic benefit, consistent with national policy (0 of 12)	0%				
State Response:	No comments on the findings.				
Action(s):	Within four months of the date of the final report, North Carolina should develop and implement final procedures for the documentation of gravity and economic benefit calculations, appropriately using the BEN model or other equivalent method that produces results consistent with EPA national policy. North Carolina should submit draft procedures to EPA for review before finalization.				

<b>CWA Element 12 - Final Penalty Assessment and Collection</b>	
<b>Degree to which differences between initial and final penalty are documented in the file along with a demonstration in the file that the final penalty was collected.</b>	
Finding	North Carolina does document the rationale between their initial and assessed penalty. Files reviewed generally had documentation that the penalty was collected.
Is this finding a(n) (select one):	<input checked="" type="checkbox"/> Meets SRF Program Requirements <input type="checkbox"/> Area for State Attention <input type="checkbox"/> Area for State Improvement – Recommendations Required <input type="checkbox"/> Good Practice

Explanation:	<p>North Carolina documents the difference between initial and final assessed penalty calculations and there is documentation that the penalties are collected.</p> <p>For File Metric 12a, 92% (11 of 12) enforcement actions files documented the difference and rationale between the initial and final assessed penalty amounts. Although one facility requested reduction of penalty due to ability to pay concerns, penalties were typically the same between initial and final assessed penalty amounts.</p> <p>For File Metric 12b, 92% (11 of 12) of the enforcement actions with penalties documented collection of penalty. Copies of the checks or check stubs were found in the enforcement files.</p>						
Metric(s) and Quantitative Value:	<table border="1"> <tr> <td><u>File Metric</u></td> <td><u>State</u></td> </tr> <tr> <td>12a - % of formal enforcement actions that document the difference and rational between initial and final assessed penalty (11 of 12)</td> <td>92%</td> </tr> <tr> <td>12b - % of final enforcement actions that document collection of final penalty (11 of 12)</td> <td>92%</td> </tr> </table>	<u>File Metric</u>	<u>State</u>	12a - % of formal enforcement actions that document the difference and rational between initial and final assessed penalty (11 of 12)	92%	12b - % of final enforcement actions that document collection of final penalty (11 of 12)	92%
<u>File Metric</u>	<u>State</u>						
12a - % of formal enforcement actions that document the difference and rational between initial and final assessed penalty (11 of 12)	92%						
12b - % of final enforcement actions that document collection of final penalty (11 of 12)	92%						
State Response:	No comments on the findings. However, the use of the term “formal enforcement actions” in the metric and quantitative value section above differs from the 1989 National EMS definition as indicated in CWA Element 9 above. It would help the state and ensure fewer discrepancies (as noted in the explanation section for CWA Element 1) if EPA employed 1 definition for the term formal enforcement.						
Action(s):	No further action is required.						

**RCRA Program:**

<b>RCRA Element 1 – Data Completeness</b>					
<b>Degree to which the Minimum Data Requirements are complete.</b>					
Finding	North Carolina has entered the Minimum Data Requirements into RCRAInfo for regulated universes, compliance monitoring and enforcement information.				
This finding (select one):	<input checked="" type="checkbox"/> Meets SRF Program Requirements <input type="checkbox"/> Area for State Attention <input type="checkbox"/> Area for State Improvement – Recommendations Required <input type="checkbox"/> Good Practice				
Explanation:	Element 1 is supported by SRF Data Metrics 1a through 1g, and measures the completeness of the data in RCRAInfo. EPA provided the SRF data metrics to the State for comment on August 4, 2009. North Carolina did not identify any data inaccuracies; therefore, the frozen RCRAInfo data is considered complete.				
Metric(s) and Quantitative	<table border="1"> <tr> <td><u>Data Metrics</u></td> <td><u>Frozen State Data</u></td> </tr> <tr> <td>1a1 - # of operating TSDFs in RCRAInfo</td> <td>24</td> </tr> </table>	<u>Data Metrics</u>	<u>Frozen State Data</u>	1a1 - # of operating TSDFs in RCRAInfo	24
<u>Data Metrics</u>	<u>Frozen State Data</u>				
1a1 - # of operating TSDFs in RCRAInfo	24				

Value:	1a2 - # of active LQGs in RCRAInfo	457
	1a3 - # of active SQGs in RCRAInfo	1,931
	1a5 - # of LQGs per latest official biennial report	410
	1b1 - # of inspections	1,430
	1c1 - # of sites with violations	171
	1d2 - Informal Actions: number of actions	118
	1e1 - SNC: number of sites with new SNC	16
	1e2 - SNC: number of sites in SNC	22
	1f2 - Formal action: number taken	41
	1g - Total amount of assessed penalties	\$423,697
State Response:	No comment.	
Action(s):	No further action is needed.	

<b>RCRA Element 2 – Data Accuracy</b>	
<b>Degree to which data reported into the national system is accurately entered and maintained (example, correct codes used, dates are correct, etc.).</b>	
Finding:	Reporting and maintaining accurate data in RCRAInfo is a concern in North Carolina. Relevant information was either missing from the file or inaccurately reported in RCRAInfo.
This finding (select one):	<input type="checkbox"/> Meets SRF Program Requirements <input type="checkbox"/> Area for State Attention <input checked="" type="checkbox"/> Area for State Improvement – Recommendations Required <input type="checkbox"/> Good Practice
Explanation:	<p>RCRA Element 2 is supported by data metrics 2a, 2b, and file review metric 2c and measures the accuracy of data in RCRAInfo.</p> <p>Data metrics 2a1 and 2a2 measure the closeness of the SNC determination to date of the formal action. This is a potential indicator of enforcement cases where the SNC entry was withheld until the enforcement action was taken. North Carolina had 41 formal actions in FY2008 and all actions were taken after the SNC determination. Therefore, delayed SNC entry into RCRAInfo is not a concern.</p> <p>Data metric 2b measures the longstanding RCRA secondary violators (non-SNCs). According to the RCRA Enforcement Response Policy (ERP), all secondary violators should be returned to compliance within 240 days, or elevated to SNC status and addressed through formal enforcement. For data metric 2b, North Carolina had one facility in SV greater than 240 days in FY2008. Since the time of the SRF review, the facility has been evaluated and resolved by correcting a data entry error. According to North Carolina, the wrong identification number was inadvertently entered into RCRAInfo. This one situation does not indicate a systemic problem, thus, no action is needed.</p> <p>File review metric 2c measures the percentage of files where corresponding data was missing or reported inaccurately in RCRAInfo. If any relevant</p>

	<p>information in the inspection reports, enforcement actions, or civil and administrative enforcement responses is missing or reported inaccurately in RCRAInfo, the data for that file is considered inaccurate. A total of 23 files were reviewed. Of the 23 files reviewed, 14 were SNC facilities. Only ten of the 23 files (44%) had complete and accurate data reported in RCRAInfo. Thirteen files had inaccurate elements either in the file or RCRAInfo.</p> <ul style="list-style-type: none"> <li>• In one file, the notice of violation and the inspection dates did not match the dates entered in RCRAInfo.</li> <li>• In another file, the date the settlement agreement was signed by North Carolina did not match the date in RCRAInfo.</li> <li>• The remaining 11 files with inaccuracies were SNC files that had incorrect SNN codes entered in RCRAInfo (meaning, no longer a significant non-complier). The facilities were coded as SNN as the date of the initial 3008(a) compliance order rather than the date that the facility returned to compliance or was placed on a compliance schedule through a final order, as outlined in the RCRA Enforcement Response Policy.</li> </ul> <p>The SNN coding constitutes a significant problem and is an area for state improvement. The premature SNN designation in RCRAInfo does not present accurate facility compliance status and enforcement response times. As a result, North Carolina has recently created quality control procedures, which includes assigning a staff person to assist in the implementation of these procedures, to ensure that data between the state files and RCRAInfo are being entered into RCRAInfo in accordance with EPA guidance and applicable policies.</p>												
<p>Metric(s) and Quantitative Value:</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Data Metrics</u></th> <th style="text-align: right;"><u>State</u></th> </tr> </thead> <tbody> <tr> <td>2a1 - # of sites SNC determinations made on day of formal action</td> <td style="text-align: right;">0</td> </tr> <tr> <td>2a2 - # of sites SNC determinations made within one week of formal action</td> <td style="text-align: right;">0</td> </tr> <tr> <td>2b – # of sites in violation greater than 240 days</td> <td style="text-align: right;">1</td> </tr> <tr> <td colspan="2"><u>File Review Metric</u></td> </tr> <tr> <td>2c – % files with accurate data elements in RCRAInfo</td> <td style="text-align: right;">44%</td> </tr> </tbody> </table>	<u>Data Metrics</u>	<u>State</u>	2a1 - # of sites SNC determinations made on day of formal action	0	2a2 - # of sites SNC determinations made within one week of formal action	0	2b – # of sites in violation greater than 240 days	1	<u>File Review Metric</u>		2c – % files with accurate data elements in RCRAInfo	44%
<u>Data Metrics</u>	<u>State</u>												
2a1 - # of sites SNC determinations made on day of formal action	0												
2a2 - # of sites SNC determinations made within one week of formal action	0												
2b – # of sites in violation greater than 240 days	1												
<u>File Review Metric</u>													
2c – % files with accurate data elements in RCRAInfo	44%												
<p>State Response:</p>	<p>It has been standard practice to enter the SNN code into RCRAInfo as the date of the initial 3008(A) compliance order. This is the first time that this had been brought to our attention. NC has developed and implemented a quality assurance quality control process to ensure that data being entered into RCRAInfo is in accordance with EPA guidance and applicable policies.</p>												
<p>Action(s):</p>	<p>Within three months after the final issuance of the NC SRF Report, North Carolina should implement procedures for entering SNN evaluation codes in RCRAInfo. The EPA RCRA &amp; OPA Enforcement &amp; Compliance Branch (ROECB) is available to assist the state in the development of these procedures.</p>												

	The progress on the implementation of these procedures with NCDENR will be reviewed during the routine ROECB bi-monthly conference calls. Within nine months of the final date of the SRF report, the recommended procedures should be fully and successfully implemented in accordance with EPA guidance and policy.
--	---

**RCRA Element 3 - Timeliness of Data Entry**

**Degree to which the Minimum Data Requirements are timely.**

Finding	SNCs were entered into RCRAInfo within 60 days of the first day of inspection.
Is this finding a(n) (select one):	<input checked="" type="checkbox"/> Meets SRF Program Requirements <input type="checkbox"/> Area for State Attention <input type="checkbox"/> Area for State Improvement – Recommendations Required <input type="checkbox"/> Good Practice
Explanation:	<p>RCRA Element 3 is supported by SRF Data Metrics 3a. It measures the percentage of SNCs entered into RCRAInfo after 60 days from the first day of the inspection. According to the RCRA ERP, SNCs should be entered into RCRAInfo upon determination, and not withheld to enter at a later time. This metric is calculated by comparing archived monthly RCRAInfo SNC pulls and determining if a two-month lag-time or longer exists between the day of inspection and when the SNC appeared in RCRAInfo. It is used as an indicator of late data entry.</p> <p>In FY2008, data metrics 3a indicates that five of eight SNCs were entered into RCRAInfo within 60 days. The remaining three were removed from the SNC universe for the following reasons:</p> <ul style="list-style-type: none"> <li>• One facility was included as a result of a delinquent fee order for nonpayment of hazardous waste fees, and did not meet the definition of SNC.</li> <li>• Two facilities were listed because previous violations at the facilities had not been linked to RTC (return to compliance) status in RCRAInfo. North Carolina has made the appropriate corrections in RCRAInfo.</li> </ul> <p>When these three facilities are removed from the metric calculation, the SNC universe for this metric becomes 5 instead of 8. Therefore, the percentage entered within 60 days is 100% (5 of 5).</p> <p>Data metric 3b represents a comparison of frozen data with production data for Element 1 metrics. The frozen data shows the data in RCRAInfo at a time when most required data entry for the fiscal year (in this case FY2008) would be expected to be complete. By showing both sets of data (note production data pulled six months after the data should have been in RCRAInfo) one can assess whether any of the data changed appreciably from that in the frozen data set. An initial review of the 16 data metrics</p>

	under Element 1 showed two elements (1E1 and 1E2) with appreciable change between frozen and production data. Upon closer review, the production data for metrics 1E1 and 1E2 included six facilities listed due to delinquent fee orders. If these six facilities are removed from the metric calculation, the production data for metric 1E1 decreased from 23 facilities to 17 facilities (compared to 16 in the frozen data). For data metric 1E2, it decreased from 29 facilities to 23 facilities (compared to 22 in the frozen data). Considering the revised metric calculation, the frozen data for metrics 1E1 and 1E2 did not change appreciably when compared to the production data. Therefore, this is not an area of concern.																		
Metric(s) and Quantitative Value:	<table border="1"> <thead> <tr> <th>Data Metrics</th> <th>State</th> <th>Revised</th> </tr> </thead> <tbody> <tr> <td>3a – % of SNCs that were entered &lt; or = 60 days</td> <td>62.5%</td> <td>100% (5 of 5)</td> </tr> <tr> <td>3b – Comparison of frozen data set for Element 1 metrics (See Below)</td> <td></td> <td></td> </tr> <tr> <td></td> <th>Frozen Data</th> <th>Production Data</th> </tr> <tr> <td>1E1 SNC: number of sites with new SNC</td> <td>16</td> <td>23 (17 Revised)</td> </tr> <tr> <td>1E2 SNC: number of sites in SNC</td> <td>22</td> <td>29 (23 Revised)</td> </tr> </tbody> </table>	Data Metrics	State	Revised	3a – % of SNCs that were entered < or = 60 days	62.5%	100% (5 of 5)	3b – Comparison of frozen data set for Element 1 metrics (See Below)				Frozen Data	Production Data	1E1 SNC: number of sites with new SNC	16	23 (17 Revised)	1E2 SNC: number of sites in SNC	22	29 (23 Revised)
Data Metrics	State	Revised																	
3a – % of SNCs that were entered < or = 60 days	62.5%	100% (5 of 5)																	
3b – Comparison of frozen data set for Element 1 metrics (See Below)																			
	Frozen Data	Production Data																	
1E1 SNC: number of sites with new SNC	16	23 (17 Revised)																	
1E2 SNC: number of sites in SNC	22	29 (23 Revised)																	
State Response:	No comment.																		
Action(s):	No further action is necessary.																		

<b>RCRA Element 4 - Completion of Commitments.</b>							
<b>Degree to which all enforcement/compliance commitments in relevant agreements (i.e., PPAs, PPGs, categorical grants, CMS plans, authorization agreements, etc.) are met and any products or projects are completed.</b>							
Finding	For FY2008, North Carolina met all of the compliance monitoring commitments from their RCRA grant workplan.						
Is this finding a(n) (select one):	<input checked="" type="checkbox"/> Meets SRF Program Requirements <input type="checkbox"/> Area for State Attention <input type="checkbox"/> Area for State Improvement – Recommendations Required <input type="checkbox"/> Good Practice						
Explanation:	In the North Carolina RCRA grant workplan for FY2008, the State included specific <i>commitments</i> and <i>projections</i> for inspection and enforcement activity. There are only grant workplan <i>commitments</i> for compliance monitoring activities, which include core program inspections for TSDs, LQGs, and SQGs. Workplan <i>projections</i> are included for record reviews, compliance assistance visits, workshops, enforcement actions, etc. These projection activities are not always within the control of the State and are therefore not actual workplan commitments. All of the planned compliance monitoring commitments were completed, and the majority of the workplan projections were met in FY2008.						
Metric(s) and Quantitative Value:	<table border="1"> <thead> <tr> <th>File Metric</th> <th>State</th> </tr> </thead> <tbody> <tr> <td>4a – Planned inspections complete</td> <td>100%</td> </tr> <tr> <td>4b – Planned commitments complete</td> <td>100%</td> </tr> </tbody> </table>	File Metric	State	4a – Planned inspections complete	100%	4b – Planned commitments complete	100%
File Metric	State						
4a – Planned inspections complete	100%						
4b – Planned commitments complete	100%						
State Response:	No comment.						
Action(s):	No further action is needed.						

<b>RCRA Element 5 – Inspection Coverage</b>													
<b>Degree to which state completed the universe of planned inspections/compliance evaluations (addressing core requirements and federal, state and regional priorities).</b>													
Finding	North Carolina completed core inspection coverage for RCRA TSDs (two-year coverage) and LQGs (one-year and five-year coverage).												
Is this finding a(n) (select one):	<input checked="" type="checkbox"/> Meets SRF Program Requirements <input type="checkbox"/> Area for State Attention <input type="checkbox"/> Area for State Improvement – Recommendations Required <input type="checkbox"/> Good Practice												
Explanation:	<p>Element 5 is supported by data metrics 5a, 5b, and 5c. The OECA National Program Managers (NPM) Guidance provides the core program inspection coverage for TSDs and LQGs. North Carolina met the two-year TSD inspection requirement (Metric 5a) and exceeded the annual requirement for LQG inspections (Metric 5b).</p> <p>The OECA NPM Guidance also provides that 100% of the RCRA LQGs must receive a Compliance Evaluation Inspection (CEI) every five years. SRF Data Metric 5c shows that 96.1% (394 of 410) of the LQGs received a CEI between FY2004-FY2008. This metric uses the LQG universe from the RCRA Biennial Reporting System (BRS), and includes LQGs that reported in the 2005 and/or 2007 BRS reporting cycles. There were approximately 12 facilities that were not LQGs for the entire five-year period (as recorded in the Biennial Reporting System). If the facilities are removed from the metric calculation, the inspection coverage increases to 99%. This is not a cause for concern.</p>												
Metric(s) and Quantitative Value:	<table border="1"> <thead> <tr> <th>Data Metrics</th> <th>Nat'l Goal</th> <th>State</th> </tr> </thead> <tbody> <tr> <td>5a - TSD inspection coverage (2 years)</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>5b - LQG inspection coverage (1 year)</td> <td>20%</td> <td>53.7%</td> </tr> <tr> <td>5c - LQG inspection coverage (5 years)</td> <td>100%</td> <td>96.1% (394 of 410) 99.0% (406 of 410) Revised</td> </tr> </tbody> </table>	Data Metrics	Nat'l Goal	State	5a - TSD inspection coverage (2 years)	100%	100%	5b - LQG inspection coverage (1 year)	20%	53.7%	5c - LQG inspection coverage (5 years)	100%	96.1% (394 of 410) 99.0% (406 of 410) Revised
Data Metrics	Nat'l Goal	State											
5a - TSD inspection coverage (2 years)	100%	100%											
5b - LQG inspection coverage (1 year)	20%	53.7%											
5c - LQG inspection coverage (5 years)	100%	96.1% (394 of 410) 99.0% (406 of 410) Revised											
State Response:	No comment.												
Action(s):	No further action is needed.												

<b>RCRA Element 6 – Quality of Inspection or Compliance Evaluation Reports</b>	
<b>Degree to which inspection or compliance evaluation reports properly document observations, are completed in a timely manner, and include accurate description of observations.</b>	
Finding	The North Carolina RCRA inspection reports were of good quality, found complete, and provided documentation to appropriately determine compliance. The State is timely in the completion of the majority of their inspection reports.
Is this finding a(n) (select one):	<input checked="" type="checkbox"/> Meets SRF Program Requirements <input type="checkbox"/> Area for State Attention <input type="checkbox"/> Area for State Improvement – Recommendations Required

	<input type="checkbox"/> Good Practice								
Explanation:	<p>Element 6 is supported by SRF file review metrics 6a, 6b, and 6c. Twenty-three inspection reports were reviewed under Metric 6a.</p> <p>File Metric 6b assesses the completeness of inspection reports and whether they provide sufficient documentation to determine compliance at the facility. Of the inspection reports reviewed, 100% (23 of 23) had sufficient documentation to determine compliance at the facility. In addition, 96% (22 of 23) of the inspection reports were considered complete. For the inspection report found incomplete, the inspection conducted was a focused compliance inspection for a facility under the Resident Inspection Program. The report was basically a streamlined report. It did not provide a sufficient introduction describing the purpose of the inspection, how the facility was regulated under RCRA, and/or the onsite hazardous waste management activities. The EPA Revised RCRA Inspection Manual (1998) specifies key information that must be in a report including a description of the “facility inspected, its operations, and the findings of the inspection.” Since only one inspection report was found incomplete, this is not indicative of a systemic problem, thus no action is needed.</p> <p>File review metric 6c measures the timely completion of inspection reports. Absent a state-defined deadline for the completion of inspection reports, the EPA Region 4 guideline of 45 days was used in the file review metric, and 96% (22 or 23) of the inspection reports were completed in this timeframe.</p>								
Metric(s) and Quantitative Value:	<table border="1"> <thead> <tr> <th>File Review Metrics</th> <th>State</th> </tr> </thead> <tbody> <tr> <td>6a - # of inspection reports reviewed</td> <td>23</td> </tr> <tr> <td>6b - % of inspection reports that are complete</td> <td>96%</td> </tr> <tr> <td>6c - % of inspection reports that are timely</td> <td>96% (45 days)</td> </tr> </tbody> </table>	File Review Metrics	State	6a - # of inspection reports reviewed	23	6b - % of inspection reports that are complete	96%	6c - % of inspection reports that are timely	96% (45 days)
File Review Metrics	State								
6a - # of inspection reports reviewed	23								
6b - % of inspection reports that are complete	96%								
6c - % of inspection reports that are timely	96% (45 days)								
State Response:	No comment.								
Action(s):	No further action is needed.								

<b>RCRA Element 7 - Identification of Alleged Violations.</b>	
<b>Degree to which compliance determinations are accurately made and promptly reported in the national database based upon compliance monitoring report observations and other compliance monitoring information (e.g., facility-reported information).</b>	
Finding	For North Carolina, all of the inspection reports reviewed included correct compliance determinations, and the inspection findings were promptly entered into RCRAInfo.
Is this finding a(n) (select one):	<input checked="" type="checkbox"/> Meets SRF Program Requirements <input type="checkbox"/> Area for State Attention <input type="checkbox"/> Area for State Improvement – Recommendations Required <input type="checkbox"/> Good Practice
Explanation:	File metric 7a assesses whether accurate compliance determinations were made based on inspection reports. Of the 23 inspection reports reviewed, 100% had accurate compliance determinations (i.e., proper identification of SNCs or SVs).

	In File Review Metric 7b, the files were also reviewed to assess if violations were determined within 150 days and entered into RCRAInfo. There were 23 facility inspections where violations were found, and all facilities (100%) were issued formal or informal enforcement actions within 150 days after the inspection and violations were entered into RCRAInfo by day 150.						
Metric(s) and Quantitative Value:	<table border="1"> <thead> <tr> <th>File Review Metrics</th> <th>State</th> </tr> </thead> <tbody> <tr> <td>7a - % of inspection reports reviewed that led to accurate compliance determinations</td> <td>100%</td> </tr> <tr> <td>7b - % of violation determinations in the files that are reported within 150 days</td> <td>100%</td> </tr> </tbody> </table>	File Review Metrics	State	7a - % of inspection reports reviewed that led to accurate compliance determinations	100%	7b - % of violation determinations in the files that are reported within 150 days	100%
File Review Metrics	State						
7a - % of inspection reports reviewed that led to accurate compliance determinations	100%						
7b - % of violation determinations in the files that are reported within 150 days	100%						
State Response:	No comment.						
Action(s):	No further action is needed.						

<b>RCRA Element 8 - Identification of SNC and HPV</b>							
<b>Degree to which the state accurately identifies significant noncompliance/high priority violations and enters information into the national system in a timely manner.</b>							
Finding	In the files reviewed, North Carolina correctly identified SNC and SV violation determinations:-						
Is this finding a(n) (select one):	<input checked="" type="checkbox"/> Meets SRF Program Requirements <input type="checkbox"/> Area for State Attention <input type="checkbox"/> Area for State Improvement – Recommendations Required <input type="checkbox"/> Good Practice						
Explanation:	<p>Data metric 8a identifies the percent of the facilities evaluated by the State during FY2008 that received a state SNC designation. North Carolina’s SNC identification rate is 2.0%, which means that 16 of the 801 inspections conducted were identified as SNCs. The 2.0% SNC identification rate is only slightly above the national goal of 1.75%.</p> <p>Data metric 8b measures the number of SNCs determinations that were made within 150 days of the first day of inspection, which is the requirement in the RCRA ERP. In FY2008, North Carolina entered 100% (15 of 15) of their SNCs into RCRAInfo in a timely manner. The national goal is 100%.</p> <p>File Metric 8d measures the percentage of violations in the files that were accurately determined to be in SNC. It serves as a verification measure for data metric 8a. In the 23 inspection reports reviewed, 14 were identified as SNCs. All 14 (100%) contained violations that were accurately determined to be SNCs. Thus, NC accurately identifies SNCs.</p>						
Metric(s) and Quantitative Value:	<table border="1"> <thead> <tr> <th>Data Metrics</th> <th>State</th> </tr> </thead> <tbody> <tr> <td>8a - SNC identification rate</td> <td>2.0%</td> </tr> <tr> <td>8b - % of SNC determinations made within 150 days</td> <td>100%</td> </tr> </tbody> </table>	Data Metrics	State	8a - SNC identification rate	2.0%	8b - % of SNC determinations made within 150 days	100%
Data Metrics	State						
8a - SNC identification rate	2.0%						
8b - % of SNC determinations made within 150 days	100%						

	<table border="1"> <thead> <tr> <th>File Review Metric</th> <th>State</th> </tr> </thead> <tbody> <tr> <td>8d - % of violations in files reviewed that were accurately determined to be SNC</td> <td>100% (14 of 14)</td> </tr> </tbody> </table>	File Review Metric	State	8d - % of violations in files reviewed that were accurately determined to be SNC	100% (14 of 14)
File Review Metric	State				
8d - % of violations in files reviewed that were accurately determined to be SNC	100% (14 of 14)				
State Response:	No comment.				
Action(s):	No further action is needed.				

<b>RCRA Element 9 - Enforcement Actions Promote Return to Compliance</b>									
<b>Degree to which state enforcement actions include required corrective action (i.e., injunctive relief or other complying actions) that will return facilities to compliance in a specific time frame.</b>									
Finding	In the files reviewed, 100% of SNCs and 100% of SVs were issued enforcement responses that included corrective action to return the facilities to compliance.								
Is this finding a(n) (select one):	<input checked="" type="checkbox"/> Meets SRF Program Requirements <input type="checkbox"/> Area for State Attention <input type="checkbox"/> Area for State Improvement – Recommendations Required <input type="checkbox"/> Good Practice								
Explanation:	<p>EPA reviewed a total of 23 enforcement responses: 14 SNCs and 9 SV under file review metric 9a.</p> <p>File review metric 9b is the percentage of the SNC enforcement responses reviewed that returned or will return the facility to compliance. From a review of the files, all 14 had documentation in the files showing the source returned to compliance or that the enforcement action required them to return to compliance in a specified timeframe.</p> <p>File review metric 9c is the percentage of SV enforcement responses reviewed that returned or will return the facility to compliance. From a review of the files, all 9 had documentation in the files showing the source returned to compliance or that the enforcement action required them to return to compliance in a specified timeframe.</p>								
Metric(s) and Quantitative Value:	<table border="1"> <thead> <tr> <th>File Review Metrics</th> <th>State</th> </tr> </thead> <tbody> <tr> <td>9a - # of enforcement responses reviewed</td> <td>14 SNCs 9 SVs</td> </tr> <tr> <td>9b - % of enforcement responses that returned SNCs to compliance</td> <td>100% (14 of 14)</td> </tr> <tr> <td>9c - % of enforcement responses that returned SVs to compliance</td> <td>100% (9 of 9)</td> </tr> </tbody> </table>	File Review Metrics	State	9a - # of enforcement responses reviewed	14 SNCs 9 SVs	9b - % of enforcement responses that returned SNCs to compliance	100% (14 of 14)	9c - % of enforcement responses that returned SVs to compliance	100% (9 of 9)
File Review Metrics	State								
9a - # of enforcement responses reviewed	14 SNCs 9 SVs								
9b - % of enforcement responses that returned SNCs to compliance	100% (14 of 14)								
9c - % of enforcement responses that returned SVs to compliance	100% (9 of 9)								
State Response:	No comment.								
Action(s):	No further action is needed								

<b>RCRA Element 10 - Timely and Appropriate Action</b>
<b>Degree to which a state takes timely and appropriate enforcement actions in accordance with policy relating to specific media.</b>

Finding	The state takes appropriate enforcement actions. However, timely enforcement response for SNC violations is a concern for North Carolina.
Is this finding a(n) (select one):	<input type="checkbox"/> Meets SRF Program Requirements <input checked="" type="checkbox"/> Area for State Attention <input type="checkbox"/> Area for State Improvement – Recommendations Required <input type="checkbox"/> Good Practice
Explanation:	<p>Element 10 is supported by Data Metrics 10a, and File Review Metrics 10c and 10d.</p> <p>For North Carolina, 100% of the SNC enforcement responses addressed the violations appropriately, as measured in file review metric 10d. However, some of the enforcement actions were not taken in a timely manner. The RCRA ERP criteria states that SNC facilities should be addressed through a final enforcement action within 360 days or the facility should be referred to the state attorney general. The RCRA ERP also recognizes that 20 percent of the cases may exceed this timeline, in situations like the following:</p> <ul style="list-style-type: none"> <li>- Cases involving violations of two or more media;</li> <li>- Potential criminal conduct which is under investigation;</li> <li>- Site abandonment; or</li> <li>- Additional sampling or information requests are required to confirm the violation(s).</li> </ul> <p>Therefore the national goal for the percentage of timely SNC enforcement cases is 80%. In FY2008, data metric 10a indicated that only 6.2% (one of sixteen) of the North Carolina SNC enforcement actions met the ERP timelines. Upon further review of North Carolina’s RCRAInfo data, it was determined that EPA had the lead on one enforcement action, thereby reducing the SNC universe from 16 to 15. Of the 15 remaining enforcement actions, the file reviews indicated that 87% (13 of 15) had, in fact, met the ERP timelines. Of these 13 enforcement actions, 12 were incorrectly showing up in the data pull as exceeding the ERP timelines. OECA has indicated that the likely cause is that the SNCs were not linked to the final enforcement actions in RCRAInfo. All SNCs and corresponding enforcement actions should be linked in RCRAInfo to show the violations as being resolved. Currently, all 13 SNCs have been linked appropriately in RCRAInfo. This is a data entry concern and not necessarily an indication of a problem with North Carolina taking timely enforcement actions for SNCs.</p> <p>File review metric 10c measures the combined percentage of enforcement responses reviewed that are taken in a timely manner (for both SV and SNC facilities). It serves as a verification measure for the above data metrics. There is no specific goal for the combined metric. Nineteen of 23 facilities, or 83%, of the enforcement actions reviewed were addressed within the ERP timeframes, as outlined below:</p>

	<ul style="list-style-type: none"> <li>• <u>SV timeliness</u>: There were nine SV enforcement responses reviewed. Informal enforcement was taken in a timely manner (i.e., within 240 days) for all nine enforcement responses.</li> <li>• <u>SNC timeliness</u>: There were 14 SNC enforcement responses reviewed where final formal enforcement was taken. Ten of the 14 enforcement responses, or 71%, were taken within the 360-day timeframe, which is below the 80% national goal set for SNCs. The four untimely actions were infrequent instances and the state can self-correct this deficiency; therefore, SNC timeliness is an area for state attention.</li> </ul>																				
Metric(s) and Quantitative Value:	<table border="1"> <thead> <tr> <th>Data Metric</th> <th>National Goal</th> <th>State</th> <th>Revised</th> </tr> </thead> <tbody> <tr> <td>10a - % timely SNC actions (13/15)</td> <td>80%</td> <td>6.2% (1/16)</td> <td>87%</td> </tr> <tr> <td colspan="4"><u>File Review Metrics</u></td> </tr> <tr> <td>10c - % of enforcement actions taken in a timely manner</td> <td></td> <td>SV 100% (9/9) SNC 71% (10/14) Combined 83% (19/23)</td> <td></td> </tr> <tr> <td>10d - % of enforcement actions that are appropriate to the violations</td> <td></td> <td>100%</td> <td></td> </tr> </tbody> </table>	Data Metric	National Goal	State	Revised	10a - % timely SNC actions (13/15)	80%	6.2% (1/16)	87%	<u>File Review Metrics</u>				10c - % of enforcement actions taken in a timely manner		SV 100% (9/9) SNC 71% (10/14) Combined 83% (19/23)		10d - % of enforcement actions that are appropriate to the violations		100%	
Data Metric	National Goal	State	Revised																		
10a - % timely SNC actions (13/15)	80%	6.2% (1/16)	87%																		
<u>File Review Metrics</u>																					
10c - % of enforcement actions taken in a timely manner		SV 100% (9/9) SNC 71% (10/14) Combined 83% (19/23)																			
10d - % of enforcement actions that are appropriate to the violations		100%																			
State Response:	No comment.																				
Action(s):	No formal recommendations being tracked for this element.																				

<b>RCRA Element 11 – Penalty Calculation Method</b>	
<b>Degree to which state documents in its files that initial penalty calculation includes both gravity and economic benefit calculations, appropriately using the BEN model or other method that produces results consistent with national policy.</b>	
Finding	North Carolina includes gravity-based penalty calculations in its initial penalty calculations, but its files do not document that economic benefit has been calculated or considered.
Is this finding a(n) (select one):	<input type="checkbox"/> Meets SRF Program Requirements <input type="checkbox"/> Area for State Attention <input checked="" type="checkbox"/> Area for State Improvement – Recommendations Required <input type="checkbox"/> Good Practice
Explanation:	<p>Element 11 determines whether penalty calculations consider and include a gravity portion and, where appropriate, economic benefit.</p> <p>The RCRA Civil Penalty Policy (RCPP) requires that economic benefit be calculated using the BEN model or other method that produces results consistent with national policy. The economic benefit can result from delaying or avoiding compliance costs, or when an illegal competitive advantage is achieved through noncompliance. In Section VIII of the RCPP (page 28), the policy provides penalty thresholds for pursuing economic benefit, an example being 10% of the gravity-based and total penalty for amounts between \$30,001 to \$49,999.</p>

	<p>For the 13 penalty enforcement actions reviewed, 100% considered and included gravity. However, it could not be determined from the file review if economic benefit was considered in any of the penalty enforcement actions. NCDENR explained that the North Carolina hazardous waste penalty authority does not specifically include a provision for economic benefit (see state comments below), and therefore they are precluded from considering this factor in the RCRA penalty calculations. EPA agrees that the North Carolina hazardous waste penalty authority is silent on consideration of economic benefit, similar to the federal statute, but does not see this as a barrier to its consideration in penalty calculations.</p> <p>During Round 1, EPA recommended that NCDENR revise their penalty calculation worksheets to document that economic benefit is being considered in assessing the penalty. Since this is a continuing issue from Round 1, it is an area for state improvement.</p>				
Metric(s) and Quantitative Value:	<table border="1"> <thead> <tr> <th>File Review Metric</th> <th>State</th> </tr> </thead> <tbody> <tr> <td>11a - % of penalty calculations reviewed that consider and include where appropriate gravity &amp; economic benefit consistent with national policy</td> <td>100% (13 of 13) (Gravity) 0% (Econ. Benefit)</td> </tr> </tbody> </table>	File Review Metric	State	11a - % of penalty calculations reviewed that consider and include where appropriate gravity & economic benefit consistent with national policy	100% (13 of 13) (Gravity) 0% (Econ. Benefit)
File Review Metric	State				
11a - % of penalty calculations reviewed that consider and include where appropriate gravity & economic benefit consistent with national policy	100% (13 of 13) (Gravity) 0% (Econ. Benefit)				
State Response:	<p>North Carolina's hazardous waste penalty authority is found in N.C.G.S. 130A-22(a) and (d). Section 130A-22(d) states "In determining the amount of the penalty in subsections (a), (b), and (c), the Secretary of Environment and Natural Resources shall consider the degree and extent of harm caused by the violation and the cost of rectifying the damage." A statutory change would be required to allow consideration of the economic benefit of non-compliance in hazardous waste program penalties.</p>				
Action(s):	<p>Six months after the issuance of the final SRF Report, North Carolina should submit the penalty worksheets and supporting economic benefit calculations for all formal enforcement actions taken during that six-month period. The civil penalty calculation methods should include economic benefit calculations using the BEN model or a state method that is equivalent to and consistent with national policy. Progress towards completion will be formally measured and additional actions taken as necessary based on the evaluation.</p>				

RCRA Element 12 - Final Penalty Assessment and Collection	
Degree to which differences between initial and final penalty are documented in the file along with a demonstration in the file that the final penalty was collected.	
Finding	<p>North Carolina does document the difference between initial and final penalties in its files. All enforcement orders reviewed had documentation that the penalty was collected.</p>
Is this finding a(n) (select one):	<p><input checked="" type="checkbox"/> Meets SRF Program Requirements  <input type="checkbox"/> Area for State Attention  <input type="checkbox"/> Area for State Improvement – Recommendations Required  <input type="checkbox"/> Good Practice</p>

<p>Explanation:</p>	<p>It is important that documentation of any differences and rationale between initial and final penalty calculations are maintained to determine if appropriate penalties have been recovered for the violations cited in the enforcement actions. A downward adjustment of the penalty in the final enforcement action may be appropriate due to new information provided in settlement negotiations, or a facility's inability to pay a penalty. As standard procedure, North Carolina does maintain initial and final RCRA penalty calculations in their records. A justification memorandum is also included in the file which explains the difference between the initial and final penalty, if any.</p> <p>Also, North Carolina maintains records of all penalty collections both in the file and through a central financial database, as reported in file metric 12b. Of the 13 enforcement orders reviewed as part of the SRF, all had documentation that penalties were collected.</p>						
<p>Metric(s) and Quantitative Value:</p>	<table border="1"> <thead> <tr> <th data-bbox="428 741 1182 779">File Review Metrics</th> <th data-bbox="1182 741 1421 779">State</th> </tr> </thead> <tbody> <tr> <td data-bbox="428 779 1182 888">12a - % of formal enforcement actions that document the difference and rationale between initial and final assessed penalty</td> <td data-bbox="1182 779 1421 888">100% (13 of 13)</td> </tr> <tr> <td data-bbox="428 888 1182 961">12b - % of final formal actions that document the collection of the final penalty</td> <td data-bbox="1182 888 1421 961">100% (13 of 13)</td> </tr> </tbody> </table>	File Review Metrics	State	12a - % of formal enforcement actions that document the difference and rationale between initial and final assessed penalty	100% (13 of 13)	12b - % of final formal actions that document the collection of the final penalty	100% (13 of 13)
File Review Metrics	State						
12a - % of formal enforcement actions that document the difference and rationale between initial and final assessed penalty	100% (13 of 13)						
12b - % of final formal actions that document the collection of the final penalty	100% (13 of 13)						
<p>State Response:</p>	<p>No comment.</p>						
<p>Action(s):</p>	<p>No further action is needed.</p>						

**V. ELEMENT 13**

**Clean Air Act Compliance Assistance**

The DAQ undertakes a wide range of compliance assistance activities that include, but are not limited to, conducting workshops, mailing reminder and information letters to facilities on various air programs, rules, and regulations, and responding to questions from facilities. A few of our accomplishments for federal fiscal year (FFY) 2009 are discussed in the following paragraphs.

**MACT and GACT Implementation** - The DAQ has formed a MACT task force to facilitate the implementation of 112(d) MACT and GACT standards. The MACT task force identifies permitted facilities, and in some cases unpermitted facilities, potentially subject to the area source GACTs that have been recently promulgated. Once the facilities are identified, the task force mails informational letters to these facilities asking them to submit initial notifications and compliance notifications, if applicable. The following information letters were mailed to facilities in FFY-2009.

- Notification letters were mailed to 61 permitted facilities potentially subject to the GACT for Plating and Polishing Operations (Subpart WWWWWW). Twenty-two facilities indicated that they were subject to this GACT.
- Notification letters were mailed to 28 unpermitted facilities potentially subject to the GACT Subpart WWWWWW. Eleven facilities indicated that they were subject to this GACT.
- Notification letters were mailed to 175 permitted facilities potentially subject to the GACT for Paint Stripping and Miscellaneous Surface Coating Operations (Subpart HHHHHH). Twenty-one of these facilities indicated that they were subject to this GACT.
- Notification letters and informational packages were mailed to 2,258 unpermitted auto body shops potentially subject to the GACT Subpart HHHHHH.
- Notification letters were mailed to 66 permitted facilities potentially subject to the GACT for Nine Metal Fabrication and Finishing Source Categories (Subpart XXXXXX). One facility indicated that it was subject to this GACT.
- Notification letters were mailed to 5 permitted facilities potentially subject to the GACT for Electric Arc Furnace Steel Making Facilities (Subpart YYYYYY). No facilities indicated that they were subject to this GACT.
- Notification letters were mailed to 6 permitted facilities potentially subject to the GACT for Iron and Steel Foundries (Subpart ZZZZZ). Two facilities indicated that they were subject to this GACT.
- Notification letters were mailed to 12 unpermitted facilities potentially subject to the GACT for Flexible Polyurethane Foam Production and Fabrication Area Sources (Subpart OOOOOO). No facilities indicated that they were subject to this GACT.
- A notification letter was mailed to a permitted facility potentially subject to the GACT for Acrylic and Modacrylic Fibers Production (Subpart LLLLLL). The facility indicated that it was not subject to this GACT.
- Information letters were mailed to 291 permitted facilities potentially subject to the GACT for Reciprocating Internal Combustion Engines (RICE) (Subpart ZZZZ). The DAQ did not ask the facilities to respond to the letters. The letters were written only to educate the facilities on the RICE GACT.

**Compliance Assistance to Permitted Facilities** - The DAQ completed their committal of inspections for FFY-2009. 328 Title V, 634 Synthetic Minor, and 1,264 minor facilities were inspected. During the exit interview for these inspections, the inspector typically offers suggestions on how to avoid a problem or better maintain a process, as well as some discussion about what the company is doing right. Accordingly, DAQ regards these inspections as compliance assistance activities.

The DAQ staff gives assistance as requested and as time allows in filling out permit applications and emissions inventories. Staff also sends letters to companies to remind them when it is time to submit permit renewal applications and emission inventories. The DAQ continues to have a low non-compliance rate with respect to these submittals, and the DAQ believes it is partly because of these reminder letters. During FFY-2009, civil penalty assessments were made against only four (4) Title V sources for late or deficient emissions inventory (EI) reports. For non-Title V sources our EI reporting frequency is every 5 years and

EI's are submitted along with the permit renewal application, instead of being linked to a specific calendar deadline.

The DAQ provides assistance to permitted facilities by responding to questions regarding permitting, stack testing and continuous monitoring. Permit conditions requiring stack testing also specify that a test plan or "protocol" be submitted prior to testing in order that DAQ may approve the test methods. Over time the DAQ has refined its protocol review procedures such that it does not simply approve or disapprove the test methods proposed. Instead, the DAQ examines the entire test plan in the context of the emissions standards detailed in the permit. Consequently, the goal of the protocol review is to determine if the proposed testing, in addition to being correctly performed, will yield information sufficient to demonstrate compliance as defined in the permit. Occasionally, the DAQ finds that a test program can be simplified over what was proposed, but in all cases, the DAQ believes that its customer service is improved by focusing on the ultimate goal of the test program.

Workshops -The DAQ conducts annual workshops in cooperation with the North Carolina Manufacturers and Chemical Industry Counsel (MCIC) to educate Title V and non-Title V permit holders on air quality issues. The 2009 workshop was held in Hickory on March 18, 2009 and in Raleigh on March 26, 2009. Topics included new rules and attainment update, emission inventories for green house gases, GACT update, and other topics related to compliance and enforcement.

### Clean Water Act Compliance Assistance

**Issue Addressed:** The North Carolina General Assembly established the Water Pollution Control System Operators Certification Commission in 1969. The Certification Commission helps protect the public's investment in water pollution control facilities through the training and certification of operators of water pollution control systems.

As the treatment and disposal of wastewater evolved, the General Assembly expanded the duties of the Certification Commission, in 1993, to include the training and certification of operators of wastewater collection systems, spray irrigation systems, subsurface treatment and disposal systems, and land application of residuals. In 1996, the General Assembly added the training and certification of operators of water pollution control systems for CAFOs to the duties of the Certification Commission and added two new members. The Certification Commission consists of 11 members.

**Project period:** Compliance assistance began in 1969 and will continue indefinitely.

**Target Audience:** This program aims to assist owners and operators of wastewater collection and treatment facilities, as well as CAFOs and land application systems.

**Activity Approach:** The Division of Water Quality, as the state authority to ensure enforcement and compliance of the Clean Water Act in North Carolina, uses the Technical Assistance and Certification Unit (TACU) as the administrative arm of North Carolina's Water Pollution Control System Operators Certification Commission. There are 7 full-time staff members in the central office and 7 treatment plant consultants throughout the state.

The goal of these staff members is to administer the operator certification process and educate treatment system operators to assist them in improved operation and maintenance of their system. A three-pronged strategy includes the coordination of an extensive certification program for operators of a variety of waste systems, managing educational opportunities, and technical assistance site visits. The TACU also provides technical support to the Commission. This activity approach employs a number of different methods outside the core program elements to assist with the overall effectiveness of the program.

**Measurement Tool:** The metrics for this program include the number and types of certifications awarded, educational efforts, and extent/success of technical assistance site visits. Pollutant load reductions are listed in the paragraph below, *Project Results*. It should be noted that a comprehensive estimate of environmental outcomes is difficult since this program is preventative in nature.

**Project Results:**

- **Operator Certification.** The TACU certifies operators in one or more of 7 possible areas, including animal Waste systems (2 grades), biological wastewater treatment facilities (4 grades), collection systems (4 grades), physical/chemical treatment, surface irrigation, subsurface disposal, and land application of residuals. Thousands of operators hold a total of nearly 10,000 certifications statewide as granted by the Commission and administered by TACU. Examinations for operators are held four times per year with requirements to secure continuing education credits and to maintain a minimum standard of performance.

- **Education.** The TACU publishes 2 newsletters for operators to keep them abreast of new and helpful information. They have published 5 educational manuals that are updated on an annual basis to assist operators with their responsibilities. In addition, continuing education courses are approved, audited, and sometimes taught by TACU.

- **Technical Assistance Site Visits.** Regional offices house 7 wastewater treatment plant consultants throughout the state. Regional staff conduct over 50 technical assistance site visits per year to various wastewater treatment systems, the majority of which are NPDES wastewater facilities. Since 2000, the Division helped reduce more than 800 tons of pollutants to the environment as a result of these technical assistance visits. In addition, the Natural Resources Conservation Service provides annual technical assistance inspections at the approximately 2,500 animal operations across North Carolina. These site visits have improved operation and maintenance at these systems and minimized the number of enforcement actions that must be taken across the state.

**Project Partners:** Community colleges and the regulated community constitute the primary project partners. Community colleges provide venues and logistical support across North Carolina. Many students of these programs become instructors and mentors to newer recruits. This perpetuates a learning atmosphere and lessens the level of resources necessary from the Division.

**Funding/Resources:** The Division pays for the majority of this program through operator training and certification fees. This source is supplemented by federal funds.

**RCRA Subtitle C Compliance Assistance**

In FY2008 the North Carolina HWS identified five compliance assistance efforts undertaken to keep North Carolina's resources and public safe from the effects of the mismanagement of hazardous waste. The efforts in FY2008 included the Mercury Switch Removal Program (MSRP), the Resource Conservation Challenge – School Chemical Cleanout Campaign (RCC-SC3), Large Generator Workshops, Compliance Assistance, and Pre-Compliance Visits. Through the MSRP, the HWS targeted operators of vehicle dismantling facilities (auto junk yards), crushing facilities, and vehicle shredding facilities (scrap preparation yards) in ensuring removal of convenience lighting mercury switches. RCC-SC3 was used by the HWS to target 15-18 North Carolina School systems for partnering in the removal of unused and unwanted chemicals from their laboratories. Additionally, the HWS targeted all North Carolina Schools for participation in Green Chemistry and Micro-Chemistry Workshops. The Large Generator Workshops were taught by HWS staff to approximately 400 LQG contacts in North Carolina in order to ensure proper management of hazardous waste at their facilities. Compliance Assistance targets the entire RCRA Subtitle C universe (LQGs, SQGs, CESQGs, Transporters, and TSDFs) and any commercial/industrial site seeking compliance information. Pre-Compliance Visits targeted all new LQG's by offering site visits to provide guidance and instructions regarding HW policy and compliance expectations in an effort to improve initial compliance. All the efforts taken in FY2008 were for educational and recognition purposes only.

**Other CWA Activities:** The Department of Environment and Natural Resources was awarded the FY2008 319(h) Nonpoint Source (NPS) Grant from the U.S. EPA (and administered by NCDWQ) in the amount of \$4,491,600. Of this amount, \$1,813,261 is supporting 24 full-time positions across five different divisions within DENR that work to reduce NPS pollution and its effects on our state's waters. Additionally, \$467,428 was awarded through a competitive grant application process for NPS education and outreach, demonstration, and planning projects, and \$2,210,911 was awarded for watershed restoration planning and implementation projects.

**Coastal Stormwater Regulations Strengthened** - The Division of Water Quality was rewarded for years of effort when the legislature passed revisions to the Coastal Stormwater Rule that regulates stormwater permitting in the state's 20 coastal counties. The Division sought the rule revision after research established that polluted stormwater runoff was the primary cause of impaired water quality along the coast. Among the new requirements are greater stormwater controls for projects within one-half mile and draining to shell fishing waters and a new threshold for requiring engineered stormwater management in areas outside of one-half mile from shell fishing waters. Stakeholders who worked to craft the rule included state and local government, environmental groups, developers and the academic community.

**Rules for New or Expanding Swine Farms** - The Division of Water Quality, working with the Division of Air Quality, developed performance standards for new or expanding swine farms. This rule making process was required by Session Law. The proposed performance standards detail how the new or expanding swine facilities must: eliminate the discharge of animal waste to surface and groundwater through direct discharge, seepage or runoff; substantially eliminate atmospheric emission of ammonia; substantially eliminate emission of

odor that is detectable beyond the boundaries of the parcel or tract where the farm is located; substantially eliminate the release of disease-transmitting vectors and airborne pathogens; and substantially eliminate nutrient and heavy metal contamination of soil and groundwater.

**Smith Creek Agricultural Sediment Initiative** - In 2000, a section of Smith Creek in Warren County was added to the North Carolina DWQ 303(d) list of impaired waters, and was identified as biologically impaired due to sediment from agricultural sources. In 2005, the North Carolina Division of Soil & Water Conservation (DSWC) was awarded a 319 grant to address agricultural degradation in the Smith Creek Watershed. Due to efforts under the 319 grant, in 2008 a 1.6-mile segment of Smith Creek was removed from the 303(d) list because of documented improvements in biological assessment data. As part of the 319 grant project, a thorough Watershed Restoration Plan was developed to identify sources of sediment in the watershed that were contributing to the impairment, and outlined management measure for water quality improvement and watershed restoration. A total of 227 acres of farmland was converted under conservation tillage management plans, and 120 acres of conservation crop was planted. Pastureland was improved with 15 new watering facilities installed, eight new dedicated heavy use areas and 33 acres now implementing a pasture management plan. The 7,700 feet of livestock fencing installed prevents sediment and fecal coliform bacteria from entering the stream by preventing cattle access, therefore eliminating stream bank erosion in those areas. The above management measures collectively prevent an estimated 6,200 pounds of nitrogen, 3,500 pounds of phosphorous, and 5,800 tons of sediment from reaching Smith Creek annually.

**Coastal Habitat Protection Plan: Ground-Truthing Submerged Aquatic Vegetation** - Submerged Aquatic Vegetation is valued as critical fishery habitat in shallow coastal environments and estuaries. The Coastal Habitat Protection Plan developed by the Department per NCGS 143B-279.8 and adopted by the Marine Fisheries, Coastal Resources and Environmental Management commissions, requires action to protect these important habitats. In 2005, as part of the collaborative efforts to characterize and map SAV in the shallow low-energy areas of the Neuse and Tar-Pamlico rivers, the Division's Rapid Response Teams began collecting data using the most accurate GPS methods available. Building upon work initiated in the Neuse River basin in 1998, the teams have collected and digitized three years worth of data in ArcGIS. Approximately 750 miles of shoreline have been observed with SAV, of which 358 miles of shoreline were found to have SAV. The total area of SAV habitat that has been mapped is roughly estimated at 3.2 square miles.

In concert with the goals of the CHPP, the SAV information has been made available for public use at [http://h2o.enr.state.nc.us/esb/SAV\\_Web/Home.htm](http://h2o.enr.state.nc.us/esb/SAV_Web/Home.htm). The interactive internet map has served as an important tool to the Department and has allowed interagency use during the permit review process (DCM, DMF, DWQ) resulting in greater habitat protection. We hope to continue our efforts to make this data available through Google Earth.

**Improved Low-Level Mercury Analysis** - The culmination of extensive efforts to improve analysis of mercury has resulted in the DWQ laboratory having the ability to detect mercury levels as low as one nanogram per liter or one part per trillion. The water quality standard is 12 nanograms per liter. In order to effectively achieve this analytical capability, the Division had to build a Class 1000 Clean Lab and train samplers to use a clean technique

collection method that has a very high level of quality control. DWQ performs analysis of surface waters, wastewater effluent and fish tissue to determine mercury concentrations. This information is critical to documenting sources of mercury, developing strategies necessary to reduce contamination of the fish and waters, and providing public health protection.

**Thirty-three Wetlands Received the Unique Wetlands Classification** - The Unique Wetlands Classification was implemented for the first time in North Carolina. The wetlands included in the reclassification are considered high quality natural communities that provide habitat for state or federally listed threatened or endangered species. Approximately 3,800 acres of wetlands in eleven of the state's river basins were reclassified; all of the reclassified areas are on public land. Permitted impacts to these areas are limited to projects that meet a public need.

**Bernard Allen Drinking Water Fund Assistance** - Division of Water Quality staff in the Fayetteville Regional Office identified dozens of private drinking water wells in Montgomery and Richmond counties that were impacted by pesticide contamination from past agricultural activities. The efforts of the Fayetteville office have enabled the users of these wells to obtain bottled water through NCDENR's Bernard Allen Drinking Water Fund.

**Migration of Environmental Sciences data to Google Earth** - Building upon work initiated in the Neuse River basin in 1998, the division's Rapid Response Teams continued efforts to characterize and map submerged aquatic vegetation in the shallow low-energy areas of the Neuse and Tar-Pamlico rivers. Plans include migration of SAV data into a Google Earth (KML) coverage to allow various users a simpler and more interactive tool for viewing SAV locations. Fish kill information received by ESS has also been converted to a Google Earth coverage and is available at <http://www.esb.enr.state.nc.us/Fishkill/fishkillmain.htm>. Environmental Sciences Section staff is currently investigating further possibilities for Google Earth as an interactive Internet-based tool to display the section's various chemical, physical, and biological data sets.

## V. APPENDICES

- a. Status of Recommendations from Previous Reviews
- b. Official Data Pull
- c. Preliminary Data Analysis & File Selection
- d. File Review Analysis
- e. Correspondence