

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 8

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Mr. Steve M. Pirner, P.E.
Department Secretary
South Dakota Department of Environment and Natural Resources
Joe Foss Building
523 East Capitol Avenue
Pierre, South Dakota 57501

Dear Mr. Pirner:

Enclosed you will find the final Permit Quality Review/State Review Framework (PQR/SRF) report summarizing the integrated evaluation of South Dakota's Clean Water Act National Pollutant Discharge Elimination System permitting and enforcement programs as well as the Clean Air Act Stationary Source and the Resource Conservation and Recovery Act Subtitle C enforcement programs for federal Fiscal Year 2011. This report incorporates comments received from the South Dakota Department of Environment and Natural Resources (SDDENR), the Environmental Protection Agency (EPA) Office of Compliance and the EPA Office of Water. We look forward to working with the SDDENR in utilizing the results of this evaluation to advance our shared objective of protection of public health and the environment in South Dakota.

If you have any questions about the PQR/SRF report, please contact us or have your staff contact Ms. Kaye Mathews at (303) 312-6889. Any program-specific questions should be directed to the EPA program contacts identified in the report.

Sincerely,

Eddie A. Sierra

Acting Assistant Regional Administrator Office of Enforcement, Compliance and

**Environmental Justice** 

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# STATE REVIEW FRAMEWORK AND INTEGRATED CLEAN WATER ACT PERMIT QUALITY REVIEW

# **South Dakota**

Clean Water Act, Clean Air Act, and Resource Conservation and Recovery Act Implementation in Federal Fiscal Year 2011

**U.S. Environmental Protection Agency Region 8** 

Final Report June 26, 2014

### **Note to Users**

This report is structured in four parts, with three media sections and one overarching Executive Summary. The intent of this structure is to allow the user to choose to look exclusively at one media-specific set of information, to look at just Permit Quality Review (PQR) or State Review State Review Framework (SRF) information individually, or to look at all at issues across all media programs.

To review Clean Water Act (CWA) information only, see the sections titled "CWA-NPDES Integrated PQR & SRF Review," "CWA-NPDES Permit Quality Review," and "State Review Framework Report: Clean Water Act Review."

If you are interested in reviewing the CWA PQR information only, see the section titled "CWA-NPDES Permit Quality Review."

If you are interested in reviewing the SRF information across all programs, look to the section titled State Review Framework Report.

If you are interested in reviewing information related to the Resource Conservation and Recovery Act only, look to the section titled Resource Conservation and Recovery Act.

If you are interested in reviewing information related to the Clean Air Act, look to the section titled Clean Air Act.

Information in this report related to the CWA National Pollutant Discharge Elimination System (NPDES) permit reviews under the PQR and NPDES enforcement under the SRF have been integrated as part of the EPA's 2009 Clean Water Act Action Plan. Information is not integrated in this report for reviews of the state's Clean Air Act (CAA) and RCRA programs because the SRF only examines enforcement information, and permit oversight under the CAA and RCRA programs is conducted through different mechanisms not associated with this review process.

The NPDES integrated oversight effort is a way to provide EPA with a comprehensive understanding of permitting and compliance elements of the NPDES program. Integrated reviews reduce the burden on states by employing one joint visit and integrated report. The integrated reviews provide EPA and the public with a greater understanding of the challenges of a state NPDES program, and increase transparency by making PQR and SRF results publicly available on EPA's website.

# **SRF** and Integrated CWA PQR Executive Summary

#### Introduction

State Review Framework (SRF) and Permit Quality Review (PQR) oversight reviews of the South Dakota Department of Environment and Natural Resources (SDDENR) were conducted July through October 2012 by EPA Region 8 and EPA Office of Water permitting and enforcement staff.

The Clean Water Act National Pollutant Discharge Elimination System (CWA-NPDES) program was reviewed under both SRF and PQR. The Clean Air Act (CAA) Stationary Source and Resource Conservation and Recovery Act (RCRA) Subtitle C programs were reviewed only under SRF.

SRF findings are based on file metrics derived from file reviews, data metrics, and conversations with program staff. PQR findings are based on reviews of permits, reviews of permit files, and interviews.

#### **Priority Issues to Address**

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

• State initiated enforcement action timeliness is a concern. The EPA found that the State did not follow its Enforcement Response Guidance when responding to instances of noncompliance.

# **CWA-NPDES Integrated Findings**

The following issues are affecting performance of both the permitting and enforcement programs:

• State follow up to Whole Effluent Toxicity violations is inconsistent with the State's Enforcement Response Guide.

# **Major PQR CWA-NPDES Findings**

The PQR found the following issues to be most significant:

- SDDENR must ensure applications include data requirements consistent with EPA regulations at 40 CFR 122.21 as part of the application process.
- SDDENR must ensure that a robust reasonable potential (RP) analysis was undertaken and document this process in the Statement of Basis. The analysis must include a comprehensive assessment of pollutants of concern based on knowledge of the facility,

facility data, and industry information; if RP exist, a limit **must** be established as required by 40 CFR 122.44(d)(i)-(iv).

- SDDENR must update its Pretreatment legal authority in §74:52:11 to include the 13 required streamlining provisions listed in §3.2.1. However, EPA strongly recommends that the SDDENR incorporate all Pretreatment Streamlining Rule updates to allow the local Pretreatment programs to adopt the required and optional streamlining provisions.
- The Pretreatment boilerplate language for NPDES permits issued to POTWs with approved Pretreatment programs must implement the NPDES requirements at 40 CFR 122.44(j)(2)(ii) to "Provide a written technical evaluation of the need to revise local limits under 40 CFR 403.5(c)(1), following permit issuance or reissuance."

#### **Major SRF CWA-NPDES Program Findings**

The SRF found the following issues to be most significant:

- Enforcement actions for minor facilities are not consistently issued in a timely manner according to time goals set by SDDENR in the state's Enforcement Response Guide.
- State penalty calculations do not consistently demonstrate a consideration of the economic benefit of noncompliance.
- Penalty action files do not consistently document the difference between proposed and final assessed penalties and contain proof that assessed penalties are collected.

# **Major SRF CAA Stationary Source Program Findings**

- Compliance Monitoring and Stack Test MDRs are not entered in a timely manner.
- EPA could not conclude that an FCE had been conducted at all sources reviewed.

# **Major SRF RCRA Subtitle C Program Findings**

• There were no major RCRA findings.

# **Major Follow-Up Actions**

Actions to address the findings found during the PQR will be implemented and tracked in an Office of Water database. Recommendations and actions identified from the SRF review will be tracked in the SRF Tracker. Recommendations and actions identified as part of the CWA SRF and PQR Integrated Review will be tracked in the SRF Tracker.

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# **CWA-NPDES Integrated SRF and PQR Review**

#### I. Introduction

EPA reviews regional and state Clean Water Act National Pollutant Discharge Elimination System (NPDES) permitting and enforcement programs on a recurring basis. During these reviews, EPA staff review topics related to NPDES program implementation and enforcement. A large component of each review is the Permit Quality Review (PQR), which assesses whether a state adequately implements the requirements of the NPDES program as reflected in the permit and other supporting documents (e.g., fact sheet, calculations). A second primary component of these reviews is the State Review Framework, which evaluates 12 elements of state enforcement programs.

Through this review, EPA promotes national consistency, identifies successes in implementation of the base NPDES program, and identifies opportunities for improvement in the development of NPDES permits and enforcement. The findings of the review may be used by EPA headquarters to identify areas for training or guidance, and by the EPA region to help identify or assist states in determining action items to improve their NPDES programs.

EPA conducted an integrated review of the State NPDES permitting and enforcement and compliance program by combining a PQR and SRF review from October 1-5, 2012. The PQR was designed to assess how well the State implements the requirements of the NPDES program as reflected in NPDES permits and other supporting documents. The PQR looked at four core topic areas of national importance (nutrients, pesticides, pretreatment, stormwater) and one special focus area of regional importance (whole effluent toxicity). The SRF review is designed to ensure a minimum baseline of consistent performance across states, and that EPA conducts oversight of state enforcement and compliance programs in a nationally consistent and efficient manner. The SRF review looks at 12 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).

The integrated review examined data and files generated and kept by the Department of Environment and Natural Resources (SDDENR). This section focuses only on the integrated PQR and Clean Water Act (CWA) SRF NPDES program findings.

The integrated review was conducted in three phases: analyzing information from the national data systems, reviewing a limited set of state files, and development of findings and recommendations. Considerable consultation was 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 issues.

The report is designed to capture the information and agreements developed during the review process in order to facilitate program improvements. The report is designed to provide factual information. EPA also uses the information from the integrated reviews to draw a "national picture" of the NPDES program, to develop comparable state performance dashboards, and to identify any issues that require a national response.

### II. Coordination Between Permitting and Enforcement

The following discussion of South Dakota's NPDES permitting, compliance, and enforcement program is the product of verbal and written exchanges between EPA Region 8 and South Dakota Department of Environment and Natural Resources (SDDENR) during the week of the on-site review and outside of this review process. All of this information has been verified for accuracy by SDDENR during the review of the draft report. More details about how the state runs the compliance and enforcement program for specific NPDES program areas appear in Appendix E.

All of South Dakota's NPDES permitting and compliance monitoring responsibilities belong to the SDDENR Surface Water Quality Program. Any NPDES judicial enforcement activities in South Dakota, including all penalty actions, also involve the Attorney General (AG) Office, as explained below.

NPDES permitting and compliance monitoring responsibilities of the Surface Water Quality Program are divided between the Surface Water Discharge and Concentrated Animal Feeding Operation groups. The Concentrated Animal Feeding Operation group manages permitting and compliance at CAFOs, whereas the Surface Water Discharge group manages those same activities at facilities having all other NPDES permits (e.g., wastewater, pretreatment, stormwater). The Surface Water Discharge and Concentrated Animal Feeding Operation groups have their compliance monitoring resources spread among the central office in Pierre and four field offices in Sioux Falls, Rapid City, Watertown and Vermillion.

The Surface Water Discharge and Concentrated Animal Feeding Operation groups of SDDENR both include a permitting and compliance unit with the dual responsibilities of writing permits and monitoring compliance. The Surface Water Discharge group is responsible for all permitting, compliance assistance, and enforcement escalation for all of South Dakota's construction and industrial stormwater sites and federal facilities. Monitoring compliance and responding to compliants regarding stormwater pollution is handled by compliance staff assigned to the various field offices.

If the Surface Water Discharge team or the Concentrated Animal Feeding Operation team decide to escalate a case of non-compliance for formal enforcement, the team leader sends an enforcement recommendation to the Program Administrator. The SDDENR staff attorney is then brought in to review the case. Once the SDDENR attorney approves the enforcement action, the South Dakota Attorney General provides a second legal review. The action is then routed through the Division of Environmental Services Director who will have the Department Secretary sign the enforcement action.

# III. Integrated Review Background

EPA Region 8 conducted reviews of both PQR and SRF components of ten facilities permitted by the state. Given more prescriptive guidelines established for permit selection in the SRF along

with the larger number of permits required for review under the SRF, a decision was made by the joint PQR-SRF workgroup to allow the enforcement program to select the initial list of permits for review. A total of 28 permits were selected by the enforcement program for review under the SRF. The NPDES program then selected a subset of those permits for review under the PQR. Ten permits were selected from the SRF permit list for review under all three components of the PQR (core review, core topic review, special focus review) based on criteria established by headquarters (minimum of two minor facilities, ratio of POTW vs. non-POTWs should reflect ratio evident in major permits issued by the state). The NPDES program also selected power plant permits and general permits for review. Permits reviewed jointly for the 2012 PQR-SRF were:

NPDES Permit Number	Permit Name	
Number		
CD0022424	Human City of	
SD0023434	Huron, City of	
SD0020010	Madison, City of	
SD0023361	Mitchell, City of	
SD0020826	Sisseton, City of	
SD0027987	Valley Queen Cheese, Inc	
SD0000141	Black Hills Corp - Ben French Power Plant	
SD0027871	Black Hills Power - LCTF	
SD0000264	Northern States Power - Pathfinder	
SD0027944	POET Biorefining - Hudson	
SD0020028	Mobridge, City of	
SD0025437	T&R Electric Supply	
SD0023698	Chamberlain, City of	
General		
Permits		
	Pesticide GP	
	SD MS4 GP	
	SD Construction GP	
	SD Multi-Sector/Industrial GP	

Permits and supporting documentation were reviewed by permitting staff from May 2012 through September 2012. A meeting of permitting and enforcement reviewers was held at the Region 8 office prior to the state visit to discuss logistics and coordination in anticipation of the onsite visit to South Dakota. Four Region 8 permitting staff, three Region 8 enforcement staff, two EPA headquarters staff and one contractor traveled to South Dakota September 30-Oct 5, 2012 to conduct the on-site portion of the review. A joint introductory meeting was held on the first day of the on-site review, a PQR exit meeting was held on October 3, 2012, and an SRF exit meeting was held on October 4, 2012. The exit meetings compiled the findings for the PQR-SRF, respectively. Senior managers from SDDENR were present for both meetings.

Following the on-site state visit, EPA reviewers worked together to formalize joint findings and recommendations for improvement identified during both the onsite and desk review portions of the PQR/SRF.

#### IV. How Report Findings Are Made

The findings in this report were made by EPA Region 8's permitting and enforcement staff after analyzing data in the national data systems, reviewing facility files at the state, and consulting with state staff. Findings cover both highlights of state performance and opportunities for improvement. Where the state program was doing particularly well or was meeting all of its requirements, EPA identified such areas in this report. Where EPA found the state had opportunities to improve both permitting and enforcement, EPA suggested an appropriate course of action.

#### V. Common Findings

#### A. Facility Information and Permit Application

#### **Common Finding A-1: ELG Applicability**

<u>Finding</u>: The non-POTW permits reviewed consisted of three power generating facilities, a cheese factory, an ethanol facility and a used transformer rebuilding/reconditioning facility. The statements of basis reviewed for these facilities included facility and treatment process discussions in varying levels of detail and lacked clear discussions of the applicability of ELGs.

<u>Recommendation:</u> Boilerplate language should require more in-depth discussion of facility operations and their relationship to pertinent ELGs. SDDENR should submit to EPA a plan with timeframe for making this modification.

#### **Common Finding A-2: Information Consistency**

<u>Finding:</u> The SRF review found instances where the basic information for the facility was not consistent with the National Database, ICIS. The instances included an inconsistent date for a comprehensive facility inspection at Wheeler Manufacturing and an inaccurate permit number for Link Snacks in the official file cover letter. Note: SDDENR corrected the inaccurate data shortly after the PQR/SRF.

<u>Recommendation:</u> SDDENR should continue to ensure that the information contained within the National Database is accurate. If inconsistencies are found between ICIS and the official file, the State should correct those issues.

#### **Special and Standard Conditions**

#### **Common Finding B-1: Boilerplate Documents**

<u>Finding</u>: Boilerplates currently used by SDDENR establish various types of discharges (SSO, emergency release, authorized / unauthorized release) not explicitly recognized by EPA which are in essence, all qualified forms of bypass. The status of these different types of discharges is unclear. Because SDDENR "bypass" and bypass conditions differ from federal requirements, it is difficult to determine whether regulatory conditions are still met. EPA acknowledges working with SDDENR on this issue after the PQR/SRF and anticipates that agreements to ensure clarity on the various forms of discharge will be reflected in permits moving forward.

A specific example of lack of clarify: Northern States Power-Angus Anson Generating Plant discharged in September 2010 due to flooding. The facility submitted DMRs stating that it did not discharge. Within the official file, EPA found evidence of the facility sampling the discharge, however, not all of the parameters required by the permit. The ICIS report does not cite any discharge violations for the facility due to the inaccurate reporting.

<u>Recommendation:</u> Standard conditions in the boilerplates must be consistent with federal regulations as required by 40 CFR 122.41 and 122.42. SDDENR worked actively with EPA to update its boilerplates, in part to address the concerns surrounding its bypass language. The updates are complete

#### **Pretreatment**

#### **Common Finding C-1: SIU Inspection and Sampling**

<u>Finding:</u> Based on the permit records review, it appears that the SDDENR inspects its permitted significant industrial users (i.e., SIUs that the state regulates in lieu of a local pretreatment program) about 2 or 3 times every 5 year permit cycle. In addition, the SDDENR performs an office permit records file review of the permitted SIU in the years that it does not physically inspect the facility. According to permit records review and information gathered during the audit, the SDDENR has not sampled the permitted CIUs/SIUs. There did not appear to be any control authority monitoring results in the permit records for the permitted CIUs/SIUs.

Recommendation: The SDDENR is required, as the control authority, to meet the inspection and sampling frequency of 1/year, as required in §403.8(f)(2)(v) of the Pretreatment regulations. The permitted CIUs/SIUs in the State of South Dakota are a significant distance from the SDDENR offices and EPA understands the logistical challenges for the SDDENR to meet the 1/year inspection and sampling requirement. However, EPA strongly recommends the SDDENR evaluate collaboration with the local POTWs to share the inspection and sampling duties of CIUs/SIUs and meet the required inspection and sampling frequencies of 1/year, as required in the Pretreatment regulations. SDDENR should submit to EPA a plan with timeframe for making this modification. EPA and SDDENR will discuss progress on a quarterly basis. Once EPA is satisfied that state action has addressed the underlying finding, this recommendation will be considered complete.

#### **Common Finding C-2 – Pretreatment Legal Authority**

<u>Finding</u>: The establishment of the SDDENR Pretreatment legal authority does not include the Pretreatment Streamlining Rule amendments to 40 CFR Part 403 that was promulgated by EPA on October 15, 2005 (70 FR 60134). The Streamlining Rule revises several provisions of the General Pretreatment Regulations found in 40 CFR Part 403 and was designed to reduce the overall regulatory burden on both IUs and Control Authorities without adversely affecting environmental protection. The October 15, 2005 Pretreatment Streamlining Rule revised many provisions of the Pretreatment Regulations. Authorized state programs are required to adopt the thirteen (13) Streamlining rule changes, listed below, that were more stringent than the existing Pretreatment provisions.

Recommendation: The SDDENR is required to update its Pretreatment legal authority in §74:52:11 to include the 13 required streamlining provisions listed in §3.2.1. However, EPA strongly recommends that the SDDENR incorporate all Pretreatment Streamlining Rule updates to allow the local Pretreatment programs to adopt the required and optional streamlining provisions. SDDENR should submit to EPA a timeframe for making this modification. Once EPA is satisfied that state action has addressed the underlying finding, this recommendation will be considered complete.

#### **Common Finding C-3 – Pretreatment Requirement**

<u>Finding</u>: The NPDES permits issued to POTWs by the SDDENR do not fully implement the Pretreatment Requirement found in 40 C.F.R. 122.44.

Recommendation: The Pretreatment boilerplate language for NPDES permits issued to POTWs with approved Pretreatment programs must implement the NPDES requirements at 40 CFR 122.44(j)(2)(ii) to "Provide a written technical evaluation of the need to revise local limits under 40 CFR 403.5(c)(1), following permit issuance or reissuance." Since the PQR, SDDENR submitted revised boilerplate language to EPA. This action item is complete.

#### **Whole Effluent Toxicity (WET)**

#### **Common Finding D-1 – WET Policy**

<u>Finding</u>: Permits do not indicate that failures of the additional tests conducted during accelerated testing are considered permit violations. The SOB for Valley Queen Cheese noted that there were 8 violations for WET testing, but did not elaborate on what the violations were; nor did it state if a TIE or TRE was conducted to determine the source(s) of toxicity. Further, the SOB did not elaborate on whether the additional treatment upgrades per the settlement agreement were required to address the results of the TIE/TRE. There was also no RP analysis performed for WET during development of the original permit or the permit addendum.

Recommendation: The state's WET policy and WET RP Policy should be updated to include standard practices reflective of the following: failures of additional tests conducted during accelerated testing are permit violations; where WET limits have not been established, failures of additional tests conducted during accelerating testing demonstrate reasonable potential for toxicity, and limits must then be established and/or a TIE/TRE must be implemented. SDDENR has submitted its WET policy to EPA since the PQR-SRF review.

#### **Common Finding D-2 – Permit Detail**

Finding: Valley Queen Cheese facility violated its WET tests in February, March, June, September, and December of 2006. The State issued a warning letter on September 4, 2007, approximately 9 months after the WET violations occurred, ordering the facility to initiate the TIE process. Valley Queen Cheese submitted the TIE on April 23, 2008. The State issued a warning letter to start the Toxicity Reduction Evaluation (TRE) on May 19, 2008. The facility submitted their TRE plan on April 14, 2010, approximately 22 months after the warning letter. The State issued a formal penalty on November 8, 2010. The State's Enforcement Response Guide (ERG) states that a warning letter specifying a re-test should be sent to the facility within 15 days of notice of a WET failure. Additionally, the State's ERG specifies that failure to initiate a TIE/TRE greater than 30 days late should be responded with an Administrative Order for Compliance, and Administrative Penalty Order, or a Judicial Action.

<u>Recommendation:</u> Permits must provide detail and greater clarity regarding what is required of the permittee in terms of TIE/TRE plan, schedule, reporting, etc., so that the expectations of the permitting authority for the TRE study are adequately outlined to the permittee.

#### **Stormwater Construction**

#### **Common Finding F-1 - Enforcement**

<u>Finding:</u> SDDENR indicated that current staff levels make it difficult to keep up with expectations for the number of inspections expected by EPA, so the state focuses on the quality of its inspections rather than a specific quantity of inspections. By prioritizing its inspection efforts on larger projects near impaired water bodies, the state can ensure these projects do not

cause or contribute to any impairment. Inherent in this process is the need to focus on "wins" in terms of bringing enforcement actions forward where there is a clear impairment/violation recognized.

Recommendation: EPA commends the SDDENR's efforts to do more with less by prioritizing inspections. This approach has been incorporated into the SDDENR's Compliance Monitoring Strategy through risk-based tiered inspection targets which incorporate elements such as TMDLs and impaired waters. However, since going to these tiered inspection requirements, zero formal enforcement actions for construction stormwater have been finalized. The SDDENR needs to pursue approaches which allow them to be more effective in enforcing construction stormwater in priority areas for the program to be effective. This could be accomplished through several means, such as education of administrative law judges regarding the importance of stormwater enforcement, public education on stormwater impacts in impaired watersheds, utilization of more expedited enforcement mechanisms, or by being more proactive in stormwater enforcement regardless of the desired priority to focus on "wins".

## **CWA-NPDES Permit Quality Review**

# I. PQR Background

National Pollutant Discharge Elimination System (NPDES) Permit Quality Reviews (PQRs) are an evaluation of a select set of NPDES permits to determine whether permits are developed in a manner consistent with applicable requirements established in the Clean Water Act (CWA) and NPDES regulations. Through this review mechanism, EPA promotes national consistency, and identifies successes in implementation of the NPDES program and identifies opportunities for improvement in the development of NPDES permits.

EPA's review team, consisting of EPA Region 8, EPA Headquarters, and contractor personnel, conducted a review of the South Dakota NPDES Permit program, which South Dakota calls the Surface Water Discharge (SWD) Program. The review included an on-site visit to the State of South Dakota Department of Environment and Natural Resources (SDDENR) office in Pierre on October 1, 2, and 3, 2012.

The 2012 South Dakota PQR consisted of two components: permit reviews and special focus area reviews. The permit reviews focused on core permit quality and included a review of the permit application, permit, statement of basis, and any correspondence, reports or documents that provide the basis for the development of the permit conditions.

The core permit review involved the evaluation of selected permits and supporting materials using basic NPDES program criteria. Reviewers completed the core review by examining selected permits and supporting documentation, assessing these materials using standard PQR tools, and talking with permit writers regarding the permit development process. The core review focused on the Central Tenets of the NPDES Permitting program. In addition, discussions between EPA and state staff addressed a range of topics including program status, the permitting process, responsibilities, organization, and staffing. Core topic area permit reviews are conducted to evaluate established topics across permits in all states. The core topics reviewed in the South Dakota PQR were: nutrients, the pesticide general permit, pretreatment, and stormwater.

Special focus area reviews target regionally-specific permit types or particular aspects of permits. EPA Region 8 focused on evaluating South Dakota's approach to Whole Effluent Toxicity (WET) as a special focus area of the review.

# II. State Permitting Program Background

#### A. NPDES Program Structure

The SDDENR, Surface Water Quality (SWQ) Program is responsible for regulating wastewater discharges (through SWD and Concentrated Animal Feeding Operations (CAFO) permits), establishing surface water quality standards (SWQS), and monitoring surface waters. Two teams develop wastewater discharge permits; one is dedicated to CAFO permit development and the other to non-CAFO permit development. SDDENR has one central office in Pierre and four regional offices located in Rapid City, Sioux Falls, Vermillion, and

Watertown. The central office drafts permits, conducts routine compliance inspections, responds to complaints, recommends enforcement actions, monitors surface water quality, and investigates water quality concerns as well as administers all NPDES functions. Staff in the regional offices support the central office in drafting permits, conducting routine compliance inspections, responding to complaints, recommending enforcement actions, monitoring surface water quality, and investigating water quality concerns (e.g., fish kills). The central office in Pierre reviews and issues all work that the field offices generate.

The SWQ Program's SWD permit staff consists of nine permit writers and one staff person primarily responsible for supporting Integrated Compliance and Information System (ICIS) and Whole Effluent Toxicity (WET) activities, and conducting informal enforcement activities. All 10 members of the SWD permitting team conduct inspections. The CAFO permitting team consists of one permit writer (the Team Leader has been the primary permit writer for the CAFO general permit) and eight supporting staff responsible for implementing program requirements for the approximately 400 permittees, including reviewing facility plans and specifications, reviewing nutrient management plans, conducting inspections, and enforcing permit conditions. In addition, the regional offices employ one staff person each (two staff are located in the Rapid City office). The SWQ Program's secretary processes public notices, tracks permit fees and application submittals, enters the majority of the data from discharge monitoring reports, and provides other administrative support to both the SWD and CAFO permitting teams. Nine of the staff do water quality modeling directly related to the issuance of the NPDES permit. SDDENR has a separate team responsible for the majority of the TMDL work in South Dakota. The TMDL team has ten staff members that are responsible for developing TMDLs and any associated water quality modeling. The SWD team provides information and support for any TMDLs that involve point sources and is primarily responsible for the development of the wasteload allocations for TMDLs.

The SWQS team provides technical support on the implementation of SWQS and conducts in-stream water quality monitoring, which supports the development of discharge permits and related modeling. In addition to the staff directly responsible for the implementation of NPDES permitting, SDDENR maintains two other staff members located in other programs that provide water quality monitoring support and occasional water quality investigations when required. The Administrator of the SWQ Program oversees the SWD, CAFO, and SWQS teams and provides direction and support to each as necessary.

Key points of coordination between SWD, TMDL and WQS programs include:

- Staff from the TMDL and WQS teams work cooperatively to develop the Integrated Report every two years, reviewing the available water quality data and identifying impairments. This report is then reviewed by the entire department, including staff from the SWD team.
- Prior to the issuance or reissuance of an SWD permit, the WQS team conducts a
  use attainability analysis of any water bodies that are not classified for higher
  fishery uses. The results of these analyses are communicated with the SWD team
  prior to drafting the permit. The permit writer then uses this information to
  determine appropriate limits.
- The TMDL and SWD team work closely on TMDLs if there are any point sources within the watershed. The SWD calculates the wasteload allocation and provides

this information to the TMDL team. On large, extensive TMDL projects with multiple point sources, a SWD team member has participated in the work group that directs and guides the development of the TMDL.

• All three teams work closely together during the development of the triennial review of the water quality standards.

With regard to training, new permit writers are provided on-the-job training by experienced permitting staff and through developing minor individual permits. Further, when the budget allows for travel, permit writers receive training (e.g., U.S. EPA's NPDES Permit Writers' Course). SDDENR has a strong commitment to ensuring that new permit writers are provided training through the U.S. EPA NPDES Permit Writers' Course. SDDENR has continued to send permit writers to this training since before South Dakota was delegated NPDES authority. With the exception of one staff person, all of the current SWQ permitting staff have completed U.S. EPA's NPDES Permit Writers' Course. In addition, SDDENR uses permit boilerplates to assist new and experienced permit writers, which also ensures consistency among permits.

The SWQ permitting staff manage permit data using EPA's ICIS and STORET, and the state's own FoxPro-based database system. The State downloads permit information from ICIS and uploads it into their own database; this is the primary mechanism for tracking SWD and pretreatment industrial user permits. Further, general stormwater and CAFO permits are also tracked through the State's database; however, ICIS information is not utilized for tracking either of these two general permits. In addition, SDDENR accepts Discharge Monitoring Reports (DMRs) electronically through EPA's online system, NetDMR.

SDDENR developed four individual permit boilerplates (e.g., industrial, major municipal, minor municipal, and no discharge municipal) and a boilerplate for the statement of basis (minor municipal). All of the boilerplates, with the exception of the no discharge municipal (2010), were updated in 2012 and provide guidance to permit writers in the development of permits. In 2004, SDDENR developed a spreadsheet tool to evaluate reasonable potential (RP), based on procedures in EPA's Technical Support Document for Water Quality-based Toxics Control (TSD). Permitting staff have used the RP spreadsheet tool sporadically. Circumstances where the RP spreadsheet tool have been used (although not consistently) include evaluating new effluent limits (largely for metals) and evaluating possible changes to monitoring frequency. (Update: The tool was updated in 2012 and given to EPA Region 8 for evaluation during this PQR. SDDENR has also developed a companion guidance document for the RP spreadsheet tool, which documents procedures used for identification of pollutants of concern, consideration of non-detect data, and final determination of RP.) Mixing zones are evaluated and implemented largely through procedures outlined in SDDENR's Mixing Zone and Dilution Implementation Procedures (August 1998); however, in certain circumstances, SDDENR may use the CORMIX model to calculate appropriate mixing zones. Additionally, SDDENR maintains Antidegradation Implementation Procedures (October 1998).

SDDENR works to ensure consistency and accuracy in permit development by requiring that permit writers use current permit and statement of basis templates. Further, SDDENR implements a well-established internal review process, through which all draft individual and

general permits are reviewed internally by the entire permitting team and the Team Leader. Draft general permits undergo additional review by all Program Administrators and Division Directors. Department managers review each public notice. SDDENR uses a permit issuance checklist that details each step in the permit issuance process along with the responsible entity associated with each step; the checklist is introduced into the process with the permit application. SDDENR also uses a checklist for coding permits into ICIS.

Permit files are maintained in the central office in Pierre in both electronic and hard copy form; most file documents are maintained in hard copy form (e.g., application, public notice documentation, statement of basis, any comments received, and SDDENR's response to comments received). Further, all correspondence is filed in hard copy form also it may be scanned electronically for staff in field offices. Hard copies of DMRs are also maintained with the permit file. A major success of SDDENR's permitting program is the substantial effort that was put forth to implement electronic reporting for discharge monitoring reports. Training, workshops and extensive outreach was conducted across the state over the last 18 months to share information and sign up operators. This resulted in the high percentage of permittees approved for electronic reporting through NetDMR. Approximately 40 percent of SDDENR's permitted facilities are approved for electronic reporting through NetDMR. Permittees enter information into NetDMR which is uploaded to ICIS directly. With NetDMR, permittees have the option of attaching information to the electronic submittal, such as a cover letter, laboratory data, or violation reports. These attachments are reviewed by SWD staff and, if necessary, printed and filed in the hard copy files. Compliance records, including formal enforcement actions and documentation of penalties paid, are maintained in hard copy format in the permit file in the central office. During the site visit, SDDENR indicated some copies of previous permits were maintained in microfiche format, as are other records that are considered archived.

#### **B.** Universe and Permit Issuance

SDDENR administers permits for 183 POTWs (21 major and 161 minor; 1 of the facilities has CSOs) and 88 non-municipal facilities (8 major and 80 minor). In addition, SDDENR administers stormwater general permits that cover 12 municipalities, 2 counties and the SD Department of Transportation (municipal separate storm sewer systems (MS4s)), 1041 industrial permittees (an additional 304 permittees are also covered under multi-media permits that combine water quality and air quality permit requirements), and 1616 construction permittees. SDDENR also administers a CAFO general permit that covers 405 permittees (2 additional CAFOs are covered by individual permits). Further, SDDENR has also developed multi-media general stormwater permits. These permits combine the stormwater requirements with the permitting requirements under the Clean Air Act. Currently, multi-media general stormwater permits have been developed for rock crushers, asphalt plants, and concrete plants. SDDENR maintains an internal database for tracking NOIs. Significant industries within the State include, meat processing, cheese processing, ethanol production, mining (including one active gold mine and a large number of sand and gravel operations), and metal finishing. SDDENR indicated South Dakota is not largely an industrial state.

As of September 2012, SDDENR had approximately 21 backlogged major individual permits meaning that the SD SWD program is approximately 73 percent backlogged for major

individual permits. During the site visit, SDDENR indicated three of the backlogged permits have received public notice and two more are drafted and will receive public notice in October 2012 (Mitchell and Vermillion effective October 1, 2012; USGS-EROS Data Center effective January 1, 2013; Hot Springs effective January 1, 2013; Huron public noticed February 29, 2013). SDDENR estimated they are 18 percent backlogged for minor individual SWD permits. SDDENR indicated that their general permits are current.

SDDENR uses its own NPDES permit application forms for municipal facilities and uses EPA's Form 2C for industrial facilities. SDDENR reminds facilities regarding permit reapplication eight months prior to permit application due dates, with a goal to receive the application 180 days prior to permit expiration. Upon receipt, SWD staff review applications and either deem them complete or request additional information from the applicant. If a delay in processing the permit renewal occurs, SDDENR will issue a letter to the permittee administratively extending the permit. SWD management assigns permits to permit writers based on existing workload and expertise; SDDENR also attempts to pair senior and junior permit writers to foster on-the-job training. SDDENR also supports cross-training of permit writers, so permits may be assigned regardless of expertise.

Following application review, permit writers review the permit file, including the current permit, facility or Operation and Maintenance inspection reports, ICIS-DMR data, and reasonable potential (RP) analysis (generally for metals, if conducted) before proceeding to drafting the statement of basis. SDDENR indicated their statements of basis meet the federal requirements for fact sheets, and SDDENR drafts statements of basis for all SWD permits.

SDDENR has used a template for developing the statement of basis since South Dakota was delegated authority for administering the NPDES Permit Program in 1993. The statement of basis template provided during the PQR includes the following sections:

- Description
- Receiving Waters
- Antidegradation
- Monitoring Data
- Inspections
- Effluent Limits
- Self-Monitoring Requirements
- Sludge
- Drainage Issues
- Endangered Species
- Permit Expiration
- Permit Contact
- Attachment 1 Antidegradation Review
- Attachment 2 Monitoring Data

Permit writers draft the statement of basis to include a description of the facility, treatment process, and designated uses of the receiving stream. SWD permitting staff may consult with SWQS staff to verify that designated uses are correct. South Dakota developed 11 classifications of water body uses, contained in the Administrative Rules of South Dakota, Chapters 74:51:02 and 74:51:03, including, "(9) Wildlife propagation and stock watering

waters; and (10) Irrigation waters." For water bodies listed as supporting only these two beneficial uses, SDDENR staff will visit the water body to verify the appropriateness of the classification. SDDENR indicated that approximately 8-10 years ago, permit backlog increased because staff were required to review beneficial use classifications of receiving water bodies. In addition, South Dakota's SWQS contain a prohibition on discharges to lakes classified as fishery waters (i.e., surface waters of the state designated for fish propagation). It is noteworthy that the SWQS at 74:51:01:43 classify Missouri River impoundments as flowing streams and not as reservoirs.

Permit writers will then perform at least an initial antidegradation review on all permits, based on the State's Antidegradation Implementation Procedures (October 1998). Permit writers use an antidegradation review checklist to conduct the evaluation and include the worksheet as an attachment to the statement of basis. The core review indicated that the antidegradation review checklist was included in each of the permit records reviewed (included as an appendix to the statement of basis). Permit writers include a summary of DMR data, findings from the most recent inspection, and a discussion of compliance issues, as appropriate.

SDDENR indicated that most of their permits are for municipal facilities (approximately 80 percent) and therefore, in most cases, pollutants of concern are those included in secondary treatment standards (i.e., pH, BOD, and TSS). For permits developed for non-municipal facilities, permit writers will consider the industry and identify pollutants expected to be present in the discharge based on staff knowledge of the industry and consideration of information provided in the permit application. SDDENR indicated that because there are few industries in the state, SWD staff are familiar with the industries and pollutants expected to be present in the discharge. Permit writers will review national effluent limitation guidelines (ELGs) and standards regulations established by EPA for various industrial categories or research information on the industry regarding expected pollutants of concern for new facilities or facilities with which they are unfamiliar. SDDENR indicated that applications for new discharges require collection of effluent monitoring data which may include analysis for the full suite of metals. This data may then be evaluated using SDDENR's RP spreadsheet tool. In addition, SWD permit writers evaluate pollutants of concern for major facilities through review of effluent monitoring data collected during the permit term (full pollutant scans may be required annually in some permits). SDDENR emphasized they have greater confidence in the quality of data collected during the permit term through permit requirements, than in data that is requested through the permit application process. Given the challenges in getting facilities to submit applications for renewal, SDDENR commented that for this reason, SWD may deem a permit application complete despite the absence of complete sampling data per federal application requirements.

Technology-based effluent limitations (TBELs) for POTWs are based on secondary treatment standards. Permits for POTWs that discharge to a stream listed for uses (9) and (10) will include effluent limitations based on secondary treatment standards; some permits may also include additional effluent limitations for ammonia and bacterial indicators for POTWs that discharge to streams listed as supporting fish propagation. Permits developed for non-municipal facilities include effluent limitations based on ELGs or, in some cases, best professional judgment (BPJ). SDDENR indicated BPJ is commonly used in permits issued to restaurants that maintain a lagoon treatment system; permit writers will apply BPJ

in establishing effluent limitations based on secondary treatment standards. Permit writers may also consider applying BPJ to develop effluent limitations for ethanol facilities; however, SDDENR commented that SWQS are usually (though not always) more stringent and subsequently, water quality-based effluent limitations (WQBELs) will be established instead of TBELs based on BPJ. For example, South Dakota's SWQS at 74:51:01:32 contain effluent limitations for discharges to coldwater fishery waters for TSS and BOD<sub>5</sub>, of 10 mg/L as a 30-day average.

SDDENR indicated SWD staff communicate with SWQS staff not only to verify the accuracy of designated beneficial uses, but also to confer regarding a stream's impairment status with respect a point source contributing to the impairment. SDDENR indicated that the TMDL program confers with the SWD program before TMDLs are issued; generally, effluent limits established in permits are incorporated as the WLA in any TMDL that is developed. SDDENR indicated point sources are rarely the cause for stream impairment and in cases where the point source is identified as the cause for impairment, it is because the facility has violated effluent limitations. Further, the facility, if in violation of effluent limitations, would be under enforcement actions to correct the violations. SWD and SWQS staff collaborate to evaluate impairment status, identify causes for the impairment, and develop the 303(d) List; most stream impairments are for TSS and bacteria, parameters for which SDDENR has developed SWQS.

As stated previously, SWD staff have indicated that they are familiar with the permitted facilities in their state and any pollutants expected to be present in their discharge. SWD staff have primarily used the RP spreadsheet for evaluating the need for effluent limits (particularly for new discharges), the need for metals limits or the need for any changes in monitoring frequency for existing discharges. SDDENR indicated that the RP spreadsheet has not been widely used to evaluate RP for toxic parameters because SDDENR does not believe toxic parameters to be present in wastewater discharges of familiar facilities. In addition, SDDENR noted whole effluent toxicity (WET) data has not been evaluated using the RP spreadsheet to date. SDDENR indicated that typically for minor facilities, SWD staff review the data and evaluate RP, but may not always use the formal RP spreadsheet to document the evaluation. SDDENR indicated staff are increasing the use of the RP spreadsheet, especially for major facilities, given growing understanding of the importance for conducting a thorough evaluation of RP. SDDENR noted that the statement of basis may not always contain a statement indicating that a formal RP evaluation has been conducted.

WQBELs are developed mostly for ammonia and bacterial indicators (fecal coliform, transitioning to *E. coli*) which are based on SWQS. SWQS are applied either end-of-pipe or after incorporation of a mixing zone. WQBELs for ammonia are established for discharges to fishery waters or water bodies that are within five miles of fishery waters. WQBELs for ammonia are developed based on SWQS and using mass-balance modeling, using the 80<sup>th</sup> or 50<sup>th</sup> percentile value of available water quality monitoring data and assuming the greater of either a 7Q5 or 1 cfs flow for most streams. SDDENR's 1998 Mixing Zone and Dilution Implementation Procedures allow for dilution and mixing zones for acute ammonia criteria (unionized ammonia). Permit writers evaluate the seasonal variability of data associated with ammonia and may establish seasonal or monthly WQBELs for ammonia. In some cases, permit writers may use the AMMTOX model to develop WQBELs for ammonia; however, permit writers require high-quality data in order to run the model. SWD staff may use a

stream DO model to develop WQBELs for dissolved oxygen and biochemical oxygen demand for facilities that continuously discharge into higher classified water bodies. In addition, CORMIX is used occasionally, but generally permit writers implement the procedures contained in the State's mixing zone policy. Where mixing is allowed for a discharge, permit writers include a discussion in an appendix to the statement of basis. South Dakota maintains surface water quality monitoring data for approximately 150 monitoring stations in the STORET database and uses these data to develop WQBELs. These ambient data are also considered when evaluating RP; stations closest to the discharge point are used as default data sources. Where WQBELs have been established in a permit, the statement of basis includes brief discussions of the development of effluent limitations, and where modeling is conducted includes an appendix providing a detailed discussion and illustration of calculations used to develop the WQBELs (e.g., ammonia effluent limitations in the draft permit for the City of Mitchell WWTF, SD0023361).

SWD staff ensure all limited parameters have associated monitoring requirements in the permit. Permit writers review permits for similar facilities to establish consistent monitoring requirements and may assign site-specific monitoring conditions where appropriate. SDDENR indicated they develop monitoring conditions that are consistent and justifiable. SWD staff may take into consideration the impact a municipality may experience based on monitoring requirements (e.g., POTWs that operate a lagoon system that discharges intermittently may have tiered monitoring frequencies). SWD permits for major facilities require annual monitoring for the priority pollutants. Minor permitted facilities submit monitoring reports to SDDENR quarterly, while major permitted facilities submit reports to SDDENR monthly.

Narrative conditions typically included in permits address visual observations of oil and grease or other pollutants. In addition, POTW permits include the prohibition on use of chemicals without prior written permission. Permits most affected by this narrative condition are ethanol facilities and are addressed through permit amendments to update the permit because of a change in chemicals used at the facility.

SWD permits that contain monitoring requirements for WET include requirements for a Toxicity Identification Evaluation (TIE)/Toxicity Reduction Evaluation (TRE). Pretreatment requirements are included in the SWD permit for municipalities that have an approved pretreatment program.

Biosolids are managed under a separate permitting program. SWD permits include definitions in section 1.0 of their permit which include definitions for monthly and weekly averages, bypass, upset, and severe property damage; conditions that are sometimes found in the standard condition sections of NPDES permits. SDDENR uses boilerplate language for standard and special conditions. The language for three boilerplates – industrial, major municipal, and minor municipal - was updated in 2012. The no-discharge boilerplate was last updated in 2010; SDDENR indicated at the time of the PQR that the no-discharge boilerplate as well as its minor municipal boilerplate will be updated in 2013 in order to incorporate EPA recommended changes to ensure that the standard and special conditions comport with federal regulation.

All individual SWD permits have an accompanying statement of basis developed as part of the permit development process and are maintained as part of the permit record. SWD staff use a template and outline format to develop the statement of basis, which serves as the development document and builds the SWD permit. SWQS staff complete 401 certifications for EPA-issued and Corps of Engineers permits.

When the SWD permit is drafted, a public notice is published in the local newspaper. SDDENR requires an affidavit of publication prior to issuing the SWD permit. SDDENR indicated that few formal comments are received on draft permits, but when they are submitted, SWD staff respond to the comments and work with the commenter to the extent possible and revise the permit as appropriate. The revised permit is provided to the parties that commented on the draft, an additional 30 days are allowed to review the comments and contest the issuance of the permit. If the commenters do not request a contested case hearing within that 30-day period, the SWD permit becomes effective. SDDENR indicated few SWD permits have required public hearings. The administrative record is maintained as part of the main permit file and housed in the central office in Pierre.

As stated previously, with regard to antidegradation, SDDENR maintains Antidegradation Implementation Procedures and conducts at least a preliminary antidegradation review during each permit issuance. SDDENR indicated many existing facilities are determined to be exempt from a formal antidegradation review based on the applicability section of the Antidegradation Review Checklist, because in most cases, the permit does not authorize an increase in effluent limits or the existing effluent quality is in compliance with SWQS. The template for the statement of basis includes language regarding antidegradation. With regard to antibacksliding, SDDENR indicated it is infrequent that antibacksliding is allowed; however, if conservative modeling supports the relaxation of effluent limitations, SDDENR may allow it. SDDENR noted an instance when a facility went through an expansion, SWD staff provided modeling results, performed an antidegradation review, made it available for public comment, and allowed the relaxation of effluent limitations associated with the facility expansion. SDDENR indicated that even with a relaxation of effluent limitations, the permitted discharge must meet the minimum requirements prescribed by the SWQS. The statement of basis would include a discussion of the evaluation and determination, if a relaxation in effluent limitations was granted.

With regard to TMDLs, the TMDL staff's early focus was developing TMDLs for lakes; however, SDDENR generally prohibits discharges to lakes. With the focus now shifted to developing TMDLs for streams, TMDL staff consult with SWD permit staff to ensure established effluent limitations in permits are incorporated as wasteload allocations (WLAs) in TMDLs. Because the WLA is generally developed based on established permit effluent limitations, point sources are not expected to cause or contribute to the further impairment of streams as provided in TMDLs. However, in cases where the facility has been identified as a possible source contributing to the impairment, SWD permit staff will develop monitoring requirements to further assess the situation.

#### C. State-Specific Challenges

SWD indicated significant technical resources are being directed towards assisting permittees with electronic reporting, particularly with system security requirements to update user passwords frequently. SDDENR noted they acknowledge the long-term efficiencies from electronic reporting but indicated they are expending resources in the near-term.

#### D. Current State Initiatives

SDDENR is developing draft Implementation Procedures for Reasonable Potential Analyses and Whole Effluent Toxicity (WET) which will improve the quality of the permit development process. This change suggests there will be greater clarity and consistency in the development of effluent limitations as permit conditions. Further, SDDENR is moving towards switching from a WET limit of Pass/Fail to Toxic Units (TUa = Acute Toxic Units and TUc = Chronic Toxic Units).

#### **III.** Core Review Findings

#### A. Basic Facility Information and Permit Application

#### **Facility Information**

Basic facility information is necessary to properly establish permit conditions. For example, information regarding facility type, location, processes and other factors is required by NPDES permit application regulations (40 CFR 122.21) because it is essential for developing technically sound, complete, clear and enforceable permits. For this reason South Dakota's statements of basis must include a description of the type of facility or activity subject to a draft permit.

The 10 permits reviewed for the core review consistently included identification of outfalls and receiving waters. The eight final permits reviewed (Mitchell WWTF and Huron WWTF were draft permits) included permit issuance and effective dates, expiration dates, authorized signatures, and specific authorization-to-discharge information. One of the statements of basis included a discussion of a stream's impairment status or TMDL applicability (Northern States Power-Angus Anson Generating Site, SD0000264) and it was related to current permit limits for TDS being more stringent than those established in the TMDL developed during the previous permit. The core review demonstrated that statements of basis developed for POTWs and non-POTWs contained an adequate description of facility location and treatment processes. Two of the four permits reviewed for industrial facilities included a discussion of the applicability of ELGs, and neither of the two included discussions specific to categorization or subpart applicability.

The boilerplate provided for minor municipal facilities included placeholder text for facility and treatment process descriptions.

#### **Permit Application Requirements**

Federal regulations at 40 CFR 122.21 and 122.22 specify application requirements for NPDES permits. Although federal forms are available, authorized states are also permitted to use their own forms provided they include all information required by the federal regulations. This portion of the review assessed whether appropriate, complete, and timely application information was received by the state and used in permit development.

Industrial permit files reviewed during the core review included EPA's Form 2C, whereas permit files for POTWs included a State-generated application form for the municipal application. The application for POTWs includes a general information form, a certification form, and an Appendix A, which is the POTW-specific portion. Regarding data requirements, Appendix A of the POTW application requests the applicant to indicate any discharge sample analyses which are routinely performed by a contract laboratory or consulting firm. SDDENR's current data requirements to be included in the application differ substantially from that required by EPA. EPA's form 2A establishes additional effluent testing data for facilities with flows greater than 0.1 mgd and 1.0 mgd which SDDENR's application does not include. The state's application for existing industrial facilities includes the same general information and certification forms that are part of the municipal application; additionally, SDDENR requires the facility to complete EPA's Form 2C (Appendix B) in the renewal application. The on-site review of supporting files revealed that permit applications were consistently available in the administrative record. Applications that were reviewed did not include the same level of data as required by the state (or EPA) application forms, as identified in 40 CFR 122.21(a)(2). For example, applications for POTWs contained only one set of analytical data for the full list of pollutants and WET testing data were not always included with the application; none of the applications reviewed for POTWs contained three sets of priority pollutant scans or WET data as required by 40 CFR 122.21. In addition, applications for industrial facilities sometimes indicated parameters were "believed present"; however, the permit record often lacked additional discussion of these parameters as well as any additional monitoring requirements to evaluate RP. During the on-site review, SDDENR indicated that requests for effluent sampling data are a part of the permit's monitoring requirements.

#### **B.** Technology-based Effluent Limitations

NPDES regulations at 40 CFR 125.3(a) require that permitting authorities develop technology-based requirements where applicable. Permits, statements of basis, and other supporting documentation for POTWs and non-POTWs were reviewed to assess whether TBELs represent the minimum level of control that must be imposed in a permit.

#### **TBELs for POTWs**

POTWs must meet limits based on secondary or equivalent to secondary standards (including limits for BOD, TSS, pH, and percent removal) and POTW permits must contain numeric limits for all of these parameters (or authorized alternatives) in accordance with the Secondary Treatment Regulations at 40 CFR Part 133. A total of six POTW permits were reviewed as part of the South Dakota 2012 PQR.

EPA found that the POTW permits and available statements of basis provided an adequate description of wastewater treatment processes and discussions of the basis of TBELs. Further, effluent limitations were established using the appropriate units, averaging periods, and expression (i.e., concentration or mass; average weekly and average monthly). However, permits reviewed for lagoon-based or batch discharging POTWs (e.g., City of Mitchell WWTF, Huron WWTF, City of Sisseton WWTF) did not consistently apply secondary

treatment standards; these permits did not include the minimum percent removal requirements for BOD and TSS. SDDENR indicated that it is not possible for SWD permits to establish minimum percent removal requirements for certain POTWs that operate lagoon systems based on the infrequent nature of discharges from these facilities. SDDENR indicates that comparing influent and effluent samples at the time of a discharge is not representative of the removal efficiency. Such limits represent exceptions to standard secondary treatment requirements, which was not clearly justified in the permit documentation. While this is consistent with EPA Region 8's policy to not include percent removal requirements for lagoons due to retention times greater than 30 days, it was not discussed in the statement of basis. It should be noted that EPA HQ has reviewed Region 8's policy and found that it is inconsistent with Secondary Treatment Regulations, which do not provide an exception to the percent removal requirement for lagoon systems. It is also noted that SDDENR does require continuously discharging POTWs to meet percent removal limits.

#### **TBELs for Non-POTW Dischargers**

Where federal effluent limitations guidelines (ELGs) have been developed for a category of dischargers, the TBELs in a permit must be based on the application of these guidelines. ELGs specify a level of treatment performance equivalent to Best Available Technology Economically Achievable (BAT) or Best Conventional Pollutant Control Technology (BCT) for existing sources, and consistent with New Source Performance Standards (NSPS) for new sources. If ELGs are not available, a permit must include requirements at least as stringent as BAT/BCT developed on a case-by-case basis using best professional judgment (BPJ) in accordance with the criteria outlined at 40 CFR 125.3(d).

The non-POTW permits reviewed consisted of three power generating facilities, a cheese factory, an ethanol facility and a used transformer rebuilding/reconditioning facility. ELGs were applied correctly in the permits reviewed. However, the statements of basis reviewed for these facilities included facility and treatment process discussions in varying levels of detail and lacked clear discussions of the applicability of ELGs. Of the two permits for which there are applicable ELGs, one permit record (Black Hills Power-Ben French Power Plant, SD0000141) appeared to include documentation of the calculations used to develop the effluent limitations based on ELGs.

Documentation did not consistently include a discussion of the applicability of ELGs or illustration of calculations used to develop the TBELs. In some cases, it was difficult to discern if final effluent limitations were technology- or water quality-based limitations; some explanations in the statements of basis indicated, "This limit is based on the SDSWQS, current permit limits, and BPJ."

- Black Hills Power-Ben French Power Plant (SD0000141). The statement of basis
  includes some discussion related to the development of effluent limitations for
  chromium and zinc which considers 40 CFR 423.12 and 423.13.
- Black Hills Corporation-Lange Combustion Turbine Facility, SD0027871. The statement of basis indicates the facility is a peaking plant that operates a natural gas combustion turbine which would suggest the steam electric ELG does apply. However, the statement of basis also says that the facility does not meet the

- definition of a steam electric power generating facility, but never clearly articulates why that is the case.
- Northern States Power-Angus Anson Generating Station, SD0000264. The
  statement of basis indicates the facility decommissioned their steam electric
  power generating units; therefore, some of the requirements contained in the
  ELGs for TSS and those for stormwater discharges do not apply to the discharge.
  In fact, none of the requirements of the ELG apply. SDDENR clarified this issue
  in the response to comments for the permit renewal, stating that the provisions
  based on the ELGs were included in the draft permit incorrectly and revised the
  permit to reflect the correction.
- Valley Queen Cheese (SD0027987). The permit did not include any references to ELGs or the subpart that is applicable to the discharge (i.e., 40 CFR Part 405, Subpart F) and lacked documentation of effluent limitation calculations. The permit for this facility established effluent limitations as concentrations, whereas the applicable ELGs establish effluent limitations expressed in mass.
- T&R Electric. The statement of basis indicated that effluent limitations were based on SDSWQS, BPJ and current permit limits; no discussion was presented regarding whether any ELGs are applicable.
- POET ethanol facility. The statement of basis indicated that effluent limitations were based on SDSWQS, BPJ, Reasonable Potential Analysis and current permit limits; no discussion was presented regarding whether any ELGs are applicable.

#### C. Water Quality-Based Effluent Limitations

The NPDES regulations at 40 CFR 122.44(d) require permits to include any requirements in addition to or more stringent than technology-based requirements where necessary to achieve state water quality standards, including narrative criteria for water quality. To establish water quality-based effluent limits (WQBELs), the permitting authority must evaluate the proposed discharge and determine whether technology-based requirements are sufficiently stringent, and whether any pollutants or pollutant parameters could cause or contribute to an excursion above any applicable water quality standard. A total of 10 permits were evaluated for their WQBELs – 6 POTW permits and 4 non-POTW permits.

The South Dakota 2012 PQR assessed the processes employed by permit writers and water quality modelers to implement these requirements. Specifically, the PQR reviewers looked at permits, statements of basis, and other documents in the administrative record to evaluate how permit writers and water quality modelers:

- determined the appropriate water quality standards applicable to receiving waters
- evaluated and characterized the effluent and receiving water including identifying pollutants of concern,
- determined critical conditions,
- incorporated information on ambient pollutant concentrations,

- assessed any dilution considerations,
- determined whether limits were necessary for pollutants of concern and, where necessary,
- calculated such limits or other permit conditions.

For impaired waters, the PQR also assessed whether and how permit writers consulted and developed limits consistent with the assumptions of applicable EPA-approved TMDLs.

Permits reviewed as part of the core review consistently identified the receiving stream and the designated uses of the receiving stream. Permits and statements of basis reviewed did not discuss impairment status or identify if a TMDL had been developed for the receiving water body. The template for the statement of basis for minor municipal facilities provided during the PQR does not appear to include placeholder text related to stream impairment or TMDL status.

**Update**: SDDENR indicates that following recommendations during EPA's site visit, DENR changed its processes and templates to address this issue. SDDENR indicates that as permit applications are reviewed for completeness, DENR checks whether a TMDL has been approved for the watershed receiving the discharge. New protocol also requires the permit writer to review and document whether the water body is listed in the 2012 South Dakota Integrated Report for Surface Water Quality Assessment. Standard language has been developed for use in SDDENR's statement of basis template regarding three possible scenarios:

- a) The segment of the receiving waterbody has not been identified as being impaired, therefore a TMDL is not needed;
- b) The segment of the receiving waterbody has been identified as being impaired for a specific parameter(s) but a TMDL has not yet been completed. Therefore, no wasteload allocation has been assigned to the facility. The statement of basis contains language noting the permit will be reopened, if necessary, to address the facility's wasteload allocation once the TMDL is completed; and
- c) The segment of the receiving waterbody has been identified as being impaired for specific parameter(s) and a TMDL has been completed and approved by EPA with a wasteload allocation. The limits will be developed for the permit to ensure the wasteload allocation is not exceeded.

In order to adequately determine the need to develop WQBELs, a comprehensive evaluation for RP must be conducted and documented in the Statement of Basis. The evaluation should identify pollutants of concern and assess the variability of those pollutants in the effluent and assess receiving water body conditions where appropriate for dilution including background pollutant concentrations and receiving water flow available to ensure that effluent limitations will protect both numeric and narrative water quality criteria. The assessment should be well documented as part of the reasonable potential analysis process. The evaluation should document all steps of the process from identifying pollutants of concern through developing water quality based limitations and/or monitoring requirements to ensure protection of numeric and narrative criteria. Although DENR might review some effluent and ambient data and provide limited information in their statement of basis, the process as documented in the

statement of basis and administrative record is not clear and transparent. It is also not clear whether or not there is an approach used for data analysis and water quality based effluent limitation development that is standard across the permitting program and used by all permit writers.

The statements of basis reviewed consistently lacked facility- and discharge-specific details regarding pollutants of concern chosen for evaluation of the need for WQBELs. The statements of basis for the permits reviewed do not specifically discuss how pollutants of concern are selected and some aspects of this process are not clear. SDDENR indicated their familiarity with permitted facilities assists them in identifying pollutants of concern. Permit records contained little documentation of an assessment of RP and the need for WQBELs, including identification of pollutants of concern (except for metals, in some cases), evaluation of RP (and resulting determination), and development of WQBELs, if WQBELs were required. It was unclear if an analysis was conducted for parameters other than metals, and if so, for what pollutants, and what the final determination was.

The materials reviewed during the PQR did not include thorough discussions or clear demonstrations that reasonable potential evaluations for the need to develop WQBELs had been conducted during the permit development process. A clear assessment of the pollutants of concern present in the discharge, pollutant variability and consideration for dilution in the receiving water was not apparent in the permit record. As stated previously, SWD permit staff indicated familiarity with the permitted facilities and pollutants expected to be present in the discharge has led to staff using the RP spreadsheet primarily for evaluating the need for new effluent limits, particularly for new discharges, or for existing discharges the need for metals limits or a change in monitoring frequency. The RP spreadsheet, which is based on procedures in the TSD, has not been widely used to evaluate RP for toxic parameters. SDDENR indicates that this is largely because SWD staff have not observed positive detections of toxic parameters in wastewater discharges; however no data was available to support this claim. Typically for minor facilities, SWD permit staff review the data and may or may not evaluate RP; if RP was evaluated, the staff may not always use the formal RP spreadsheet to document the assessment. Further, SDDENR noted that the statement of basis might not always contain a statement indicating that a formal RP evaluation has been conducted. SWD permit staff are moving towards using the RP spreadsheet more consistently, especially for major facilities, understanding the need to conduct and document a thorough evaluation of RP. Two statements of basis reviewed during the POR accompanied draft permits (City of Mitchell WWTF, SD0023361 and City of Huron WWTF, SD0023434) and appeared to contain more detailed language regarding an evaluation of RP within the section, "Self-Monitoring Requirements." In addition, both draft permits required annual monitoring for the full list of priority pollutants. However, a number of permits did establish RP for pollutants, yet did not include an effluent limitation for those pollutants (e.g. Chamberlain, Huron, Mitchell, Mobridge).

Permits and statements of basis reviewed lacked consistent evaluation of RP for WET or the need for WET monitoring. Where permits required WET monitoring, accompanying statements of basis included a discussion of WET requirements; however, permit records did not consistently demonstrate that the permit writer evaluated RP for WET. Permits were also observed where neither effluent limitations nor methods to limit toxicants responsible for WET failure were established despite the demonstration of RP associated with multiple WET

failures in previous permits. The requirement to establish a WET limit or method to control toxicants responsible for WET failure(s) applies regardless of whether the discharge is continuous or limited in nature. (Please see Section IV.A for more details on WET.)

During the on-site review, SDDENR noted they are continuing to develop a guidance document to accompany the RP spreadsheet tool SDDENR began using in 2004. SDDENR and EPA discussed development of the guidance document [since submitted to EPA], with regard to outlining procedures for conducting RP analysis, beginning with identifying pollutants of concern, analyzing monitoring data (including approaches for evaluating censored, or non-detect data), defining RP, and concluding with procedures on calculating WQBELs.

Where limits were established in the final permits, the limits appeared consistent with documentation available in the accompanying statement of basis.

Permit records consistently included documentation that the permit writer conducted an antidegradation analysis; the evaluation checklist was consistently included as an appendix to the statement of basis. Finally, most of the statements of basis reviewed noted that some limits were based on the existing permit to prevent backsliding, which suggests limits are as stringent as previous permit limits and that backsliding is not allowed.

#### D. Monitoring and Reporting

NPDES regulations at 40 CFR 122.41(i) require facilities discharging pollutants to waters of the U.S. to periodically evaluate compliance with the effluent limitations established in their permits and provide the results to the permitting authority. Monitoring and reporting conditions require the permittee to conduct routine or episodic self-monitoring of permitted discharges and where applicable, internal processes, and report the analytical results to the permitting authority with information necessary to evaluate discharge characteristics and compliance status.

Specifically, 40 CFR 122.44(i) requires NPDES permits to establish, at minimum, annual monitoring for all limited parameters sufficient to assure compliance with permit limitations, including specific requirements for the types of information to be provided and the methods for the collection and analysis of such samples. In addition, 40 CFR 122.48 requires that permits specify the type, intervals, and frequency of monitoring sufficient to yield data which are representative of the monitored activity. The regulations at 40 CFR 122.44(i) also require reporting of monitoring results, developed on a case-by-case basis, with a frequency dependent on the nature and effect of the discharge.

The 10 permits reviewed included appropriate monitoring requirements based on the facility type, type of discharge and corresponding limit basis. SWD permits include a statement addressing each monitoring requirement; the review indicated that for each limited parameter there is an accompanying monitoring requirement. SDDENR noted that in some cases (e.g., cyanide), the analytical method might be specified in the permit; otherwise, the permit contained a general requirement that monitoring must be conducted according to test procedures approved under 40 CFR Part 136. Eight of the permits reviewed required monitoring for whole effluent toxicity; however, discussion of the basis for WET requirements was not consistent among those permits reviewed. The statements of basis for

three facilities referred to "EPA Region VIII policy for South Dakota" as the rationale for including WET requirements. Another statement of basis referred to the need to collect WET data in order to evaluate RP during the permit term. This is likely an artifact reflecting the span of ages of the permits reviewed and changes in EPA's WET guidance documents (Region VIII guidance vs. Region IX and X guidance). However, with SD in the process of updating its own WET procedures and boilerplates in 2013, we anticipate consistency with SDDENR's approach moving forward.

#### E. Special and Standard Conditions

Federal regulations at 40 CFR 122.41 require that all NPDES permits contain an enumerated list of "standard" permit conditions. Further, the regulations at 40 CFR 122.42 require that NPDES permits for certain categories of dischargers must contain additional standard conditions. Permitting authorities must include these conditions in NPDES permits and may not alter or omit any standard condition, unless such alteration or omission results in a requirement more stringent than required by the federal regulations.

In addition to standard permit conditions, permits may also contain additional requirements that are unique to a particular permittee or discharger. These case-specific requirements are generally referred to as "special conditions." Special conditions might include requirements such as: additional monitoring or special studies (e.g., pollutant management plan, mercury minimization plan); best management practices [see 40 CFR 122.44(k)], or permit compliance schedules [see 40 CFR 122.47]. Where a permit contains special conditions, such conditions must be consistent with applicable regulations.

The permits reviewed did not have separate sections specifying standard permit conditions or special conditions; however, permits were organized to include separate sections for definitions, permit coverage, effluent limits, monitoring, record keeping, and reporting requirements, compliance requirements, industrial wastes, and additional permit conditions.

Standard conditions established at 40 CFR 122.41 and 122.42 were included in the 10 permits reviewed in the core review. SDDENR provided permit boilerplates for industrial facilities, minor municipal facilities, and major municipal facilities, each of them containing standard conditions. These templates were reviewed during the PQR to evaluate the standard conditions to ensure consistency with federal requirements in SDDENR permits, as required by 40 CFR 122.41 and 122.42.

With the exception of bypass language, standard conditions included in the SWD permits and three boilerplates reviewed were consistent with standard conditions established at 40 CFR 122.41 and 122.42. Compliance schedule reporting requirements were not universally included in the individual permits reviewed; however, state regulations at 74:52:03:24 include the 14-day reporting requirement.

SDDENR indicates that it has found it difficult to implement EPA's bypass requirements as written, leading to confusion with its permittees and enforcement program. To address this issue, DENR narrowed its definition of the word "bypass" and included additional definitions for "sanitary sewer overflows" and "emergency discharges. SDDENR provided clarification as to how it would implement these three definitions:

- 1. Diversion piping to bypass wastewater around a section of sewer line that is undergoing repairs or replacement This would be considered a **bypass**.
- 2. Direct discharge of wastewater to surface waters resulting from a broken pipeline or lift station failure This would be considered a **sanitary sewer overflow**.
- 3. Discharge of raw sewage prior to entering the wastewater treatment facility due to flooding or power failure This would be considered a **sanitary sewer overflow** if the wastewater was released from the collection system or an **emergency discharge** if the release occurred from some preliminary portion of the treatment system, such as a bar screen.
- 4. Diverting wastewater around a treatment unit, such as a clarifier, for necessary repairs or replacement This would be considered a **bypass**.
- 5. Discharge of wastewater from a clarifier or primary stabilization pond This would be considered an **emergency discharge**.
- 6. Discharging wastewater prior to a chlorine contact basin when disinfection not needed to meet bacteria limits This would be considered a **bypass**.

SDDENR indicates that taken as a whole, its definitions of bypass, sanitary sewer overflows, and emergency discharges equal EPA's definition of bypass. To simplify these terms, SDDENR cumulatively refers to them as "unauthorized releases." While SDDENR indicates that these discharges are not authorized by the permit, it does provide some exceptions for "unauthorized releases" in the boilerplate. These exceptions attempt to mirror EPA's requirements for when a bypass would be allowed.

SDDENR's permit language for bypass does not follow EPA regulations (40 CFR 122.41(m)(1)) verbatim and includes definitions for additional events such as 'emergency discharges' and 'SSOs' that EPA regulations do not recognize and which are, in essence, forms of bypass. The definitions and actions required by bypass conditions are changed so that assurance that regulatory conditions are met becomes difficult to follow and thus blurs the understanding of what is prohibited and what is authorized. The other forms of non-permitted discharges established in the boilerplate are all forms of bypass which need to be explicitly prohibited in the permit (they are currently not explicitly prohibited).

**Biosolids** South Dakota is delegated to manage the biosolids permitting program and SDDENR requires all biosolids facilities to obtain a separate permit.

#### F. Administrative Process

The administrative process includes documenting the basis of all permit decisions (40 CFR 124.5 and 40 CFR 124.6), coordinating EPA and state review of the draft (or proposed) permit (40 CFR 123.44), providing public notice (40 CFR 124.10), conducting hearings if appropriate (40 CFR 124.11 and 40 CFR 124.12), responding to public comments (40 CFR 124.17), and modifying a permit (if necessary) after issuance (40 124.5). EPA discussed each

element of the administrative process with SDDENR, and reviewed materials from the administrative process as they related to the core permit review.

For the 10 permits that were reviewed, the supporting record included documentation that demonstrated that public notice procedures were implemented accordingly (e.g., a copy of the public notice announcement and affidavit of posting) and that comments had been received and addressed. SDDENR's public notice refers to a notice of "application" as opposed to notice of "proposed permit."

SDDENR's use of an internal review checklist to track the permit development process is noted as strength of the SWD program.

#### G. Documentation

The administrative record is the foundation that supports the NPDES permit. If EPA issues the permit, the contents of the administrative record are prescribed by regulation, with 40 CFR 124.9 identifying the required content of the administrative record for a draft permit and 40 CFR 124.18 describing the requirements for final permits. Authorized state programs should have equivalent documentation. The record should contain the necessary documentation to justify permit conditions. At a minimum, the administrative record for a permit should contain the permit application and supporting data, draft permit, fact sheet or statement of basis, all items cited in the statement of basis or fact sheet including calculations used to derive the permit limitations, meeting reports, correspondence between the applicant and regulatory personnel, all other items supporting the file, final response to comments and, for new sources where EPA issues the permit, any Environmental Assessment, Environmental Impact Statement, or Finding of No Significant Impact.

During the on-site review, EPA found the permit record was consistently organized and easy to follow. In some cases, once the permit is effective the previous permit is removed from the hard copy permit record and archived. In one instance, the previous permit had already been archived to microfiche format. Archived files are maintained in the Pierre office.

#### **Fact Sheet or Statement of Basis**

Under 40 CFR 124.8 and 124.56 fact sheets (or what South Dakota uses, statements of basis) are required for major NPDES permits, general permits, permits that incorporate a variance or warrant an explanation of certain conditions, and permits subject to widespread public interest.

The statement of basis, permit file and administrative record were reviewed to assess whether the basis or rationale for limitations and permit conditions were appropriately documented in the development of the final permit.

All SWD permits reviewed were accompanied by a statement of basis. While all statements of basis contained a consistent discussion of receiving stream designated uses, they all lacked discussion of the receiving stream's impairment status or TMDLs.

While the statements of basis for the six POTW permits reviewed contained a complete description of the wastewater treatment process, they lack a complete discussion of pollutants

contributed by industrial users in their service area as well as the applicability of EPA's pretreatment program; not all SOBs deliberately state if a pretreatment program is required.

The statements of basis and permit record generally did not provide complete documentation of the decision-making process (i.e., did not adequately include all information required by 40 CFR 124.8 or 124.56) employed during permit development or the rationale for and calculation of final effluent limitations.

Specifically, the statements of basis reviewed did not provide adequate discussion of pollutants of concern specific to the facility and did not provide adequate documentation of a reasonable potential evaluation and the need for WQBELs, as discussed in Section III.C, Water Quality Based Effluent Limitations. As discussed previously in Section III.B.2., TBELs for Non-POTW Dischargers, the statements of basis also lacked documentation of the development of certain TBELs.

While SDDENR has indicated that water quality impacts are considered during permit development (i.e., reasonable potential analysis), the record does not clearly indicate that all possible impacts were considered. In some cases, it was difficult to interpret what SDDENR considers during effluent limitation development to the final permit document, specifically with regard to ELG applicability and implementation (e.g., Valley Queen Cheese). The statements of basis and permit record do not provide an explanation or illustration of the decision-making process permit writers employ during permit development. The basis for final effluent limitations was unclear in that it lacked illustration that a comparison between TBELs and WQBELs was made. In one case (Black Hills Power Lange Combustion Turbine Facility, SD0027871), the rationale for a total residual chlorine effluent limitation was, "This limit is based on the SDSWQS, current permit limits, and BPJ." It was not clear if TBELs were considered for this pollutant. In addition, in some cases where effluent limitations were carried forward in the renewal permit, the historical basis for the effluent limitation is unknown (the statement of basis simply states, "...based on the current permit...").

Statements of basis reviewed in the PQR contained standard language addressing implementation of SDDENR's antidegradation policy.

#### H. Core Topic Areas

Core topic areas are specific aspects of the NPDES permit program that are reviewed based on the specific requirements applicable to the selected topic areas. Four topic areas have been determined to be important on a national level: permitting for nutrients, the pretreatment program, the pesticide general permit, and stormwater permitting. The same core topic areas are reviewed for all state PQRs across the nation.

#### **Nutrients**

Nitrogen and phosphorus pollution of all types of surface waters has consistently ranked as one of the top causes of degradation in U.S. waters for more than a decade. EPA has worked at reducing the levels and impacts of this pollution since 1998 and continues to support a range of efforts including the development and implementation of numeric nutrient criteria.

In March of 2011 EPA announced a framework for nutrient reductions that in part called for ensuring the effectiveness of point source permits in sub-watersheds targeted or identified as priorities due to nutrient pollution. The framework specifically identified permits for municipal and industrial wastewater treatment facilities that contribute significant nitrogen and phosphorus loadings, CAFOs, and urban stormwater sources that discharge into nitrogen- and phosphorus—impaired waters or are significant sources of nitrogen or phosphorus. For the nutrient component of this PQR, EPA Region 8 reviewed 12 permits.

a) Program Strengths. SDENR has a narrative standard, but no numeric standards, for nutrients. To protect the designated uses of lakes, generally, point sources are not allowed to discharge directly to lakes or to receiving waters within five miles upstream. However, under certain circumstances, SDDENR will grant permission to discharge to a lake or receiving water within five miles upstream of a lake. For example, one municipality could not find a feasible alternative to discharging to a lake. SDENR allowed a discharge after a TMDL WLA of 0.1 mg/L for Total Phosphorus was developed and reflected in the permit.

To protect the designated uses of streams, SDENR has, in some cases, used the narrative standard if there are problems caused by a point source discharge in the receiving water. In one instance, nuisance algae growth was occurring downstream of a cheese processor. Limits for total phosphorus were developed as part of an enforcement action and included in the permit.

SDENR has been informally discussing the need for municipalities to consider nutrient treatment when treatment upgrades are being planned. The dischargers have been informed that future nutrient limits are likely to be very low.

b) Critical Findings (i.e. core review findings identifying practices that are inconsistent with regulatory requirements);

Nitrate discharges at the POET ethanol facility have been identified as having potential negative impacts on endangered aquatic species (Topeka shiner). While discharges are meeting numeric effluent limitations for nitrate established in the permit, narrative criteria should be considered to ensure adequate protection of the endangered Topeka shiner.

For non-municipal facilities, BPJ was often not used to develop and evaluate technology based effluent limits. For example, the Valley Queen Cheese Statement of Basis does not include any rationale for the Total Phosphorus limit of 7.0 mg/L. Best Professional Judgment (BPJ) should have been used to develop the technology based effluent limits; the narrative standard should have been interpreted to develop a final water quality based effluent limit that adequately protected downstream uses; and the permit should have included a schedule of compliance for the facility to reach the final permit limit. Similarly for POET ethanol facility, technology based effluent limits were not evaluated or discussed in the statement of basis.

c) Recommended Actions. The impairment status of the receiving water body should be established in the Statement of Basis. For receiving waters impaired for nutrient related response variables (e.g. dissolved oxygen, chlorophyll a), the Statement of Basis should discuss whether nutrients present in the discharge may be causing/contributing to the impairment. While monitoring data for TKN, nitrate/nitrite and total phosphorus must be included as part of the facility renewal application package, SDDENR should consider additional self-monitoring requirements during the permit cycle for the facility.

Currently, South Dakota is the only state in Region 8 that does not have a mutually agreed upon nutrient criteria development plan which provides a road map identifying how and when the state will develop numeric nutrient criteria. In the absence of numeric nutrient criteria, SDENR should use its narrative criteria to ensure that discharges are not impacting aquatic species, or causing or contributing to downstream water quality impairments. Since interpreting narrative criteria for nutrients can be challenging, EPA can assist SDDENR with identifying nutrient thresholds that will ensure protection of downstream uses. Permit limits should be developed where nutrient impairment is identified.

A comprehensive nutrient strategy would foster greater coordination between the TMDL, Water Quality Standards and NPDES programs to better ensure that NPDES permits are protective of South Dakota's waters. EPA has also requested, in a March 2011 memo, that states should consider developing nutrient strategies to make greater progress in reducing nutrient loading in the near-term while they continue to develop numeric nutrient criteria.

UPDATE: SDDENR indicated during recent communications after the site visit that South Dakota has developed a nutrient strategy; however, this strategy has not been shared with EPA to date. EPA requests an opportunity to review this strategy in 2014.

## **Pesticide General Permit**

On October 31, 2011, the EPA issued a final NPDES *Pesticide General Permit (PGP) for Discharges from the Application of Pesticides*. This action was in response to a 2009 decision by the U.S. Sixth Circuit Court of Appeals (<u>National Cotton Council of America v. EPA</u>, 553 F.3d 927 (6<sup>th</sup> Cir., 2009)). The federal PGP applies where the EPA is the permitting authority. Approximately 40 authorized NPDES programs, including South Dakota, have issued state pesticide general permits.

For this PQR, Region 8 reviewed the South Dakota *General Permit for Pesticide Application* (SDGA 10000). Region 8 focused on assessing the status of the implementation of the South Dakota PGP.

The SDDENR issued its PGP on April 11, 2011. The permit was effective October 31, 2011. Any pesticide applicator discharging a pollutant from a point source associated with the

application of a pesticide is authorized by the PGP to discharge into waters of the State of South Dakota. Waters of the State are defined as all waters within the jurisdiction of South Dakota, including all streams, lakes, ponds, impounding reservoirs, marshes, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, situated wholly or partly within or bordering upon the state, but not waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the federal Clean Water Act other than cooling ponds as defined at 40 CFR 423.11(m). Additionally, Part 2.3 of the permit states that coverage under the permit is required if water is present at the time and location of the pesticide application. If the application is in a dry drainage and does not reach a flowing stream, the authorization is not applicable.

The South Dakota PGP covers the following activities:

- 1. Mosquito and other flying insect pest control
- 2. Weed and algae control
- 3. Aerial pest control (i.e., aerial application of a pesticide)
- 4. Ditch and stream bank pest control
- 5. Declared pest emergency situation

The State intends to issue individual permits for the application of pesticides to waters of the State for the control of invasive or nuisance pests. To date, an individual permit for control of invasive or nuisance pests has not been issued. The State estimates that maybe one or two of these types of permits will be issued in the next 5 years.

The State requires an individual or alternative general permit for discharges of a pesticide to waters impaired for that pesticide or its degradates, unless a TMDL has been established for the receiving waters and the TMDL establishes a WLA for the discharge.

The South Dakota PGP automatically covers all pesticide applicators. The permit does not require the submittal of a Notice of Intent.

Permittees who apply pesticides as part of a declared pest emergency or have been certified for (1) aquatic pest control or for (2) public health pest control must prepare a Pesticide Discharge Management Plan. The permittee is required to review its PDMP at a minimum once per year and when pest management strategies are updated. The South Dakota Department of Agriculture will review these plans. The SDDENR will also review the PDMPs to identify major deficiencies.

Permittees that exceed certain treatment area thresholds are required to submit annual reports. These reports cover the calendar year and are due no later than February 28<sup>th</sup> of the following year. The first of these reports was due in 2013.

The SDDENR water quality program collects data at 10 stations for pesticides that are currently in use. If a pesticide is detected, the State will investigate the source of the pesticide and determine what actions need to be taken.

Because there is no requirement for submittal of an NOI, applications in response to pest emergencies can proceed without delay. The applicator must complete and submit an annual report.

SDDENR provided significant outreach to applicator groups. The State also consulted with the Department of Agriculture and the Spills group at SDDENR. The State feels that its public outreach and coordination efforts prior to issuance of its PGP have resulted in an easier acceptance of the permit and little resistance to compliance with the permit.

The SDDENR has very little resources dedicated to the administration of the PGP, less than one FTE. However, the Department of Agriculture and the SDDENR Spills Group help with compliance assistance.

- a) Recommended Actions. Region 8 has no recommendations for improving the South Dakota PGP. The permit meets the requirements of the CWA.
- b) Program Strengths. The State of South Dakota dedicated significant staff time and resources to develop the State PGP and to coordinate with affected stakeholders, e.g., the South Dakota Department of Agriculture, the State of South Dakota Department of Game, the USFWS, and private applicators and their associations. This upfront public outreach investment has resulted in a more accepting and well-informed regulated public.

#### **Pretreatment**

The Pretreatment program review portion of the PQR assessed the status of the South Dakota Department of Environment and Natural Resources (SDDENR) Pretreatment program (including its State legal authority and Approval Authority implementation), assessed specific language in the POTW NPDES permits for approved and non-approved Pretreatment programs, and evaluated the implementation of the SDDENR Pretreatment program for CIUs/SIUs in non-approved programs. The PQR focused on regulatory requirements for Pretreatment activities and programs found in 40 CFR Parts 122.42(b), 122.44(j), and 403.

Four (4) POTW NPDES permits with and without approved Pretreatment programs and fifteen (15) Pretreatment Categorical Industrial User (CIU) permits in non-approved Pretreatment programs were reviewed across the state. In addition, permit records for six (6) CIUs in POTWs without approved Pretreatment records were reviewed to evaluate the implementation of the Pretreatment regulations by the SDDENR.

The SDDENR's Pretreatment program was approved on December 30, 1993. Under state rules, any local pretreatment program can request that the state, rather than the local program, administer local pretreatment program requirements. In addition to performing the PQR on State issued permits, EPA reviewed the following areas of the SDDENR's Pretreatment program:

- Streamlining Rule implementation of regulatory requirements from the 2005 revisions to the Pretreatment Regulations (40 CFR Part 403)
- Approval Authority implementation procedures for approved program modifications.
- Control of CIUs/SIUs in non-approved Pretreatment programs throughout the State of South Dakota.
- Adherence of the Compliance Monitoring Strategy (CMS) program policy for frequency of Regional and State reviews of approved POTW Pretreatment programs and sampling for CIUs/SIUs in non-approved Pretreatment programs.
- Database entry consistency for Pretreatment categories.

## Regulatory Background

The SDDENR was authorized by EPA to implement the NPDES regulations, which included the Pretreatment regulations, on December 30, 1993. The EPA and SDDENR memorialized the authorization and the establishment of policies, responsibilities, and procedures pursuant to the NDPES regulations found in 40 CFR 123 in a 1993 Memorandum of Agreement (MOA).

Section VI of the 1993 NPDES MOA describes the primary responsibilities of the SDDENR in carrying out the establishment, implementation, and enforcement of the National Pretreatment Program under Section 307 and 402(b) of the Clean Water Act. The SDDENR has the primary responsibility to implement the National Pretreatment Program, which includes the following responsibilities:

- Enforcement of prohibited discharges and categorical standards under the National Pretreatment Standards by 40 CFR 403.5 and 40 CFR 403.6, respectively.
- Application and enforcement of the National Pretreatment Standards established by the EPA in accordance with Section 307(b) and (c) of the Act, POTW limits, and State standards.
- Review, approval or denial of POTW Pretreatment programs in accordance with procedures listed in 40 CFR 403.8, 403.9, and 403.11,
- Require a local Pretreatment program in NPDES permits issued to POTWs as required by 40 CFR 403.8, and as provide in Section 402(b)(8) of the Act,
- Require POTWs to develop and enforce local limits as set forth in 40 CFR 403.5(c),

- Review and approval of POTW requests for authority to modify categorical Pretreatment Standards to reflect removal of pollutants by a POTW in accordance with 40 CFR 403.7, 403.9, 403.11 and enforcing related conditions in the POTW's NPDES permit,
- Oversee POTW Pretreatment programs to ensure compliance with requirements specified in 40 CFR 403.8, and in the POTW's NPDES permit,
- Require industrial user reports, as outlined in 40 CFR 403.12.
- Carry out independent inspection, surveillance, and monitoring procedures which will determine compliance by the POTW with Pretreatment conditions incorporated in the NPDES permit.
- Carry out inspection, surveillance, and monitoring procedures which will determine whether each industrial user is in compliance with the National Pretreatment Standards.

In addition, Section VII.A, #s 9 and 11 of the 1993 NPDES MOA establishes the reporting and transmittal of Pretreatment information from the SDDNER to EPA Region 8.

*Approval Authority Responsibilities* 

# **SDDENR Pretreatment Regulations**

The SDDENR establishes the Pretreatment Regulations in Article 74:52, Chapter 11 of the State Rules. In addition, the SDDENR establishes the Effluent Guidelines and Standards for industrial users in non-approved programs in Article 74:52, Chapter 10 of the State Rules.

Section 74:52:11:01 of the SDDENR Pretreatment Regulations references 40 CFR 403 to establish the Pretreatment legal authority in South Dakota. The SDDENR reference to 40 CFR 403 in §74:52:11:01 establishes the reference to 40 CFR 403 as February 13, 1992 and includes the following substitutions:

- (1) Substitute "surface water discharge permit" for "NPDES permit";
- (2) Substitute "secretary" for "director";
- (3) Substitute "SDCL 34A-2-94" for all federal regulation references to "40 C.F.R.
  - 2.302" in 40 C.F.R. § 403.14;
- (4) Substitute "department" for "EPA" in 40 C.F.R. § 403.5(e); and
- (5) Substitute "secretary" for "approval authority."

The establishment of the SDDENR Pretreatment legal authority does not include the Pretreatment Streamlining Rule amendments to 40 CFR Part 403 that was promulgated by EPA on October 15, 2005 (70 FR 60134). The Streamlining Rule revises several provisions of the General Pretreatment Regulations found in 40 CFR 403 and was designed to reduce the overall regulatory burden on both IUs and Control Authorities without adversely affecting environmental protection.

Local Control Authorities must update their legal authority (municipal ordinance or rules and regulations) and submit this program modification to the SDDENR for approval, in accordance with 40 CFR 403.18 to implement the Streamlining Rule in their service area. However, the State Rule must be changed before the local Control Authorities can incorporate streamlining updates.

Although the October 15, 2005 Pretreatment Streamlining Rule revised many provisions of the Pretreatment Regulations, EPA identified thirteen (13) rule changes, listed below, that were more stringent than the existing Pretreatment provisions found in 40 CFR Part 403 during the Streamlining rule update:

- 1. Updated removal credits provisions relating to Overflows [§ 403.7(h)]
- 2. Slug control requirements must be included in SIU control mechanisms [§ 403.8(f)(1)(iii)(B)(6)]
- 3. SIUs must be evaluated for the need for a plan or other action to control slug discharges within a year from the final rule's effective date or from becoming an SIU [§ 403.8(f)(2)(vi)]
- 4. SIUs are required to notify the POTW immediately of any changes at its facility affecting the potential for a slug discharge [§ 403.8(f)(2)(vi)]
- 5. Significant Noncompliance (SNC) definition is expanded to include additional types of Pretreatment Standards and Requirements [§ 403.8(f)(2)(viii)(AC)]
- 6. SIU reports must include BMP compliance information [§ 403.12(b), (e), (h)]
- 7. SIU control mechanisms must contain any BMPs required by a Pretreatment Standard, local limits, state, or local law [403.8(f)(1)(iii)(B)(3)]
- 8. Documentation of compliance with BMP requirements must be maintained as part of the SIU's and POTW's record-keeping requirements [§ 403.12(o)]
- 9. Control Authorities which perform sampling for SIUs must perform any required repeat sampling and analysis within 30 days of becoming aware of a violation [§ 403.12(g)(2)]
- 10. Require periodic compliance reports to comply with sampling requirements, require Control Authority to specify the number of grab samples necessary in periodic and noncategorical SIU reports, and require noncategorical SIUs to report all monitoring results [§ 403.12(g)(3), (4), (6)]
- 11. Non-Categorical SIUs are required to provide representative samples in their periodic monitoring reports [§ 403.12(g)(3)]

- 12. Require notifications of changed discharge to go to the Control Authority and the POTW, where the POTW is not the Control Authority [§ 403.12(j)]
- 13. How and when the POTW can designate a "duly authorized employee" to sign POTW reports [§ 403.12(m)]

At a minimum, the SDDENR is required to updates its Pretreatment legal authority in §74:52:11 to include the 13 required streamlining provisions. However, EPA strongly recommends that the SDDENR incorporate all Pretreatment Streamlining Rule updates to allow the local Pretreatment programs to adopt the required and optional streamlining provisions. It appears that the SDDENR Pretreatment Regulations may be updated to include the 2005 Streamlining Rule update if the February 13, 1992 reference date included in 74:52:11:01 is changed to October 15, 2005. During the update, the SDDENR should ensure the substitutions adopted with the incorporation reference date in §74:52:11:01 are still valid. After the update to the State Pretreatment legal authority is made, the SDDENR must revise NPDES permit to require implementation of the Pretreatment Streamlining required provisions.

Similarly, the SDDENR should evaluate updating the reference date of Article 74:52, Chapter 10 of the State Rules that establishes the Effluent Guidelines and Standards for industrial users in non-approved programs. The State legal authority in §74:52:10:01 states that the "The effluent guidelines and standards for surface water discharge permits and pretreatment industrial users are those in 40 C.F.R. Subchapter N" and establishes the reference date as February 12, 2003. EPA is evaluating new or revised rulemaking for the Dental Amalgam and Oil and Gas Sectors in FY 2012 that may make this section out of date.

## Permit Quality Review of NPDES Permits

EPA evaluated four (4) NPDES permits and associated fact sheets issued by the SDDENR to POTWs with and without approved Pretreatment programs. The NPDES permits issued to POTW with approved Pretreatment programs were for the cities of Mitchell and Huron (both draft permits). The NPDES permit issued to POTWs without approved Pretreatment programs were for the cities of Mobridge and Chamberlain.

Based on the permit quality review of these NPDES permits, EPA has the following findings:

• The Pretreatment boilerplate language for NPDES permits issued to POTWs with approved Pretreatment programs must implement the NPDES requirements at 40 CFR 122.44(j)(2)(ii) to "Provide a written technical evaluation of the need to revise local limits under 40 CFR 403.5(c)(1), following permit issuance or reissuance." [Complete]

- After the Streamlining Update of the State Pretreatment Regulations in §74:52:11, the SDDENR should evaluate the Pretreatment boilerplate language to ensure it adequately implements the Pretreatment Streamlining required provisions.
- The fact sheets for the NPDES permits issued to POTWs without approved Pretreatment programs should provide justification whether a Pretreatment program is required or not.

SDDENR Approval Authority Resources and Implementation Procedures

EPA evaluated the SDDENR's implementation as an Approval Authority for the locally approved Pretreatment programs within the State. According to information gathered during the PQR, the SDDENR Pretreatment Coordinator's FTE is divided 0.5 FTE to Pretreatment and 0.5 FTE to the Stormwater program. The Pretreatment Coordinator is primarily responsible for implementing the SDDENR Pretreatment program as an Approval Authority and as a Control Authority for CIUs/SIUs in POTWs without approved Pretreatment programs. The Pretreatment Coordinator is currently supported by the WET Coordinator in informal enforcement actions and by the NPDES Permit Manager for formal enforcement actions. It appears that the SDDENR Pretreatment program is adequately funded through permit fees. However, the SDDENR should evaluate its resource commitment to the Pretreatment program. As described later in this report, it appears that the SDDENR is adequately implementing its responsibilities as an Approval Authority but the SDDENR has a backlog of Pretreatment IU permits and, as the Control Authority for POTWs without approved Pretreatment programs, is not adequately implementing the sampling and inspection frequency required by the Pretreatment regulations.

The SDDENR serves as the Approval Authority for seven (7) POTWs with approved Pretreatment programs. According to information gathered during the PQR, approximately 45 SIUs are controlled through these approved Pretreatment programs. EPA evaluated the records for the POTWs with approved Pretreatment programs during the PQR. The Pretreatment records appear to be in good order and included Pretreatment annual reports, correspondence, Audit/PCI reports, and enforcement records, if applicable.

Section 1.C of the October 17, 2007 CWA NPDES Compliance Monitoring Strategy (CMS) for the Core Program and Wet Weather Sources Memorandum establishes inspection frequency goals for Pretreatment Audits, PCIs, and Industrial User inspections. The 2007 CMS memorandum establishes the Pretreatment audit frequency for POTWs with approved Pretreatment programs as 1 audit every five years with oversight IU inspections conducted in at least 2 IUs discharging to the POTW. The 2007 CMS memorandum also establishes a PCI frequency as at least 2 PCIs every 5 years. It appears that the SDDENR meets the CMS goals for frequencies of audits and PCIs at POTWs with approved Pretreatment programs. The audit reports appear to be adequate.

Annual reports are received from the approved Pretreatment programs. These reports are evaluated and entered into an internal database. EPA Region 8 is copied on all annual Pretreatment reports.

As an Approval Authority for local Pretreatment programs, it appears that the SDDENR has the appropriate approval and public notice procedures in place, however, EPA did not evaluate a program modification during the PQR. EPA participated in a recent program modification that involved a local limits evaluation with Sioux Falls in FY 2012 and had an opportunity to collaborate with both the SDDENR and the City of Sioux Falls.

Control of CIUs/SIUs in POTWs without Approved Programs

EPA evaluated the SDDENR direct implementation of the Pretreatment Regulations as the Control Authority for CIUs/SIUs in POTWs without Approved Pretreatment Programs. The components of the State's Control Authority program evaluated included the following:

- Legal Authority
- Industrial User Characterization and Inventory
- Control of CIUs/SIUs
- Inspections/Sampling
- Compliance Evaluation
- Enforcement

# Legal Authority

The SDDENR has established the appropriate authority to control SIUs/CIUs in POTWs without approved Pretreatment programs in Chapter 74:52:11 – Pretreatment Regulations of the State Rules. The Pretreatment Regulations establish the Control Authority requirements for the SDDENR such as right of entry, permitting applicability, procedures, and conditions, as well as signatory and certification requirements. Section 74:52:11:03 of the Pretreatment Regulations allows the SDDENR to assume approved POTW Pretreatment implementation responsibilities, as set forth in 40 CFR 403.10(e), if requested by an POTW or combination of POTWs with approved Pretreatment programs.

In addition, as mentioned previously, the SDDENR has incorporated the General Pretreatment regulations in §74:52:11:01, which provides control authority implementation procedures. However, the SDDENR is required, at a minimum, to update this chapter to incorporate the required provisions of the 2005 Pretreatment Streamlining Rule.

Industrial User Characterization and Inventory

It appears that the SDDENR has provided good coverage of the State of South Dakota in identifying, characterizing, and if necessary, controlling categorical industrial users (CIUs)

and significant industrial users (SIUs) in POTWs without approved Pretreatment programs. The CIUs and SIUs are identified in part by querying if there are any IUs in the service area during POTW inspections by SDDENR personnel.

There are approximately 34 industrial users (IUs) in POTWs without approved Pretreatment programs throughout the State of South Dakota that are controlled with a Pretreatment permit issued by the SDDENR. In addition, the SDDENR's 5-year inspection plan includes about 40 unpermitted IUs to inspect. This identification and control of IUs in POTWs without approved Pretreatment program provides a good benefit to help smaller POTWs in the state.

The SDDENR evaluates an IU for both Pretreatment and Stormwater during a facility inspection. The SDDENR provides the IU inspections reports to EPA and based on this ongoing review, these IU inspection reports are strong documents. These facility inspection reports adequately characterize the facilities based on their processes, operating practices, chemical storage, wastewater generation, and wastewater management practices, including treatment, recycling, and offsite management. The inspection reports utilize digital photos to provide additional information as a supplement to the narrative inspection language. The information contained in the inspection reports provides the SDDENR and the local POTWs adequate information to determine the significance of the IU and develop an appropriate control mechanism, if necessary. EPA acknowledges the SDDENR for its efforts in developing the inspection reports.

# Control of CIUs/SIUs

Based on a review of the statement of basis and permits for the CIUs/SIUs in POTW without approved Pretreatment programs, the SDDENR adequately categorizes the facilities to the appropriate Pretreatment Categorical Standard. The SDDENR collaborates with the local POTWs to develop local limits and includes these in the permit, if necessary. The statements of basis and permits are well written and appear to establish appropriate control for these CIUs/SIUs in POTWs without approved Pretreatment programs. However, EPA recommends the SDDENR strengthen the statement of basis for each Pretreatment IU permit by providing adequate justification for representative and appropriate sampling methods based on the facility operating practices and discharge conditions.

The SDDENR has a 33% permit backlog for SDDENR issued Pretreatment permits. Section 74:52:11:08 of the SDDENR Pretreatment regulations allow for continuation of expired permits, if the permittee has submitted a complete and timely application for a new permit. However, EPA strongly recommends the SDDENR commit to decreasing the permit backlog percentage for the Pretreatment permits.

### Inspections/Sampling

40 CFR 403.8(f)(2)( $\nu$ ) of the General Pretreatment Regulations require that the Control Authority "...Inspect and sample the effluent from each Significant Industrial User at least

once per year..." Based on the permit records review, it appears that the SDDENR inspects its permitted SIUs about 2 or 3 times every 5 year permit cycle. In addition, the SDDENR performs an office permit records file review of the permitted SIU in the years that it does not physically inspect the facility. According to permit records review and information gathered during the audit, the SDDENR has not sampled the permitted CIUs/SIUs. There did not appear to be any control authority monitoring results in the permit records for the permitted CIUs/SIUs.

The SDDENR is required, as the control authority, to meet the IU inspection and sampling frequency of 1/year, as required in 403.8(f)(2)(v) of the Pretreatment regulations. The permitted CIUs/SIUs in the State of South Dakota are a significant distance from the SDDENR offices and EPA understands the logistical challenges for the SDDENR to meet the 1/year inspection and sampling requirement. However, EPA strongly recommends the SDDENR evaluate collaboration with the local POTWs to share the inspection and sampling duties of CIUs/SIUs and meet the required inspection and sampling frequencies of 1/year, as required in the Pretreatment regulations.

## Compliance Evaluation

Based on information gathered during the PQR, it appears that the discharge monitoring reports from the permitted CIUs/SIUs in POTWs without approved Pretreatment programs are received by the SDDENR, date stamped and entered into ICIS within the department goal of 30 days. It appears that data and permit records management is adequate. The permit records were well organized and were easily accessible to EPA during the PQR.

Although the SDDENR is meeting the department goal for ICIS data entry, it appears that the compliance evaluation of the discharge monitoring reports is performed during either the facility inspection or during the office permit records file review of the permitted SIU. EPA encourages the SDDENR to improve its response time for non-compliance by performing compliance evaluations during the receipt of the discharge monitoring reports.

# Enforcement

It appears that the SDDENR has an adequate enforcement response plan to address noncompliance that may occur. In addition, it appears that the Pretreatment Coordinator has the appropriate procedures and support from other NPDES personnel to carry out either informal or formal enforcement actions. There were no enforcement cases in the permit records reviewed by EPA.

PQR Findings of the SDDENR Pretreatment Program

**Program Strengths** 

- It appears that the SDDENR provides good coverage of the State of South Dakota for the CIUs/SIUs in POTWs without approved Pretreatment programs; approximately 34 CIUs/SIUs are controlled by the SDDENR. The control of these facilities provides a significant benefit to the POTWs without approved Pretreatment programs.
- It appears that the SDDENR is adequately meeting the 2007 Compliance Monitoring Strategy goals for Audit/PCI frequency for approved Pretreatment programs.
- The combined Pretreatment/Stormwater inspection reports for CUIs/SIUs in POTWs without approved Pretreatment programs are comprehensive and strong documents. These inspection reports provide adequate narrative detail to adequately characterize the facility. In addition, the inspection reports include digital photos that help to supplement the narrative information contained within the report.
- The SDDENR Pretreatment records are well maintained and were easily accessible to EPA during the audit.

# **Critical Findings**

- The SDDENR is required to update its Pretreatment legal authority in §74:52:11 to include the 13 required streamlining provisions listed in §3.2.1. However, EPA strongly recommends that the SDDENR incorporate all Pretreatment Streamlining Rule updates to allow the local Pretreatment programs to adopt the required and optional streamlining provisions.
- The Pretreatment boilerplate language for NPDES permits issued to POTWs with approved Pretreatment programs must implement the NPDES requirements at 40 CFR 122.44(j)(2)(ii) to "Provide a written technical evaluation of the need to revise local limits under 40 CFR 403.5(c)(1), following permit issuance or reissuance." [Complete]
- EPA strongly recommends the SDDENR commit to decreasing the permit backlog percentage for the Pretreatment permits it issues.
- The SDDENR is required, as the control authority, to meet the SIU inspection and sampling frequency of 1/year, as required in 403.8(f)(2)(v) of the Pretreatment regulations.

#### Recommended Actions

• The SDDENR should evaluate updating the reference date of Article 74:52, Chapter 10 of the State Rules that establishes the Effluent Guidelines and Standards for industrial users in non-approved programs.

- After the Streamlining Update of the State Pretreatment Regulations in §74:52:11, the SDDENR should evaluate the Pretreatment boilerplate language to ensure it adequately implements the Pretreatment Streamlining required provisions.
- The fact sheets for the NPDES permits issued to POTWs without approved Pretreatment programs should provide justification as to whether a Pretreatment program is required or not.

# **Suggested Practices**

- The SDDENR should evaluate its resource commitment to the Pretreatment program. It appears that the SDDENR is adequately implementing its responsibilities as an Approval Authority but the SDDENR has a backlog of Pretreatment IU permits and is not adequately implementing the Pretreatment regulations as a Control Authority.
- The statements of basis and permits for CIUs/SIUs in POTWs without approved Pretreatment programs are well written and appears to establish appropriate control. However, EPA recommends the SDDENR strengthen the statement of basis for each Pretreatment IU permit by providing adequate justification for representative and appropriate sampling methods based on the facility operating practices and discharge conditions.
- EPA strongly recommends the SDDENR evaluate collaboration with the local POTWs to share the inspection and sampling duties of CIUs/SIUs and meet the required SIU inspection and sampling frequencies of 1/year, as required in the Pretreatment regulations.
- EPA encourages the SDDENR to improve its response time for non-compliance by performing compliance evaluations during the receipt of the discharge monitoring reports.

#### Stormwater

The NPDES program requires stormwater discharges from certain municipal separate storm sewer systems (MS4s), industrial activities, and construction sites to be permitted. Generally, EPA and NPDES-authorized states issue individual permits for medium and large MS4s and general permits for smaller MS4s, industrial activities, and construction activities.

#### **Program Strengths**

 Stormwater permits issued by the State are in compliance with Effluent Limitation Guidelines and expectations consistent with EPA's guidance for the Maximum Extent Practicable (MEP) standard for municipal stormwater discharges.

- SDDENR has a strong industrial stormwater permits program with approximately 1,100 facilities covered under the industrial general permit. An overlap of the program with the industrial pretreatment program is very logical as both programs have significant overlap in terms of permitting and inspection.
- SDDENR is exploring opportunities to streamline resources working with the City of Sioux Falls, the City of Rapid City, and the Department of Transportation to leverage resources for stormwater manual implementation and to drive management practices which have shown to be effective in the State.

# **Critical Findings**

- Expiration of the Municipal Stormwater general permit is of critical concern as it has been expired for over five years. An expiration of this length brings attention that municipal stormwater discharges may not be effectively addressed at the State.
- Enforcement of stormwater permits is limited due to state authority to process Expedited Settlement Offer enforcement actions and the need to submit "guaranteed wins" for enforcement.

#### Recommended Actions

- SDDENR should reissue the municipal general stormwater permit as soon as possible and evaluate whether municipalities have been moving forward with program implementation consistent with the "Maximum Extent Practicable" (MEP) standard.
- SDDENR should continue to leverage resources for construction and municipal stormwater discharges.
- SDDENR could create promotional materials for administrative law judges and municipal officials to educate them on the significance of stormwater concerns, so that the State is not limited in its ability to pursue enforcement.

Information which supports these assertions follows

Most stormwater discharges in the State of South Dakota are covered by general permits. The following permits regulating stormwater discharges, and their status, is as follows:

- 1. Construction Stormwater General Permit Covers the discharge of stormwater from construction sites greater than or equal to one acre in size. Permit is valid and expires in 2015.
- 2. General Permit for Industrial Activities Covers the discharge of stormwater from most industrial activities This permit was expired at

- the time of the PQR assessment but was since re-issued on October 1, 2012 with an expiration date of September 30, 2017.
- 3. General Permit for Small MS4s Covers the discharges of stormwater from small municipal separate storm sewer systems (Small MS4s) At the time of the PQR assessment, this permit had been expired for several years since its first issuance in 2003.
- 4. Individual permit for discharges from Sioux Falls Covers the discharge of stormwater from Sioux Falls, a Phase 1 MS4. At the time of the PQR assessment, this permit was expired.

Findings from the South Dakota Stormwater Program were largely based on program interviews and are as follows:

- 1. Staffing Staffing in South Dakota may be significant enough to handle the stormwater workload, but there needs to be better focus to assure that permits can be reissued in a timely manner. Most people who work in stormwater have multiple tasks, with stormwater permitting not being their sole function. The state has approximately 5 staff persons that complete the majority of South Dakota's stormwater permitting activities, with duties shared between the Pierre, Sioux Falls, and Rapid City offices. One of the state's stormwater permitting positions is currently vacant and the state is actively pursuing a replacement. No further changes are proposed. The State plans to do more with less, utilizing electronic systems and G.I.S. to focus inspections and oversight.
- 2. Permit Tracking Permit tracking for South Dakota permits is available through ICIS, as well as real-time numbers for stormwater permit authorizations. South Dakota is a direct user of ICIS for much of its NPDES permitting program. However, South Dakota uses an inhouse database developed by the state to track its stormwater general permit coverages. The current, in-house database system was developed in FoxPro, which is no longer supported by Microsoft. Therefore, South Dakota has begun preparing to update this database into a supported format.
- 3. Targeting Resources Resources are targeted (including inspections) to focus on construction projects where there are impairments for sediment/suspended solids and to focus on larger sites near impaired waterbodies. It is difficult to keep up with expectations for the number of inspections expected by EPA with the current staff, so the state focuses on the quality of its inspections rather than a specific quantity of inspections. By prioritizing its inspection efforts on larger projects

- near impaired water bodies, the state can ensure these projects do not cause or contribute to any impairment. Inherent in this process is the need to focus on "wins" in terms of bringing enforcement actions forward where there is a clear impairment/violation recognized.
- 4. Numeric Effluent Limits for Stormwater Most stormwater permits with numeric limits are covered by individual permits. One of these individual stormwater permits was reviewed as part of the 2012 PQR. For mineral mines, SDDENR issues individual permits which cover all discharges (stormwater, stormwater with ELGs, process water) under one individual permit. Mines undergoing active reclamation may be covered under stormwater general permits, though. The industrial general permit does contain numeric stormwater limits for coal pile runoff. Sand and gravel operators are covered under the general permit. However, if they discharge from pits, they are required to get a different permit. The state allows infrequent discharges to be covered under its temporary discharge permit which addresses the same pollutants of concern as would be covered by an individual process water discharge from a gravel mine (e.g., TSS). For ongoing discharges from pits, the state requires an individual NPDES permit, which contains monitoring and limits for the pollutants of concern.
- 5. Ongoing designation of MS4s or industrial sites for permitting The cities of Sturgis and Spearfish are covered under the state's Phase II MS4 general permit. Both communities voluntarily requested coverage under the permit, and are developing and preparing to implement their programs. Other areas, which include a transient or seasonal population (Hill City/ Keystone) near Mount Rushmore, are significantly smaller and don't approach MS4 designation criteria.
- 6. Expired MS4 permits (Sioux Falls and Small MS4 General Permit) The Sioux Falls (Phase 1) is drafted and undergoing internal review. The state plans to move forward with Sioux Falls's permit in concert with a TMDL and related efforts to reduce sediment loading into the Big Sioux River from the MS4. The TMDL is in the final stages of development and the city of Sioux Falls MS4 has been identified as a source of the impairment. Following the completion of the Sioux Falls MS4 permit, the state plans to then move forward with reissuing the MS4 general permit. The tentative schedule for this general permit is 2013.
- 7. Partnering with other entities There are stormwater manuals which address post-construction runoff for Sioux Falls and Rapid City. DOT is the primary partner for training and SD uses DOT training for its

own employees as well as encouraging permittees to complete the training. Sioux Falls is emerging as a leader for the state and is having yearly training conferences. Sioux Falls is a Phase 1 entity and has an annual ½ day meeting with its permittees. Rapid City is also stepping forward as a leader in the western part of the state and has been holding annual conferences since 2011.

8. State Successes - The state is seeing an improved awareness of permitting requirements through the outreach efforts of both SDDENR and DOT. In addition, the public seems to be showing an increased awareness of the need for stormwater protections based on the complaints received by the state. The state is still working to improve compliance rates, but there seems to be a trend towards better awareness and compliance. The city of Sioux Falls' MS4 has been identified as a source of both total suspended solids and bacteria impairment into the Big Sioux River. However, the TMDL study has documented substantial improvements in the sediment loading into the Big Sioux River related to the city's MS4 program.

One position covers both industrial stormwater discharges and the industrial pretreatment program. There is a very effective program overlap with the pretreatment and stormwater programs. The pretreatment program is often more comprehensive than the industrial stormwater program in terms of locating industrial sites for permitting or no exposure certification. There are approximately 1,100 facilities covered under the SD industrial stormwater general permit.

9. Changes needed to run a more effective program: It is difficult to enforce the stormwater program unless there are specific demonstrated impacts. The state recently reissued its industrial and construction general permits and tried to improve the enforceability of these permits and as well as more clearly communicate the state's requirements.

The state does not use expedited settlement offers because enforcement actions with penalties require the involvement of SDDENR's management and both the department attorney and the Attorney General's office. The state implements a consistent penalty policy across all media regulated by SDDENR. The state believes its process ensures consistency and accountability.

There are hurdles to implementing a post-construction numeric retention standard like what could be proposed by EPA given a complex water rights program. The state has water rights laws that protect downstream vested water rights. Enacting requirements for upstream sources to reduce flows into a water body could impact downstream vested rights and conflict with existing state laws.

For construction sites, operators not sending in Notices of Termination can slow the process. The state is implementing a process to contact these site owners at least annually to remind them of permit requirements and request a NOT if the project is complete. This has been effective in the past but time consuming. The state is planning to streamline this process and send out letters more frequently to ensure contact information stays current, as well as improving compliance with the requirements. In addition, over the last couple of years, the state has hired summer interns to conduct reconnaissance inspections to identify sites needing additional follow-up as well as sites eligible for termination.

The state is developing a system to use GPS and GIS in real-time to identify both permitted and unpermitted sites during field work. As part of this new system, the state is now requiring accurate latitude/longitude information from permittees. Moving forward, this system should provide improved efficiencies.

# IV. SPECIAL FOCUS AREA FINDINGS

# A. Whole Effluent Toxicity (WET)

**Program Strengths** 

SDDENR permits with WET limits number in the upper 40s. Most WET limitations are acute, end-of-pipe, pass/fail; eight or nine require chronic testing. No exemptions from normal acute vs. chronic WET testing determinations have been granted.

SD has a dedicated WET contact/position in their unit who oversees the WET program and implementation. The working relationship with the Region 8 office has been positive as the state has worked to develop their WET program and implementation policies.

The State is currently working on finalizing their WET policy which will describe reasonable potential and implementation procedures for WET and ensure transparency and consistency among SD permits. EPA will continue to utilize SD permit reviews as the final assessment of any WET implementation.

The final SDDENR WET policy is expected to reference the R8/R9/R10 Toxicity Testing Tool, utilized by EPA R8 to implement WET. The policy will outline the requirement for more robust justification language in statements of basis on WET testing. It will also explain necessary inclusion of details pertaining to TIEs/TREs and associated deliverables. SDDENR currently utilizes a standard boilerplate for WET language in their permits.

# **Program Findings**

- Pursuant to EPA regulations at 40 CFR 122.44 (d)(1), during permit development, the permit writer must determine whether the discharge causes, has the reasonable potential to cause, or contributes to non-attainment of WQS for WET [reasonable potential (RP) determination]. The RP determination may be based on toxicity data, if available, or without specific WET data (if there is none). Based on the RP determination, permit conditions are expressed as either WET limits or WET numeric monitoring triggers. The data and information utilized during the WET analysis portion of permit development becomes part of the permit record and is provided in the fact sheet to provide a legally defensible final permit.
- Permits lack details regarding what is required of the permittee in terms of TRE-TIE plan, schedule, reporting, etc. This is necessary to ensure that the expectations of the permitting authority of the TRE study are adequately outlined to the permittee and that the necessary oversight provisions are provided in the permit.
- Permits currently require quarterly testing and in the event of acute toxicity, a resample within two weeks. If toxicity is still observed, then testing is conducted

monthly. Accelerating acute testing to monthly may not be frequent enough to evaluate impacts to the receiving water from acute toxicity.

- Permits do not indicate that failures of the additional tests conducted during accelerated testing are considered permit violations.
- Permits do not indicate that WET failures result in RP; once RP is established (e.g. multiple WET failures in the previous permit term) WET limits must be established in the permit upon renewal.

#### Recommended Actions

SD must include RP determinations for WET in its fact sheets that clearly explain decision for inclusion or exclusion of WET requirements, the basis of these decisions. Fact sheets must also include data to support the decision, and provide information to the permittee on requirements for testing, sampling, and follow up if there are WET failures.

The PQR focused on the regulatory requirements for WET activities as required by 40 CFR 122.44(d)(1) and on specific questions developed after review of three permits: Sisseton, Huron, and Valley Queen Cheese.

WET as implemented in permits reviewed:

SISSETON: The facility does not have any data on toxicity because it has not discharged. Acute testing is required, end of pipe, once per quarter because this is a major facility.

HURON: The Huron permit states that no acute toxicity is allowed from Outfall 001 if a discharge occurs. The permit lists three outfalls; however, there is no WET testing required for Outfalls 002 or 003 (discharges to mitigated wetlands). There is no explanation in the statement of basis for why only one outfall has monitoring requirements.

VALLEY QUEEN CHEESE: The statement of basis noted that there were 8 violations for WET testing, but does not describe or explain what the violations were; did not state if a TIE or TRE was conducted to determine the source(s) of toxicity; and did not elaborate if the additional treatment upgrades per the settlement agreement were required to address the results of the TIE/TRE. There was also no RP procedure (either qualitative or quantitative) conducted for WET in the original permit or the permit addendum. The procedure used and the results obtained for the WET RP determination should be described in the statement of basis

## V. ACTION ITEMS

This section summarizes the main findings of the PQR and provides proposed action items to improve SD's SWD permit programs. This list of proposed action items will serve as the

basis for ongoing discussions between EPA and SDDENR as well as within EPA. These discussions should focus on eliminating program deficiencies to improve performance by enabling good quality, defensible permits issued in a timely fashion.

The proposed action items are divided into three categories according to the priority that should be placed on each item and to facilitate discussions between EPA and SDDENR.

- Critical Findings (Category One) proposed action items will address a current deficiency or noncompliance with a federal regulation.
- Recommended Actions (Category Two) proposed action items will address a current deficiency with EPA guidance or policy.
- Suggested Practices (Category Three) proposed action items are listed as recommendations to increase the effectiveness of SD's SWD permit program.

The critical findings and proposed action items should be used to augment the existing list of "follow up actions" currently established as indicator performance measures and tracked under EPA's Strategic Plan Water Quality Goals. They may also serve as a roadmap for modifications to the EPA's program management.

# A. Basic Facility Information and Permit Application

The review of statements of basis developed for industrial permits revealed inconsistent descriptions of facility operations, wastewater treatment operations, and categorization related to ELGs. Further, the discussion of receiving stream impairment status and TMDL applicability was absent from the permit record for all but one of the permits reviewed.

The PQR revealed that applications reviewed for POTWs did not include whole effluent toxicity data or the required amount of sampling data (e.g., at least three sets). Proposed action items to help SDDENR strengthen their NPDES permit program are the following:

- A. SDDENR must ensure applications include data requirements consistent with EPA regulations at 40 CFR 122.21 as part of the application process. (Category 1)
- B. SDDENR should continue to update boilerplate documents used for developing the permit and statement of basis. Standard conditions in the boilerplates must be consistent with federal regulations as required by 40 CFR 122.41 and 122.42. Specifically, SDDENR's approach to bypass must comport with federal regulations as referenced above. [Completed] (Category 1).
- C. Boilerplate language should direct discussion of facility operations and pertinent ELGs (Category 1).
- D. Boilerplates should address stream impairment status and TMDLs. [Complete] (Category 2)

# **B.** Technology-based Effluent Limitations

Permits developed for municipal facilities did not consistently apply the minimum removal requirements for BOD and TSS consistent with secondary treatment standards and the accompanying statements of basis were silent on the rationale for not including the requirement. SDDENR indicated SWD permits may not establish minimum percent removal requirements for certain POTWs that operate lagoon systems based on the infrequent nature of discharges from these facilities.

Of the two permits reviewed for which there are applicable ELGs, one permit record (Black Hills Power-Ben French Power Plant, SD0000141) appeared to include documentation of the calculations used to develop the effluent limitations based on ELGs. Further, the statements of basis for the facilities reviewed were not consistent in their explanation of facility categorization and determination of applicable ELGs.

Proposed action items to help SDDENR strengthen their NPDES permit program are the following:

- 1. Permit documentation must include the basis and/or rationale for all technology-based and water-quality based effluent limitations. (Category 1).
- 2. Permits issued to non-POTWs must require compliance with a level of treatment performance equivalent to Best Available Technology Economically Achievable (BAT) or Best Conventional Pollutant Control Technology (BCT) for existing sources and consistent with New Source Performance Standards for new sources. If ELGs are not available, a permit must include requirements at least as stringent as BAT/BCT developed on a case-by-case basis using BPJ in accordance with the criteria outlined at 40 CFR 125.3(d). (Category 1)
- 3. SDDENR should ensure the permit record demonstrates the permit writer considered applicable ELGs. Additionally, SDDENR should consider developing boilerplate language for statements of basis to address the applicability of ELGs to industrial facilities. (Category 3)

# C. Water Quality-Based Effluent Limitations

Evaluations of reasonable potential were not always apparent in the materials reviewed during the PQR. Permits and statements of basis lacked discussion of specific pollutants of concern, receiving stream impairment status, TMDL applicability, and WET requirements. They also lacked documentation of reasonable potential analyses and WQBEL calculations. Proposed Action Items to help SDDENR strengthen their NPDES permit program are the following:

- 1. SDDENR must ensure that a robust RP analysis was undertaken and document this process in the Statement of Basis. The analysis must include a comprehensive assessment of pollutants of concern based on knowledge of the facility, all available facility data including application and DMR data, and industry information; if RP is determined, a limit must be established as required by 40 CFR 122.44(d)(i)-(iv). (Category 1)
- 2. SDDENR would benefit from developing an implementation procedures document to accompany the RP spreadsheet tool that SDDENR already uses, to guide SWD permit writers through the process of identifying pollutants of concern, evaluating monitoring data, defining RP, and documenting WQBEL development. SDDENR should continue to work with EPA to evaluate potential improvements to SDDENR's current RP spreadsheet tool (e.g., ensure calculations are consistent with EPA guidance and the method for evaluation of censored data is consistent). [Complete] (Category 3)
- 3. SDDENR must ensure the permit record includes evaluations of background pollutant concentrations and available dilution for the facility to evaluate RP and develop effluent limitations that will meet both numeric and narrative water quality criteria. (Category 1)

# D. Monitoring and Reporting

Generally, monitoring and reporting conditions were adequate. SWD permits do not specify analytical methods for certain parameters to ensure methods are sufficiently sensitive; permits require compliance with 40 CFR Part 136. SDDENR relies upon discharge monitoring data collected during the permit term for evaluating RP, as opposed to ensuring full data sets are submitted during the application process. Proposed action items to help SDDENR strengthen their NPDES permit program are the following:

- Permits should include specific analytical methods for certain parameters (e.g., mercury and cyanide). SWD should specify analytical methods for certain parameters to ensure methods are sufficiently sensitive to gather data sufficient to support permitting and compliance assessment decisions. (Category 2)
- SDDENR should continue to work with permittees to ensure adequate data are submitted during the permit term to provide for RP evaluation. (Category 3)

# E. Special and Standard Conditions

The municipal SWD permit boilerplates reviewed as part of the core review did not clearly reflect the bypass prohibition at 40 CFR 122.41. Proposed action items to help SDDENR strengthen their NPDES permit program are the following:

- SDDENR should continue to work with EPA to ensure the requirements of the federal standard conditions for bypass are fully captured in all SWD permits. [Complete] (Category 1)
- SDDENR should consistently include language in SWD permits and statements of basis indicating if a pretreatment program is required. (Category 3)

### F. Administrative Process

Generally, the supporting record was organized and easy to follow. The supporting record contained evidence of proper public notice and that comments were received and responded to. The supporting record did not always include a hard copy of the previous permit; however, a copy of it was usually accessible.

Proposed action items to help SDDENR strengthen their NPDES permit program are the following:

• SDDENR should consider maintaining a hard copy of the previous permit within the current permit record, for easier reference. (Category 3)

## **G.** Documentation

Documentation of overall effluent limitation development should be improved. Specifically, documentation should address facility operations with regard to categorization and application of ELGs and assessment of water quality impacts of the discharge. Statements of basis lacked detailed discussions of specific pollutants of concern, applicability of ELGs, evaluation of reasonable potential, and overall demonstration of effluent limitation calculations (both technology- and water quality-based). Proposed action items to help SDDENR strengthen their NPDES permit program are the following:

- SDDENR should work with the Region to continue developing an implementation
  procedures document to accompany the RP spreadsheet tool. A clear set of
  instructions would support clearer documentation of a water quality impacts
  assessment and the basis for effluent limitation development. [Complete] (Category
  2)
- SDDENR should work with the Region to evaluate potential improvements to SDDENR's current template documents, including development of a more robust discussion and documentation for effluent limitation development, especially water quality assessments and WQBEL development, consistent with requirements of 40 CFR 124.8 and 124.56. [Complete] (Category 2)
- SDDENR should consider additional modifications to their template documents so
  that a more developed discussion of industrial facility information is provided in the
  permit record that would enable a clearer understanding of the applicability of ELGs
  and water quality-based effluent limits. (Category 3)

# H. Core Topic Areas

Proposed actions items for core topic areas are provided below.

#### **Nutrients**

Proposed Action Items to help the SDDENR strengthen their NPDES permit program are the following:

- The statement of basis should establish the impairment status of the receiving water body. [Complete] (Category 2)
- In the case where a facility is discharging to an impaired water body, the statement of basis should discuss whether the permittee will discharge any pollutants that may cause, have reasonable potential to cause, or contribute to an excursion of a water quality standard. Specific to nutrients, this includes impacts of nutrients on response variables with established numeric and/or narrative water quality criteria as established under 40 CFR 122.44(d). [Complete] (Category 1)
- While monitoring data for TKN, nitrate/nitrite and total phosphorus must be included as part of the facility renewal application package, SDDENR should consider additional self-monitoring requirements for TKN, nitrate/nitrite and total phosphorus during the permit cycle for facilities discharging to waters with nutrient or nutrient related impairments (DO, chlorophyll a). (Category 2)
- In the absence of numeric nutrient criteria, SSDDENR should use its narrative criteria to ensure that discharges are not impacting aquatic species, or causing or contributing to downstream water quality impairment. (Category 2)

# **Pesticide General Permit**

Proposed Action Items to help the SDDENR strengthen their NPDES permit program are the following:

Region 8 has no recommendations for improving the South Dakota PGP. The permit meets the requirements of the Clean Water Act.

# **Pretreatment**

Proposed Action Items to help the SDDENR strengthen their pretreatment program include the following:

- SDDENR must update its Pretreatment legal authority in §74:52:11 to include the 13 required streamlining provisions listed in §3.2.1. However, EPA strongly recommends that the SDDENR incorporate all Pretreatment Streamlining Rule updates to allow the local Pretreatment programs to adopt the required and optional streamlining provisions. (Category 1)
- The Pretreatment boilerplate language for NPDES permits issued to POTWs with approved Pretreatment programs must implement the NPDES requirements at 40 CFR 122.44(j)(2)(ii) to "Provide a written technical evaluation of the need to revise local limits under 40 CFR 403.5(c)(1), following permit issuance or reissuance." [Complete] (Category 1)
- EPA strongly recommends the SDDENR commit to decreasing the permit backlog percentage for Pretreatment permits where it is the control authority. (Category 2)
- The SDDENR is required, as the control authority, to meet the inspection and sampling frequency of 1/year, as required in 403.8(f)(2)(v) of the Pretreatment regulations. (Category 1)
- The SDDENR should evaluate updating the reference date of Article 74:52, Chapter 10 of the State Rules that establishes the Effluent Guidelines and Standards for industrial users in non-approved programs. (Category 2)
- After the Streamlining Update of the State Pretreatment Regulations in §74:52:11, the SDDENR should evaluate the Pretreatment boilerplate language to ensure it adequately implements the Pretreatment Streamlining required provisions. (Category 1)
- The fact sheets for the NPDES permits issued to POTWs without approved Pretreatment programs should provide justification whether a Pretreatment program is required or not. (Category 2)
- EPA strongly recommends the SDDENR perform an adequate compliance evaluation during the receipt of the discharge monitoring reports to ensure the timeliness of any necessary enforcement response. (Category 2)
- The SDDENR should evaluate its resource commitment to the Pretreatment program. It appears that the SDDENR is adequately implementing its responsibilities as an Approval Authority but the SDDENR has a backlog of Pretreatment IU permits and is

not adequately implementing the Pretreatment regulations as a Control Authority. (Category 3)

- EPA recommends the SDDENR strengthen the statement of basis for each Pretreatment IU permit by providing adequate justification for representative and appropriate sampling methods based on the facility operating practices and discharge conditions. (Category 3)
- EPA strongly recommends the SDDENR evaluate collaboration with the local POTWs to share the inspection and sampling duties of CIUs/SIUs and meet the required inspection and sampling frequencies of 1/year, as required in the Pretreatment regulations. (Category 3)

#### Stormwater

Proposed Action Items to help the SDDENR strengthen their NPDES permit program include the following:

- Reissue the Municipal Stormwater General Permit as soon as possible as it has been expired for over five years. Evaluate whether municipalities have been moving forward with program implementation consistent with the "Maximum Extent Practicable" (MEP) standard. (Category 1)
- SDDENR could create promotional materials for administrative law judges and municipal officials to educate them on the significance of stormwater concerns, so that the State is not limited in its ability to pursue enforcement. (Category 3)
- Target efforts to ensure that permits can be reissued in a timely manner. The State plans to do more with less, utilizing electronic systems and G.I.S. to focus inspections and oversight. (Category 3)

#### **Special Focus Areas**

Proposed actions items for special focus areas are provided below.

Whole Effluent Toxicity (WET)

Proposed Action Items to help the SDDENR strengthen their NPDES permit program are the following:

- The procedure used and the results obtained for the WET RP determination must be adequately stated in the statement of basis because regulations at 40 CFR 122.44(d)(1) require RP evaluations (qualitative or quantitative). [Complete] (Category 1)
- A definitive concentration series must be clearly established that accounts for the receiving water concentration which is based on low flow conditions and is less variable over time. [Complete] (Category 2)
- Permits must provide detail and greater clarity regarding what is required of the permittee in terms of TRE-TIE plan, schedule, reporting, etc., so that the expectations of the permitting authority of the TRE study are adequately outlined to the permittee. [Complete] (Category 2)
- In the case that toxicity is still observed after the resample, consider increasing frequency of accelerated acute testing; current monthly requirements may not be frequent enough to evaluate impacts to the receiving water from acute toxicity. (Category 2)
- Failures of additional tests conducted during accelerated testing are permit violations. [Complete] (Category 1)
- Permits do not indicate that WET failures result in RP; once RP is established (e.g. multiple WET failures in the previous permit term) limits must be established in the permit upon renewal [40 CFR 122.44(d)(1)(iii & iv)]. Limits must be established either for WET or for the pollutant identified as causing toxicity. [40 CFR 122.44(d)(1)(v & vi)]. [Complete] (Category 1)

## **Action Item Summary**

This section provides a summary of the main findings of the review and provides proposed Action Items to improve South Dakota NPDES permit programs. This list of proposed Action Items will serve as the basis for ongoing discussions between Region 8 and South Dakota as well as between Region 8 and EPA HQ. These discussions should focus on eliminating program deficiencies to improve performance by enabling good quality, defensible permits issued in a timely fashion.

The proposed Action Items are divided into three categories to identify the priority that should be placed on each Item and facilitate discussions between Regions and states.

- Critical Findings (Category One) Most Significant: Proposed Action Items will address a current deficiency or noncompliance with respect to a federal regulation.
- **Recommended Actions** (Category Two) Recommended: Proposed Action Items will address a current deficiency with respect to EPA guidance or policy.

• Suggested Practices (Category Three) - Suggested: Proposed Action Items are listed as recommendations to increase the effectiveness of the states or Region's NPDES permit program.

The Critical Findings and Recommended Action proposed Action Items should be used to augment the existing list of "follow up actions" currently established as an indicator performance measure and tracked under EPA's Strategic Plan Water Quality Goals and/or may serve as a roadmap for modifications to the Region's program management.

	Category 1 – Critical Findings	
	Most Significant: Proposed action items will address a current deficiency or noncompliance	
with respect to a federal regula		
Topic	Action Item	
Basic Facility Information and Permit Application	SDDENR must ensure applications include data requirements consistent with EPA regulations at 40 CFR 122.21 as part of the application process.	
Basic Facility Information and Permit Application	SDDENR should continue to update boilerplate documents used for developing the permit and statement of basis. Standard conditions in the boilerplates must be consistent with federal regulations as required by 40 CFR 122.41 and 122.42. Specifically, SDDENR approach to bypass must comport with federal regulations as referenced above. [Complete] Additionally, boilerplate language should direct discussion of: facility operations and its relationship to pertinent ELGs.	
Technology-based Effluent Limitations	Permit documentation must include the basis and/or rationale for all technology-based and water-quality based effluent limitations.	
Technology-based Effluent Limitations	Permits issued to non-POTWs must require compliance with a level of treatment performance equivalent to Best Available Technology Economically Achievable (BAT) or Best Conventional Pollutant Control Technology (BCT) for existing sources and consistent with New Source Performance Standards for new sources. If ELGs are not available, a permit must include requirements at least as stringent as BAT/BCT developed on a case-by-case basis using BPJ in accordance with the criteria outlined at 40 CFR 125.3(d).	
Water Quality-based Effluent Limitations	SDDENR must ensure the permit record includes evaluations of background pollutant concentrations and available dilution for the facility to evaluate RP and develop effluent limitations that will meet both numeric and narrative water quality criteria.	

	Category 1 – Critical Findings
Most Significant: Proposed a	action items will address a current deficiency or noncompliance
with respect to a federal regu	lation.
Topic	Action Item
Water Quality-based	SDDENR must ensure that a robust RP analysis was undertaken
Effluent Limitations	and document this process in the Statement of Basis. The
	analysis must include a comprehensive assessment of pollutants
	of concern based on knowledge of the facility, all available
	facility data including application and DMR reported data, and
	industry information; if RP exists, a limit must be established as
	required by 40 CFR 122.44(d)(i)-(iv).
Special and Standard	SDDENR should continue to work with EPA to ensure the
Conditions	requirements of the federal standard conditions for Bypass are
	fully captured in all SWD permits. [Complete]
Nutrients	In the case where a facility is discharging to an impaired water
	body, the Statement of Basis should provide discussion
	surrounding whether the discharge from the permitted facility
	will discharge any pollutants that may cause, contribute to, or
	have the reasonable potential to cause or contribute to an
	excursion of a water quality standard. Specific to nutrients, this
	includes impacts of nutrients on response variables with
	established narrative and/or numeric water quality criteria as
Pretreatment	established under 40 CFR 122.44(d).[Complete]
Fredeatment	SDDENR must update its Pretreatment legal authority in §74:52:11 to include the 13 required streamlining provisions
	listed in §3.2.1. However, EPA strongly recommends that the
	SDDENR incorporate all Pretreatment Streamlining Rule
	updates to allow the local Pretreatment programs to adopt the
	required and optional streamlining provisions.
Pretreatment	The Pretreatment boilerplate language for NPDES permits
	issued to POTWs with approved Pretreatment programs must
	implement the NPDES requirements at 40 CFR 122.44(j)(2)(ii)
	to "Provide a written technical evaluation of the need to revise
	local limits under 40 CFR 403.5(c)(1), following permit
	issuance or reissuance." [Complete]
Pretreatment	The SDDENR is required, as the control authority, to meet the
	inspection and sampling frequency of 1/year, as required in
	403.8(f)(2)(v) of the Pretreatment regulations.
Pretreatment	After the Streamlining Update of the State Pretreatment
	Regulations in §74:52:11, the SDDENR should evaluate the
	Pretreatment boilerplate language to ensure it adequately
	implements the Pretreatment Streamlining required provisions.

Category 1 – Critical Findings		
Most Significant: Proposed action items will address a current deficiency or noncompliance		
with respect to a federal regulation.		
Topic	Action Item	
Stormwater	Reissue the Municipal Stormwater General Permit as soon as	
	possible as it has been expired for over five years. Evaluate	
	whether municipalities have been moving forward with program	
	implementation consistent with the "Maximum Extent	
	Practicable" (MEP) standard.	
Whole Effluent Toxicity	The procedure used and the results obtained for the WET RP	
(WET)	determination must be adequately stated in the statement of	
	basis because regulations at 40 CFR 122.44(d)(1) require RP	
	analyses on all discharges to waters of the U.S. [Complete]	
Whole Effluent Toxicity	Failures of additional tests conducted during accelerated testing	
(WET)	are permit violations; [Complete]	
Whole Effluent Toxicity	Permits do not indicate that WET failures result in RP; once RP	
(WET)	is established (e.g. multiple WET failures in the previous permit	
	term) limits must be established in the permit upon renewal [40	
	CFR 122.44(d)(1)(iii & iv)]. Limits must be established either	
	for WET or for the pollutant identified as causing toxicity. [40	
	CFR 122.44(d)(1)(v & vi)]. [Complete]	

Basic Facility Information and Permit Application  Monitoring and Reporting	SDDENR should continue to update boilerplate documents used for developing the permit and statement of basis. Boilerplate language should direct discussion of receiving stream impairment status and presence of TMDLs.  SDDENR should include specific analytical methods for certain
Monitoring and Reporting	parameters (e.g., mercury and cyanide).
Documentation (including Fact Sheet)	SDDENR should work with the Region to continue developing an implementation procedures document to accompany the RP spreadsheet tool. A clear set of instructions would support clearer documentation of a water quality impacts assessment and the basis for effluent limitation development.
Documentation (including Fact Sheet)	SDDENR should work with the Region to evaluate potential improvements upon SDDENR's current template documents, including development of a more robust discussion and documentation for effluent limitation development, especially water quality assessments and WQBEL development, consistent with requirements of 40 CFR 124.8 and 124.56.
Nutrients	The Statement of Basis should establish the impairment status of the receiving water body.
Nutrients	While monitoring data for TKN, nitrate/nitrite and total phosphorus must be included as part of the facility renewal application package, SDDENR should consider additional self-monitoring requirements for TKN, nitrate/nitrite and total phosphorus during the permit cycle for facilities discharging to waters with nutrient or nutrient related impairments (DO, chlorophyll a).
Nutrients	In the absence of numeric nutrient criteria, SDDENR should use its narrative criteria to ensure that discharges are not impacting aquatic species, or causing or contributing to downstream water quality impairments.
Pretreatment	EPA strongly recommends the SDDENR commit to decreasing the permit backlog percentage for the Pretreatment permits.
Pretreatment	The SDDENR should evaluate updating the reference date of Article 74:52, Chapter 10 of the State Rules that establishes the Effluent Guidelines and Standards for industrial users in non-approved programs.
Pretreatment	The fact sheets for the NPDES permits issued to POTWs without approved Pretreatment programs should provide justification whether a Pretreatment program is required or not.

Pretreatment	EPA strongly recommends the SDDENR perform an adequate compliance evaluation during the receipt of the discharge monitoring reports to ensure the necessary enforcement response is timely.
Whole Effluent Toxicity (WET)	A definitive concentration series must be clearly established that accounts for the receiving water concentration which is based on low flow conditions and is less variable over time. (Category 1)
Whole Effluent Toxicity (WET)	Permits must provide detail and greater clarity regarding what is required of the permittee in terms of TRE-TIE plan, schedule, reporting, etc., so that the expectations of the permitting authority of the TRE study are adequately outlined to the permittee. (Category 2)
Whole Effluent Toxicity (WET)	In the case that toxicity is still observed after the resample, consider increasing frequency of accelerated acute testing; current monthly requirements may not be frequent enough to evaluate impacts to the receiving water from acute toxicity.

Category 2 - Recommended Actions		
Recommended: Proposed Action Items will address a current deficiency with respect to EPA guidance or policy.		
Topic	Action Item	
Basic Facility Information and Permit Application Monitoring and Reporting	Boilerplate language should address stream impairment status and TMDLs. [Complete]  Permits should include specific analytical methods for certain parameters (e.g., mercury and cyanide). SWD should specify analytical methods for certain parameters to ensure methods are sufficiently sensitive to gather data sufficient to support permitting and compliance assessment decisions.	
Documentation (including Fact Sheet)	SDDENR should work with the Region to continue developing an implementation procedures document to accompany the RP spreadsheet tool. A clear set of instructions would support clearer documentation of a water quality impacts assessment and the basis for effluent limitation development. [Complete]	
Documentation (including Fact Sheet)	SDDENR should work with the Region to evaluate potential improvements upon SDDENR's current template documents, including development of a more robust discussion and documentation for effluent limitation development, especially water quality assessments and WQBEL development, consistent with requirements of 40 CFR 124.8 and 124.56. [Complete]	
Nutrients	The Statement of Basis should establish the impairment status of the receiving water body. [Complete]	
Nutrients	While monitoring data for TKN, nitrate/nitrite and total phosphorus must be included as part of the facility renewal application package, SDDENR should consider additional self-monitoring requirements for TKN, nitrate/nitrite and total phosphorus during the permit cycle for facilities discharging to waters with nutrient or nutrient related impairments (DO, chlorophyll a).	
Nutrients	In the absence of numeric nutrient criteria, SDDENR should use its narrative criteria to ensure that discharges are not impacting aquatic species, or causing or contributing to downstream water quality impairments.	
Pretreatment	EPA strongly recommends the SDDENR commit to decreasing the permit backlog percentage for the Pretreatment permits.	

Pretreatment	The SDDENR should evaluate updating the reference date of Article 74:52, Chapter 10 of the State Rules that establishes the Effluent Guidelines and Standards for industrial users in non-approved programs.
Pretreatment	The fact sheets for the NPDES permits issued to POTWs without approved Pretreatment programs should provide justification whether a Pretreatment program is required or not.
Pretreatment	EPA strongly recommends the SDDENR perform an adequate compliance evaluation during the receipt of the discharge monitoring reports to ensure the necessary enforcement response is timely.
Whole Effluent Toxicity (WET)	A definitive concentration series must be clearly established that accounts for the receiving water concentration which is based on low flow conditions and is less variable over time.[Complete]
Whole Effluent Toxicity (WET)	Permits must provide detail and greater clarity regarding what is required of the permittee in terms of TRE-TIE plan, schedule, reporting, etc., so that the expectations of the permitting authority of the TRE study are adequately outlined to the permittee. [Complete]
Whole Effluent Toxicity (WET)	In the case that toxicity is still observed after the resample, consider increasing frequency of accelerated acute testing; current monthly requirements may not be frequent enough to evaluate impacts to the receiving water from acute toxicity.

Category 3 - Suggested Practices		
	ns are listed as recommendations to increase the	
effectiveness of the state's or	Region's NPDES permit program.	
Topic Act	ion Item	
Technology-based Effluent	SDDENR should ensure the permit record demonstrates	
Limitations	the permit writer considered applicable ELGs.	
	Additionally, SDDENR should consider developing	
	boilerplate language for statements of basis to address the	
	applicability of ELGs to industrial facilities.	
Water Quality-based Effluent	SDDENR would benefit from developing an	
Limitations	implementation procedures document to accompany the	
	RP spreadsheet tool that SDDENR already uses, to guide	
	SWD permit writers through the process of identifying	
	pollutants of concern, evaluating monitoring data, defining	
	RP, and documenting WQBEL development. SDDENR	
	should continue to work with EPA to evaluate potential	
	improvements upon SDDENR's current RP spreadsheet	
	tool (e.g., ensure calculations are consistent with EPA guidance and the method for evaluation of censored data is	
	consistent). [complete]	
Monitoring and Reporting	SDDENR should continue to work with permittees to	
Withinforming and Reporting	ensure adequate data are submitted during the permit term	
	to provide for RP evaluation.	
	to provide for Re evaluation.	
Special and Standard Conditions	SDDENR should consistently include language in SWD	
	permits and statements of basis indicating if a pretreatment	
	program is required.	
Administrative Process (including	SDDENR should consider maintaining a hard copy of the	
Public Notice)	previous permit within the current permit record, for easier	
	reference.	
Documentation (including Fact	SDDENR should consider additional modifications to their	
Sheet)	template documents so that a more developed discussion of	
,	industrial facility information is provided in the permit	
	record that would enable a clearer understanding of the	
	applicability of technology-based standards (e.g., ELGs)	
	and water quality-based standards.	
Pretreatment	The SDDENR should evaluate its resource commitment to	
	the Pretreatment program. It appears that the SDDENR is	
	adequately implementing its responsibilities as an	
	Approval Authority but the SDDENR has a backlog of	
	Pretreatment IU permits and is not adequately	
	implementing the Pretreatment regulations as a Control	
	Authority.	

Cat	egory 3 - Suggested Practices
	Items are listed as recommendations to increase the
	s or Region's NPDES permit program.
	Action Item
Pretreatment	EPA recommends the SDDENR strengthen the statement of basis for each Pretreatment IU permit by providing adequate justification for representative and appropriate sampling methods based on the facility operating practices and discharge conditions.
Pretreatment	EPA strongly recommends the SDDENR evaluate collaboration with the local POTWs to share the inspection and sampling duties of CIUs/SIUs and meet the required inspection and sampling frequencies of 1/year, as required in the Pretreatment regulations.
Stormwater	SDDENR could create promotional materials for administrative law judges and municipal officials to educate them on the significance of stormwater concerns, so that the State is not limited in its ability to pursue enforcement.
Stormwater	Target efforts to ensure that permits can be reissued in a timely manner. The State plans to do more with less, utilizing electronic systems and G.I.S. to focus inspections and oversight.

### **State Review Framework**

### I. Background on the State Review Framework

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

- Clean Air Act Stationary Source
- Clean Water Act National Pollutant Discharge Elimination System
- Resource Conservation and Recovery Act Subtitle C

### Reviews cover these program areas:

- Data completeness, timeliness, and quality
- Compliance monitoring inspection coverage, inspection quality, identification of violations, meeting commitments
- Enforcement actions appropriateness and timeliness, returning facilities to compliance
- Penalties calculation, assessment, and collection

### Reviews are conducted in three phases:

- Analyzing information from the national data systems
- Reviewing a limited set of state files
- Development of findings and recommendations

Consultation is also built into the process. This ensures that EPA and the state understand the causes of issues and seek agreement on actions needed to address them.

SRF reports are designed to capture the information and agreements developed during the review process in order to facilitate program improvements. EPA also uses the information in the reports to develop a better understanding of enforcement and compliance nationwide, and to identify any issues that require a national response.

Reports provide factual information. They do not include determinations of overall program adequacy, nor are they used to compare or rank state programs.

Each state's programs are reviewed at least once every five years. The first round of SRF reviews began in FFY 2004. The Round 2 SRF review of South Dakota was conducted in FFY 2012 however Round 3 guidance and metrics were implemented for this review. Round 3 reviews will continue through FFY 2017.

### **II. SRF Review Process**

**Review period**: FFY 2011

**Key dates** During the year in which this SRF review was conducted, EPA changed how it conducted oversight reviews of state NPDES permitting and enforcement programs. PQR and SRF reviews were previously conducted separately. In 2012, EPA integrated these reviews to obtain a comprehensive understanding of permitting and compliance elements of the NPDES program and a better appreciation of the work and challenges of a state NPDES program. The fully integrated NPDES PQR SRF process is outlined below.

The kickoff letter to the state (Appendix F) was sent August 15, 2012. Individual EPA media programs contacted SDDENR permitting and enforcement managers and staff to discuss expectations, procedures, and scheduling for the review. EPA media programs coordinated with SDDENR to verify availability of EPA's requested files, the location of the files, and to confirm review dates, arrival times and logistics.

Individual EPA media programs sent lists of data metrics to SDDENR (Appendix F) and conducted data metric analyses. EPA sent lists of requested files to SDDENR (Appendix F) for review in advance of the onsite file reviews.

On-site file reviews were conducted for CAA, RCRA and NPDES from July through October 2012. EPA typically conducted entrance conferences upon arrival for the reviews at SDDENR offices and exit meetings prior to departure for SDDENR managers and staff.

EPA media programs drafted reports of review findings, shared preliminary reports with SDDENR in February 2013 (Appendix F) and requested comments. The state provided initial comments which were incorporated into the initial draft report where possible. The final draft report was finalized and transmitted to the state for final comments in September 2013 (Appendix F). The final EPA report was transmitted to the South Dakota DENR Department Secretary in June 2014.

EPA will add the final report and any recommendations in the report to the SRF Tracker. EPA will consult with SDDENR and add agreed-upon action items in the report to the Action Item database. EPA will also initiate follow-up discussions periodically with SDDENR to see if progress is being made on the report recommendations.

Communication with the state Individual kickoff meetings with SDDENR staff and management were held at the discretion of each EPA media program. Individual on-site file reviews were conducted for CAA, RCRA and NPDES programs in which discussions were held with respective staff and management throughout the reviews. Exit meetings were held prior to departure for SDDENR managers and staff. EPA media programs communicated independently with SDDENR regarding findings and recommendations. Resolution of significant issues was conducted either on-site, through follow-up correspondence or calls by the EPA SRF Coordinator or the individual media reviewers. The South Dakota SDDENR Department Secretary was informed of SRF review results through a formal letter from the EPA Region 8

Assistant Regional Administrator for Enforcement, Compliance Assurance, and Environmental Justice (Appendix F).

### **III. SRF Findings**

Findings represent EPA's conclusions regarding state performance, and may be based on:

- Initial findings made during the data and/or file reviews
- Annual data metric reviews conducted since the state's Round 2 SRF review
- Follow-up conversations with state agency personnel
- Additional information collected to determine an issue's severity and root causes
- Review of previous SRF reports, MOAs, and other data sources

There are four types of findings:

**Good Practice:** Activities, processes, or policies that the SRF metrics show are being implemented at the level of Meets Expectations, **and** are innovative and noteworthy, **and** can serve as models for other states. The explanation must discuss these innovative and noteworthy activities in detail. Furthermore, the state should be able to maintain high performance.

**Meets Expectations:** Describes a situation where either: a) no performance deficiencies are identified, or b) single or infrequent deficiencies are identified that do not constitute a pattern **or** problem. Generally, states are meeting expectations when falling between 91 to 100 percent of a national goal. The state is expected to maintain high performance.

Area for State Attention: The state has single or infrequent deficiencies that constitute a minor pattern or problem that does not pose a risk to human health or the environment. Generally, performance requires state attention when the state falls between 85 to 90 percent of a national goal. The state should correct these issues without additional EPA oversight. The state is expected to improve and achieve high performance. EPA may make recommendations to improve performance but they will not be monitored for completion.

**Area for State Improvement:** Activities, processes, or policies that SRF data and/or file metrics show as major problems requiring EPA oversight. These will generally be significant recurrent issues. However, there may be instances where single or infrequent cases reflect a major problem, particularly in instances where the total number of facilities under consideration is small. Generally, performance requires state improvement when the state falls below 85 percent of a national goal. Recommendations are required to address the root causes of these problems, and they must have well-defined timelines and milestones for completion. Recommendations will be monitored in the SRF Tracker.

Element 1 — Data Completeness: Completeness of Minimum Data Requirements.		
Finding 1-1	Meets Expectations	
Description	Permit limits and DMR data for the vast majority of major and minor facilities are present in ICIS.	
Explanation	Based on an analysis of data metrics for FFY 2011, South Dakota's ICIS data for permit limits and DMR data meet or exceed the national goal and/or national average for all metrics.	
Relevant metrics	<ul> <li>1a1 – Number of active NPDES majors with individual permits: 29</li> <li>1a2 – Number of active NPDES majors with general permits: 0</li> <li>1a3 – Number of active NPDES non-majors with individual permits: 243</li> <li>1a4 – Number of active NPDES non-majors with general permits: 172</li> <li>1b1 – Permit limit data entry rate for major facilities: 100%. <ul> <li>National goal: &gt;=95% entry of permit limits.</li> <li>National average: 98.6%.</li> </ul> </li> <li>1b2 – DMR entry rate for major facilities: 100%. <ul> <li>National average: 96.5%</li> </ul> </li> <li>1b3 – Number of major facilities with a manual override of RNC/SNC to a compliant status - 1</li> <li>1c1 – Permit limit data entry rate for non-major facilities: 99.2% <ul> <li>National average: 66.1%</li> </ul> </li> <li>1c2 – DMR entry rate for non-major facilities: 97.71%. <ul> <li>National average: 72.6%.</li> </ul> </li> <li>1e1 – Informal action counts completed: 119</li> <li>1e2 – Total number of informal actions at CWA NPDES facilities: 185</li> <li>1f1 – Facilities with formal actions: 5</li> <li>1f2 – Total number of formal actions at CWA NPDES facilities: 5</li> <li>1g2 – Total penalties assessed: \$241,000</li> </ul>	
State response		
Recommendation	None required.	

Element 2 — Data Accuracy:	Accuracy of Minimum Data Requirements.
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### Finding 2-1 Meets Expectations

# **Description** Required data for major and minor facilities is accurately entered into

ICIS.

### **Explanation** Two discrepancies between ICIS and the official files reviewed during

the SRF. After the SRF, South Dakota has corrected one of the two

items. These are specified below.

#### Link Snacks:

• The official file contained a cover letter which stated the incorrect permit number for the facility.

### Wheeler Manufacturing:

• The ICIS report indicates the inspection date defined as 8/11/2011. The actual inspection date as defined by the inspection report was 8/18/2011. Note: SDDENR has since corrected the ICIS discrepancy.

#### **Relevant metrics**

**2a** - 100 % of formal enforcement actions, taken against major facilities, with enforcement violation type (EVTP in PCS or equivalent in ICIS-NPDES) codes entered.

• Goal: >= 95% completion of required information.

**2b** - 20 of 22 or 90.9% of the files are accurately reflected in the national data systems.

• Goal: >=95% of data accurately reflected.

#### **State response**

#### Recommendation

None required.

Finding 3-1	Meets Expectations
Description	Water Enforcement National Data Base data elements for major and minor facilities is entered into ICIS in a timely manner.
Explanation	Based on the files reviewed, SDDENR enters WENDB data elements into ICIS in a timely manner.
Relevant metrics	<ul> <li>3a – Timeliness of mandatory data entered in the national data system:</li> <li>22/22 = 100%.</li> <li>Goal: 100% of data entered timely.</li> </ul>
State response	
Recommendation	None required.

# Element 4 — Completion of Commitments: Meeting all enforcement and compliance commitments made in state/EPA agreements.

Finding 4-1	Meets Expectations
Description	The state completed all tracked commitments made in EPA/State agreements.
Explanation	In FFY 11, South Dakota met or exceeded their PPA reporting requirements and inspection commitments in 14 sectors monitored by EPA Region 8. South Dakota met or exceeded the requirements in six sectors specifically identified in the Compliance Monitoring Strategy Plan (CMS Plan) as specified by the '4a#' identifier in the metric below. South Dakota had particular success in Pretreatment, Significant Industrial User, Combined Sewer Overflow, Sanitary Sewer Overflow, Phase I and II stormwater construction, and CAFO. SDDENR completed additional supplemental inspections not specifically mandated by the CMS in the following sectors: Major (off-site), Minor (on and off-site), Biosolids, and Federal Facility (off and on-site) as the state inspected many more facilities than originally committed.
Relevant metrics	4a - Percent of planned inspections completed 4a1: Pretreatment compliance inspections and audits 26/6 = > 100% 4a2: Significant Industrial User inspections for SIUs discharging to non-authorized POTWs 19/16= > 100% 4a4: Major CSO inspections 1/1 = 100% 4a5: SSO inspections 77/76 = > 100% 4a8: Industrial stormwater inspections 30/30 = 100% 4a9: Phase I and Phase II stormwater construction inspections 303/230 = > 100% 4a10: Number of inspections of NPDES-permitted CAFOs 233/226 = >100% Goal: 100% of commitments Supplemental Inspections Completed by SDDENR S#1 - On-site major inspections 14/14 = 100% S#2 - Off-site major inspections 16/15 = >100% S#3 - On-site non-major inspections 99/70 = >100% S#4 - Off-site non-major inspections 76/60 = >100% S#5 - Biosolids inspections 13/6 = >100% S#6 - Federal Facilities inspections onsite 2/0 = >100% S#7 - Federal Facilities inspections offsite 5/2 => 100%

4b - Planned commitments completed.

- South Dakota completed the 6/6 commitments tracked for this measure.
  - o Goal: 100% of commitments.

**State response** 

Recommendation

None required.

Element 5 — Inspection	<b>Coverage:</b>	<b>Completion</b> of	of planned	inspections.
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Finding 5-1	Meets Expectations	
Description	Inspection goals for major and non-major traditional dischargers were satisfied in FFY 2011. South Dakota meet all of its commitments.	
Explanation	South Dakota met or exceeded all of its commitments for the FFY11 inspection year. In addition to the on-site inspections, SDDENR also performed 110 desk audits to evaluate compliance.	
Relevant metrics	<ul> <li>5a – Inspection coverageNPDES majors: 14/29 = 48.3%</li> <li>5b1 – Inspections at NPDES non-majors with individual permits: 57/243 = 23.4%</li> <li>National average: 23.7%</li> <li>5b2 – Inspections at NPDES non-majors with general permits: 30/172 = 17.4%.</li> </ul>	
State response		
Recommendation	None required.	

None required.

Element 6 — Quality of Inspection Reports: Proper and accurate documentation of observations and timely report completion.

Finding 6-1

 Meets Expectations
 25 of the 25 inspection reports reviewed provided sufficient documentation so that a compliance determination could be made.

 Explanation
 Relevant metrics
 6a – Inspection reports reviewed that provide sufficient documentation to determine compliance: 25/25 = 100 %
 State response

Recommendation

Element 6 — Quality of Inspection Reports: Proper and accurate documentation of observations and timely report completion.

observations and timely report completion.		
Finding 6-2	Area for State Improvement	
Description	Six of the 23 inspection reports reviewed were not completed in a timely manner.	
Explanation	Region 8 has established a 45 day time frame for completion of inspection reports. Six of the inspection reports reviewed during the SRF were completed more than 45 days after the inspection or receipt of sample results.	
	The six inspection reports not completed in a timely manner were South Dakota Department of Transportation (54 day average), City of Sioux Falls (118 days), City of Summerset (48 days), Northern States Power Angus (161 days), Poet Biorefining - Hudson (122 days), Spring Valley Colony (49 days). The average time to complete the 23 inspection reports was 54 days.	
Relevant metrics	<ul> <li>6b – Inspection reports reviewed that were completed within the prescribed timeframe: 17/23 = 73.9%</li> <li>Goal: 100% of reports completed in timely manner.</li> </ul>	
State response	The state has established a goal of 45 days to complete an inspection report and has made significant progress in meeting that goal consistently. The snapshot of inspections chosen did not do a good job of representing DENR's overall inspection program.	
	For inspections conducted in FY 2011, DENR pulled a full list of all the inspections from ICIS. 82% (70/85) of DENR's onsite inspections in FY 2011 were completed in 45 days or less. While this is still not meeting the state's or EPA's goal, it is significantly better than the 68% EPA notes in its report. It also represents a significant improvement from years past.	
	For FY 2012, DENR completed 91 of its 99 inspections within 45 days or less (one of the remaining 8 inspections went out in 46 days). This represents 92% of DENR's inspection reports that were completed within 45 days or less. This is within 91% of EPA's national goal.	

area.

DENR would ask that EPA acknowledge DENR's improvement in this

### Recommendation

The State should establish a goal of 45 days to complete an inspection report. Until a yearly goal of 91% of all inspection reports are completed within 45 days, report to EPA at the mid-year (April 30) and end-of-year (October 1) the percentage of inspection reports that have been issued within 45 days.

Element 6 — Quality of Inspection Reports: Proper and accurate documentation of observations and timely report completion.

Finding 6-3	Area for State attention
rinumg v-3	Arca for State attention

**Description** Fourteen of the 23 inspection reports reviewed are not 100% complete.

### **Explanation**

EPA used the SRF Round 3 File Review CWA Facility Checklist and based on the requirements found in the checklist, a portion of the inspection report did not meet the completeness requirements specified in the checklist. Compliance determination could be found and followed in 100% of the inspection reports. The inspection reports did contain information depicting violations found; however, the specific permit citation was not referenced. Small errors in inspection report documentation included items referenced as an item needing to be addressed in the inspection report but not required within the findings table, recommendations located within the required corrective actions table, and the time the inspector initiated the inspection.

Permit citation not included in findings: City of Mitchell, City of Summerset, City of Chamberlain, Magnum 43, LLC., Spring Valley Colony, Hub City Livestock Auction, County Line Feeders, Pechous Feedlot, Veblen East Dairy, John Morrell and Company, City of Huron, Sioux Falls WWTP, South Dakota Department of Transportation, City of Viborg WWTF.

Violations of the permit which should be Required actions: Sioux Falls WWTP flume issues, animal burrows at Belvidere/Presho/Vivian, bypass issues at Wasta, SSO issues at Homestead, inadequate O&M at South Dakota Department of Transportation sites (Ward Road Outfall 4, Hidewood Outfalls 002/003, Spearfish Outfall 19), inadequate O&M at City of Viborg, inadequate O&M at City of Summerset.

Items included in the inspection report yet not listed in findings table: unknown application rate City of Mitchell.

Time of inspection missing: Magnum 43, LLC., Spring Valley Colony, Hub City Livestock Auction, County Line Feeders, Pechous Feedlot, Veblen East Dairy.

To address this issue, the State could revise their inspection report templates so this information is included in the inspection report. Before

	finalizing the report, the inspector could ask a colleague to QA the report for missing information.
Relevant metrics	Generally falls under metric 6a and 6b.
State response	
Recommendation	None required.

Element 7 — Identification of Alleged Violations: Compliance determinations accurately made and promptly reported in national database based on inspection reports and other compliance monitoring information.

Finding 7-1	Meets Expectations
Description	The state accurately makes compliance determinations.
Explanation	Twenty-three of the 23 inspection reports reviewed led to an accurate compliance determination.
Relevant metrics	<ul> <li>7a1 - Number of single-event violations at active majors: 0</li> <li>7a2 - Number of single-event violations at non-majors: 1</li> <li>7b - Compliance schedule violations: 0</li> <li>7c - Permit schedule violations: 2</li> <li>7d - Percent of major facilities with DMR violations reported to the national database: 9/29 = 31%</li> <li>7e - Inspection reports reviewed that led to an accurate compliance determination 23/23 = 100%</li> <li>7f1 - Non-major facilities in category 1 noncompliance: 68</li> <li>7g1 - Non-major facilities in category 1 noncompliance: 55</li> <li>7h1- Non-major facilities in noncompliance: 130/244 = 53.2%</li> </ul>
State response	
Recommendation	None required.

Element 7 — Identification of Alleged Violations: Compliance determinations accurately made and promptly reported in national database based on inspection reports and other compliance monitoring information.

Finding 7-2	Area for State Improvement
Description	The state does not make prompt determinations of noncompliance based on Discharge Monitoring Report (DMR) data.
Explanation	This is a performance issue that falls generally under Element 7. The State did not issue timely enforcement following violations found in DMRs submitted by facilities permitted by SDDENR.
	The SDDENR office in Pierre receives DMRs from facilities within one month following the end of each monitoring period and enters the DMR data into ICIS. Many files reviewed by the EPA included a compliance determination concerning DMR effluent violations or DMR non-receipt. Though appropriate, four of the 32 determinations were not made until three to twelve months following SDDENR's receipt of the DMRs. Those four instances include John Morrell and Company (86 days), Town of Keystone (90 days), Valley Queen Cheese (300+ days), and City of Chamberlain (120 days).
Relevant metrics	No metric specifically points to this item. It generally falls under metric 7.
State response	DENR has been working on ways to improve its response time on DMR violations and will respond in more detail to the final report. However, DENR would like to provide EPA with details on steps DENR already takes to identify, address, and prevent violations:
	<ul> <li>Violations are required to be reported to DENR by phone. When DENR receives a verbal report of a violation, the state discusses the cause of the violation and the steps the facility is and will be taking to correct and prevent the violation.</li> <li>Lagoon facilities with ammonia and/or bacteria limits are required to obtain permission from the department prior to a discharge. This allows DENR to discuss steps the facility can take to improve treatment and prevent violations before the discharge even begins. In a few cases, DENR has required facilities with past compliance issues to obtain permission also.</li> </ul>

- A large number of communities use the South Dakota State
   Health Laboratory to analyze wastewater samples. DENR
   receives copies of these results at least once per week. These
   results are reviewed as they are received. If DENR identifies a
   potential violation, the facility is contacted by phone right away.
- DENR provides on-site operator assistance to improve operations and prevent noncompliance. DENR provides this assistance during inspections or upon request from the facility.

DENR is looking for ways to automate and simplify the process of sending warning letters to facilities that report violations on the DMRs. However, the processes outline above are significantly more effective at addressing and preventing violations and provide much more timely response. DENR would request that EPA acknowledge these steps in the final report.

#### Recommendation

SDDENR should continue to devise and implement procedures for promptly identifying and responding to DMR effluent and non-receipt violations. The state should develop a standard operation procedure outlining these practices. The item will be removed from SRF tracker after 3-months of successful implementation of the developed standard operating procedure. SDDENR should report to EPA on actions taken and the extent to which DMRs are consistently reviewed in a timely manner.

Element 8 — Identification of SNC and HPV: Accurate identification of significant noncompliance and high-priority violations, and timely entry into the national database.

Finding 8-1	Area for State Attention
Description	Nine major facility inspection reports were reviewed; two facilities did not have any violations, two facilities were in the process of being issued formal enforcement by SDDENR, and five facilities had violations yet no determinations were made to state whether the violations put the facility in SNC.
Explanation	Major facilities in South Dakota are not typically in SNC, as shown by metric 8a1 below. South Dakota does not typically enter SEV codes following their inspections. On occasion, South Dakota will enter unauthorized discharges into ICIS as an SEV code; however, this process is not defined in any South Dakota process or protocol. The five major facilities where violations were found seemed to have violations that would not have led to SNC; however, no information in the file could be utilized to understand SDDENR's SNC determination.
Relevant metrics	<ul> <li>8a1 - Active major facilities in SNC during reporting year: 1/29 = 3.4%</li> <li>8a2 - Percent of active major facilities in SNC during the reporting year: 1/29 = 3.4%</li> <li>National goal: 22.30%</li> <li>8b - Verify that facilities with an SEV were accurately determined to be SNC or non-SNC: 0/9 = 0%</li> <li>8c - Verify that SEVs that are SNC are timely reported: N/A</li> </ul>
State response	DENR would like further clarification on this issue. What violations were identified that would not have been captured in the discharge monitoring reports or the quarterly noncompliance report SDDENR uses the QNCR to identify major facilities in significant noncompliance.  DENR and EPA may need to have further discussions on this issue. DENR is concerned about the workload involved with this request. However, since EPA states DENR "should" identify SEVs, DENR will
Recommendation	take this suggestion under advisement.  None required.
	<u>.</u>

Element 9 — Enforcement Actions Promote Return to Compliance: Enforcement actions include required corrective action that will return facilities to compliance in specified timeframe.

Finding 9-1	Area for State Attention
Description	Informal enforcement actions do not consistently result in violators returning to compliance. All formal enforcement actions include the use of compliance schedules to bring the facility back into compliance.
Explanation	Three of the six informal enforcement actions reviewed by EPA either succeeded in getting a return to compliance or ultimately led to a formal enforcement action that legally required a return to compliance. The other three of the six informal actions consisted of warning letters, all issued to non-major facilities. The warning letters reiterated the violations but did not require facility action by a specified date and if SDDENR is seeking voluntary or mandatory compliance. The state needs to ensure the violations have been corrected and that they are properly documented in the facility file.  All four formal enforcement actions reviewed by EPA required
	corrective actions by the violator by a required date.
Relevant metrics	Six formal enforcement actions, six informal enforcement actions.
	9a – Responses that have returned or will return a source in violation to compliance: $7/10 = 70%$ .
State response	
Recommendation	None required.

Element 10 — Timely and Appropriate Action: Timely and appropriate enforcement action in accordance with policy relating to specific media.

### **Description**

Enforcement actions for Minors are not issued in a timely manner according to time goals set by SDDENR in the state's Enforcement Response Guide.

### **Explanation**

City of Summerset, City of Tripp, and Valley Queen Cheese had DMR violations and violations found during the process of a compliance inspection. SDDENR did not follow their Enforcement Responses Guidance when it found the facility was out of compliance.

### City of Summerset:

• The facility has had issues meeting their discharge limits dating back to 2004. The State issued warning letters approximately 1-4 months after each DMR violation. The State's ERG states that minor violations should be responded to in 14 days with a phone call or Warning Letter to the permittee. Additionally, the State's Warning Letter does not require the facility to meet their permit limits.

### City of Tripp:

• The facility has had DMR violations for TSS and BOD5 for the months of June August, and September 2010. South Dakota issued an NOV for the violations on October 5, 2010 and January 31, 2011. The State's ERG states that minor violations should be responded to in 14 days with a phone call or Warning Letter to the permittee. The State issued a warning letter an average of 105 days after the DMR violation.

### Valley Queen Cheese:

• The facility violated their WET tests in February, March, June, September, and December of 2006. The State issued a warning letter on September 4, 2007, approximately 9 months after the WET violations occurred. The State issued a warning letter to start the Toxicity Reduction Evaluation (TRE) on May 19, 2008. The facility submitted their TRE plan on April 14, 2010, approximately 11 months after the warning letter. The State issued a formal penalty on November 8, 2010. The State's ERG states that a warning letter specifying a re-test should be sent to the facility within 15 days of notice of a WET failure.

Additionally, the State's ERG specifies the failure to initiate a Toxicity Identification Evaluation (TIE)/TRE greater than 30 days late should be responded with an Administrative Order for Compliance, and Administrative Penalty Order, or a Judicial Action.

EPA and SDDENR will discuss what can be done to expedite compliance staff review of violations found during inspections of the facilities.

**Relevant metrics** 

10a – Major facilities with timely action as appropriate: N/A 10b - Enforcement responses reviewed that address violations in a timely manner: 7/10 = 70%.

**State response** 

Recommendation

None required.

Element 11 — Penalty Calculation Method: Documentation of gravity and economic benefit in initial penalty calculations using BEN model or other method to produce results consistent with national policy and guidance.

Finding 11-1	Area for State Improvement
Description	State files document that initial penalty calculations include gravity. However, economic benefit is not consistently considered by SDDENR.
Explanation	Three of five penalty actions reviewed documented that economic benefit was considered. According to the State's Penalty Policy Calculation Guidance "A reasonable methodology to estimate any economic benefit or advantage the entity would have gained by not complying or alleviating the violation. The penalty should be set high enough to offset any benefit or advantage to the entity. The penalty shall also be set reasonably high enough to offset any potential burden to the State by the avoidance of responsibility by the entity." The two files lacking information on the calculation, or at least consideration, of economic benefit were John Morrell and Company and City of Sioux Falls.
Relevant metrics	11a – Penalty calculations reviewed that consider and include where appropriate gravity and economic benefit: $3/5 = 60%$ .
State response	<ul> <li>City of Sioux Falls: The penalty calculations did not provide detail on DENR's thought process on this issue. However, DENR did not believe Sioux Falls received any economic benefit from the line break that resulted in releases of raw sewage and standards violations. The City of Sioux Falls plans out its public works projects years in advance. The line that collapsed was slated for replacement the following year. So, while the City recognized the line needed to be replaced, it had not disregarded the situation. In addition, the City spent millions of dollars on emergency contracts with engineering firms, contractors, and suppliers, overtime for City staff, and water quality monitoring. Responding to this line break was significantly more expensive than the project slated for the following year. Therefore, DENR determined the City received no economic benefit from these violations. In the future, DENR will do a better job of documenting this in the penalty calculations.</li> <li>John Morrell and Company: John Morrell voluntarily came to the department and requested to enter into a Consent Decree to</li> </ul>

address its violations. John Morrell provided details on the steps that had already been taken to address violations and its proposal for further improvements. John Morrell voluntarily took these steps prior to the department's enforcement action. Therefore, DENR did not believe there was any economic benefit in this case.

#### Recommendation

If the recommended penalty excludes an economic benefit component, SDDENER's penalty worksheet needs to provide a rationale for its exclusion. SDDENR should submit a report to EPA by a date specified in the state response documenting improvements made in this area. EPA and SDDENR will discuss progress on a quarterly basis. In FY13, EPA will review 25% of all penalty actions issued to determine if the state is addressing economic benefit.

Element 12 — Final Penalty Assessment and Collection: Differences between initial and final penalty and collection of final penalty documented in file.

Finding 12-1	Area for State Attention
Description	South Dakota files for penalty actions generally account for the difference between proposed and final assessed penalties and contain proof that assessed penalties are collected.
Explanation	Two of the five penalty action files reviewed for documentation of the difference between initial and final assessed penalties contained information on how any reduction in penalty was derived. Three instances, Valley Queen Cheese, John Morrell and Company, and City of Sioux Falls did not contain any information to evaluate the difference in the issued penalty from the amount collected. Sioux Falls' penalty calculation did not contain any information pertaining to the penalty. It appears that the penalty documentation was lost or not completed prior to EPA's SRF.
	EPA reviewed five total penalty actions issued by South Dakota. In one instance, South Dakota was awarded their full penalty of \$169,937 by the South Dakota Attorney General's office. This penalty could not be collected as the Respondent went into bankruptcy.
Relevant metrics	<ul> <li>12a – Documentation on difference between initial and final penalty: 2/5= 40%.</li> <li>Goal: 100% of penalties document difference between initial and final assessed penalty.</li> <li>12b – Penalties collected: 4/4 = 100%.</li> <li>Goal: 100% of penalties collected.</li> </ul>
State response	
Recommendation	None required.

# ${\bf Element~1-Data~Completeness:~Completeness~of~Minimum~Data~Requirements.}$

Finding 1-1	Meets Expectations
Description	State entry of MDRs into AFS is generally complete.
Explanation	Review of MDRs for the federally reportable universe revealed infrequent deficiencies. Those deficiencies that were discovered were in the process of being corrected.
Relevant metrics	
State response	
Recommendation	None required.

### Element 2 — Data Accuracy: Accuracy of Minimum Data Requirements.

Finding 2-1 Meets Expectation

**Description** State entry of MDRs into AFS is generally accurate.

**Explanation** Review of the CMS code for Title V sources reveals minor

discrepancies.

**Relevant metrics** 2a – Major Sources Missing CMS Source Category Code: 4

2b – 100% file reviewed where MDR data are accurately reflected in

AFS.

No concerns noted.

**State response** 

### Element 3 — Timeliness of Data Entry: Timely entry of Minimum Data Requirements.

Finding 3-1	Areas for State Improvement
Description	Compliance Monitoring and Stack Test MDRs are not entered in a

timely manner.

**Explanation** Compliance monitoring-related MDR actions were not entered into AFS within 60 days of the date achieved. Stack test results were not entered

into AFS within 120 days of the stack test.

**Relevant metrics** 3b1 – Percentage of timely reporting of compliance monitoring

minimum data requirements: 130/233 = 55.8%

National Goal: 100%National Average: 78.6%

3b2 – Percentage of timely reporting of stack test minimum data

requirements: 3/23 = 13%
National Goal: 100%
National Average: 75.5%

State response The State was unaware of the timely reporting requirements for entering

data into AFS. The State will enter data accordingly in the future.

**Recommendation** The state should enter MDRs in a timely manner as outlined in the AFS

Minimum Data Requirements Information Collection Request (IRC). EPA will enter this information into the SRF Tracker and reevaluate the percentages of timely data entry of compliance monitoring and stack test MDRs on a bi-annual basis during the mid-year and end of year review.

Element 4 — Completion of Commitments: Meeting all enforcement and compliance commitments made in state/EPA agreements.

**Description** Annual inspection commitments were met however minor discrepancies

exist between the CMS plan and facilities actually inspected.

**Explanation** In the CMS plan, the state provided a list of facilities to be inspected in

FY2011. Comparison of the facilities inspected in FY2011 as reported in AFS to the list of facilities in the FY2011 CMS plan revealed that in some instances, a FCE was conducted were no commitment was made or no FCE was conducted even though a commitment existed in the CMS

plan.

**Relevant metrics** FCEs for 18 facilities listed on the FY2011 CMS plan were not present

in FY2011 AFS data. FY2011 AFS data indicated FCEs were conducted on 12 facilities that were not identified for inspection in the FY2011

CMS plan.

**4a1** – Title V Major FCEs: 91/91 = 100%

4a2 - SM-80 FCEs: 34/34 = 100%

**State response** 

### **Element 5** — **Inspection Coverage: Completion of planned inspections.**

Finding 5-1 Meets Expectations

**Description** The commitments for planned FCEs and Title V Annual Compliance

Certification reviews are generally being met.

**Explanation** The negotiated frequency for FCEs is generally being met for each CMS

source. The negotiated frequency for FCEs is calculated using historic records therefore some minor discrepancies may exist. All Title V Annual Compliance Certification reviews were completed for FY2011.

**Relevant metrics** 5a - FCE Coverage Major: 89/94 = 94.7%

National Goal: 100%National Average: 90%

**5b** – FCE Coverage SM-80: 16/17 = 94.1%

National Goal: 100%National Average: 90.6%

 ${\bf 5e}-Review\ of\ Title\ V\ Annual\ Compliance\ Certifications\ Completed:$ 

94/94 = 100%

National Goal: 100%National Average: 72.5%

**State response** 

Element 6 — Quality of Inspection Reports: Proper and accurate documentation of observations and timely report completion.

Finding 6-1	Area for State Improvement
Description	EPA could not conclude that a FCE had been conducted at all sources reviewed.
Explanation	Nine of the 25 compliance monitoring reports (CMRs) <sup>1</sup> do not assess compliance of all conditions of the applicable permit and no other information was contained in the files to confirm compliance of those conditions.
	This has not been identified as an issue in the prior SRF review.
Relevant metrics	<ul> <li>6a - Documentation of FCE elements: 16/25 = 64%</li> <li>National Goal: 100%</li> </ul>
State response	The state agrees that there has been a problem and has already spoken to their inspectors to make sure the CMRs are complete.
Recommendation	The state should assure that inspectors assess compliance of all conditions of a source's permit and document compliance in the CMR.

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<sup>&</sup>lt;sup>1</sup> Also known as the inspection report.

Element 7 — Identification of Alleged Violations: Compliance determinations accurately made and promptly reported in national database based on inspection reports and other compliance monitoring information.

Finding 7-1	Meets Expectations
Description	Accurate compliance determinations are generally being made.
Explanation	One of the 25 CMRs reviewed reaches a conclusion of compliance when the information in the CMR did not support that conclusion.
Relevant metrics	<ul> <li>7a – Accuracy of compliance determinations: 24/25 = 96%</li> <li>National Goal: 100%</li> </ul>
State response	
Recommendation	None required.

Element 8 — Identification of SNC and HPV: Accurate identification of significant noncompliance and high-priority violations, and timely entry into the national database.

Finding 8-1 Meets Expectations

**Description** No SNC and HPVs identified.

**Explanation** The State did not identify any SNC or HPVs in 2011. Based on the

sources reviewed this determination appears to be correct.

**Relevant metrics** 

**State response** 

Element 9 — Enforcement Actions Promote Return to Compliance: Enforcement actions include required corrective action that will return facilities to compliance in specified timeframe.

Finding 9-1 Meets Expectations

**Description** No enforcement actions taken.

**Explanation** No enforcement actions were taken on the 25 sources reviewed by EPA.

**Relevant metrics** 

**State response** 

Element 10 — Timely and Appropriate Action: Timely and appropriate enforcement action in accordance with policy relating to specific media.

Finding 10-1 Meets Expectations

**Description** No enforcement actions taken.

**Explanation** No enforcement actions were taken on the 25 sources reviewed by EPA.

**Relevant metrics** 

**State response** 

#### **Clean Air Act Findings – Element 11**

Element 11 — Penalty Calculation Method: Documentation of gravity and economic benefit in initial penalty calculations using BEN model or other method to produce results consistent with national policy and guidance.

Finding 11-1 Meets Expectations

**Description** No enforcement actions taken.

**Explanation** No enforcement actions were taken on the 25 sources reviewed by EPA.

**Relevant metrics** 

**State response** 

**Recommendation** None required.

#### **Clean Air Act Findings – Element 12**

Element 12 — Final Penalty Assessment and Collection: Differences between initial and final penalty and collection of final penalty documented in file.

Finding 12-1 Meets Expectations

**Description** No enforcement actions taken.

**Explanation** No enforcement actions were taken on the 25 sources reviewed by EPA.

**Relevant metrics** 

**State response** 

**Recommendation** None required.

<b>Element 1 — Data Completeness</b>	: Completeness of Minimum	Data Requirements.
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Finding	Meets Expectations
Description	The state entered their data in a timely manner.
Explanation	The state data is always timely. The inspection reports that were evaluated indicate the state has documented all their violations found and documented all returned to compliance.
Relevant metrics	2a - Data evaluated were found to be 100% accurate.
State response	
Recommendation	None required.

El	A C N T: - :	D-4- D
Element 2 — Data Accuracy:	Accuracy of Millimum	Data Keguirements.

Finding	Meets Expectations
Description	
Explanation	The state conducted 75 inspections during the FY11 inspection cycle. The region reviewed 14 files which included 3 informal actions. All the data elements required to be entered in RCRA/Info had been entered in a timely fashion.
Relevant metrics	<b>2b</b> - Data evaluated were determined to be 100% accurate and timely.
State response	
Recommendation	None required.

#### Element 3 — Timeliness of Data Entry: Timely entry of Minimum Data Requirements.

Finding	Meets Expectations
Description	Data on inspections, violations, and enforcement actions in files reviewed were reported timely in EPA data systems.
Explanation	There were 14 files reviewed by the Region this reviewed period. Violations, inspections, and enforcement actions in files reviewed were reported in a timely manner by the state.
Relevant metrics	3a - The data reviewed were entered in a timely manner (14/14 = 100%)
State response	
Recommendation	None required.

Element 4 — Completion of Commitments: Meeting all enforcement and compliance commitments made in state/EPA agreements.

Finding	Meets Expectations
Description	The state meets all enforcement/compliance commitments in accordance with the state/EPA agreements.
Explanation	The state submits their inspection schedule, PPA language, provides copies of documents and reports as requested or required by the agreements with EPA.
Relevant metrics	<ul><li>4b1 - Planned inspection commitments completed 100%.</li><li>4b2 - Planned inspection commitments completed 100%.</li></ul>
State response	
Recommendation	None required.

<b>Element 5 — Inspection Co</b>	verage: Completion	of planned inspections.
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Finding	Meets Expectations
Description	The state did not achieve the 100% five year average of large quantity generator inspections.
Explanation	The state performed on average 25% of large quantity generator inspections. Compared to the national average of 67.6% coverage of LQGs inspection, the achieved 80% coverage of their LQG universe. On any given year, there are three to four facilities that are a one-time LQG due to clean up at that facility.
	Although the state conducts on average about 60 CESQGs inspections per year and provides compliance assistance on average to about 40 difference a year and responds to countless numbers of citizen complaints, greater effort can be made to raise the number of inspections conducted at SQGs facilities.
Relevant metrics	<ul> <li>5a - TSDFs with one operating TSDF facility, the state average 100% coverage every year. A new TSDF operating with an emergency permit was added during this reviewed period.</li> <li>5c - 5 year inspection coverage of LQGs 80%.</li> <li>5d - 5 year inspection coverage of SQGs 10.5%</li> </ul>
State response	The draft FY2011 SRF review (dated September 25, 2013) indicated South Dakota's Hazardous Waste Program met the overall SRF expectations for all twelve review elements. Although the state met expectations, EPA noted minor issues under Element 5 – Inspection Coverage: Completion of Planned Inspections. In summary, the report indicates the state did not achieve:
	5(a) 100 percent inspection of the state's TSDF universe over two years; 5(c) 100 percent inspection over five years of the LQG universe; and 5(d) Five-year inspection coverage for active SQGs.
	In response to that review, the state and EPA recognize that universe values for these categories varied during the five year FY2007-2011 review period. This variability resulted in what appears to be a failure to meet the identified SRF goals. Specific responses to these items are provided below:

Element 5a: Two-year inspection coverage for operating TSDFs (Goal: 100%). The SRF review indicates the state conducted 50% of its TSDF universe during the two-year time span. In FY2010, South Dakota's TSDF universe totaled one facility (Safety-Kleen Systems). In FY2011 the universe remained a total of one, with the caveat that an emergency permit was issued to Chemring Energetic Devices (formerly Technical Ordnance). This emergency permit was not a fully permitted TSDF, and the resulting OTIS data calculation is in error. With that said, the site was inspected in 2009, which is within the two-year review period examined for SRF purposes.

**Element 5b**: Annual inspection coverage for LQGs (Goal: 20%). The SRF review indicates the state met the goal by conducting inspections at 25% of the universe. Although the state met the annual inspection goal, the LQG universe calculation is a key component of Element 5b as well as 5c (below). The LQG universe calculation merits discussion here to provide background for Elements 5b and 5c. In FY2011, South Dakota's LQG universe rose to an all-time high of 42. This value contrasts with the 2009 total LQG universe of 25, and the 2007 LQG universe of 19 (based on Biennial Reporting data). The increased number of LQGs in FY2011 was due to reports received from 16 onetime, episodic LQGs. Many of these businesses reported as LQGs after generating a onetime, acutely hazardous pharmaceutical waste. In reality, the number of operations generating LQG amounts of hazardous waste on a routine, consistent basis in FY2011 was closer to 26. Using that value, the state conducted seven (7) or 27 percent of the recurrent LQG universe.

Element 5c: Five-year inspection coverage for LQGs (Goal: 100%). The SRF review indicates that the state's five-year inspection coverage of LQGs was 80%. The state agrees with this assessment. In reviewing the list of FY2011 LQGs inspected from 2007 to 2011, 19 of the 26 generators were inspected over that time frame. However, one of those operations was subject to Performance Track standards and reduced inspection frequency; a second generator has been found to be an SQG. Therefore, the state inspected 19 of the 24 actual LQGs, representing approximately 80% of the universe.

**Element 5d**: Five-year inspection coverage for active SQGs (Informational only). The SRF review includes examining the number of SQG inspections for the period FY2007 to FY2011. EPA calculated that inspection coverage for the state was 10.5%. The state disagrees with that assessment. First, the state routinely focuses inspection efforts on small and conditionally exempt generators. In FY2011, of the 75 inspections, 61, or 81% were conducted of small and conditionally

exempt small quantity generators. In reviewing inspection accomplishments over the past few years the state has recognized a significant trend: waste minimization efforts have allowed many SQG (and some LQG) notifier operations to become CESQGs. For example, in FY2011, out of a total 75 inspections, 27 were conducted of SQG/CESQG notifiers. Of that number, 11 or 40% originally notified as SQGs but upon inspection were found to be CESQGs. FY2010, the number was less, but still reflected waste minimization successes: 14 or approximately 19% of the 75 operations inspected that year notified either as an SQG or LQG but inspection information indicated they were actually CESQGs. As such, the state has found that the true SQG universe, based upon notification information, is not accurate; basing an evaluation element, even for informational purposes, on inaccurate universe data will not give a true reflection of SQG/CESQG inspections performed by the state. [Please note that both the state and EPA do not require generators to submit updated generator information should their status change. Although the state welcomes status updates, unless received voluntarily, the bulk of generator status updates is gathered through on-site inspections.]

Recommendation

None required.

Element 6 — Quality of Inspection Reports: Proper and accurate documentation of observations and timely report completion.

Finding	Meets Expectations
Description	The state conducted 75 inspections during this review period.
Explanation	Fourteen inspections were evaluated for this review. All the inspection reports were timely and accurately documented all violations. All the reports were completed in a timely manner.
Relevant metrics	$\bf 6a$ - All reports were timely and completed on time and sufficient to determined compliance (14/14 = 100%)
State response	
Recommendation	None required.

Element 7 — Identification of Alleged Violations: Compliance determinations accurately made and promptly reported in national database based on inspection reports and other compliance monitoring information.

Finding	Meets Expectations
Description	All violation determinations were documented.
Explanation  Relevant metrics	During this review period, three violations were documented in the inspection reports that were reviewed. Those violations were recorded into RCRA/Info data base. Proper violation determinations were made and timely and appropriate actions were taken.  7a - Accurate compliance was determined (14/14 = 100%)
Relevant metrics	9b - Return to compliance was documented (3/3 = 100%) 10b - Violations were addressed appropriately (3/3 = 100%)
<b>State response</b>	
Recommendation	None required.

Element 8 — Identification of SNC and HPV: Accurate identification of significant noncompliance and high-priority violations, and timely entry into the national database.

Finding	Meets Expectations
Description	There were no violations identified as SNC or HPV.
Explanation	During this review there were no violating facilities or violations found to be classified as SNC or HPV.
Relevant metrics	9b - Enforcement actions found has returned SV to compliance (3/3 = 100%) 10b - Appropriate enforcement actions to address violations were accurate (3/3 = 100%)
State response	
Recommendation	None required.

Element 9 — Enforcement Actions Promote Return to Compliance: Enforcement actions include required corrective action that will return facilities to compliance in specified timeframe.

Finding	Meets Expectations
Description	Informal actions are followed by written documentation from the facility documenting correction of violations.
Explanation	Three informal actions were reviewed for this evaluation. 100% of the enforcement responses reviewed have returned those secondary violators into compliance. One formal enforcement action was also reviewed for this evaluation. Penalties were collected and compliance measures were taken pursuant to the formal actions to return that facility into full compliance.
Relevant metrics	<ul> <li>9b - Enforcement actions taken have returned facility to compliance (3/3 = 100%)</li> <li>10b - Appropriate enforcement taken to address violations (3/3 = 100%)</li> </ul>
State response	
Recommendation	None required.

Element 10 — Timely and Appropriate Action: Timely and appropriate enforcement action in accordance with policy relating to specific media.

Finding	Meets Expectations
Description	State takes appropriate enforcement to address violations.
Explanation	All of the three informal actions reviewed were taken within the established time frame to appropriately address the violations identified. The one formal action taken was timely and appropriate for the identified violations. Enforcement actions taken have returned facility to compliance.
Relevant metrics	<ul> <li>9b - Three informal enforcement actions were taken to address secondary violator and returned those facilities into compliance (3/3 = 100%)</li> <li>10b - Appropriate enforcement action taken to address violations (3/3 = 100%)</li> </ul>
State response	
Recommendation	None required.

Element 11 — Penalty Calculation Method: Documentation of gravity and economic benefit in initial penalty calculations using BEN model or other method to produce results consistent with national policy and guidance.

Finding	Meets Expectations
Description	The state includes economic benefit and gravity component in their penalty calculation.
Explanation	One penalty action was reviewed for this review period. The penalty calculation reviewed demonstrated that the state included both economic benefit and gravity components in their calculations. Documentation of the penalty calculations and compliance measure taken were shared with the Region.
Relevant metrics	<b>11a</b> - Reviewed penalty calculations that consider and include appropriate gravity and economic benefit – 100%.
State response	
Recommendation	None required.

Element 12 — Final Penalty Assessment and Collection: Differences between initial and final penalty and collection of final penalty documented in file.

Finding	Meets Expectations
Description	The state documents the adjustment made to reduce the initial penalty to the final penalty amount per their EPA negotiated policy.
Explanation	EPA reviewed one penalty calculation. With the information shared with the Regional office, the file contained documentation that the penalty had been collected.
Relevant metrics	<b>12b</b> - Percentage of files that document collection of penalty $(1/1 = 100\%)$
State response	
Recommendation	None required.

#### **Appendix A: Data Metric Analysis**

Attached below are the results of the SRF data metric analyses. All data metrics are analyzed prior to the on-site file review. This provides reviewers with essential advance knowledge of potential problems. It also guides the file selection process as these potential problems highlight areas for supplemental file review.

The initial findings are preliminary observations. They are used as a basis for further investigation during the file review and through dialogue with the state. Where applicable, this analysis evaluates state performance against the national goal and average. Final findings are developed only after evaluating the data alongside file review results and details from conversations with the state. Through this process, initial findings may be confirmed or modified. Final findings are presented in Section III of this report.

## **Clean Water Act**

## **Data Metric Analysis**

Metric	Metric Name	Metric Type	Agency	Natl Goal	Natl Avg	South Dakota	Count	Universe	Not Cntd	Initial Findings	Explanation
	Number of Active										
	NPDES Majors with	Data									
1a1	Individual Permits	Verification	State			29					
	Number of Active										
	NPDES Majors with	Data									
1a2	General Permits	Verification	State			0					
	Number of Active										
	NPDES Non-Majors with										
1a3	Individual Permits	Verification	State			243					
	Number of Active										
	NPDES Non-Majors with										
1a4	General Permits	Verification	State			170					
											SDDENR
											exceeds the
	Permit Limits Rate for			>=						Meets	national
1b1	Major Facilities	Goal	State	95%	98.6%	100%	29	29	0	Expectations	average
											SDDENR
											exceeds the
	DMR Entry Rate for			>=						Meets	national
1b2	Major Facilities.	Goal	State	95%	96.5%	100%	910	910	0	Expectations	average
	Number of Major										
	Facilities with a Manual										
	Override of RNC/SNC to	Data									
1b3	a Compliant Status	Verification	State			1					

Metric	Metric Name	Metric Type	Agency	Natl Goal	Natl Avg	South Dakota	Count	Universe	Not Cntd	Initial Findings	Explanation
											SDDENR
											exceeds the
	Permit Limits Rate for	Informational	_							Meets	national
1c1	Non-Major Facilities	only	State		66.1%	99.2%	242	244	2	Expectations	average
											SDDENR
		T. C								3.4	exceeds the
1.2	DMR Entry Rate for	Informational	Ctata		72.60/	07.70/	2100	2100	70	Meets	national
1c2	Non-Major Facilities. Facilities with Informal	only Data	State		72.6%	97.7%	3108	3180	12	Expectations	average
le1	Actions With Informat	Verification	State			119					
161	Total Number of	Verification	State			119					
	Informal Actions at CWA	Data									
1e2	NPDES Facilities	Verification	State			185					
	Facilities with Formal	Data									
1f1	Actions	Verification	State			5					
	Total Number of Formal										
	Actions at CWA NPDES	Data									
1f2	Facilities	Verification	State			5					
	Number of Enforcement	Data									
1g1	Actions with Penalties	Verification	State			5					
											The penalty
											amount does
											not include
											CAFO
											enforcement
		Data									actions taken during
1g2	Total Penalties Assessed	Verification	State			\$241,100				State Attention	FY11.

Metric	Metric Name	Metric Type	Agency	Natl Goal	Natl Avg	South Dakota	Count	Universe	Not Cntd	<b>Initial Findings</b>	Explanation
	Number of formal			Guai	Avg	Dakuta			CIII		
	enforcement actions,										
	taken against major										
	facilities, with										
	enforcement violation	Data									
2a1	type codes entered.	Verification	State			2					
											Although
											the national
											average is
											not met,
											SDDENR
											inspects
										3.4	100% of its
F a 1	Inspection Coverage -	Cool moterio	Ctata		E 1 10/	40.20/	1.4	20	1.5	Meets	majors every
5a1	NPDES Majors	Goal metric	State		54.4%	48.3%	14	29	15	Expectations Meets	two years.
5b1	Inspection Coverage - NPDES Non-Majors	Goal metric	State		23.7%	23.4%	57	244	197	Expectations	
301	Inspection Coverage -	Goai metric	State		23.1%	23.4%	37	244	107	Expectations	
	NPDES Non-Majors with									Meets	
5b2	General Permits	Goal metric	State			17.4%	30	172	1/12	Expectations	
302	Number of Major	Goar metre	State			17.4/0	30	172	142	Expectations	
	Facilities with Single	Data									
7a1	Event Violations	Verification	State			0					
741	Number of Non-Major	Vermeuron	State								
	Facilities with Single	Informational									
7a2	Event Violations	only	State			1					
	Compliance schedule	Data									
7b1	violations	Verification	State			0					
	Permit schedule	Data									
7c1	violations	Verification	State			2					

Metric	Metric Name	Metric Type	Agency	Natl Goal	Natl Avg	South Dakota	Count	Universe	Not Cntd	Initial Findings	Explanation
				Guai	Avg	Dakuta			Cittu		SDDENR
											exceeds the
	Major Facilities in	Review								Meets	national
7d1	Noncompliance	Indicator	State		71.2%	31%	9	29	20	Expectations	average
	Non-Major Facilities in									_	
	Category 1	Data								Supplemental	
7f1	Noncompliance	Verification	State			68				Review	
	Non-Major Facilities in										
	Category 2	Data								Supplemental	
7g1	Noncompliance	Verification	State			55				Review	
	Non-Major Facilities in	Informational								Supplemental	
7h1	Noncompliance	only	State			53.3%	130	244	114	Review	
		Review									
		indicator	_								
8a1	Major Facilities in SNC	metric	State			1					
		ъ .									SDDENR
	D (CM)	Review								N	exceeds the
0.2	Percent of Major Facilities in SNC	indicator	Ctoto		22.20/	2.40/	1	20	20	Meets	national
8a2		metric	State		22.3%	3.4%	1	29	28	Expectations	average
	Major facilities with Timely Action as										
10a1	Appropriate	Goal metric	State				0	0			
1041	Number of Active	Goai metre	State				U	U			
	NPDES Majors with	Data									
1a1	Individual Permits	Verification	State			29					
141	Number of Active	Verification	State								
	NPDES Majors with	Data									
1a2	General Permits	Verification	State			0					
	Number of Active										
	NPDES Non-Majors with	Data									
1a3	Individual Permits	Verification	State			244					

Metric	Metric Name	Metric Type	Agency	Natl Goal	Natl Avg	South Dakota	Count	Universe	Not Cntd	<b>Initial Findings</b>	Explanation
	Number of Active										
	NPDES Non-Majors with	Data									
1a4	General Permits	Verification	State			170					
											SDDENR
											exceeds the
	Permit Limits Rate for			>=						Meets	national
1b1	Major Facilities	Goal	State	95%	98.6%	100%	29	29	0	Expectations	average
											SDDENR
											exceeds the
	DMR Entry Rate for			>=						Meets	national
1b2	Major Facilities.	Goal	State	95%	96.5%	100%	910	910	0	Expectations	average
	Number of Major										
	Facilities with a Manual										
	Override of RNC/SNC to	Data									
1b3	a Compliant Status	Verification	State			1					
											SDDENR
											exceeds the
	Permit Limits Rate for	Informational								Meets	national
1c1	Non-Major Facilities	only	State		66.1%	99.2%	242	244	2	Expectations	average
											SDDENR
											exceeds the
	DMR Entry Rate for	Informational								Meets	national
1c2	Non-Major Facilities.	only	State		72.6%	97.7%	3108	3180	72	Expectations	average
	Facilities with Informal	Data									
1e1	Actions	Verification	State			119					
	Total Number of										
	Informal Actions at CWA										
1e2	NPDES Facilities	Verification	State			185					
	Facilities with Formal	Data									
1f1	Actions	Verification	State			5					

Metric	Metric Name	Metric Type	Agency	Natl Goal	Natl Avg	South Dakota	Count	Universe	Not Cntd	Initial Findings	Explanation
	Total Number of Formal										
	Actions at CWA NPDES	Data									
1f2	Facilities	Verification	State			5					
	Number of Enforcement	Data									
1g1	Actions with Penalties	Verification	State			5					
1g2	Total Penalties Assessed	Data Verification	State			\$241,100				State Attention	The penalty amount does not include CAFO enforcement actions taken during FY11.
2a1	Number of formal enforcement actions, taken against major facilities, with enforcement violation type codes entered.	Data Verification	State			2					
	Inspection Coverage -									Meets	Although the national average is not met, SDDENR inspects 100% of its majors every
5a1	NPDES Majors	Goal metric	State		54.4%	48.3%	14	29	15	Expectations	two years.
	Inspection Coverage -	=			3 11 1/0	/ 0				Meets	J = ======
5b1	NPDES Non-Majors	Goal metric	State		23.7%	23.4%	57	244	187	Expectations	

Metric	Metric Name	Metric Type	Agency	Natl Goal	Natl Avg	South Dakota	Count	Universe	Not Cntd	Initial Findings	Explanation
	Inspection Coverage -										
	NPDES Non-Majors with									Meets	
5b2	General Permits	Goal metric	State			17.4%	30	172	142	Expectations	
	Number of Major										
	Facilities with Single	Data									
7a1	Event Violations	Verification	State			0					
	Number of Non-Major										
	Facilities with Single	Informational									
7a2	Event Violations	only	State			1					
	Compliance schedule	Data									
7b1	violations	Verification	State			0					
	Permit schedule	Data									
7c1	violations	Verification	State			2					
7d1	Major Facilities in Noncompliance	Review Indicator	State		71.2%	31%	9	29	20	Meets Expectations	SDDENR exceeds the national average
7f1	Non-Major Facilities in Category 1 Noncompliance	Data Verification	State			68				Supplemental Review	
7g1	Non-Major Facilities in Category 2 Noncompliance	Data Verification	State			55				Supplemental Review	
	Non-Major Facilities in	Informational								Supplemental	
7h1	Noncompliance	only	State			53.3%	130	244	114	Review	
		Review indicator									
8a1	Major Facilities in SNC	metric	State				1	29			

Metric	Metric Name	Metric Type	Agency	Natl Goal	Natl Avg	South Dakota	Count	Universe	Not Cntd	Initial Findings	Explanation
											SDDENR
		Review									exceeds the
	Percent of Major	indicator								Meets	national
8a2	Facilities in SNC	metric	State		22.3%	3.4%	1	29	28	Expectations	average
	Major facilities with										
	Timely Action as										
10a1	Appropriate	Goal metric	State				0	0			

## **Clean Air Act**

#### **Data Metric Analysis**

		Metric		National	National	South			Not	Initial	
Metric	<b>Metric Name</b>	Type	Agency				Count	Universe	Counted	Findings	<b>Explanation</b>
	Number of Active										
	Major Facilities	Data								Meets	
1a1	(Tier I)	Verification	State			79				Expectations	
			EPA			79					
	Number of Active										
	Synthetic Minors	Data								Meets	
1a2	(Tier I)	Verification	State			54				Expectations	
			EPA			54					
	Number of Active										
	NESHAP Part 61	Data									
1a3	Minors (Tier I)	Verification	State			0					
			EPA			0					
	Number of Active										
	CMS Minors and										
	Facilities with										
	Unknown										
	Classification (Not										
	counted in metric										
	1a3) that are										
	Federally-	Data								Meets	
1a4	Reportable (Tier I)	Verification	State			14				Expectations	
			EPA			0					
	Number of Active										
	HPV Minors and										
	Facilities with	Data									
1a5	Unknown	Verification	State			0					

		Metric		National	National	South			Not	Initial	
Metric	<b>Metric Name</b>	Type	Agency	Goal	Average	Dakota	Count	Universe	Counted	Findings	<b>Explanation</b>
	Classification (Not										
	counted in metrics										
	1a3 or 1a4) that are										
	Federally-										
	Reportable (Tier I)										
			EPA			0					
	Number of Active										
	Minors and										
	Facilities with										
	Unknown										
	Classification										
	Subject to a Formal										
	Enforcement Action										
	(Not counted in										
	metrics 1a3, 1a4 or										
	1a5) that are										
	Federally-	Data									
1a6	Reportable (Tier II)	Verification	State			0					
			EPA			0					
	Number of Active										
	Federally-										
	Reportable NSPS										
	(40 C.F.R. Part 60)	Data								Meets	
1b1	Facilities	Verification	State			50				Expectations	
			EPA			50					
	Number of Active										
	Federally-										
	Reportable										
	NESHAP (40										
	C.F.R. Part 61)	Data									
1b2	Facilities	Verification	State			0					

		Metric		National	National	South			Not	Initial	
Metric	<b>Metric Name</b>	Type	Agency	Goal	Average	Dakota	Count	Universe	Counted	Findings	<b>Explanation</b>
			EPA			0					
	Number of Active										
	Federally-										
	Reportable MACT										
	(40 C.F.R. Part 63)	Data								Meets	
1b3	Facilities	Verification	State			64				Expectations	
			EPA			64					
	Number of Active										
	Federally-										
	Reportable Title V	Data								Meets	
1b4	Facilities	Verification	1			94				Expectations	
			EPA			94					
	Number of Tier I										
	Facilities with an										
	FCE (Facility	Data								Meets	
1c1	Count)	Verification				125				Expectations	
			EPA			0					
	Number of FCEs at										
	Tier I Facilities	Data								Meets	
1c2	(Activity Count)	Verification				126				Expectations	
			EPA			0					
	Number of Tier II										
	Facilities with FCE	Data				_					
1c3	(Facility Count)	Verification	1			0					
			EPA			0					
	Number of FCEs at										
	Tier II Facilities	Data									
1c4	(Activity Count)	Verification				0					
			EPA			0					

		Metric		National	National	South			Not	Initial	
Metric	<b>Metric Name</b>	Type	Agency	Goal	Average	Dakota	Count	Universe	Counted	Findings	<b>Explanation</b>
	Number of Tier I										
	Facilities with										
	Noncompliance										
	Identified (Facility	Data								Meets	
1d1	Count)	Verification	State			5				Expectations	
			EPA			2					
	Number of Tier II										
	Facilities with										
	Noncompliance										
	Identified (Facility	Data									
1d2	Count)	Verification				0					
			EPA			0					
	Number of Informal										
	Enforcement										
	Actions Issued to										
	Tier I Facilities	Data									
1e1	(Activity Count)	Verification				0					
			EPA			0					
	Number of Tier I										
	Facilities Subject to										
	an Informal										
	Enforcement Action										
1e2	(Facility Count)	Verification	1			0					
			EPA			0					
	Number of HPVs										
	Identified (Activity	Data									
1f1	Count)	Verification				0					
			EPA			0					
	Number of Facilities										
1f2	with an HPV	Verification	State			0					

		Metric		National	National	South			Not	Initial	
Metric	<b>Metric Name</b>	Type	Agency	Goal	Average	Dakota	Count	Universe	Counted	Findings	<b>Explanation</b>
	Identified (Facility										
	Count)										
			EPA			0					
	Number of Formal										
	Enforcement										
	Actions Issued to										
	Tier I Facilities	Data									
1g1	(Activity Count)	Verification	State			0					
			EPA			1					
	Number of Tier I										
	Facilities Subject to										
	a Formal										
	Enforcement Action	Data									
1g2	(Facility Count)	Verification	State			0					
			EPA			1					
	Number of Formal										
	Enforcement										
	Actions Issued to										
	Tier II Facilities	Data									
1g3	(Activity Count)	Verification				0					
			EPA			0					
	Number of Tier II										
	Facilities Subject to										
	a Formal										
	Enforcement Action										
1g4	(Facility Count)	Verification				0					
			EPA			0					
	Total Amount of	Data									
1h1	Assessed Penalties	Verification				\$0					
			EPA			\$75,000					

		Metric		National	National	South			Not	Initial	
Metric	Metric Name	Type	Agency	Goal	Average	Dakota	Count	Universe	Counted	Findings	<b>Explanation</b>
	Number of Formal										
	Enforcement										
	Actions with an	Data									
1h2	Assessed Penalty	Verification				0					
			EPA			1					
	Number of Stack										
	Tests with Passing	Data								Meets	
1i1	Results	Verification				23				Expectations	
			EPA			0					
	Number of Stack										
	Tests with Failing	Data									
1i2	Results	Verification				0					
			EPA			0					
	Number of Stack										
	Tests with Pending	Data									
1i3	Results	Verification				0					
			EPA			0					
	Number of Stack										
	Tests with No	Data									
1i4	Results Reported	Verification				0					
			EPA			0					
	Number of Stack										
	Tests Observed &	Data								Meets	
1i5	Reviewed	Verification				18				Expectations	
			EPA			0					
	Number of Stack										
	Tests Reviewed	Data								Meets	
1i6	Only	Verification				5				Expectations	
			EPA			0					

		Metric		National	National	South			Not	Initial	
Metric	Metric Name	Type	Agency	Goal	Average	Dakota	Count	Universe	Counted	Findings	<b>Explanation</b>
	Number of Title V										
	Annual Compliance										
	Certifications	Data								Meets	
1j	Reviewed	Verification	State			107				Expectations	
			EPA			0					
	Major Sources										
	Missing CMS										
	Source Category	Review								Meets	
2a	Code	Indicator	State			4	4			Expectations	
			EPA			4	4				
	Timely Entry of										
	HPV	Review									
3a1	Determinations	Indicator	State	100%		0				N/A	No data
			EPA	100%		0					
	Untimely Entry of HPV										
3a2	Determinations	Goal	State	100%		0				N/A	No data
	2 0001111111111111111111111111111111111	0 0 442	EPA	100%		0				1,111	110 0000
	Timely Reporting of		DI 71	10070		U					
	Compliance										
	Monitoring										
	Minimum Data									Area for State	
3b1	Requirements	Goal	State	100%	78.60%	55.80%	130	233	103	Improvement	
	•		EPA	100%	73.40%	0/0	0	0	0		
	Timely Reporting of			7							
	Stack Test										
	Minimum Data									Area for State	
3b2	Requirements	Goal	State	100%	75.50%	13%	3	23	20	Improvement	
			EPA	100%	85.70%	0/0	0	0	0		

		Metric		<b>National</b>	National	South			Not	Initial	
Metric	<b>Metric Name</b>	Type	Agency	Goal	Average	Dakota	Count	Universe	Counted	Findings	<b>Explanation</b>
	Timely Reporting of										
	Enforcement										
	Minimum Data										
3b3	Requirements	Goal	State	100%	76.10%	0/0	0	0	0	N/A	No data
			EPA	100%	68.40%	0%	0	1	1		
	FCE Coverage									Meets	
5a	Major	Goal	State	100%	90%	94.70%	89	94	5	Expectations	
			EPA	100%	NA	NA	NA	NA	NA		
	FCE Coverage SM-									Meets	
5b	80	Goal	State	100%	90.60%	94.10%	16	17	1	Expectations	
			EPA	100%	NA	NA	NA	NA	NA		
	FCE Coverage										
	Synthetic Minors										
5c	(non SM-80)	Goal	State	100%	NA	NA	NA	NA	NA	N/A	No data
			EPA	100%	NA	NA	NA	NA	NA		
	FCE Coverage										
5d	Minors	Goal	State	100%	NA	NA	NA	NA	NA	N/A	No data
			EPA	100%	NA	NA	NA	NA	NA		
	Review of Title V										
	Annual Compliance										
	Certifications									Meets	
5e	Completed	Goal	State	100%	72.50%	100%	94	94	0	Expectations	
			EPA	100%	1%	0%	0	94	94		
	Alleged Violations										
	Reported Per										
	Informal										
	Enforcement										
7b1	Actions (Tier I only)	Goal	State	100%	62.20%		0	0		N/A	No data
			EPA	100%	52.60%	0/0	0	0	0		

		Metric		<b>National</b>	National	South			Not	Initial	
Metric	Metric Name	Type	Agency	Goal	Average	Dakota	Count	Universe	Counted	<b>Findings</b>	Explanation
	Alleged Violations										
	Reported Per Failed	Review									
7b2	Stack Tests	Indicator	State		54%	0/0	0	0	0		
			EPA		0%	0/0	0	0	0		
	Alleged Violations Reported Per HPV										
7b3	Identified	Goal	State	100%	69.60%	0/0	0	0	0	N/A	No data
			EPA	100%	40.60%	0/0	0	0	0		
	HPV Discovery Rate Per Major	Review									
8a	Facility Universe	Indicator	State	100%	3.90%	0%	0	79	79	N/A	No data
			EPA	100%	0.40%	0%	0	79	79		
	HPV Reporting Indicator at Majors with Failed Stack	Review									
8b	Tests	Indicator	State	100%	20.50%	0/0	0	0	0	N/A	No data
			EPA	100%	0%	0/0	0	0	0		
	HPV cases which meet the timeliness goal of the HPV	Review									
10a	Policy	Indicator	State	100%	63.70%	0/0	0	0	0	N/A	No data
			EPA	100%	48.60%	0/0	0	0	0		

# **Resource Conservation and Recovery Act**

## **Data Metric Analysis**

Metric	Metric Name	Metric Type	Agency	Natl Goal	Natl Avg	South Dakota	Count	Universe	Not Cntd	Initial Findings	Explanation
	Number of	Data									
1a1	operating TSDFs	Verification	State			2					
			EPA			2					
	Number of active	Data									
1a2	LQGs	Verification	State			28					
			EPA			28					
	Number of active	Data									
1a3	SQGs	Verification	State			609					
			EPA			609					
		Data									
1a4	All other active sites	Verification	State			750					
			EPA			750					
	Number of BR	Data									
1a5	LQGs	Verification	State			25					
			EPA			25					
	Number of sites	Data									
1b1	inspected	Verification	State			45					
			EPA			4					
	Number of	Data									
1b2	inspections	Verification	State			45					

Metric	Metric Name	Metric Type	Agency	Natl Goal	Natl Avg	South Dakota	Count	Universe	Not Cntd	Initial Findings	Explanation
			EPA			4					
	Number of sites		LIA			7					
	with new violations	Data									
1c1	during review year	Verification	State			2					
			EPA			0					
	Number of sites in		LIA			U					
	violation at any time										
	during the review										
	year regardless of	Data									
1c2	determination date	Verification	State			3					
			EPA			0					
	Number of sites	5									
1d1	with informal enforcement actions	Data Verification	State			1					
101	emorcement actions	verification	State			1					
			EPA			0					
	Number of informal	Data									
1d2	enforcement actions	Verification				1					
			EPA			0					
	Number of sites										
	with new SNC	Data	a								
1e1	during year	Verification	State			0					
			EPA			0					
	Number of sites in										
	SNC regardless of	Data									
1e2	determination date	Verification	State			0					
			EPA			0					
			LIA	l		U					

Metric	Metric Name	Metric Type	Agency	Natl Goal	Natl Avg	South Dakota	Count	Universe	Not Cntd	Initial Findings	Explanation
	Number of sites										
4.04	with formal	Data									
1f1	enforcement actions	Verification	State			1					
			EPA			0					
	Number of formal	Data									
1f2	enforcement actions	Verification	State			1					
			ED.4								
		_	EPA			0					
	Total dollar amount	Data	_								
1g	of final penalties	Verification	State			\$28,389					
			EPA			\$0					
	Number of final										
	formal actions with	Data									
1h	penalty in last 1 FY	Verification	State			1					
			EPA			0					
	Long-standing	Review									
2a	secondary violators	Indicator	State			0					
			EPA			0					

Metric	Metric Name	Metric Type	Agency	Natl Goal	Natl Avg	South Dakota	Count	Universe	Not Cntd	Initial Findings	Explanation
<b>5</b> a	Two-year inspection coverage for operating TSDFs	Goal	State	100%	89.4%	50%	1	2	1	Meets expectations	There has been one TSD facility in SD the second facility is added as a result of an emergency permit. The facility is in the process of acquiring a full operating permit.
Ja	operating 19D13	Goar								expectations	регине.
			Combined	100%	94.2%	50%	1	2	1	Area for	
	Annual inspection									State	
5b	coverage for LQGs	Goal	State	20%	22.6%	12%	3	25	22	Improvement	
			Combined	20%	24.7%	12%	3	25	22		
			State	100%	62.9%	80%	20	25	5		
	Five-year inspection coverage for LQGs	Goal	Combined	100%	67.6%	80%	20	25	5	Area for attention	Due to fluctuation in a generator status, some facilities do change status during the course of 5 yrs. The facilities that were constant

Metric	Metric Name	Metric Type	Agency	Natl Goal	Natl Avg	South Dakota	Count	Universe	Not Cntd	Initial Findings	Explanation
											during the five years' time were inspected.
5d	Five-year inspection coverage for active SQGs	Informational Only	State		11%	10.5%	64	609	545	Area for attention	Even though many SQGs facilities inspected during the 5yrs have changed generator's status mostly to CESQG
			Combined		11.6%	10.5%	64	609	545		
5e1	coverage at other	Informational Only	State			132	132			Meets expectations	
	sites (CESQGs)	Ollry	Combined			132	132				
5e2	coverage at other	Informational Only	State			2	2			Meets expectations	
	sites (Transporters)		Combined			2	2				
	Five-year inspection	Informational	State			0				N/A	No data
5e3	coverage at other sites (Non-notifiers)	Only	Combined			0					
5e4	Five-year inspection coverage at other sites (not covered by metrics 5a-5e3)	Informational Only	State			14	14			Best Practices	SD provides a lot of compliance assistant to various facilities and industries

Metric	Metric Name	Metric Type	Agency	Natl Goal	Natl Avg	South Dakota	Count	Universe	Not Cntd	Initial Findings	Explanation
			Combined			17	17			Best Practices	SD provides compliance assistant to various facilities and training to help keep facilities in compliance.
	fication of alleged vio tional database based ion.								reported		
7b	Violations found during inspections	Review Indicator	State		32.5%	4.4%	2	45	43	Meet expectations	The state provides a lot of compliance assistant to constituents and those facilities are frequently inspected.
0.11 .:0	The CONC. 111		EPA		33.2%	0%	0	4	4	Meet expectations	

<sup>8.</sup> Identification of SNC and HPV. Degree to which the state accurately identifies significant noncompliance & high priority violations and enters information into the national system in a timely manner.

Metric	Metric Name	Metric Type	Agency	Natl Goal	Natl Avg	South Dakota	Count	Universe	Not Cntd	Initial Findings	Explanation
8a			State		1.6%	0%	0	45	45	•	Most of those facilities are frequently inspected which prevent them from committing any type of SNC violations.
			EPA		2.6%	0%	0	4	4		
8b	Timeliness of SNC	Goal	State	100%	81.7%	0/0	0	0	()	No data available	
	determinations		EPA	100%	72.2%	0/0	0	0	0		
	ly and appropriate act		which a state takes t	imely ar	nd appropriate	e enforceme	ent actio	ns in accord	dance		
10a			State	80%	81.8%	0/0	0	0	0	No available data	
			EPA	80%	33.3%	0/0	0	0	0		

## **Appendix B: File Metric Analysis**

This section presents file metric values with EPA's initial observations on program performance. Initial findings are developed by EPA at the conclusion of the file review.

Initial findings are statements of fact about observed performance. They should indicate whether there is a potential issue and the nature of the issue. They are developed after comparing the data metrics to the file metrics and talking to the state.

Final findings are presented above in the Findings section.

Because of limited sample size, statistical comparisons among programs or across states cannot be made.

### **Clean Water Act**

### **File Metric Analysis**

CWA Metric #	Description	Numerator	Denominator	Metric Value	Goal	Initial Findings	Details
2b	Percentage of files reviewed where data in the file are accurately reflected in the national data systems	20	22	90.9%	95%	Meets Expectations	
3a	Timeliness of mandatory data entered in the national data system	22	22	100%	100%	Meets Expectations	
4a1	Percentage of planned inspections completed: Pretreatment compliance inspections and audits	26	6	> 430%	100%	Meets Expectations	
4a2	Percentage of planned inspections completed: SIU inspections	19	16	118%	100%	Meets Expectations	
4a4	Percentage of planned inspections completed CSO inspection	1	1	100%	100%	Meets Expectations	

CWA Metric #	Description	Numerator	Denominator	Metric Value	Goal	Initial Findings	Details
4a5	Percentage of planned inspections completed: SSO inspections	77	76	101%	100%	Meets Expectations	
4a8	Percentage of planned inspections completed: Industrial stormwater inspections	30	30	100%	100%	Meets Expectations	
4a9	Percentage of planned inspections completed: Construction stormwater inspections	303	230	131%	100%	Meets Expectations	
<b>4a10</b>	Percentage of planned inspections completed: CAFO inspections	233	226	103%	100%	Meets Expectations	

CWA Metric #	Description	Numerator	Denominator	Metric Value	Goal	Initial Findings	Details
4b	CWA compliance and enforcement commitments other than CMS commitments, including work products/commitments in PPAs, PPGs, grant agreements, MOAs, MOUs or other relevant agreements	12	12	100.0%	100%	Meets Expectations	
6a	Percentage of inspection reports reviewed that are complete and provide sufficient documentation to determine compliance	25	25	100%	100%	Meets Expectations	
6b	Inspection reports completed within the prescribed time frame: Percentage of inspection reports reviewed that are timely	17	23	73.9%	100%	Area for State Attention	Six of the inspection reports reviewed during the SRF were completed more than 45 days after the inspection or receipt of sample results. The average time to complete the 23 inspection reports was 54 days.

CWA Metric #	Description	Numerator	Denominator	Metric Value	Goal	Initial Findings	Details
7e	Inspection reports reviewed that led to an accurate compliance determination	23	23	100%	100%	Area for State Attention	
8b	Percentage of single event violation(s) that are accurately identified as SNC or Non-SNC	0	9	0%	100%	Area for State Improvement	No SEV information was found within the state files.
8c	Percentage of SEVs Identified as SNC reported timely	0	0	0%	100%	Area for State Attention	South Dakota had one of their 29 Majors in SNC, or 3.4%. South Dakota does not typically enter SEV codes as their Major facilities are not typically in SNC.
9a	Percentage of enforcement responses that return or will return source in SNC to compliance	7	10	70%	100%	Area for State Attention	Three of the 10 enforcement actions reviewed did not contain specific information on how the facility could return to compliance.
10b	Percentage of enforcement responses reviewed that address	7	10	70%	100%	Area for State Attention	Enforcement actions issued to Minor facilities are

CWA Metric #	Description	Numerator	Denominator	Metric Value	Goal	Initial Findings	Details
	SNC that are appropriate to the violations						not issued in a timely manner and do not contain requirements for the facility to come back into compliance.
11a	Percentage of penalty calculations reviewed that consider and include, where appropriate, gravity and economic benefit	3	5	60%	100%	Area for State Improvement	Three of the five penalty actions reviewed contained economic benefit information.
12a	Percentage of penalties reviewed that document the difference between the initial and final assessed penalty, and the rationale for that difference	2	5	40%	100%	Area for State Improvement	South Dakota files for penalty actions generally account for the difference between proposed and final assessed penalties and contain proof that assessed penalties are collected.
12b	Percentage of penalty files reviewed that document collection of penalty	4	4	100%	100%	Meets Expectations	Note: EPA reviewed 5 total penalty actions; however, the State was unable to collect the penalty for one of the cases

CWA Metric #	Description	Numerator	Denominator	Metric Value	Goal	Initial Findings	Details
							due to the facility becoming bankrupt without any collectable assets.

## **Clean Air Act**

File Metric Analysis

CAA Metric #	CAA File Review Metric Description	Numerator	Denominator	Percentage	Goal	Initial Findings	Details	
2b	Accurate MDR data in AFS: Percentage of files reviewed where MDR data are accurately reflected in AFS	25	25	100.0%	100%	Meets Expectations		
4a1	Planned evaluations completed: Title V Major FCEs	91	91	100.0%	100%	Meets Expectations		
4a2	Planned evaluations completed: SM-80 FCEs	34	34	100.0%	100%	Meets Expectations		
4a3	Planned evaluations completed: Synthetic Minor FCEs	0	0		100%			
4a4	Planned evaluations completed: Other Minor FCEs	0	0		100%			
4a5	Planned evaluations completed: Title V Major PCEs	0	0		100%			
<b>4a6</b>	Planned evaluations completed: SM-80 PCEs	0	0		100%			
4a7	Planned evaluations completed: Synthetic Minor PCEs	0	0		100%			
4a8	Planned evaluations completed: Other Minor PCEs	0	0		100%			
4b	Planned commitments completed: CAA compliance and enforcement commitments other than CMS commitments	6	6	100.0%	100%	Meets Expectations		

CAA Metric #	CAA File Review Metric Description	Numerator	Denominator	Percentage	Goal	Initial Findings	Details	
6a	Documentation of FCE elements: Percentage of FCEs in the files reviewed that meet the definition of a FCE per the CMS policy	16	25	56.0%	100%	Area for State Improvement		
6b	Compliance Monitoring Reports (CMRs) or facility files reviewed that provide sufficient documentation to determine compliance of the facility: Percentage of CMRs or facility files reviewed that provide sufficient documentation to determine facility compliance	24	25	96.0%	100%	Meets Expectations		
7a	Accuracy of compliance determinations: Percentage of CMRs or facility files reviewed that led to accurate compliance determinations	24	25	92.0%	100%	Meets Expectations		
8c	Accuracy of HPV determinations: Percentage of violations in files reviewed that were accurately determined to be HPVs	0	0		100%			

CAA Metric #	CAA File Review Metric Description	Numerator	Denominator	Percentage	Goal	Initial Findings	Details	
9a	Formal enforcement responses that include required corrective action that will return the facility to compliance in a specified time frame: Percentage of formal enforcement responses reviewed that include required corrective actions that will return the facility to compliance in a specified time frame	0	0		100%			
10a	Timely action taken to address HPVs: Percentage of HPV addressing actions that meet the timeliness standard in the HPV Policy	0	0		100%			
10b	Appropriate Enforcement Responses for HPVs: Percentage of enforcement responses for HPVs that appropriately address the violations	0	0		100%			
11a	Penalty calculations reviewed that consider and include gravity and economic benefit: Percentage of penalty calculations reviewed that consider and include, where appropriate, gravity and economic benefit	0	0		100%			

CAA Metric #	CAA File Review Metric Description	Numerator	Denominator	Percentage	Goal	Initial Findings	Details	
12a	Documentation on difference between initial and final penalty and rationale: Percentage of penalties reviewed that document the difference between the initial and final assessed penalty, and the rationale for that difference	0	0		100%			
12b	<b>Penalties collected:</b> Percentage of penalty files reviewed that document collection of penalty	0	0		100%			

# **Resource Conservation Recovery Act**

**File Metric Analysis** 

RCRA Metric #	Name and Description	Numerator	Denominator	Metric %	Goal	Initial Findings	Details
2b	Accurate entry of mandatory data: Percentage of files reviewed where mandatory data are accurately reflected in the national data system	14	14	100.0%	100%	Meets Requirements	
3a	<b>Timely entry of mandatory data:</b> Percentage of files reviewed where mandatory data are entered in the national data system in a timely manner	14	14	100.0%	100%	Meets Requirements	
4a	Planned non-inspection commitments completed: Percentage of non-inspection commitments completed in the review year	3	3	100.0%	100%	Meets Requirements	
4b1	<b>Planned inspections completed:</b> LQGs	7	7	100.0%	100%	Meets Requirements	
4b2	<b>Planned inspections completed:</b> SQGs	10	10	100.0%	100%	Meets Requirements	
4b3	<b>Planned inspections completed:</b> CESQGs	58	58	100.0%	100%	Meets Requirements	
4b4	Planned inspections completed: Transporters	75	75	100.0%	100%	Meets Requirements	

RCRA Metric #	Name and Description	Numerator	Denominator	Metric %	Goal	Initial Findings	Details
6a	Inspection reports complete and sufficient to determine compliance: Percentage of inspection reports reviewed that are complete and provide sufficient documentation to determine compliance	14	14	100.0%	N/A	Meets Requirements	
6b	Timeliness of inspection report completion: Percentage of inspection reports reviewed that are completed in a timely manner	14	14	100.0%	100%	Meets Requirements	
7a	Accurate compliance determinations: Percentage of inspection reports reviewed that led to accurate compliance determinations	14	14	100.0%	100%	Meets Requirements	
8c	Appropriate SNC determinations: Percentage of files reviewed in which significant noncompliance (SNC) status was appropriately determined during the review year	0	0	100.0%	-	N/A	
9a	Enforcement that returns SNC sites to compliance: Percentage of enforcement responses that have returned or will return a site in SNC to compliance	0	0	100.0%	0	N/A	

RCRA Metric #	Name and Description	Numerator	Denominator	Metric %	Goal	Initial Findings	Details
9b	Enforcement that returns SV sites to compliance: Percentage of enforcement responses that have returned or will return a secondary violator to compliance	3	3	100.0%	100%	Meets Requirements	
10b	Appropriate enforcement taken to address violations: Percentage of files with enforcement responses that are appropriate to the violations	3	3	100.0%	100%	Meets Requirements	
11a	Penalty calculations include gravity and economic benefit: Percentage of reviewed penalty calculations that consider and include, where appropriate, gravity and economic benefit	1	1	100.0%	100%	Meets Requirements	
12a	Documentation on difference between initial and final penalty: Percentage of penalties reviewed that document the difference between the initial and final assessed penalty, and the rationale for that difference	0	0	100.0%	-	N/A	
12b	<b>Penalties collected:</b> Percentage of files that document collection of penalty	1	1	100.0%	100%	Meets Requirements	

# **Appendix C: File Selection**

Files are selected according to a standard protocol using a web-based file selection tool. These are designed to provide consistency and transparency to the process. Based on the description of the file selection process below, states should be able to recreate the results in the table.

#### **Clean Water Act**

#### **File Selection Process**

EPA selected facility files to represent the various types of permits, industries, and facilities that were subject to SDDENR compliance monitoring and/or enforcement activities in FY 2011. South Dakota had a total universe of 2,179 NPDES permitted facilities that were subject to compliance monitoring or enforcement in FY 2011, including the following permit groups:

- 29 core program majors;
- 139 core program minors;
- 27 pretreatment industries;
- 1,524 construction stormwater permittees;
- 65 industrial stormwater permittees; and
- 405 permitted concentrated animal feeding operations.

A total of 28 facility files were selected for the SRF review. The 28 representative files were selected to represent compliance inspections and enforcement actions taken at facilities from the municipal and industrial groups listed above as well as from the state's four field offices.

The EPA selected representative files using the Online Tracking Information System (OTIS) SRF File Selection Tool to the extent possible, which depended on the amount of data that SDDENR has entered into ICIS for the activities of interest. The EPA found that the OTIS File Selection Tool defined 241 facilities which could be selected. With compliance monitoring records in ICIS for core program majors and minors, EPA was able to select inspections from those two groups using the OTIS tool. The OTIS SRF File Selection Tool enables random selection from within each permit group, while random selection from SDDENR lists was facilitated using Excel spreadsheets.

The table that follows displays information for the 28 facilities selected for the SRF review. Information for core program majors and minors, as discussed above, is present in the national database and therefore was available via the OTIS File Selection tool.

### **Clean Water Act**

### **File Selection Table**

NPDES ID	Facility Name	City	Zip	<b>Inspect</b> ion	Violat ion	SE V	SNC	Informal Enforce ment	Formal Enforce ment	Pena lty	Unive	Selection
TD .	1 demity 1 diffe	City	Zip	1011	TOIL	V	DITE	ment	ment	Ity	150	Accepted
SD00000	JOHN MORRELL	SIOUX	571							4407		Represent
78	& COMPANY	FALLS	03	1	Yes	0	No	3	1	9	Major	ative
	NORTHERN											
	STATES POWER											
	- ANGUS ANSON											Accepted
SD00002	GENERATING	SIOUX	571								Non-	Represent
64	PLANT	FALLS	03	1	No	0	No	0	0	0	Major	ative
an												Accepted
SD00200	MADISON, CITY	MADIGON	570	1							3.7	Represent
10	OF	MADISON	42	1	No	0	No	0	0	0	Major	ative
SD00200	MOBRIDGE,	MOBRIDG	576									Accepted
28	CITY OF	E	01	1	No	0	No	0	0	0	Major	Represent ative
20	CITTOI	E	01	1	NO	U	NO	U	U	U	Major	Accepted
SD00205	VIBORG - CITY		570				Categ				Non-	Represent
41	OF	VIBORG	70	1	Yes	0	ory 1	0	0	0	Major	ative
11	01	VIDORG	70	1	105	0	Oly 1		O		Wingor	Accepted
SD00208	SISSETON, CITY		572									Represent
26	OF	SISSETON	62	1	No	0	No	0	0	0	Major	ative
												Accepted
SD00218	OLDHAM, CITY		570				Categ				Non-	Represent
65	OF	OLDHAM	51	0	Yes	0	ory 1	1	0	0	Major	ative
												Accepted
SD00221	SIOUX FALLS,	SIOUX	571							1087		Represent
28	CITY OF	FALLS	04	1	Yes	0	No	1	1	7	Major	ative

NPDES ID	Facility Name	City	Zip	<b>Inspect</b> ion	Violat ion	SE V	SNC	Informal Enforce ment	Formal Enforce ment	Pena lty	Unive	Selection
	<u></u>											Accepted
SD00224			573				Categ				Non-	Represent
03	TRIPP, CITY OF	TRIPP	76	0	Yes	0	ory 1	2	0	0	Major	ative
												Accepted
SD00233	MITCHELL,		573									Represent
61	CITY OF	MITCHELL	01	1	No	0	No	1	0	0	Major	ative
												Accepted
SD00234	HURON - CITY		573									Represent
34	OF	HURON	50	1	No	0	No	0	0	0	Major	ative
												Accepted
SD00236	Chamberlain - City											Represent
98	of										Major	ative
GD 002 10	TARKATONE.	TATA TATA TATA										Accepted
SD00240	KEYSTONE,	KEYSTON	577		37		Categ	2			Non-	Represent
07	TOWN OF T & R ELECTRIC	Е	51	0	Yes	0	ory 1	3	0	0	Major	ative
SD00254	SUPPLY											Accepted Represent
37	COMPANY										Major	ative
31	SD DEPT OF										Major	Accepted
SD00273	TRANSPORTATI		575								Non-	Represent
59	ON IRA	PIERRE	01	13	No	0	No	0	0	0	Major	ative
37	OI \_IKI	TIERRE	01	13	110	U	110		U	U	Triagor	Accepted
SD00277	SUMMERSET,	SUMMERS	577				Categ				Non-	Represent
58	CITY OF	ET	18	1	Yes	0	ory 1	3	0	0	Major	ative
												Accepted
SD00278	RED RIVER		572				Categ				Non-	Represent
55	ENERGY	ROSHOLT	60	0	Yes	0	ory 1	3	0	0	Major	ative
	POET						-					Accepted
SD00279	BIOREFINING -		570								Non-	Represent
44	HUDSON	HUDSON	34	1	No	0	No	0	0	0	Major	ative

NPDES ID	Facility Name	City	Zip	<b>Inspect</b> ion	Violat ion	SE V	SNC	Informal Enforce ment	Formal Enforce ment	Pena lty	Unive	Selection
			•							·		Accepted
SD00279	VALLEY QUEEN		572							1400	Non-	Represent
87	CHEESE, INC.	MILBANK	52	1	Yes	0	No	3	1	0	Major	ative
												Accepted
SDG010	MARSHALL										Non-	Represent
0004	DAIRY			1							Major	ative
												Accepted
SDG010	PECHOUS										Non-	Represent
0317	FEEDLOT			1							Major	ative
	HUB CITY											Accepted
SDG010	LIVESTOCK										Non-	Represent
0330	AUCTION, INC.			1							Major	ative
												Accepted
SDG010	MAGNUM 43,										Non-	Represent
0360	LLC			1							Major	ative
GD CO10	COLINEXALINE										NT.	Accepted
SDG010	COUNTY LINE			1							Non-	Represent
0471	FEEDERS WHEELER			1							Major	ative
SDP0000	MANUFACTURI		576								Non-	Accepted Represent
34	NG CO, INC.	LEMMON	38	1	3	0	0	0	0	0	Major	ative
34	BRIDGEWATER	LEMINION	36	1	3	U	U	0	0	0	Major	Accepted
SDP0001	QUALITY	BRIDGEW	573							1699	Non-	Represent
03	MEATS	ATER	19	0	No	0	No	0	1	37	Major	ative
03	WILITIS	TILK	17	0	110		110		1	37	iviajoi	Accepted
SDP0001	LINK SNACKS,		573									Represent
17	INC.	ALPENA	12	1	1	0	0	0	0	0	Major	ative
- '				1			Ů	Ů	Ů	Ü		Accepted
Unpermit	SPRING VALLEY										Non-	Represent
ted	COLONY									2207	Major	ative

#### **Clean Air Act**

#### **File Selection Process**

The size of the facility universe was 128 and consisted of critical compliance and enforcement activities such as inspections and enforcement actions. The number of facilities chosen for review was 25 based on guidance contained in the File Selection Protocol. Facility types were major, synthetic minor, and tier I minor. For FY2011, 5 tier I facilities with noncompliance were identified; all 5 of these facilities were selected for file review based on File Selection guidance. The remaining 20 facilities were selected using the following protocol: The advanced sort was utilized on the OTIS File Selection Tool. Facilities were sorted by universe, full compliance evaluations, flag, ID number, LCON, stack test failed, violations, HPVs, informal action, formal action, penalties, Indian country, and country. 10 facilities were chosen from the majors as it was the largest group, 5 facilities were chosen from synthetic minors, and 5 facilities were chosen from Tier I minors. Facilities within each group (majors, synthetic minors, and Tier I minors) were chosen based on the number of FCEs conducted for FY2011. For majors with a FCE of 0, the only facility listed had already been selected because it was identified as having noncompliance in FY2011. For majors with a FCE of 1, the 1st facility listed was chosen. For majors, with a FCE of 0, both facilities were already selected because they were identified as having noncompliance in FY2011. For synthetic minors with a FCE of 1, every 8th facility was chosen. For synthetic minors with a FCE of 0 were listed. For Tier I minors with a FCE of 1 or 3, every 3th facility was chosen. For Tier I minors with a FCE of 2 or 4, the 1st facility listed was chosen.

At the time of this file selection, a discrepancy was present in AFS where activities were being counted multiple times. This discrepancy led to multiple FCEs showing up for individual facilities. This discrepancy was fixed in July 2012; however the results that led to the file selection are not reproducible.

**Clean Air Act** 

### **File Selection Table**

				Stack Tests			Informal	Formal			
ID Number	City	Zip	FCE	Failed	Violations	HPVs	Actions	Actions	Penalty	Universe	Flag Value
	BELLE	_								Synthetic	Accepted
4601900003	FOURCHE	57717	1	0	1	0	0	0	0	Minor	Representative
											Accepted
4602700001	VERMILLION	57069	2	0	0	0	0	0	0	Major	Representative
											Accepted
4601300008	GROTON	57445	5	0	0	0	0	0	0	Major	Representative
										Synthetic	Accepted
4604700087	HOT SPRINGS	57747	3	0	0	0	0	0	0	Minor	Representative
											Accepted
4601300010	ABERDEEN	57401	2	0	0	0	0	0	0	Tier I Minor	Representative
										Synthetic	Accepted
4609900032	SIOUX FALLS	57118	1	0	0	0	0	0	0	Minor	Representative
										Synthetic	Accepted
4606300005	BUFFALO	57720	2	0	0	0	0	0	0	Minor	Representative
										Synthetic	Accepted
4606300006	BUFFALO	57720	1	0	0	0	0	0	0	Minor	Representative
										Synthetic	Accepted
4610300008	RAPID CITY	57709	0	0	1	0	0	0	0	Minor	Representative
											Accepted
4609900030	SIOUX FALLS	57104	3	0	0	0	0	0	0	Major	Representative
											Accepted
4609900011	SIOUX FALLS	57103	2	0	0	0	0	0	0	Major	Representative
											Accepted
4677700367	BROOKINGS	57006	1	0	0	0	0	0	0	Tier I Minor	Representative

4677700402	MADCHALI	56250	1	0						Ti I Mi	Accepted
4677700493	MARSHALL	56258	1	Stack	0	0	0	0	U	Tier I Minor	Representative
				Tests			Informal	Formal			
ID Number	City	Zip	FCE	Failed	Violations	<b>HPVs</b>	Actions	Actions	Penalty	Universe	Flag Value
										Synthetic	Accepted
4603700003	WEBSTER	57274	0	0	1	0	0	0	0	Minor	Representative
											Accepted
4601300011	ABERDEEN	57401	1	0	0	0	0	0	0	Major	Representative
						_				Synthetic	Accepted
4603300006	PRINGLE	57773	1	0	0	0	0	0	0	Minor	Representative
4 50000000		==101									Accepted
4609900036	SIOUX FALLS	57104	4	0	0	0	0	0	0	Major	Representative
4605100004	BIG STONE	57016	,			0	0			3.6 *	Accepted
4605100004	CITY	57216	4	0	1	0	0	0	0	Major	Representative
4600500002	WOLCEN	57204	2		0	0	0	0		Maian	Accepted
4600500003	WOLSEY	57384	2	0	0	0	0	0	0	Major	Representative
4603500004	MITCHELL	57384	3	0	0	0	0	0	0	Maian	Accepted
4003300004	MITCHELL	37384	3	0	0	U	U	U	0	Major	Representative
4612500001	CHANCELLOR	57015	5	0	0	0	0	0	0	Major	Accepted Representative
4012300001	CHANCELLOR	37013	3	U	U	U	U	0	0	iviajoi	Accepted
4610300005	RAPID CITY	57701	3	0	0	0	0	0	0	Tier I Minor	Representative
+010300003	KAI ID CIT I	37701	3	0	0	U	0	0	0	TICI TIVIIIOI	Accepted
4610300030	HILL CITY	57745	2	0	0	0	0	0	0	Major	Representative
.510500050		37713			0			0	0	1.14101	Accepted
4608300007	HUDSON	57034	4	0	0	0	0	0	0	Tier I Minor	Representative
											Accepted
4608100004	SPEARFISH	57783	0	0	1	0	0	0	0	Major	Representative

### **Resource Conservation and Recovery Act**

#### **File Selection Process**

The total RCRA facility universe for South Dakota is about 1700 facilities. The South Dakota RCRA universe consist of 34 LQGs, 2 TSDs, 622 SQGs and 1150 CESQGs. For the federal fiscal year of 2011 South Dakota conducted a total of 74 inspections the majority of which were CESQGs facilities. A total of 7 large quantity generator facilities were inspected, one TSD facility inspected, ten small quantities generator facilities were inspected and a total of fifty eight conditional exempt generator facilities inspections were conducted during this cycle of SRF process. Unlike other states with large RCRA universes, the file review selection process for states with a small RCRA universe such as South Dakota can result in a comprehensive review base only on Conditionally Exempt Small Quantity Generators (CESQG). Therefore, in order to avoid doing a comprehensive review base on CESQG alone, with the state's participation, special selection was made in order to include a broad mix of facilities in the review process. The file selection for the FFY 2011 SD SRF consisted of a total of 14 facilities which included five large quantity generators, six small quantity generators, two conditionally exempt generators and one treatment and disposal facility. There were no supplemental files selected for this review.

# **Resource Conservation and Recovery Act**

### **File Selection Table**

File Number	ID Number	City	ZIP CODE	Universe	Inspections	Violations	SNC	Informal Actions	Formal Actions	Penalty	Flag Value
File Number	ID Number	City	ZIP CODE	Universe	Inspections	Violations	SNC	Informal Actions	Formal Actions	Penalty	Flag Value
1	SD0000072017	YANKTON	57078	SQG	1	0	0	0	0	0	Accepted Representative
2	SD0000704973	RAPID CITY	57702	SQG	1	0	0	0	0	0	Accepted Representative
3	SDD030027841	ABERDEEN	57401	LQG	1	0	0	0	0	0	Accepted Representative
4	SDD987674314	ABERDEEN	57401	SQG	1	0	0	0	0	0	Accepted Representative
5	SDD987674496	SIOUX FALLS	57104	CESQG	2	0	0	0	0	0	Accepted Representative
6	SDR000201269	SIOUX FALLS	57106	SQG	2	0	0	0	0	0	Accepted Representative
7	SDR000203497	SISSETON	57262	LQG	1	3	0	1	0	0	Accepted Representative
8	SDR000206060	ABERDEEN	57402	SQG	1	0	0	0	0	0	Accepted Representative
9	SDR000207779	ABERDEEN	57401	LQG	1	0	0	0	0	0	Accepted Representative
10	SDR000209320	SIOUX FALLS	57104	SQG	2	3	0	0	0	0	Accepted Representative
11	SDR000213470	BROOKINGS	57006	LQG	1	0	0	0	0	0	Accepted Representative
12	SDR000214353	SIOUX FALLS	57104	CESQG	1	0	0	0	0	0	Accepted Representative
13	SDT000622258	MITCHELL	57301	LQG	1	0	0	0	0	0	Accepted Representative

File Number	ID Number	City	ZIP CODE	Universe	Inspections	Violations	SNC	Informal Actions	Formal Actions	Penalty	Flag Value
14	SDD981549983	CLEAR LAKE	57226	TSDF LQG	0	0	0	0	1	28389	Accepted Representative

## **Appendix D: Status of Past SRF Recommendations**

During the Round 1 SRF review of South Dakota's compliance and enforcement programs, EPA Region 8 recommended actions to address issues found during the review. The following table contains all completed and outstanding actions for Round 1. The statuses in this table are current as of 05/27/2014.

For a complete and up-to-date list of recommendations from Round 1, visit Enforcement and Compliance History Online at <a href="https://echo.epa.gov/">https://echo.epa.gov/</a>.

State	Status	<b>Due Date</b>	Media	<b>E</b> #	Element	Finding	Explanation
SD -	Working	9/30/2012	CWA	E6	Timely &	The EMS does not address	An appropriate escalation policy for effluent violations
Round					Appropri	newer areas of the NPDES	which do not reach SNC status, spills, and unpermitted
1					ate	program such as biosolids,	discharges should be included in the EMS. SDDENR
Total:					Actions	storm water, SSOs, or	should update its EMS to address newer areas of the
$\Box$ C0						CAFOs, although it should	NPDES program such as biosolids, storm water and
						be noted that a national	CAFOs once a national EMS is available for these areas,
						EMS is only available for	and to include all violations addressed by EPA Region
						SSOs at this time. The	8's EMS.
						Enforcement Response	
						Guidance within	EPA applauds SDDENR for taking storm water and
						SDDENR's EMS does not	CAFO enforcement actions in FY06; however, SDDENR
						identify Responsible	should make every effort to complete enforcement
						Person(s) for carrying out	actions in a timely manner. As SDDENR works on
						enforcement responses.	updating its EMS to include wet weather areas,
							enforcement time frames should be developed for those
							areas added to the EMS.

State	Status	<b>Due Date</b>	Media	<b>E</b> #	Element	Finding	Explanation
SD - Round 1 Total: □C0	Completed	9/29/2008	CWA	E7	Penalty Calculati ons	SDDENR provides EPA with its draft NOVs and/or Settlement Agreements which do not contain information on SDDENR's penalty calculations. EPA was unable to determine appropriateness of the remaining two penalties calculated, due to lack of information.	Discussions are currently underway between EPA and South Dakota regarding the issue of providing penalty calculations to EPA on state enforcement actions. Please see the Executive Summary for more information. Due to the fact that the State Review Framework review period may be up to three years prior to formal review of enforcement actions, EPA is asking all states to share information on all actions on a real-time basis with EPA.
SD - Round 1 Total: □C0	Working	9/30/2012	CWA	E8	Penalties Collected	The penalty collected in one case was less than the proposed penalty. However, no documentation was included in the file on how this reduced penalty was reached. Without supporting documentation on how the penalty was reduced, EPA does not find that the penalty collected was appropriate.	SDDENR should ensure that the enforcement file clearly identifies how final penalties are reached, and that they take into account, as appropriate, economic benefit and gravity.

State	Status	<b>Due Date</b>	Media	<b>E</b> #	Element	Finding	Explanation
SD - Round 1 Total: □C0	Completed	12/31/200 7	CWA	E9	Grant Commit ments	Thirteen annual commitments were required per the PPA for the NPDES enforcement program.  Nine of these commitments were submitted on time. Of the nine PPA deliverables submitted, all were found to be timely and complete.	It is unknown why the PPA deliverables were not submitted, or were not submitted on time. EPA is asking for clarification from SDDENR on why the PPA deliverables were not submitted, or were not submitted on time as a part of the SRF review process. These clarifications will then be incorporated as a part of the final SRF report. New time lines for these deliverables will be negotiated in FY08 PPA. During the FY 2008 PPA negotiations, EPA and DENR negotiated a new due date of October 31, 2007, for the Sioux Falls CMOM Report summary submittal. SDDENR should work to ensure all PPA deliverables are submitted on time and are complete. In the future, a discussion of upcoming PPA deliverables will be conducted between EPA and Division during quarterly calls.
SD - Round 1 Total: □C0	Completed	9/29/2008	CAA	E4	SNC Accuracy	Of the 82 major facilities evaluated, SDDENR reported to EPA 0 HPVs during FY06; however, on June 8, 2007, the State reported to EPA they were settling an enforcement action against one facility for HPV violations discovered in FY06, and had settled with another facility for non-HPV violations discovered in FY06.	The State should adhere to the guidance outlined in the HPV policy and identify potential HPVs to EPA as soon as possible after discovery and no later than 30 days after discovery. The State should apprise EPA of enforcement actions taken. EPA will review the State's progress during the End-of-Year review.

State	Status	<b>Due Date</b>	Media	<b>E</b> #	Element	Finding	Explanation
SD - Round 1 Total:	Completed	9/29/2008	CAA	E6	Timely & Appropri ate Actions	The HPV Policy was not always followed.	The State should follow the HPV policy and report HPVs, Day Zeroes, and issue NOVs by Day 60, and address or resolve HPVs by Day 270. Settlement of enforcement actions should require compliance with permits issued. The State should consult with EPA during the enforcement actions. EPA will evaluate the State's progress during End-of-Year review.
SD - Round 1 Total: □C0	Working	9/30/2013	CAA	E7	Penalty Calculati ons	Because EPA was unable to obtain any documentation of economic and gravity calculations from the State, EPA is unable to assess this element.	The State should provide penalty calculations to EPA. Update: Due date changed from 4/30/2009 to 11/30/2010 per 2/23/2010 email from Albion Carlson. State agreed to share enforcement actions with EPA by end of fiscal year.
SD - Round 1 Total: □C0	Completed	11/30/201	CAA	E8	Penalties Collected	Because EPA was unable to obtain any documentation of economic and gravity calculations from the State, EPA is unable to assess this element. The State does not share its penalty calculations with EPA so EPA cannot confirm the State calculated its penalties including both gravity and economic benefit; however, the State's penalty policy is consistent with EPA's penalty policy and when EPA performed independent penalty calculations the overall penalties assessed by the State are appropriate.	The State should provide penalty calculations to EPA. Update: Due date changed from 4/30/2009 to 11/30/2010 per 2/23/2010 email from Albion Carlson. State agreed to share enforcement actions with EPA by end of fiscal year.

State	Status	<b>Due Date</b>	Media	<b>E</b> #	Element	Finding	Explanation
SD - Round 1 Total: □C0	Working	9/30/2013	CAA	E10	Data Timely	SDDENR has no HPV enforcement actions taken against facilities in AFS. The State has one HPV enforcement action underway since FY06 and has not entered the required minimum data requirements. The State had other non – HPV actions in FY06 for which the State day zero and NOV and addressing actions were all listed as the same day.	The State should enter all minimum data requirements in accordance with provisions for timeliness. EPA will review the State's progress during the End-of-Year review. Update: Due date changed from 4/30/2009 to 9/30/2010 per 2/23/2010 email from Albion Carlson. Progress has been made, but State still has some work to do.
SD - Round 1 Total: □C0	Working	9/30/2013	CAA	E11	Data Accurate	Comparison of AFS data to the 15 source files reviewed revealed inaccuracies in the database.	Correct inaccuracies and make updates to AFS. The State should enter all minimum data requirements in accordance with provisions for enforcement actions and communicate with EPA on HPVs. EPA will review the State's progress during the End-of-Year review. Update: Due date changed from 4/30/2009 to 9/30/2010 per 2/23/2010 email from Albion Carlson. Progress has been made, but State still has some work to do.
SD - Round 1 Total: □C0	Completed	9/30/2010	CAA	E12	Data Complete	Significant discrepancies in the universe data appear to be present.	The State should work with EPA to resolve the discrepancies in the universe data in AFS to and the CMS. Also, the State should input the missing data in AFS discovered in the comparison of AFS data to the 15 source files reviewed. The State should enter all minimum data requirements in accordance with provisions for enforcement actions and communicate with EPA on HPVs. EPA will review the State's progress during the End-of-Year review. Update: Due date changed from 4/30/2009 to 9/30/2010 per 2/23/2010 email from Albion Carlson. Progress has been made, but State still has some work to do.

State	Status	<b>Due Date</b>	Media	<b>E</b> #	Element	Finding	Explanation
SD - Round 1 Total: □C0	Completed	9/29/2007	RCRA	E11	Data Accurate	The universe of LQG facilities is not accurately reflected in RCRAInfo.	The State is pursuing efforts to clean up the database to reflect the actual number of LQGSs. EPA will evaluate the State's progress during the FY07 end-of-year review.
SD - Round 1 Total: □C0	Long Term Resolution	9/30/2012	CWA	E3	Violation s ID'ed Timely	A total of twenty-three (23) inspection reports were reviewed. Nineteen (19) of these inspection reports were completed within forty-five (45) days of the inspection or the receipt of sampling results, and three (3) were completed in excess of forty-five (45) days after the inspection or the receipt of sampling results.	Inspection reports should be completed and reviewed within forty-five (45) days of a compliance evaluation inspection (CEI) or forty-five (45) days from receipt of the lab results from a compliance sampling inspection (CSI). In FY08, EPA will complete spot checks of South Dakota's reports to determine if reports are being completed within the 45-day timeframe. Update: Per conversation with Seth Draper 3/22/10, changed due date from 9/30/2009 to 9/30/2010.

State	Status	<b>Due Date</b>	Media	<b>E</b> #	Element	Finding	Explanation
SD -	Completed	9/30/2012	CWA	E2	Violation	The SDDENR inspection	SDDENR should review the recommendations provided
Round	-				s ID'ed	reports identified the	in the oversight inspection report and adjust its inspection
1					Appropri	majority of the deficiencies	procedures as necessary. Inspectors should ensure
Total:					ately	observed during the CAFO	inspection reports are consistent in documenting areas of
$\Box$ C0						inspections, and the state	concern or noncompliance. EPA will conduct oversight
						inspectors had significant	inspections in FY08 to determine if the recommendations
						knowledge of the CAFO	are being implemented.
						program. A detailed	
						evaluation of SDDENR's	
						inspection was provided to	
						SDDENR in an oversight	
						inspection report on	
						November 30, 2006. Based	
						on EPA's observations	
						during the inspection and a	
						review of the completed	
						inspection report, EPA	
						provided comments and	
						recommendations regarding	
						areas of improvement for	
						future SDDENR CAFO	
						inspections and reports.	

## **Appendix E: Program Overview**

#### **Agency Structure**

The mission of SDDENR is to protect public health and the environment by providing environmental monitoring and natural resource assessment, technical and financial assistance for environmental projects, and environmental regulatory services; all done with reduced red tape, expanded e-government functions, and exceptional customer service to promote a prosperous economy while protecting South Dakota's environment and natural resources for today and tomorrow.

The South Dakota Secretary of Environment and Natural Resources is an appointed executive position in the South Dakota state government. The secretary heads the Department of Environment and Natural Resources, whose mission is "to protect public health and the environment by providing environmental monitoring and natural resource assessment, technical and financial assistance for environmental projects, and environmental regulatory services. The current officeholder is Steven Pirner. He was first appointed to the position in 2000.

The mission of the department is "to protect public health and the environment by providing:

- environmental monitoring and natural resource assessment
- technical and financial assistance for environmental projects
- environmental regulatory services

SDDENR is made up of two divisions - the Division of Environmental Services and the Division of Financial and Technical Assistance. The Division of Environmental Services includes seven programs for Air Quality, Drinking Water, Ground Water Quality, Minerals and Mining, Surface Water Quality, Waste Management, and Water Rights. The Division of Financial and Technical Assistance includes four programs for Fiscal Management, Geological Survey, Information Services, and Water Resources Assistance. The Water Resources Assistance Program includes two areas - Watershed Protection and Water and Waste Funding.

The SDDENR Home office is in the Joe Foss Building in Pierre. There are also regional and field office in Vermillion, Rapid City, Sioux Falls, and Watertown.

<u>NPDES</u> If the Surface Water Discharge or the Concentrated Animal Feeding Operation groups decide to escalate a case of non-compliance for formal enforcement, the division sends an enforcement recommendation to the Program Administrator. The SDDENR Staff Attorney is then brought in to review the case. Once the SDDENR Group attorney approves the enforcement action, the South Dakota Attorney General provides a second legal review. The action is then reviewed through the Division of Environmental Services Director who will have the Department Secretary sign the enforcement action.

All of South Dakota's NPDES permitting and compliance monitoring responsibilities belong to the SDDENR Surface Water Quality Program. Any NPDES judicial enforcement activities in South Dakota, including all penalty actions, also involve the Attorney General (AG) Office, as explained below.

NPDES permitting and compliance monitoring responsibilities of the Surface Water Quality are divided between the Surface Water Discharge and Concentrated Animal Feeding Operation groups. The Concentrated Animal Feeding Operation group manages permitting and compliance at CAFOs, whereas the Surface Water Discharge group manages those same activities at facilities having all other NPDES permits (e.g. wastewater, pretreatment, stormwater, etc.). The Surface Water Discharge and Concentrated Animal Feeding Operation groups have their compliance monitoring resources spread among the central office in Pierre and four field offices in Sioux Falls, Rapid City, Watertown and Vermillion.

The Surface Water Discharge and Concentrated Animal Feeding Operation groups of SDDENR both include a permitting and compliance unit with the dual responsibilities of writing permits and monitoring compliance. Staff responsibilities are arranged such that the permit writer and inspector for a given facility is the same individual, when possible. The Surface Water Discharge group is responsible for all permitting, compliance assistance, and enforcement escalation for all of South Dakota's construction, industrial stormwater, federal facilities, direct discharges, and pretreatment entities. Monitoring compliance and responding to complaints regarding stormwater pollution is handled by compliance staff assigned to the various field offices.

<u>CAA</u> The Air Quality Program is located in the Department of Environment and Natural Resources within the Division of Environmental Services. There are eight individuals responsible for inspecting and monitoring sources permitted under the various permit programs. There are also two individuals in the Minerals and Mining Program that inspect and monitor asphalt plants and rock crushers. The air quality permit programs consist of the following:

- Minor air quality permit;
- Title V air quality permit;
- Prevention of Significant Deterioration (PSD) air quality permit; and
- Acid Rain air quality permit.

In certain cases, a source may take operational restrictions to avoid a Title V air quality permit and the associated requirements. In this case, a permit is issued to the source under the minor air quality permit program. A source may also take operational restrictions to avoid a PSD preconstruction air quality permit. In this case, a permit is issued to the source under the Title V or minor air quality permit program, depending on the amount of air emissions from the source.

There are also sources that are required to meet federal maximum achievable control technology standards (MACT) but are not required to have a permit. These sources are identified as area sources. These types of sources are also inspected to ensure compliance with federal rules and to assist the operators in understanding the federal rules.

The purposes for inspecting permitted sources are to:

- Verify permittee compliance;
- Respond to citizen complaints;
- Help permittee stay in compliance
- Observe performance tests;
- Audit continuous emission monitoring equipment;
- Develop enforcement information; and
- Maintain regulatory presence.

### **Local Agencies Included and Excluded From Review**

South Dakota does not have any local agencies involved in the implementation of the NPDES program.

### **Staffing and Training**

As stated on page 8 of the SRF, new permit writers are provided on-the-job training by experienced permitting staff and through developing minor individual permits. Further, when the budget allows for travel, permit writers receive training (e.g., U.S. EPA's NPDES Permit Writers' Course). SDDENR has a strong commitment to ensuring that new permit writers are provided training through the U.S. EPA NPDES Permit Writers' Course. SDDENR has continued to send permit writers to this training since before South Dakota was delegated NPDES authority.

## **Major State Priorities and Accomplishments**

Key priorities are priorities the EPA and State senior managers will take the most active interest in during the agreement period. Priorities SDDENR and EPA will focus on in FY 2013 are listed below.

South Dakota SDDENR Priorities	EPA Region 8 Priorities
Continued Performance & Compliance	Agricultural Initiative
	<ul> <li>AFOs and CAFOs</li> </ul>
	Nonpoint Source Water
Total Maximum Daily Loads (TMDL)	Pollution Control
	<ul> <li>Pesticides</li> </ul>
Underground Storage Tanks	Special Air Monitoring Projects
Concentrated Animal Feeding Operations	Clean Water Act Implementation
	•TMDLs
	<ul> <li>Water Quality Standards</li> </ul>

Surface Water Quality Standards  Surface Water Quality Standards  Safe Drinking Water Act Requirements  Source Water Assessment and Protection Program  Source Water Assessment and Protection Program  Aquifer Delineation  New Safe Drinking Water Act Requirements  Statewide Ground Water Quality Monitoring Network  PM 2.5 Program  Sustainable Development  Superfund/Brownfields/Voluntary Cleanup Plan for Rapid City Full Obligation of Clean Water and Drinking Water State Revolving Fund (SRF) Capitalization Grants and Required State Match Department Internet Site  Children and the Environment  State Capacity Enhancement  State Capacity Enhancement  State Capacity Enhancement  State Capacity Enhancement  Removal Non-Point Source Water Pollution Control Implementation Upper Basin State Recognition in Missouri River Master Plan Large Scale Gold Mines in the northern Black Hills Superfund Leaking Underground Storage Tank Trust Program Geologic Mapping in the Black Hills		777 ( 1 1D ( ( ) 1
Surface Water Quality Standards  Safe Drinking Water Act Requirements  Safe Drinking Water Act Requirements  Enforcement Sectors Environmental Accountability  Mining (participate in Brohm Mine, Large Scale Gold Mines)  Aquifer Delineation  New Safe Drinking Water Act Requirements  Statewide Ground Water Quality Monitoring Network PM 2.5 Program  Sustainable Development  Implementation of Natural Events Action Plan for Rapid City Full Obligation of Clean Water and Drinking Water State Revolving Fund (SRF) Capitalization Grants and Required State Match Department Internet Site  Assessment, Restoration, or Abandonment of Test Holes and Monitoring Wells  Abandoned Underground Storage Tank Removal Non-Point Source Water Pollution Control Implementation Upper Basin State Recognition in Missouri River Master Plan  Large Scale Gold Mines in the northern Black Hills Superfund Geologic Mapping in the Black Hills		Watershed Protection and
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Geologic Mapping in the Black Hills		
Homeland Security	Homeland Security	
Oil and gas initiative		

# **Appendix F: SRF Correspondence**



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 8

1595 Wynkoop Street DENVER, CO 80202-1129 Phone 800-227-8917 http://www.epa.gov/region08

AUG 1 5 2012

Ref: 8ENF-PJ

Steven M. Pirner, P.E., Department Secretary
South Dakota Department of Environment & Natural Resources
PMB 2020
SD DENR
Joe Foss Building
523 E Capitol
Pierre, SD 57501

Re:

FY2011 State Review Framework (SRF) and

Integrated NPDES Permit Quality Review (PQR)

Dear Mr. Pirner:

As part of the Clean Water Act Action Plan, the EPA's Office of Water (OW) and Office of Enforcement and Compliance Assurance (OECA) have been working with regions and states to integrate oversight of state National Pollutant Discharge Elimination System (NPDES) permitting and enforcement programs by integrating the enforcement State Review Framework (SRF) and NPDES Permit Quality Reviews (PQR) at the regional level.

In 2012, the EPA Region 8 is conducting an integrated oversight review of the South Dakota Department of Environment and Natural Resources (DENR) Clean Water Act NPDES program for the FY2011 performance period. We are also conducting SRF reviews of Clean Air Act Stationary Source, and Resource Conservation and Recovery Act Subtitle C enforcement programs for the FY2011 performance period.

We intend to assist DENR in meeting both federal standards and goals agreed to in DENR's Performance Partnership Agreement. Region 8 and DENR are partners in carrying out the review. If any areas for improvement are identified, we will work with you to address them in the most constructive manner possible.

Region 8 has established a cross program team of managers and senior staff to implement the DENR review. Kaye Mathews will be Region 8's primary contact for the review, and she can be reached at (303) 312-6889, <a href="mathews.kaye@epa.gov">mathews.kaye@epa.gov</a>. Mike Gaydosh, Assistant Regional Administrator, Office of Enforcement, Compliance and Environmental Justice and Callie Videtich, Acting Assistant Regional Administrator, Office of Partnerships and Regulatory Assistance are Region 8's senior managers with overall responsibility for the review. To facilitate communication throughout this review process, please let Ms. Mathews know who you intend to designate as your primary state contact for the review. The program experts on the EPA review team are:

- Seth Draper, NPDES Enforcement Unit, (303) 312-6763, draper.seth@epa.gov
- Natasha Davis, NPDES Enforcement Unit, (303) 312-6225, davis.natasha@epa.gov
- Elaine Lai, Wastewater Unit, (303) 312-7041, lai.elaine@epa.gov
- Alexas Gilbert, Toxics Enforcement Unit, (303) 312-6850, gilbert.alexas@epa.gov
- Phillipe Pierre-Louis, RCRA Enforcement, (303) 312-6849, pierre-louis.phillipe@epa.gov

#### **Objectives of Integrated NPDES Reviews**

As you know, the EPA has changed how it conducts oversight reviews of state NPDES permitting and enforcement programs. PQR and SRF reviews were previously conducted separately. Now the EPA is integrating these reviews to:

- obtain a comprehensive understanding of permitting and compliance elements of the NPDES program;
- gain a better appreciation of the work and challenges of a state NPDES program
- reduce the burden on states through having a joint visit and report; and
- allow increased transparency through making PQR and SRF results publically available on the EPA's website.

#### **NPDES Workgroup Efforts**

In FY2011, a workgroup composed of representatives from the EPA headquarters and regional offices was formed to revise the PQR process and develop guidance for implementation of these reviews. The revised PQR process will continue to assess how well states implement NPDES program requirements as reflected in permits and other supporting documents, and shift responsibility for conducting reviews from the EPA Headquarters to the regional offices.

In parallel, beginning in FY2011, a workgroup composed of representatives from the EPA headquarters and regional offices, ECOS, state media associations, and state agencies revised SRF Round 2 elements, metrics, process and guidance. These revisions are incorporated in the SRF Round 3 process for implementation in FY2012. SRF Round 3 enables the EPA to continue to ensure that agreed-upon minimum performance levels are met by state and local agencies in providing environmental and public health protection.

#### **Overview of Process for Integrated NPDES Reviews**

An integral part of the integrated review process is the visit to state agencies. Through this visit, the EPA will have face-to-face discussions with permitting and enforcement staff and review their respective files to better understand the overall NPDES program. State visits for these integrated reviews will include:

- discussions between Region 8 and DENR program managers and staff;
- examination of data in the EPA and DENR data systems; and
- · review of selected DENR permitting, inspection and enforcement files and policies

Following our visit to your offices, the EPA will summarize findings and recommendations in an integrated report. Your management and staff will be provided an opportunity to review and comment on

the draft report. The EPA expects to complete the DENR review including the final integrated report by the end of FY2013.

The EPA is communicating with DENR permitting and enforcement managers and staff to coordinate expectations, procedures, and scheduling for the integrated review. A list of more specific steps is enclosed. The EPA will send its analysis of the SRF data metrics and list of selected facility files in separate transmittals.

#### **Tracking Progress for Integrated Reviews**

The EPA has designated the SRF Tracker as the repository for all SRF products, including draft and final reports, letters, and datasets. SRF Tracker is also used to track the progress of the state review and follow up on recommendations. States can view and comment on their information securely on the Internet before it is posted for public consumption.

The EPA regional office is conducting the PQR and will be providing you with PQR materials and information. All PQR-related documents and final reports will be posted on the EPA NPDES website. Action items are identified through the PQR process, negotiated with the state and region, and subsequently tracked using an internal Action Item database at the EPA Headquarters. The state will have an opportunity to review and comment on the draft PQR report and discuss action items with the region. Action items and their respective milestones will be tracked in the internal Action Item database.

Please do not hesitate to contact us or have your staff contact Kaye Mathews at (303) 312-6889, mathews.kaye@epa.gov with questions about this integrated review process. We look forward to working with you.

Sincerely,

Andrew M. Gaydosh

Assistant Regional Administrator

Office of Enforcement, Compliance and

Environmental Justice

Callie A. Videtich

Acting Assistant Regional Administrator

Office of Partnerships and Regulatory

Assistance

Enclosure

cc: By E-mail

Regional Administrator

Deputy Regional Administrator

Region 8 Enforcement and Water Office Directors

Region 8 SRF Coordinator

Headquarters PQR Liaison, Office of Wastewater, OW

Headquarters SRF Liaison, Office of Compliance, OECA

#### **Enclosure**

#### PQR/SRF Integrated Review Planning & Logistics

As the EPA begins the integrated PQR/SRF review process, South Dakota DENR can expect the following from the EPA:

- The EPA will contact DENR permitting and enforcement managers and staff to schedule a meeting or conference call to discuss expectations, procedures, and scheduling for the review if this has not already occurred.
- The EPA will provide DENR with a list of reviewers and ask for preliminary information that is readily available, such as descriptions of agency and program structures, agency enforcement policies, staffing numbers and other organizational information.
- The EPA will send DENR a list of data metrics and conduct a data metric analysis.
- The EPA will send DENR a list of requested files for review at least two weeks in advance of onsite file reviews. As an option, EPA may request that the state send paper or electronic facility files to the region for review as a result of restricted travel budgets or for other reasons.
- The EPA will set up a conference call with DENR to verify the files in EPA's requested file list will be available, where the files will be located, to confirm review dates, arrival times and logistics.
- The EPA will conduct an entrance conference upon arrival for the review at the DENR offices and an exit meeting prior to departure for DENR managers and staff.
- The EPA will draft a report on its review findings, share the draft report with the DENR and request comments.
- Once the report is final, the EPA will add the report and any recommendations in the report to the SRF Tracker.
- Once the report is final, the EPA will consult with the state and add agreed-upon action items in the report to the Action Item database.
- The EPA will initiate follow-up discussions periodically with DENR to see if progress is being made on the report recommendations.



• *PDA transmittal letter(s) or email(s)* 

#### Clean Air Act

To: <Kyrik.Rombough@state.sd.us> From: Alexas Gilbert/R8/USEPA/US

Date: 07/16/2012 05:10PM

Subject: Initial Data Metric Analysis & File Selection Transmittal - SRF

(See attached file: File Selection 7.16.12.xlsx)

(See attached file: Data Metric Analysis 7.16.12.xlsx)

Hello Kyrik-

In preparation for the upcoming State Review Framework (SRF) Review, I am sending you the initial data metric analysis and the file selection.

Both documents were created using frozen, verified FY 11 data from OTIS and the guidance documents: *Conducting an SRF Review* and the *File Selection Protocol* (both available on OTIS).

The file selection contains a list of facilities that were randomly chosen for review based on the data analysis.

In order to facilitate the file review and work within constraints, I am requesting the facility files for the selected facilities be sent to Region 8 by **September 16, 2012** preferably by email to me at <a href="mailto:gilbert.alexas@epa.gov">gilbert.alexas@epa.gov</a> or via paper mail at the address listed below.

Please don't hesitate to contact me via phone ((303) 312-6850) or via email if you have any questions or concerns.

Sincerely,

Alexas Gilbert U.S. EPA Region VIII 1595 Wynkoop Street Mailcode: 8ENF-AT Denver, CO 80202-1129

### **Clean Water Act**

Kelli and Kent,

The start of the SRF process is a Data Metric Analysis (DMA). This is a data pull from ICIS that is facilitated by the OTIS system. Could you please review the DMA to determine its accuracy? This may have already been accomplished during the Data Verification process that took place during the December-February time frame earlier this year.

As part of my SRF review, I must make comments analyzing the date. The four options I have are: Meets Expectations, Area for State Attention, Area for State Improvement, and Supplemental Review. These are defined below.

**Meets Expectations:** Describes a situation where either: a) no performance deficiencies are identified, or b) single or infrequent deficiencies are identified that do not constitute a pattern or problem. Generally, states are meeting expectations when falling between 91 to 100 percent of a national goal. The state is expected to maintain high performance.

**Area for State Attention:** The state has single or infrequent deficiencies that constitute a minor pattern or problem that does not pose a risk to human health or the environment. Generally, performance requires state attention when the state falls between 85 to 90 percent of a national goal. The state should correct these issues without additional EPA oversight.

**Area for State Improvement:** Activities, processes, or policies that SRF data and/or file metrics show as major problems requiring EPA oversight. These will generally be significant recurrent issues. However, there may be instances where single or infrequent cases reflect a major problem, particularly in instances where the total number of facilities under consideration is small. Generally, performance requires state improvement when the state falls below 85 percent of a national goal.

**Supplemental Review**: For metrics that are not Goal metrics, particularly those that are Review Indicators, you are not required to make initial findings using these categories. Instead, where those metrics indicate problems, you may mark them with "**Supplemental Review**" in the Initial Finding column.

Most of the DMA falls into the Meets Expectations category, although, I do have a couple comments regarding the data that is defined in the excel table. Also, could you please double-check the permitted numbers defined in the DMA?

Metric 1G2: Total Penalties Assessed

The total penalties assessed for FY11 does not include the CAFO penalty actions taken. Could you include an explanation of why these penalty actions were not included in this metric?

Metric 7f1, 7g1, 7h1: Non-major Faciltiies in Non-compliance

It appears that 55% (130 of the 244 facilities) of the non-major facilities are in non-compliance. The OTIS tool does not indicate which of these facilities have received state attention. Could you respond back with comments indicating which of the facilities have received a follow-up state action and what type of action was taken? I am assuming that a majority of the facilities have received a follow up action as the OTIS tool indicates the formal and informal enforcement actions taken by SDDENR to be a total of 319 (Metrics 1e1-1g1).

Please let me know if you have any comments. Thank you for you assistance with the DMA,



SDDENR\_FY11SRF\_DMA.xlsx

Seth Draper Environmental Scientist (303) 312-6763 NPDES Unit Water Technical Enforcement Program EPA Region 8 1595 Wynkoop St.; Denver CO. 80202

• State comments on the draft and final versions of the report (if received)]

# Preliminary Draft FY2011 EPA NPDES PQR, SRF and Integrated Report Sections

Kaye Mathews

to: Jeanne.Goodman

02/13/2013 04:05 PM

jodi.cloud, kelli.buscher, woodmansey.kent, Art Palomares, Gwen Campbell, Seth Cc: Draper, Colleen Rathbone, Elaine Lai, Lisa Luebke, Al Garcia, Natasha Davis, Kimberly Opekar, Corbin Darling

Jeanne Goodman Administrator, Surface Water Quality Program South Dakota Department of Environment and Natural Resources Joe Foss Building 523 E. Capitol Pierre, SD 57501

Dear Jeanne.

Attached are preliminary draft FY2011 EPA NPDES PQR, SRF and integrated report sections for your review and feedback. Region 8 incorporates this courtesy draft review step so that your key clarifications, explanations, or disagreements can be raised earlier rather than later in the report development process. Although SDDENR will have another more formal opportunity to comment on the report this spring, we will address or incorporate your responses to the extent possible in this early draft. We look forward to hearing from you and would appreciate receiving your comments by February 22, 2013.

#### **Permit Quality Review (PQR)**



PQR\_Draft\_accepted\_21jan13.docx

A few key points on the PQR from Colleen Rathbone, Region 8 Wastewater Unit Chief:

- Similar to the SRF, this report will go to OW for review and additional changes and revisions may be made.
- We understand that the time period for this initial, courtesy review is short given the length of the PQR. Please keep in mind you will have the opportunity for another, more substantial review after the HQ review
- Please call with questions or concerns. While we cannot guarantee we will address every concern
  you may have, we will certainly listen and do what we can. This is a pilot process, so communication
  is doubly important.

#### State Review Framework (SRF)



SD NPDES FMA Final.pdf



Draft CWA SRF

Findings 13Feb2013.docx

A few key points from Seth Draper, NPDES Technical Enforcement Reviewer:

 We are including the file metric analysis to help you better understand what information we used to complete the findings report.

- Please feel free to enter your response to the findings in the "State Response" section for each Element. Your responses will be included in the final report.
- We have a requirements that this draft report also be reviewed by OECA and they may identify changes that are needed to meet national consistency.
- For the item identified as "Area for State Improvement," a recommendation is required. We have included sample recommendation language however we want to approach any recommendation in a collaborative fashion, so we definitely want input and discussion on how to move this issue forward.

#### Integrated SRF and PQR Review



Draft CWA NPDES Integrated SRF and

PQR Review 13Feb2013.docx

Thanks to you and your staff for all your help in completing this review and preliminary draft report. Please do not hesitate to contact anyone on the EPA review team with questions.

Sincerely,

Kaye I. Mathews

State Enforcement Performance Oversight . National Energy Extraction Enforcement Initiative . Indian Country Office of Enforcement, Compliance and Environmental Justice U.S. Environmental Protection Agency . Region 8 . 8ENF-PJ (303) 312-6889

From: Buscher, Kelli [Kelli.Buscher@state.sd.us]

**Sent:** Friday, March 01, 2013 5:11 PM

**To:** Mathews, Kaye; jeanne.goodman@state.sd.us

**Cc:** Woodmansey, Kent; Campbell, Gwen; Palomares, Art; Rathbone,

Colleen; Draper, Seth; Lai, Elaine; Walsh, Elizabeth; Darling, Corbin;

Campbell, Gwen

Subject: RE: Preliminary Draft FY2011 EPA NPDES PQR, SRF and Integrated

Report Sections

Attachments: SD PQR SRF Comments.pdf

Thank you again for granting us an extension on our comments. As you can see, we needed every minute of it (and then some!).

Please let us know if you have any questions or need clarification. Thanks!!

Kelli D. Buscher, P.E. Natural Resources Engineering Director SD DENR/Surface Water Quality Program 605/773-3351 kelli.buscher@state.sd.us From: Mathews, Kaye [mailto:Mathews.Kaye@epa.gov]

Sent: Tuesday, February 19, 2013 3:22 PM

To: Goodman, Jeanne

Cc: Woodmansey, Kent; Buscher, Kelli; Campbell, Gwen; Palomares, Art; Rathbone, Colleen; Draper,

Seth; Lai, Elaine; Walsh, Elizabeth; Darling, Corbin; Campbell, Gwen

Subject: RE: Preliminary Draft FY2011 EPA NPDES PQR, SRF and Integrated Report Sections

Jeanne,

Per our phone conversation today, the timeframe for completing review of the preliminary draft NPDES report sections is extended to March 1. We look forward to your response.

Kaye Mathews 303.312.6889

From: Goodman, Jeanne [mailto:Jeanne.Goodman@state.sd.us]

Sent: Thursday, February 14, 2013 7:42 AM

To: Mathews, Kaye

Cc: Woodmansey, Kent; Buscher, Kelli

Subject: RE: Preliminary Draft FY2011 EPA NPDES PQR, SRF and Integrated Report Sections

Thank you, Kaye, for the opportunity to provide Region 8 with comments on the drafts. We appreciate it and will do our best to provide appropriate comments in response by February 22. It is a very short time period given the Monday holiday, but we will have something to you by the 22<sup>nd</sup> and realize we will have another opportunity to comment later in the process.

#### Jeanne

From: Mathews.Kaye@epamail.epa.gov [mailto:Mathews.Kaye@epamail.epa.gov]

Sent: Wednesday, February 13, 2013 5:06 PM

To: Goodman, Jeanne

**Cc:** Cloud, Jodi; Buscher, Kelli; <a href="woodmansey.kent@state.sd.us">woodmansey.kent@state.sd.us</a>; <a href="Palomares.Art@epamail.epa.gov">Palomares.Art@epamail.epa.gov</a>; <a href="Campbell.Gwen@epamail.epa.gov">Campbell.Gwen@epamail.epa.gov</a>; <a href="Drawland:Drawland:Drawland:epa.gov">Draper.Seth@epamail.epa.gov</a>; <a href="Rathbone.Colleen@epamail.epa.gov">Rathbone.Colleen@epamail.epa.gov</a>; <a href="Luebke.Lisa@epamail.epa.gov">Luebke.Lisa@epamail.epa.gov</a>; <a href="Davis.Natasha@epamail.epa.gov">Garcia.Al@epamail.epa.gov</a>; <a href="Davis.Natasha@epamail.epa.gov">Davis.Natasha@epamail.epa.gov</a>; <a href="Davis.Natasha@epamail.epa.gov">Davis.Natasha@epa.gov</a>; <a href="Davis.Natasha@epa.gov">Davis.Natasha@epa.gov</a>; <a href="Davi

Subject: Preliminary Draft FY2011 EPA NPDES PQR, SRF and Integrated Report Sections

Jeanne Goodman
Administrator, Surface Water Quality Program
South Dakota Department of Environment and Natural Resources
Joe Foss Building
523 E. Capitol
Pierre, SD 57501

Dear Jeanne,

Attached are preliminary draft FY2011 EPA NPDES PQR, SRF and integrated report sections for your review and feedback. Region 8 incorporates this courtesy draft review step so that your key clarifications, explanations, or disagreements can be raised earlier rather than later in the report development process. Although DENR will have another more formal opportunity to comment on the report this spring, we will address or incorporate your responses to the extent possible in this early draft. We look forward to hearing from you and would appreciate receiving your comments by February 22, 2013.

#### **Permit Quality Review (PQR)**

(See attached file: PQR Draft accepted 21jan13.docx)

A few key points on the PQR from Colleen Rathbone, Region 8 Wastewater Unit Chief:

- Similar to the SRF, this report will go to OW for review and additional changes and revisions may be made.
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#### State Review Framework (SRF)

(See attached file: SD NPDES FMA Final.pdf)(See attached file: Draft CWA SRF Findings 13Feb2013.docx)

A few key points from Seth Draper, NPDES Technical Enforcement Reviewer:

- We are including the file metric analysis to help you better understand what information we used to complete the findings report.
- Please feel free to enter your response to the findings in the "State Response" section for each Element. Your responses will be included in the final report.
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- For the item identified as "Area for State Improvement," a recommendation is required. We have included sample recommendation language however we want to approach any recommendation in a collaborative fashion, so we definitely want input and discussion on how to move this issue forward.

#### Integrated SRF and PQR Review

(See attached file: Draft CWA NPDES Integrated SRF and PQR Review 13Feb2013.docx)

Thanks to you and your staff for all your help in completing this review and preliminary draft report. Please do not hesitate to contact anyone on the EPA review team with questions.

Sincerely,

Kave I. Mathews

State Enforcement Performance Oversight . National Energy Extraction Enforcement Initiative . Indian Country Office of Enforcement, Compliance and Environmental Justice



# DEPARTMENT of ENVIRONMENT and NATURAL RESOURCES

PMB 2020 JOE FOSS BUILDING 523 EAST CAPITOL PIERRE, SOUTH DAKOTA 57501-3182 denr.sd.gov

March 1, 2013

Kaye I. Mathews
Office of Enforcement Compliance and Environmental Justice
US Environmental Protection Agency – Region VIII (8ENF-PJ)
1595 Wynkoop Street
Denver, CO 80202-1129

RE: South Dakota Response to the CWA-NPDES Integrated SRF and PQR Review

Dear Ms. Mathews:

Thank you for the opportunity to review the early draft of EPA's report from the integrated review of South Dakota's National Pollutant Discharge Elimination System permitting program. We appreciate the opportunity to clarify and explain some of the findings.

At this time, we focused our review and comments on identifying corrections and disagreements. EPA did identify improvements to the program, and DENR will look forward to working with EPA on those issues as we move forward. DENR will be providing EPA with a more formal response to those items in the near future. However, with this initial review, we wanted to ensure the report accurately reflected the details of the program; so, our focus is on potential areas of disagreement or clarification.

I have attached our detailed review and comments to these documents. However, we thought it might be helpful to provide a summary of our comments in this cover letter. The document entitled "CWA-NPDES Integrated SRF and PQR Review" seemed to provide a succinct summary of EPA's overall findings. Therefore, DENR will use this document to address the summary of our findings.

DENR would like to make a couple of general observations about the audit and the process involved. EPA sent four Region VIII permitting staff, three Region VIII enforcement staff, two EPA Headquarters staff, and an EPA contractor. In addition, DENR and the on-site EPA staff conducted interviews by telephone with other Region VIII staff during the site visit. In all, EPA sent 10 people to South Dakota, with at least 5 other staff members participating by telephone. This was a tremendous amount of resources devoted to reviewing the work of South Dakota's 20 NPDES staff. With this investment of resources, we want to make sure the report accurately reflect SDDENR's NPDES work.

In the draft report, EPA states that through the PQR and SRF review, EPA "promotes national consistency, identifies successes in implementation of the base NPDES program, and identifies opportunities for improvement in the development of NPDES permits and enforcement." DENR

March 1, 2013 Kaye Mathews Page 2 of 10

welcomes the opportunity to identify areas to strengthen and improve its permitting programs. However, I was disappointed EPA made little effort to identify successes in South Dakota's programs.

- South Dakota has one of the strongest feedlot permitting programs in the nation. DENR's
  innovative approaches to managing animal waste while promoting a strong agricultural
  industry in South Dakota should be upheld as an example for EPA and the rest of the
  country.
- SD has become a leader in data management through ICIS. South Dakota's ICIS
  coordinator is frequently contacted by the Region, EPA Headquarters, and other states to
  provide input on the development and improvement of the system as well as providing
  assistance.
- South Dakota passed legislation enabling the use of electronic reporting and has been approved to implement NetDMR. In less than 18 months' time, South Dakota had 40% of its facilities approved for electronic reporting.
- South Dakota implements a strong and effective biosolids program, issued a wellaccepted pesticide general permit (over initial objections), and provides training and assistance to storm water permittees and wastewater operators, just to name a few.

None of these successes and innovations were highlighted or even mentioned in the report. If EPA did not collect adequate information to highlight these successes, I would encourage you to discuss this further with my staff. The report identified areas where we can improve, and we look forward to implementing these improvements. We simply ask that EPA highlight the good work we are currently doing as well.

Thanks again for this early opportunity to review and provide comments on the reports. If you have any questions or would like additional information, please feel free to contact me, Kelli Buscher, or Kent Woodmansey at (605) 773-3351.

Sincerely,

Jeanne Goodman, P.E.

Surface Water Quality Program

Enclosures



#### DEPARTMENT of ENVIRONMENT and NATURAL RESOURCES

PMB 2020 JOE FOSS BUILDING 523 EAST CAPITOL PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

November 15, 2013

Kaye I. Mathews
Office of Enforcement Compliance and Environmental Justice
US Environmental Protection Agency – Region VIII (8ENF-PJ)
1595 Wynkoop Street
Denver, CO 80202-1129

RE: South Dakota Response to SRF-PQR Report

Dear Ms. Mathews:

Thank you for the opportunity to review the draft of EPA's report from the State Review Framework and Permit Quality Review of South Dakota's program. We appreciate the opportunity to clarify and explain some of the findings.

I have attached comments on the NPDES and RCRA reviews; the Air Quality Program did not have any comments.

South Dakota had the opportunity to review an early draft of the NPDES audit. We reviewed the document and provided extensive comments on March 1, 2013. I was disappointed that many of our comments and clarifications were not addressed in the latest version of the draft. If possible, I would like to suggest a conference call with DENR and EPA staff to discuss our comments, if EPA does not agree with some of the issues we are raising. It has been over a year since EPA did this review of the NPDES program. DENR has addressed or is addressing many of the items identified. The report needsto reflect that.

Please feel free to contact me if you have any questions on the NPDES portion of the comments. Carrie Jacobson is the contact person for any RCRA questions.

Sincerely,

Kelli D. Buscher, P.E.

Surface Water Quality Program

Enclosure

#### CWA-NPDES Integrated SRF and PQR

# Section II. Coordination Between Permitting and Enforcement Page 9

EPA provides an overview of SDDENR's process when taking a formal enforcement action. As noted in the report, the SD Attorney General's office provides a legal review of the proposed action. However, the AG's office does not "approve" the action. While SDDENR does have a sign-off sheet for the action stating that each person has "approved" the content, the AG's office typically changes the wording to state they approve the "form" of the action, not the content. SDDENR would suggest this discussion be changed as follows:

Once the SDDENR attorney approves the enforcement action, the South Dakota Attorney General's Office provides a second legal review. The action is then routed through the Division of Environmental Services Director who will have the Department Secretary sign the enforcement action.

# Section III. Integrated Review Background Page 10

There is a minor typographical error. Permit number SD0000264 has been assigned to "Northern States Power – Pathfinder."

#### Section V. Common Findings

#### Common Finding A-2, Page 11

EPA says it found three instances where the basic information for the facility was not consistent with the National Database. SDDENR provided the following response during its initial review of this information:

- Wheeler Manufacturing: The information in ICIS has been corrected; thank you for bringing this to DENR's attention.
- City of Tripp: The official file included an off-site record evaluation, not an on-site inspection. This was properly coded into ICIS. Please remove this comment from the final report.
- Northern States Power: This was a unique situation. Prior to the flooding in late September 2010, Northern State Power had very little water in its ponds. The facility estimated about 4 inches, which was primarily due to recent precipitation. Due to flooding, the ponds quickly filled with water from the Big Sioux River. Based on the verbal report from the facility, NSP could not even determine if there was an actual discharge from the ponds, but the ponds were inundated. DENR asked NSP to sample the water in the ponds to document the quality. These results were submitted to DENR with the discharge monitoring reports for the 4th quarter of 2010; however they were not reported on the discharge monitoring report for October 2010. The facility sampled the water in the ponds as well as in the Big Sioux River. The results were very similar, with the exception of total suspended solids. The total suspended solids levels in the ponds

were substantially lower than the solids levels in the river, likely due to settling in the ponds. Since the facility could not determine if the ponds were actually discharging and since the water quality data clearly indicated the water was river water, DENR agreed this was not a discharge regulated by the permit and NSP properly submitted the sampling results as requested. Please remove this comment from the final report.

The draft report states SDDENR should work to ensure the information contained within the National Database is accurate. SDDENR does work to ensure our data is accurate in ICIS. This was documented in the SRF portion of the review. While SDDENR understands EPA wishes to memorialize its findings from the review, the manner in which this information is presented significantly overstates the magnitude of the issue. SDDENR would suggest EPA change the finding to state that one typographical error was identified which has been corrected by SDDENR. If inconsistencies are found between ICIS and the official file, the State does correct those issues.

In addition, as explained above and in our earlier comment letter, Northern States Power did not have a discharge from its lagoon. SDDENR requests this discussion be removed from the final report.

#### Common Finding B-1, Page 12

During the review, EPA raised concerns about changes SDDENR made to its boilerplates concerning various types of discharges. Following the audit, SDDENR had several conversations with EPA about this issue. SDDENR and EPA reached an understanding about the reasons for SDDENR's changes and agreed on the language that would be incorporated into the boilerplates. These changes have been made and implemented throughout all boilerplates and SDDENR has provided EPA with these changes. The updates are final and no further work is needed. SDDENR would ask that EPA remove the following language on page 12 and simply acknowledge the issue has been addressed to everyone's satisfaction:

While updates are nearly final to resolving this issue on the minor municipal boilerplate, SDDENR should continue to update the other boilerplate documents used for developing the permit and statement of basis. SDDENR should submit to EPA a timeframe for making this modification. Once EPA is satisfied that state action has addressed the underlying finding, this recommendation will be considered complete. Continue working with EPA to address this issue through the remainder of SDDENR's permit boilerplates.

SDDENR modified the bypass language found in 40 CFR 122.41(m)(1) to specifically address sanitary sewer overflows and emergency discharges, and defined bypasses as diversions of wastewater within the system. DENR explained its definitions of bypass, sanitary sewer overflows, and emergency discharges, when taken together, are equivalent to EPA's definition of bypass. DENR modified its boilerplate language to clearly state that bypasses, sanitary sewer overflows, and emergency discharges are prohibited discharges. EPA is satisfied South Dakota's language is at least as stringent as the federal requirements. No further recommendations are necessary and this item is considered complete.

This issue is addressed again in more detail on page 33, under the Core Review Findings, Part E.

SDDENR would ask that this section also be updated to reflect the fact the issue has been addressed to everyone's satisfaction:

SDDENR indicates that taken as a whole, its definitions of bypass, sanitary sewer overflows, and emergency discharges equal EPA's definition of bypass. While SDDENR indicates that these discharges are not authorized by the permit, it does provide some exceptions in the boilerplate. These exceptions mirror EPA's requirements for when a bypass would be allowed.

SDDENR worked with EPA to ensure that language pertaining to bypass situations are at least as stringent as that required by the federal regulations.

On page 57 EPA details its Action Items. Under Part A., EPA states:

B. SDDENR should continue to update boilerplate documents used for developing the permit and statement of basis. Standard conditions in the boilerplates must be consistent with federal regulations as required by 40 CFR 122.41 and 122.42. Specifically, SDDENR approach to bypass must comport with federal regulations as referenced above (Category 1).

Since this work is now complete and addressed to everyone's satisfaction, please remove this language from the final report. No further action is necessary.

#### Common Finding C-1, Page 12

As discussed during the site visit, SDDENR does not conduct on-site inspections or sampling at SIUs every year. However, SDDENR does conduct either an on-site inspection or an off-site desk audit of these facilities each year. This has been included and approved in South Dakota's inspection plan for a number of years and SDDENR is proposing to continue this approach.

In response to EPA's findings from the audit, SDDENR has begun sampling during the on-site inspections. During each pretreatment inspection, SDDENR collects samples if the facility is discharging. Many of South Dakota's smaller regulated industries discharge very infrequently and it will not be possible to schedule inspections around a planned discharge from these facilities. However, we are communicating with the facilities to inquire about the possibility of scheduling a visit during a discharge and we are always prepared to sample during each site visit.

Based on the size of our communities and industries, as well as the geographical challenges we face, SDDENR asks that EPA accept this approach and consider this finding addressed and complete.

#### Common Finding, Page 13

EPA notes the SDDENR did not clearly include a requirement for a written technical evaluation

of the need to revise local limits under 40 CFR 403.5(c)(1). As noted in our earlier comments to EPA, this change has been made. All permits issued from this point forward to facilities with approved pretreatment programs will contain the required language. It is not necessary for

SDDENR to submit to EPA a timeframe for making its modifications; the work is complete. Please note this item as addressed and complete. In addition, please remove this as an action item on page 62.

#### Common Findings D-1 and D-2, Pages 13-14

One of EPA's findings is that South Dakota needs to update (Common Finding D-1) and implement (Common Finding D-2) its whole effluent toxicity policy. A revised draft WET policy was provided to EPA during its site visit in October 2012. SDDENR would ask that EPA acknowledge that fact and consider these items complete.

#### Common Finding E-1, Pages 14-15

EPA urges South Dakota to begin incorporating requirements into permits to ensure analytical methods are sufficiently sensitive. As discussed during the site visit and in our previous comments, SDDENR believes it is a good practice to require specific laboratory procedures to ensure the permittee is collecting useful data. However, SDDENR disagrees this is a requirement or deficiency in its implementation. The federal NDPES regulations state:

When "quantitative data" for a pollutant are required, the applicant must collect a sample of effluent and analyze it for the pollutant in accordance with analytical methods approved under Part 136 of this chapter unless use of another method is required for the pollutant under 40 CFR subchapters N or O.

There are currently no federal regulations regarding sufficiently sensitive test methods. SDDENR's surface water discharge permits require permittees to collect samples and have them analyzed in accordance with the methods approved under 40 CFR Part 136. When appropriate, or

in absence of an approved methods, SDDENR does specify specific or alternative methods that must be used for compliance. SDDENR is already in compliance with the current NPDES requirements and requests this comment be removed from the final report.

#### CWA-NPDES Permit Quality Review

#### Section II. State Permitting Program Background

#### A. NPDES Program Structure, Page 18

EPA states SDDENR is in the process of developing a companion guidance document for the reasonable potential spreadsheet. This document has been developed and submitted to EPA. Please revise this section to reflect this fact.

#### B. Universe and Permit Issuance, Page 23

EPA includes a discussion of the "Universe and Permit Issuance." EPA includes the following statement about water quality-based effluent limits on page 23:

Where WQBELs have been established in a permit, the statement of basis includes brief discussions of the development of effluent limitations, and in some cases an appendix providing a detailed discussion and illustration of calculations used to develop the WQBELs (e.g., ammonia effluent limitations in the draft permit for the City of Mitchell WWTF, SD0023361).

As noted in SDDENR's previous comments, we disagree with this characterization. EPA's statement that a detailed discussion of the water quality-based effluent limits is provided "in some cases" does not properly characterize SDDENR's permitting program. We would be happy to provide dozens of examples demonstrating the detailed discussions that have been included in permits with water quality-based effluent limits. The only time the discussions have been at all limited in the statement of basis is when the surface water quality standards are applied at the end of the pipe. In these cases, detailed discussions are not needed. SDDENR would ask that EPA strike "in some cases" from the statement above in the final version of the report.

#### Section III. Core Review Findings

#### C. Water Quality-Based Effluent Limitations, Pages 29-31

EPA states that SDDENR must ensure the permit record includes evidence that water quality assessments were conducted for the facility to ensure limitations will allow both numeric and narrative water quality criteria to be met. Similar comments were included on pages 59 and 60. In our previous comments, SDDENR asked for an explanation of the term "water quality assessment":

EPA makes several references to DENR's consistent failure to conduct and document "water quality assessments." What is a "water quality assessment?" DENR did a review of the entire NPDES regulations and found no definition of or requirement for a water quality assessment as it pertains to NPDES permits.

DENR reviews the discharge monitoring report data for every individual permit that is written. A summary of this data is included in each statement of basis. If the permit contains modeling to develop water quality-based effluent limits, the statement of basis contains a detailed and extensive analysis of the available data for the receiving stream. If EPA was not able to find this information in the statements of basis that were reviewed, this should have been discussed with DENR during the site visit. DENR can provide dozens of examples of its documentation. EPA states at the bottom of page 13 and continuing onto page 14 that the statements of basis consistently lacked facility- and discharge-specific details regarding water quality assessments. This paragraph goes on to discuss that DENR needs to specifically discuss how pollutants of concern are chosen. The paragraph discusses the need to assess reasonable potential and the need for water quality-based effluent limits. This paragraph

also states the permit records contained little documentation of an assessment of the development of water quality-based effluent limits. Similar comments were reiterated on pages 41, 42, 47, and 49. DENR requests an explanation of what EPA expects from a "water quality assessment." During the site visit, DENR and EPA spent a great deal of time discussing the need for analyzing and documenting the reasonable potential for pollutants to violate surface water quality standards.

However, there was no discussion or indication that DENR did not do a good job of documenting the development of the water quality-based effluent limits. In fact, DENR believes this should instead be highlighted as a strength of the program.

To date, SDDENR has not received an explanation for the "water quality assessments" or any follow-up from EPA regarding these comments. SDDENR will not be able to address this apparent concern if we do not understand the basis for the comment.

*On Pages 30 and 31, EPA states the following:* 

Permits were also observed where neither effluent limitations nor method to limit toxicants responsible for WET failure were not established despite demonstration of RP associated with multiple WET failures in previous permits. The requirement to establish a WET limit or method to control toxicants responsible for WET failure(s) applies regardless of whether the discharge is continuous or limited in nature.

With all due respect, this statement contains double negatives, making it difficult to understand. In an earlier draft of the report, EPA said SDDENR had not established WET effluent limits despite "multiple WET failures. SDDENR commented on this statement and asked for clarification. This section appears to have been re-worded as shown above; is this the same issue?

SDDENR is still requesting more detail on the basis for this statement. SDDENR sent drafts of its reasonable potential and whole effluent toxicity implementation procedures to EPA following the on-site visit. In these documents, SDDENR discusses how staff will conduct a reasonable potential analysis for whole effluent toxicity. SDDENR acknowledged we needed to improve our procedures for permits that did not contain whole effluent toxicity and believe the documents demonstrate our commitment to improving the approach to determining if there is a reasonable potential for whole effluent toxicity violations.

However, EPA's statements appear to claim SDDENR has not set whole effluent toxicity limits in cases where a permittee has had WET failures. This is simply not correct. As noted in our previous comments, South Dakota has 46 permits that require whole effluent toxicity testing. Only three of these permits do not contain a whole effluent toxicity limit – the city of Madison, the city of Sisseton, and the Magellan Pipeline. These facilities have not discharged in years, if ever. Therefore, it simply is not possible that a facility has had whole effluent toxicity test failures and does not currently have a whole effluent toxicity limit. Please remove this discussion from the final report. If EPA wishes to memorialize its findings from the audit, then please acknowledge that South Dakota has established procedures to better identify the reasonable potential for whole effluent toxicity and submitted those procedures to EPA.

#### H. Core Topic Areas, Page 36

Under EPA's critical findings for nutrients, EPA includes a discussion of nitrate discharges at an ethanol facility:

Nitrate discharges at the POET ethanol facility have been identified as having potential negative impacts on endangered aquatic species (Topeka shiner). While discharges are meeting numeric effluent limitations for nitrate established in the permit, narrative criteria should be considered to ensure adequate protection of the endangered Topeka shiner.

As noted in our earlier comments, these statement do not properly characterize this situation. First of all, EPA mistakenly refers to the facility in question as an ethanol facility owned and operated by POET. SDDENR would also reiterate its comments from its March 1, 2013, letter:

During the public notice period for the Valero permit, the US Fish and Wildlife Service expressed discomfort with the state's surface water quality standards for nitrates. However, there is no evidence to suggest Medary Creek is impaired for nitrates or the state's narrative criteria. There is no evidence to suggest this discharge has "potential negative impacts" on Topeka shiners. DENR and Valero agreed to conduct a water quality study of Medary Creek to investigate the situation further; the Service rejected this approach. Therefore, DENR modified the Valero permit to require the facility to meet the acute nitrate standards at the end of the pipe. DENR discussed this approach with Region VIII and reached a consensus. EPA's statements in the draft report imply a change to the agreed upon approach. Valero's permit ensures that South Dakota's surface water quality standards for nitrates, as approved by EPA, will be met and maintained. This statement needs to be stricken from the final report.

*Please remove this discussion from the final report.* 

#### Section IV. Special Focus Area Findings

#### A. Whole Effluent Toxicity (WET), Page 56

EPA includes a discussion about the whole effluent toxicity testing implemented in the permits for the cities of Sisseton and Huron, and Valley Queen Cheese. In our previous comments, SDDENR included a response to each of these issues. Since EPA has reiterated these comments in the latest draft, with no acknowledgement or response to SDDENR's earlier comments, these comments will be repeated here:

City of Sisseton

On page 38, EPA discussed three permits that contain whole effluent toxicity requirements. The city of Sisseton operates a series of lagoons and artificial wetlands as described earlier in this document. The city's system is designed for total retention. However, the permit does contain a provision allowing the city to discharge to the

mitigated wetlands nearby. These mitigated wetlands were constructed in response to the city's impact to nearby natural wetlands during the treatment facility's construction. The statement of basis for Sisseton's permit contained the following discussion on whole effluent toxicity:

The US Environmental Protection Agency requires that all major municipal facilities be evaluated for the reasonable potential to exceed water quality standards for toxicity. There is currently no data available to conduct this evaluation. Therefore, to collect this data, acute whole effluent toxicity monitoring shall be required during a discharge but will not have a limit. If the data collected from this monitoring indicates that there is no reasonable potential for toxicity, this monitoring may be removed from future permits.

The only industries in town are food processing facilities, which were not expected to discharge substances that would result in toxicity in the city's discharge. Qualitatively, DENR did not feel there was a reasonable potential for whole effluent toxicity to be present in the discharge.

However, as noted above, DENR understood that whole effluent toxicity was required for all major permits unless the department could demonstrate there was no reasonable potential for toxicity. DENR believed it was a better approach to require testing if a discharge did occur. This would provide data to quantitatively determine reasonable potential. The statement of basis notes that DENR will remove this requirement in the future if the testing demonstrates no reasonable potential. The permit includes a reopener clause allowing DENR to reopen the permit if whole effluent toxicity is detected.

#### City of Huron

The city of Huron contains a narrative acute toxicity limit for Outfall 001, which is the normal discharge point for the city's discharge to the James River. The city is also required periodically to dose the nearby mitigated wetlands. Like Sisseton, Huron was required by the US Corps of Engineers to construct mitigated wetlands following the wastewater facility's construction.

DENR did not require whole effluent toxicity testing or limits for any discharges into the mitigated wetlands. EPA is questioning why DENR took two seemingly different approaches with the Sisseton and Huron permits. In Sisseton's case, DENR had no data to quantitatively determine if there was a reasonable potential for toxicity in Sisseton's discharge. Since Sisseton does not discharge, this is likely a moot point. However, DENR did feel this approach was the best way to possibly collect data to better evaluate toxicity.

For Huron, the discharge to the mitigated wetlands is the same treated wastewater Huron discharges to the James River. Therefore, DENR did not need to collect further whole effluent toxicity data to characterize Huron's discharge. In addition, the James River has higher beneficial uses than the mitigated wetlands. Therefore, DENR felt the whole effluent toxicity testing and limits required for Outfall 001 were more than sufficient to protect the mitigated wetlands.

As noted earlier, DENR agrees more explanation is needed for these decisions and will be working to improve its documentation in the future.

#### Valley Queen Cheese

EPA is correct that DENR did not do a specific reasonable potential analysis on whole effluent toxicity for Valley Queen Cheese. However, what exactly is the deficiency in this particular case? 40 CFR 122.44 states, in part:

In addition to the conditions established under § 122.43(a), each NPDES permit shall include conditions meeting the following requirements when applicable ...

- (d) Water quality standards and State requirements: any requirements in addition to or more stringent than promulgated effluent limitations guidelines or standards under sections 301, 304, 306, 307, 318 and 405 of CWA necessary to:
- (1) Achieve water quality standards established under section 303 of the CWA, including State narrative criteria for water quality.
- (i) Limitations must control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality.

A full-blown reasonable potential analysis by any method (qualitative or quantitative) would have determined chronic whole effluent toxicity limits were necessary. DENR included chronic whole effluent toxicity limits in the permit.

The regulations state that if there is reasonable potential, the permit must include a limit. The regulations do not state that if there is a limit, the permit must establish there was a reasonable potential. DENR would ask that EPA remove this discussion from the final report.

#### Section V. Action Items

#### I. Special Focus Areas, Pages 63-64

EPA states that 40 CFR 122.44(d)(1) requires reasonable potential calculations on all discharges

to waters of the US. This is a Category 1 finding. SDDENR commented on this issue in its March 1, 2013, comments:

#### EPA also states:

The procedure used and the results obtained for the WET RP determination must

be adequately stated in the statement of basis because regulations at 40 CFR 122.44(d)(1) require RP calculations on all discharges to waters of the U.S. [emphasis added]

And the "Findings and Recommended Actions" on the same page reiterate this same comment:

The procedure used and the results obtained for the WET RP determination must be adequately stated in the statement of basis because regulations at 40 CFR 122.44(d)(1) require RP calculations on all discharges to waters of the U.S. [emphasis added]

There is nowhere in 40 CFR 122.44(d) that requires calculations to determine reasonable potential. EPA even states on this same page in the draft report that qualitative determinations can be made in lieu of quantitative data. Therefore, this statement needs to be corrected or clarified in the final report. In addition, 40 CFR 122.44 requires a reasonable potential analysis when applicable. 122.44(d)(1) goes on to explain that a reasonable potential analysis is necessary if there are any requirements in the surface water quality standards that are in addition to or more stringent than the promulgated effluent guidelines. In other words, reasonable potential analyses are only required for water quality-based effluent limits to ensure water quality standards are maintained or determine if it is necessary to establish water quality-based effluent limits in addition to or more stringent than the technology-based effluent limits. The regulations do not state that reasonable potential analyses are required on all discharges to waters of the US.

DENR is in the final stages of developing reasonable potential implementation procedures. A draft of this document will be sent to EPA by April 1, 2013. These procedures will detail how DENR will conduct reasonable potential analyses for water quality-based effluent limits.

Calculations are not required by 40 CFR 122.44(d)(1). SDDENR would ask that EPA remove this discussion from the final report. In addition, SDDENR would like to note the reasonable potential procedures referenced in its comment letter have been submitted to EPA.

#### State Review Framework

#### Clean Water Act Findings

#### Finding 4-1, page 78

In Finding 4-1, SDDENR provided comments on this section in our earlier submittal. Thank you for making most of the changes requested. However, there is one statement still in this section that SDDENR would ask that EPA either remove or provide further clarification. Under the "Description," EPA states:

The state completed all tracked commitments made in the EPA/State agreements. Nearly

all inspection commitments for FFY 2011 were completed. [emphasis added]

The "Relevant metrics" states that SDDENR met or exceeded 100% of its commitments in every sector noted. Please either remove the bolded statement above or provide an explanation for any inspection commitments the state did not meet.

#### Finding 5-1, Page 80

In Finding 5-1, EPA made the changes SDDENR requested. However, there is one change that was not noted in our original comments. EPA removed the statement in the "Description" that said we did not meet all of our inspection commitments. However, there is still a sentence in the "Explanation" section that states:

South Dakota met or exceeded nearly all of its commitments for the FFY11 inspection year. [emphasis added]

Please remove the word "nearly" from this statement.

There also appears to be a typographical error under Finding 5-1 (5b1). EPA states that inspections have been conducted at 57 of 244 NPDES non-majors with individual permits. Earlier in the document (Finding 1-1), EPA sates there are 243 NPDES non-majors with individual permits. 57 inspections out of 243 permits equates to 23.4% of the facilities inspected, which is the percentage noted in 5b1. Therefore, it appears the 244 should actually be 243.

There is also a discrepancy between the number of non-majors NPDES facilities with general permits between Element 5 and Element 1. Finding 1-1 states there are 170 facilities; Finding 5-1

states there are 172. SDDENR did not re-pull this information to verify the numbers. However, please feel free to contact SDDENR staff if you need clarification or assistance determining the correct number.

#### Finding 10-1, Page 90

EPA states SDDENR did not appropriately follow its Enforcement Response Guidance for the city of Mitchell's sanitary sewer overflows in 2010 and 2011. SDDENR provided the following discussion in its earlier comments:

City of Mitchell: The only sanitary sewer overflows that resulted in releases to waters of the state were during flooding events in 2010. As EPA is likely aware, the state of South Dakota experienced significant flooding around this time period. The sanitary sewer overflows were unavoidable and were necessary to prevent property damage or impacts to public health. DENR does not take action for sanitary sewer overflows that meet the bypass exceptions in EPA's regulations. No enforcement was taken for these sanitary sewer overflows. The sanitary sewer overflows reported in 2011 were simply line breaks that did not result in a discharge. The city identified the sources of the problem and repaired or replaced the lines. DENR disagrees these were permit violations. Please remove this discussion from the final report.

SDDENR would ask that EPA please re-evaluate its comments in regards to the city of Mitchell. We do not agree these SSOs resulted in permit violations that needed enforcement.

#### Resource Conservation and Recovery Act Findings

#### Finding 5, page 110

The draft FY2011 SRF review (dated September 25, 2013) indicated South Dakota's Hazardous Waste Program met the overall SRF expectations for all twelve review elements. Although the state met expectations, EPA noted minor issues under Element 5 – Inspection Coverage: Completion of Planned Inspections. In summary, the report indicates the state did not achieve:

- 5(a) 100 percent inspection of the state's TSDF universe over two years;
- 5(c) 100 percent inspection over five years of the LQG universe; and
- *5(d) Five-year inspection coverage for active SQGs.*

In response to that review, the state and EPA recognize that universe values for these categories varied during the five year FY2007-2011 review period. This variability resulted in what appears to be a failure to meet the identified SRF goals. Specific responses to these items are provided below:

Element 5a: Two-year inspection coverage for operating TSDFs (Goal: 100%). The SRF review indicates the state conducted 50% of its TSDF universe during the two-year time span. In FY2010, South Dakota's TSDF universe totaled one facility (Safety-Kleen Systems). In FY2011 the universe remained a total of one, with the caveat that an emergency permit was issued to Chemring Energetic Devices (formerly Technical Ordnance). This emergency permit was not a fully permitted TSDF, and the resulting OTIS data calculation is in error. With that said, the site was inspected in 2009, which is within the two-year review period examined for SRF purposes.

Element 5b: Annual inspection coverage for LQGs (Goal: 20%). The SRF review indicates the state met the goal by conducting inspections at 25% of the universe. Although the state met the annual inspection goal, the LQG universe calculation is a key component of Element 5b as well as 5c (below). The LQG universe calculation merits discussion here to provide background for Elements 5b and 5c.

In FY2011, South Dakota's LQG universe rose to an all-time high of 42. This value contrasts with the 2009 total LQG universe of 25, and the 2007 LQG universe of 19 (based on Biennial Reporting data). The increased number of LQGs in FY2011 was due to reports received from 16 one-time, episodic LQGs. Many of these businesses reported as LQGs after generating a onetime, acutely hazardous pharmaceutical waste. In reality, the number of operations generating

*LQG* amounts of hazardous waste on a routine, consistent basis in FY2011 was closer to 26. Using that value, the state conducted seven (7) or 27 percent of the recurrent LQG universe.

Element 5c: Five-year inspection coverage for LQGs (Goal: 100%). The SRF review indicates

that the state's five-year inspection coverage of LQGs was 80%. The state agrees with this assessment. In reviewing the list of FY2011 LQGs inspected from 2007 to 2011, 19 of the 26 generators were inspected over that time frame. However, one of those operations was subject to Performance Track standards and reduced inspection frequency; a second generator has been found to be an SQG. Therefore, the state inspected 19 of the 24 actual LQGs, representing approximately 80% of the universe.

Element 5d: Five-year inspection coverage for active SQGs (Informational only). The SRF review includes examining the number of SQG inspections for the period FY2007 to FY2011. EPA calculated that inspection coverage for the state was 10.5%. The state disagrees with that assessment. First, the state routinely focuses inspection efforts on small and conditionally exempt generators. In FY2011, of the 75 inspections, 61, or 81% were conducted of small and conditionally exempt small quantity generators. In reviewing inspection accomplishments over the past few years the state has recognized a significant trend: waste minimization efforts have allowed many SQG (and some LQG) notifier operations to become CESQGs. For example, in FY2011, out of a total 75 inspections, 27 were conducted of SQG/CESQG notifiers. Of that number, 11 or 40% originally notified as SOGs but upon inspection were found to be CESOGs. FY2010, the number was less, but still reflected waste minimization successes: 14 or approximately 19% of the 75 operations inspected that year notified either as an SQG or LQG but inspection information indicated they were actually CESQGs. As such, the state has found that the true SQG universe, based upon notification information, is not accurate; basing an evaluation element, even for informational purposes, on inaccurate universe data will not give a true reflection of SQG/CESQG inspections performed by the state. [Please note that both the state and EPA do not require generators to submit updated generator information should their status change. Although the state welcomes status updates, unless received voluntarily, the bulk of generator status updates is gathered through on-site inspections.]

#### Appendix E: Program Overview

#### Agency Structure

#### NPDES, Page 173

In Appendix E, EPA provides an overview of SDDENR's organization. EPA states:

SDDENR is made up of two divisions - the Division of Environmental Services and the Division of Financial and Technical Assistance. The Division of Environmental Services includes eight programs for Air Quality, Drinking Water, Ground Water Quality, Minerals and Mining, Plans & Specifications, Surface Water, Waste Management, and Water Rights. The Division of Financial and Technical Assistance includes four programs for Fiscal Management, Geological Survey, Information Services, and Water Resources Assistance. The Water Resources Assistance Program includes two areas - Watershed Protection and Water and Waste Funding.

During the review period covered by this report, the Division of Environmental Services consisted of seven programs, not eight as stated in the report. The programs were as follows:

- Air Quality Program
- Drinking Water Program
- Ground Water Quality Program
- Minerals and Mining Program
- Surface Water Quality Program
- Waste Management
- Water Rights

There was not a Plans and Specifications Program. In April 2013, the Division was reorganized slightly. The Surface Water Quality Program, which housed all of the NPDES and water quality standards functions, was divided into two separate programs. The CAFO activities were pulled out of the Surface Water Quality Program to form the Feedlot Permitting Program. There are now eight programs within the Division, however the eighth program is the Feedlot Permitting Program, not the Plans and Specifications Program. SDDENR would ask that this section be corrected to either represent the Division as it existed at the time of the review or its current status, as the information in the report is incorrect.

EPA also includes a summary of the NPDES formal enforcement process. As stated above in our comments, the AG's office does not approve the content of the action. In addition, SDDENR would ask that you refer to the SDDENR Attorney as our "Staff Attorney", not the SDDENR Surface Water Discharge and Concentrated Animal Feeding Operation group staff attorney. SDDENR would suggest this section be re-written as follows:

If the Surface Water Quality Program or the Feedlot Permitting Program decides to escalate a case of non-compliance for formal enforcement, the staff sends an enforcement recommendation to the Program Administrator. The SDDENR Staff Attorney is then brought in to review the case. Once the SDDENR Staff Attorney approves the enforcement action, the South Dakota Attorney General provides a second legal review. The action is then reviewed through the Division of Environmental Services Director who will have the Department Secretary sign the enforcement action.

The suggested corrections above reflect the current organization of the Surface Water Quality and Feedlot Permitting Programs. If EPA agrees with this change, SDDENR would request the remainder of this section refer to the two programs separately. Otherwise, the recommended changes above should be changed to reflect the organization of the division at the time of the review (i.e. - Surface Water Discharge and Concentrated Animal Feeding Operation teams). A similar request was included in SD's March 1, 2013 comments.

Page 174 – EPA states that staff responsibilities for NPDES compliance are arranged such that the permit writer and inspector for a given facility is the same individual. While this is a good practice, and is employed when possible, it is not universally possible or practical. In our earlier comments, SDDENR asked EPA to remove this statement. However, if EPA keeps this provision in the final report, SDDENR would suggest this statement be appended and qualified to say "when possible."

Page 175 – Under "Staff and Training," EPA discusses the tools SDDENR employs to train new

inspectors and permit writers. EPA stated:

However, SDDENR is currently experiencing a tight state budget and these training opportunities have become optional for most employees.

SDDENR believes these training opportunities are very important to the effective implementation of our NPDES program. We do not consider this training optional. With that said, South Dakota, like most state and federal governments, has had a tight budget in recent years. Out-of-state training and conferences are typically very expensive. That has not lessen our commitment to the training, just a practical consideration we have had to accept. On page 8, EPA included this discussion of SDDENR's commitment to training:

With regard to training, new permit writers are provided on-the-job training by experienced permitting staff and through developing minor individual permits. Further, when the budget allows for travel, permit writers receive training (e.g., U.S. EPA's NPDES Permit Writers' Course). SDDENR has a strong commitment to ensuring that new permit writers are provided training through the U.S. EPA NPDES Permit Writers' Course. SDDENR has continued to send permit writers to this training since before South Dakota was delegated NPDES authority.

SDDENR feels this statement better reflects our approach to training and would ask that EPA revise the discussion on page 175 to make it consistent with the statements on page 8.