

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

Iowa

**Clean Water Act
Implementation in Federal Fiscal Year 2012**

**U.S. Environmental Protection Agency
Region 7, Kansas City**

**Final Report
March 24, 2014**

Note to Users

This report presents findings and recommendation for the Clean Water Act – National Pollutant Discharge Elimination System (CWA-NPDES). It is structured in four parts, with one overarching Executive Summary followed by individual parts for permitting and enforcement program reviews and an integrated part for findings and recommendations common to permitting and enforcement. The intent of this structure is to allow the user to look exclusively at just Permit Quality Review (PQR) or State Review Framework (SRF) enforcement information individually, or to look at both program parts with an integrated component.

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 look to the section titled State Review Framework Report.

The PQR and SRF components of this NPDES program review have been integrated as part of the EPA’s 2009 Clean Water Act Action Plan. 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 having 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 it increases transparency through making PQR and SRF results publicly available on EPA’s website.

SRF and Integrated CWA PQR Executive Summary

I. Introduction

The Permit Quality Review (PQR) and State Review Framework (SRF) oversight reviews of the Iowa Department of Natural Resources (IDNR) were conducted July 15-18, 2013, by EPA Region 7 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 are not included in this report.

The context of the SRF review excludes the Concentrated Animal Feeding Operations (CAFO) program, which EPA thoroughly reviewed in 2011 in response to a Petition for Withdrawal of the NPDES Program Authorization from the State of Iowa. The petition alleges that Iowa's NPDES CAFO program does not meet the requirements of the Clean Water Act. On September 11, 2013, EPA and IDNR signed a Work Plan Agreement to correct deficiencies in Iowa's CWA permit and compliance program for CAFOs. The agreement includes specific actions the IDNR intends to take to remedy identified deficiencies and a timeline for implementation of those actions. The Work Plan Agreement and associated information can be found at the following website: <http://www.epa.gov/region7/water/index.htm>

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, fact sheets, and interviews.

II. Priority Issues to Address

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

A. CWA-NPDES Integrated Findings

Following are the most significant issues affecting performance of both the permitting and enforcement programs:

- Language was found in the requirements of stormwater permits which lacked specificity to a degree that might hinder enforcement of those provisions.
- There is language in Pretreatment Program cities' permits that is inapplicable and inaccurate, making these permits potentially difficult to enforce.

B. Major PQR CWA-NPDES Findings

From the PQR, EPA found the following issues to be most significant:

- IDNR does not always establish technology-based effluent limits (TBELs) where required, and is not always properly documenting TBELs decisions.
- IDNR does not always establish water quality-based limits in cases where data on the discharge is limited (even when the possibility of violating water quality criteria is clear).
- IDNR has not always established limits based on EPA approved uses for receiving waterbodies.

C. Most Significant SRF CWA-NPDES Program Issues¹

From the SRF, EPA found the following issues to be most significant:

- Inspection reports do not consistently describe inspectors' observations relative to regulatory requirements. Reports should account for inspectors' field activities, an evaluation of lab practices, and include pretreatment facilities' sampling data.
- Compliance determinations are not consistently made based on inspection findings, including the determination of Significant Noncompliance at pretreatment industries. Cover letters and Notices of Violation should clearly articulate violations based on inspector observations.
- Ongoing noncompliance is not consistently escalated in a timely and appropriate manner. When voluntary compliance efforts do not resolve noncompliance in a timely manner, the matter should be escalated for handling in the formal enforcement arena.

D. 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.

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

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CWA-NPDES Integrated SRF and PQR Review

I. INTRODUCTION

EPA reviews regional and state Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) permitting and enforcement programs every four years. During these reviews, EPA staff review NPDES program implementation and enforcement. A 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 component of these reviews is the State Review Framework (SRF), which evaluates state enforcement programs.

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

EPA conducted an oversight review of the Iowa NPDES permitting and enforcement program in July 2013. The PQR is 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 reviewed the administrative record for selected NPDES permits (core permits) using a standardized checklist. Additionally, the PQR looked at four National Topics (areas of national importance), and a Regional Topic (area of Regional importance) listed below:

National Topic Areas

- nutrients,
- pesticides,
- pretreatment, and
- storm water

Regional Topic Area

- ethanol plants

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 looked at 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).

These reviews examined data and files generated and kept by the Iowa Department of Natural Resources, Environmental Services Division.

The reviews were conducted in three phases: analyzing information from the national data systems, reviewing a set of state files and permits, and the development of findings and recommendations. 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. As part of the reviews conducted in 2013 in Iowa, Region 7 reviewed the State's program authorization documents and the State's Memorandum of Agreement using the final approved Guidance for NPDES MOAs Between States and EPA. EPA is currently working with the state on the results of the MOA review.

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. How Report Findings Are Made

The findings in these reports were made by EPA Region 7's permitting and enforcement staff after analyzing data in the national data systems and reviewing facility files and permits. Permitting and enforcement staff consulted with state staff during separate but concurrent processes for PQR and SRF to determine findings in the respective programs. Separate PQR and SRF parts of this report discuss those findings. EPA Region 7 staff then consulted with one another to develop the Common Findings section below, which discusses areas from one or both programs that impact both permitting and enforcement.

Common Files for PQR/SRF Reviews

The PQR reviewed 13 permits for the core permit reviews, 8 permits for the national topic reviews and 2 permits for the regional topic reviews. The CWA SRF reviewed 50 enforcement files. To facilitate the coordination of the PQR and SRF reviews, and to encourage dialogue between the permitting and enforcement components of the NPDES Program, 12 common files were selected for both the PQR and SRF reviews. The common files/permits reviewed were:

- John Deere Dubuque Works (IA0000051)
- Sioux City STP (IA0043095)
- Walter Scott, Jr. Energy Center (IA0004308)
- Roquette America, Inc. (IA0000256)
- Sioux City MS4 (IA0078662)
- Petersen Mfg Co., Inc. (General Permit #1)
- Valero Renewables (IA0080403)
- Poet Biorefining (IA0080063)

- Clinton City STP (IA0035947)
- Ottumwa City STP (IA0058611)
- Janesville City STP (IA0026506)
- Rock Valley City STP (IA0033057)

III. NPDES Permitting and Enforcement Coordination

Aside from the oversight provided in this integrated review, EPA Region 7 permitting and enforcement staff work together closely on an as-needed basis to review draft general permits from the state as well as other permits for which the Region has noted past concerns with compliance at the facility. In addition, permitting staff routinely review major and minor permits as they are placed on public notice. The location of Region 7's permits branch and water enforcement branch in the same division lends to efficient coordination over such matters.

For detailed information on the background of Iowa's permitting program, see the State Permitting Program Overview in the PQR part of this report. For detailed information on the background of Iowa's compliance and enforcement program, see Appendix C.

IV. Common Findings

This section describes findings, recommendations, and follow-up activities identified as common issues for CWA enforcement and permitting. These issues also appear in the PQR and/or SRF parts of the report, as noted for each item, unless the item does not fit within any PQR areas of consideration or SRF metrics (e.g. permit enforceability findings and a Pretreatment finding, as noted).

Pretreatment Program Cities' Permit Requirements for Treatment Agreements

Finding: The permits for Pretreatment Program cities specify that IDNR is to be notified in advance of any discharge from a Significant Industrial User, notified of any changes at an SIU that modifies a treatment agreement along with the modified TA, and notified of any new SIU along with the treatment agreement submitted with the notification. The problem with this language is that none of it applies to Pretreatment Program cities, nor is enforced. It is IDNR's practice that the 21 Pretreatment program cities do not need treatment agreements with their SIUs because all of the cities have permitting authority. Program cities are expected to develop local limits, which IDNR approves, and use them to establish permit requirements in lieu of treatment agreements. This finding also appears in the PQR portion of the report.

State Response: [This is a known issue. IDNR agrees that the language should be removed from the Major Contributing Industries page for pretreatment cities, and we plan to do a complete review of the language on the Major Contributing Industries page.](#)

Recommendation: To keep Pretreatment Program cities from being in unintentional violation with permit implementation language, IDNR should modify the "Major Contributing

Industries” provisions that require approved Pretreatment Program cities to submit treatment agreements for the Department to review, since this is not done in practice.

Pretreatment Program Cities’ Approval Dates

Finding: EPA reviewed the program implementation requirement in the NPDES permits for the 21 Pretreatment Program cities in Iowa, which states “You shall continue to implement the pretreatment program approved [date] and any amendments thereto.” The approval dates for 11 of the 21 cities does not agree with the dates on file at EPA Region 7. The concern is that permits containing citations to the wrong Pretreatment Program approval date do not have an enforceable NPDES permit requirement for program implementation. This finding also appears in the PQR portion of the report.

State Response: IDNR will determine what pretreatment program approval dates are in the pretreatment permits, and will amend the permits to change the dates as needed. If there is an incorrect date in an expired pretreatment permit, it will be corrected when the permit is reissued. IDNR plans to include a statement requiring the implementation of the General Pretreatment Regulations at 40 CFR Part 403 on the Major Contributing Industries pages of the pretreatment permits.

Recommendation: The IDNR needs to verify the Region’s record of approval dates and compare them to those that are included in each Pretreatment city permit, and make corrections as needed. In addition, IDNR should add a sentence or clause to the implementation requirement that also requires implementation of the General Pretreatment Regulations at 40 CFR Part 403.

Treatment Agreements and State Reporting for Industrial Users

Finding: Five of seven of the Categorical facilities reviewed from non-approved program cities have Treatment Agreements (TAs) with the receiving Publicly Owned Treatment Works (POTW) that had not been incorporated into the receiving city’s NPDES permit. Categorical industries in this circumstance are not reported to EPA in IDNR’s semiannual report on significant industrial user (SIU) compliance status, although they should be. EPA’s Pretreatment Regulations at 40 C.F.R. Part 403 apply to pollutants from non-domestic sources covered by Pretreatment Standards which are indirectly discharged into or transported by truck or rail or otherwise introduces into POTWS (403.1). Pursuant to 403.12(b), industrial users subject to Pretreatment Standards and discharging to a POTW must submit reporting requirements to the Control Authority (IDNR in these cases).

State Response: IDNR agrees that Treatment Agreements should be incorporated into permits in a timely manner. This is a workload issue, and we will continue to amend or reissue permits to incorporate TAs as our workload allows. IDNR will have internal discussions between the permit writing staff and the enforcement staff in our Field Offices to determine the best way to collect and include monitoring data in the semiannual SIU report for those categorical industries whose TAs are not in an NPDES permit.

Recommendation: IDNR should ensure that all Treatment Agreements are incorporated into the POTWs' NPDES permits as expeditiously as possible. Until this occurs for each Categorical industry, IDNR should include monitoring data for those Categorical industries in the semiannual report to EPA on SIU compliance status. By May 1, 2014, IDNR should report to EPA on how the state intends to accomplish these items. EPA will verify that monitoring data for such industries are present in the semiannual report before considering this recommendation complete.

Tracking of Permit Compliance Schedules in ICIS

Finding: Permit compliance schedule milestones in ICIS are not consistently maintained with current dates for milestone completion or deliverable receipt, and file contents do not reflect whether deliverables were ever received. Legitimate violations of permit compliance schedules are an enforcement concern and can also aggravate the state's effort to reissue an environmentally protective permit if the facility has not completed all required treatment process changes within the term of the expiring permit. This common finding also appears as SRF Finding 3-4.

State Response: The permit compliance milestones in ICIS are an accurate reflection of the permit compliance milestone dates that have been entered into the state permit database (NPDS). All completed milestone information is entered into NPDS as soon as it is received, and all past milestone data in NPDS is correct. Ideally, if the milestone date is missing from ICIS, it means that the facility has not completed that milestone. Missing permit compliance milestones are tracked, and enforcement staff in the Field Offices are working to get these facilities back in compliance. Areas of inconsistency will be investigated per EPA's recommendation.

Recommendation: IDNR should investigate the permit schedule violations to determine whether the required deliverables have been received. If they have in fact been received, the state should enter or batch an appropriate code to override the violation flags in ICIS. If the deliverables have not been received for any facilities, the state should work with those facilities to ensure that proper documentation is filed. IDNR should complete this investigation and corrective actions by May 1, 2014. By that date, IDNR should report to EPA on the outcome of its actions and provide a plan for monitoring the receipt of future schedule deliverables and logging the corresponding data into state and federal databases.

Stormwater General Permit Enforceability

Finding: Iowa NPDES General Permit #1 (GP #1) for stormwater from industrial activities contains language that lacks specificity, making the permit potentially difficult to enforce. This finding does not appear elsewhere in the report. Particular requirements in the permit that raise this concern include the following:

- Part III, C.2.c., page 5 of permit:

The Department may review the plan (SWPPP) at any time and may notify the permittee that the plan does not meet one or more of the minimum requirements of this Part.

The language goes on to describe additional requirements that are contingent on the permittee receiving Department notification. If notification of a permit deficiency is verbal, the permittee could deny it occurred, making enforcement of this section difficult.

- Part III, C.4.B.(8), page 6 of the permit. This section on employee training does not include a minimum frequency for training to occur during the permit period. Due to the lack of a minimum frequency for training one would have to assume once per permit cycle is the minimum required. Enforcement of any training frequency greater than this minimum would not be possible with this language.
- Part III, C.4.C.(2), page 7 of the permit, on making revisions to the SWPPP following an inspection. The last part of the paragraph reads, “but in no case less than twelve weeks from the inspection.” Given the intent, however, it should instead read “in no case more than twelve weeks” because the current language allows noncompliance with this section to continue indefinitely.
- Part III, C.4.f.(3)(g), page 10 of the permit. This section of the permit requires that all areas of the facility be inspected “at specific intervals” but does not provide a minimum frequency for inspection. As above, if IDNR or EPA were to enforce this provision of the permit, one would have to assume that once per permit cycle is the minimum frequency required, but the intent of the permit was probably to expect a higher frequency.

State Response:

- Part III, C.2.c, page 5 of permit - The IDNR understands the EPA concern, which is why IDNR’s standard operating procedure is to always follow-up verbal instructions with written instructions. Should the permit language be changed to state that the IDNR may notify the permittee, in writing, it would mean our verbal instructions are not enforceable, which is not desirable for something that needs to be immediately implemented. The denial that verbal instructions were never given is a risk in all enforcement scenarios where electronic means have not been used to document the situation. The problem is not with the permit language. IDNR has already addressed this issue in its procedures by requiring the proper documentation of verbal instructions.
- Part III, C.4.B(8), page 6 of the permit - Part III.C.2.c states, in part: “The Department may review the plan at any time and may notify the permittee that the plan does not meet one or more of the minimum requirements of this Part.” Thus, if the IDNR is not satisfied with the frequency of training activities it can instruct the permittee to adjust the frequency. More complex facilities with more employees are likely to need more frequent training than simpler facilities with fewer employees. If a training frequency were specified in GP#1, it could be insufficient for some facilities and too much for others. This is the nature of

general permits.

- Part III, C.4.C(2), page 7 of the permit - We agree. We will change the permit language specified by EPA above the next time GP#1 is renewed.
- Part III, C.4.f(3)(g), page 10 of the permit - Part III.C.2.c states, in part: “The Department may review the plan at any time and may notify the permittee that the plan does not meet one or more of the minimum requirements of this Part.” Part III.C.4.c. states: “Qualified personnel shall inspect designated equipment and plant area at appropriate intervals specified in the plan, but, except as provided in paragraphs III.C.4.C.(4) and (5) (which apply only for certain remote and unmanned sites), in no case less than once a year.” Thus, the minimum frequency is once per year except for certain remote or unmanned sites. IDNR can determine in specific instances if once per year is insufficient and require the permittee to increase the frequency in these instances. The minimum frequency of once per year can also be included in this permit section next time GP#1 is renewed.

Recommendation: During the process of reissuing the next iteration of GP #1, IDNR should add more specificity and clarity to the language for notifications, frequencies, and deadlines, in order to make those provisions more enforceable by regulatory bodies. IDNR and EPA should work together on this matter during the process of drafting the permit that will eventually replace GP #1, which will expire 10/1/2017.

MS4 Permit Enforceability

Finding: EPA reviewed the Municipal Separate Storm Sewer System (MS4) permit for the City of Sioux City, which is patterned after a template used for all MS4 permits in the state. The permit does not require a Storm Water Management Plan (SWMP) because the Department intends the permit to serve as the SWMP. Although the permit states the required activities to be implemented by the permittee, it does not describe standard operating procedures and protocols for the many required activities nor does it include a minimum frequency for many of the activities. The permit does not require the permittee to provide a rationale for the decisions made in implementing the permit, nor does it require the permittee to assess its own successes and failures and to modify its plan accordingly. One would expect to find all of these missing items in a SWMP. Other particular concerns with enforceability of the permit include the following:

- Part II, B.1., page 3 of the permit requires that a stormwater advisory committee be established and “meetings shall be organized by the permittee as needed for the duration of the permit.” The permit does not establish a minimum meeting frequency and it appears that if the permittee were to assert meetings were never needed, this requirement could not be enforced.

- Part II, E.1., page 5 of the permit. This section discusses the post-construction ordinance required to be enforced by the permittee and states, “The ordinance shall require water quality and quantity components be considered in the design of new construction and implemented when practical.” This language seems unenforceable if the permittee were to contend that it was never practical to implement the requirement.
- Part II.E.4, pages 5-6 of the permit requires a watershed assessment program be developed and implemented “whenever possible to meet these goals.” The permittee might state it was never practical to implement the program, thereby making the requirement unenforceable.
- Part II.F.3, page 6 of the permit requires that a training program for municipal employees be implemented for the duration of the permit. The permit does not contain a minimum frequency for training, and so one would have to accept a minimum frequency of once per permit cycle.
- Part II.F.4, page 6 of the permit requires best management practices (BMPs) be implemented at city facilities to reduce pollutants in stormwater from these facilities and that it be implemented “whenever practical.” The permittee could argue that implementation of BMPs was never practical, rendering this requirement unenforceable.

State Response:

The final paragraph in Part IV of all MS4 permits issued by IDNR states: “The manner in which actions required by this permit are accomplished by the permittee is subject to review and approval by the Department. Should the Department give notice to the permittee that the approach used by the permittee to comply with any permit provision is unacceptable, the permittee must modify its approach as required in order to be considered in compliance with the permit.”

Thus, there is no unenforceability or, after a permittee has received specific instructions from IDNR, no ambiguity in the MS4 permits. The first and third specific items mentioned can be addressed by inserting a specific number after discussing the issue with the permittee, though this is not necessary. The second and fourth items are of greater importance, and IDNR will have an internal discussion concerning potential wording changes. As the MS4 permits now exist, IDNR may still make and enforce a decision pursuant to the final paragraph in Part IV of the MS4 permit quoted above. To date, IDNR has chosen to neither make a decision regarding, nor enforce, certain portions of the MS4 permits. It may be easier for IDNR to specify exact, enforceable language to be placed in the MS4 permits, and IDNR will discuss this option.

Regarding the general observations made in the initial paragraph of the MS4 portion of the comments, IDNR would like EPA to indicate the specific locations in the Code of Federal Regulations where the following requirements for the contents of a storm water management plan for MS4 permits are found: Standard operating procedures; Protocols; Minimum frequencies; Rationales; and Assessment of successes and failures.

IDNR's MS4 permits do specify the first three items where appropriate. The rationale for the permits (which are the storm water management programs (SWMP)) are available in hard copy or online. The assessments of successes and failures are contained in the inspection reports of IDNR field office personnel. The SWMP (permits) were written by the IDNR, and IDNR is responsible for assessing successes and failures and then changing the SWMP (permits), as the permittee cannot.

Recommendation: During the process of reissuing MS4 permits, IDNR should add more specificity and clarity to the language for expected frequencies and should modify the language for "as needed," "whenever possible," and "where(ever) practical," so that these conditions do not serve as broad, indiscrete exemptions from needing to meet the requirements at all. IDNR and EPA should work together on this matter during the process of drafting and reviewing each MS4 permit as it comes up for reissuance.

Inaccurate Permit Status Codes in ICIS for wastewater facilities

Finding: EPA reviewed 25 individually permitted wastewater facilities with permit records in ICIS. 15 of those 25 records have a Permit Status Code of "Effective." The remaining 10 records have a Permit Status Code of "Expired," which would signify that the permit expiration date has elapsed and the permittee has not submitted its reapplication. In such circumstances, the terms of the permit are no longer in force and the facility is no longer authorized to discharge. In contrast, the Permit Status Code of "Administratively Continued" is the appropriate choice when the permit expiration date has elapsed and the permittee has in fact submitted its reapplication. In those circumstances, the terms of the permit remain in force while the state takes steps to reissue the permit. EPA discussed this matter with IDNR and understands that IDNR considers non-submittal of a permit reapplication to be an enforcement priority and addresses that violation where it occurs. Non-submittal does not apply to any of the 10 facilities characterized as "Expired," however, making this code inaccurate and misleading in the national database. 7 of the 10 instances were major facilities, and only one major facility that EPA reviewed had a Permit Status Code of "Effective" rather than "Expired." A correct Permit Status Code is important so that the national, publicly available database does not show those facilities as being unauthorized to discharge. Currently, ICIS characterizes 648 Iowa permittees as having expired permits. This finding also appears as Finding 1-2 in the SRF part of the report.

State Response: IDNR transfers the data on permit application receipt from our permit database (NPDS) to ICIS in a batch upload. IDNR is unsure why the Permit Status Code is "Expired" in ICIS for 648 permits, and IDNR will investigate this to determine the cause and a possible solution. IDNR plans to correct the data (the permit application receipt dates and the Permit Status Codes) using the current batch upload process within the next few months.

Recommendation: IDNR should evaluate all 648 permit records in ICIS that currently show "Expired" in the Permit Status Code, with priority given to majors, and change the code to "Administratively Continued" if IDNR has in fact received the facility's permit reapplication. IDNR should conduct this evaluation and make the resulting changes by May 1, 2014 and report

to EPA on the completion status at that time. Once EPA is satisfied that state action has addressed the underlying concern, EPA will consider this recommendation complete.

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 on-site PQR review team, Mark Matthews and John Dunn, conducted the on-site review portion of the Iowa Department of Natural Resources' NPDES permitting program in Des Moines, IA from July 15 to July 19, 2013. Donna Porter and Kimberly Hill conducted portions of the review from Region 7's office in Lenexa, Kansas.

The Iowa 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, fact sheet, 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 to evaluate the Iowa NPDES 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 similar issues or types of permits in all states. The national topics reviewed in the Iowa NPDES program were: nutrients, pesticide general permit, pretreatment, and stormwater.

Regional topic area reviews target regionally-specific permit types or particular aspects of permits. The regional topic areas selected by EPA Region 7 included: Ethanol facilities and CAFOs. These reviews provide important information to Iowa, EPA Region 7, EPA HQ and the public on specific program areas.

A total of 15 permits were reviewed as part of the PQR. Thirteen permits were reviewed for the core review and two permits were reviewed for regional topic areas. Permits were selected based on issue date and the review categories that they fulfilled.

II. STATE PROGRAM BACKGROUND

A. Program Structure

Iowa Department of Natural Resources (IDNR) operates a central office in Des Moines and six field offices in Manchester, Mason City, Spencer, Atlantic, Des Moines, and Washington. All NPDES permits are issued from the central office, including general permits.

The field offices conduct compliance and inspection activities and address any complaints. IDNR permits CAFOs and municipal separate storm sewer systems (MS4s) using individual permits.

Currently, the IDNR NPDES Section has twelve central office staff. There are nine permit writers that develop and issue industrial and municipal permits, two permit writers for storm water, and one permit writer for CAFO's. Three of the nine permit writers are senior permit writers that provide oversight, regulatory, and technical assistance to the other permit writers. The Section Chief performs management and administrative duties. The NPDES Section is supported by four staff in the Water Resources Section.

IDNR uses a database (NPDS) to generate permit documents (e.g., cover page, outfall description page, effluent limits, and monitoring requirements). Templates are used for municipal permit rationales. Permit writers have several guidance and process manuals, developed by IDNR staff, available to them.

The EPA is reviewing existing Memoranda of Agreement (MOAs) between the EPA and states governing the NPDES permit programs as part of the Agency's activities under the October 15, 2009, Clean Water Act Action Plan (CWA Action Plan), and the Interim Guidance to Strengthen Performance in the NPDES Program (June 22, 2010). EPA Region 7 reviewed the Iowa MOA, signed August 1, 1978, and a revised MOA was drafted and submitted to IDNR for review on March 5, 2013. As of February 2014, discussions regarding the revision of the MOA are currently on-going.

B. Universe and Permit Issuance

As seen in the tables below (counts are current as of November 2013) IDNR is responsible for issuing 1,433 individual permits of which 133 are major facilities. There are also 7,925 authorizations under the 6 general NPDES permits.

Table 1

Individual permits	Permits
Industrial	339
Municipal Waste Water	828
Municipal Drinking Water Treatment Plant	88
Semi-public	222
Individual Stormwater permits	61
Individual MS4 Storm water permits	44

Table 2

General Permits	Authorizations
Storm Water Discharge Associated with Industrial Activity	1,564

Storm Water Discharge Associated with Construction Activity	3,719
Storm Water Discharge Associated with Industrial Activity for Asphalt Plants, Concrete Batch Plants, Rock Crushing Plants, and Sand and Gravel Facilities	564
Discharge from On-Site Wastewater Treatment and Disposal Systems	1,739
Mining and Processing Facilities	332
Pesticides General Permit	7

Currently, IDNR has a backlog of 654 (46%) individually permitted facilities. The large backlog is mainly due to a legislative mandate to complete a Use Attainability Analyses (UAA) prior to issuing or renewing any NPDES permit. This multi-year effort diverted permitting resources during which time the backlog grew inordinately. There is a strategy being implemented for reducing the backlog in a way that addresses priorities first. The strategy calls for 300 permits to be issued each year with a priority on permits targeted by the nutrient reduction strategy, major municipal permits, permits that have been expired the longest, EPA priority permits, and permits which have completed UAAs.

The large backlog has resulted in a large number of facilities being candidates for reissuance under EPA’s priority permits program. At the beginning of FY13 IDNR had 641 priority permit candidates, of these candidates Iowa specifically designated 129 of these as priority permits for FY13. The national goal is for states to reissue or inactivate at least 80 % of their FY13 designated priority permits. IDNR took action on 88 candidate permits during FY13 and did not meet the 80% goal. Both federal and IDNR’s NPDES regulations require permittees to submit NPDES applications 180 days prior to the permits expiring. The permit writer is responsible for the entire process, from sending the application to the facility to developing the draft permit. To assist permittees in submitting timely and complete permit renewal applications (which can optionally be submitted electronically), IDNR sends out a reminder letter ten months (300 days) before permit expiration to minor facilities, and thirteen months (390 days) before permit expiration for major facilities. The ten and thirteen month windows also allow the field offices to inspect the facility for compliance issues. A notice of violation is issued for applications over 30 days late.

When the application is received, the permit writer conducts a preliminary review to determine whether the application is complete. Permit writers review the technical aspects of the application for completeness and work with the permittee to collect any additional pertinent and/or required information. IDNR’s application forms are based on EPA’s forms, although state forms for industrial facilities request some additional information (e.g., the Supplemental Form requests sulfate and chloride data). Following receipt and a preliminary completeness review of the application, a permit writer fills out the Decision Matrix Checklist to ascertain whether permit development can begin.

The permit writer is responsible for the development of the technology based limits while the Water Quality Section develops the waste load allocations and water quality based effluent limits, which includes evaluating whether a mixing zone can be used and the appropriate size of

the mixing zone according to Iowa rules. IDNR permits contain the standard conditions required by federal regulation and they also reference the Iowa narrative water quality standards. EPA has suggested that Iowa include the narrative standards in permits verbatim instead of referencing them through a citation.

The permit writer drafts the permit rationale (which serves as the federally required fact sheet, or statement of basis) prior to drafting the permit. The draft permit and rationale are posted online at IDNR's Wastewater Permit Information Exchange (WWPIE) internet site. As agreed in the Memorandum of Agreement, EPA has 30 days to review and comment on the draft permit and rationale – this is generally done when the draft permit is put on public notice. In Iowa the State Director has delegated authority to the permit writers to issue the permits, so the final permits are signed by the permit writer. Iowa provides hearing and appeal opportunities in compliance with federal regulations.

C. State-Specific Challenges

As mentioned above the requirement to perform UAAs on all receiving water bodies before permits could be renewed was a challenge for the state and had a side-effect of bringing about a large backlog. Even after a large number of UAAs were completed, there were still delays in permitting due to disagreements with EPA over some of the results of the UAAs.

The general economic climate over the last several years has also been a drag on the State's permitting efforts due to hiring freezes because of budget constraints. However, around the time of the on-site visit, the near term outlook for the permitting program appears to be improving as 3 positions had been approved for filling. Some of the permits personnel have also been heavily involved in the development and promotion of a nutrient reduction strategy for the state that considers both point and non-point sources. Around the time of the site visit the strategy had been adopted which should again free up some resources for utilization in the permitting program.

D. Current State Initiatives

The Iowa Nutrient Reduction Strategy is a science and technology-based framework to assess and reduce nutrients from both point and nonpoint sources to Iowa waters and the Gulf of Mexico. The Strategy was a collaborative effort of the Iowa Department of Agriculture and Land Stewardship, the Iowa Department of Natural Resources, and the Iowa State University College of Agriculture and Life Sciences. The Iowa strategy outlines a pragmatic approach for reducing nutrient loads discharged from the state's largest wastewater treatment plants, in combination with targeted practices designed to reduce loads from nonpoint sources such as farm fields. This is the first time such an integrated approach involving both point sources and nonpoint sources has been attempted in the state. The point source nutrient reductions will target the levels achievable through biological nutrient reduction (BNR).

Waste load allocations and water quality-based effluent limitations are developed by following rule referenced permitting procedures. EPA has concerns about the protectiveness of a number of practices prescribed in these procedures. For the last few years IDNR has been attempting to revise these procedures in a document referred to as the Wasteload Allocation Procedures, or WLAP. IDNR has sought input on the WLAP from EPA's permitting and water quality standards programs as well as state stakeholders. The WLAP revision process has been on hold over the last year as attention has been focused on the Nutrient Reduction Strategy. EPA is anxious to see work on the WLAP resume so that permitting procedures can be improved.

III. CORE REVIEW FINDINGS

A. Basic Facility Information and Permit Application

1. 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). This information is essential for developing technically sound, complete, clear and enforceable permits. Similarly, 40 CFR 124.8(b)(1) specifies that fact sheets must include a description of the type of facility or activity subject to a draft permit.

The applications reviewed during this PQR all provided the required basic facility information and no other inadequacies were noted in the applications.

2. Permit Application Requirements

Federal regulations at 40 CFR 122.21 and 122.22 specify application requirements for permittees seeking 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 assesses whether appropriate, complete, and timely application information was received by the state and used in permit development. IDNR uses its own application forms, but they are based on EPA's forms. Where permits had not been reissued in a timely manner and applications were old, updated applications had been requested and received.

B. Technology-based Effluent Limitations

NPDES regulations at 40 CFR 125.3(a) require that permitting authorities develop technology-based requirements where applicable. Permits, fact sheets and other supporting documentation for POTWs and non-POTWs were reviewed to assess whether technology based effluent limitations (TBELs) were the appropriate level of control for the permitted facilities.

1. TBELs for POTWs

POTWs must meet secondary or equivalent to secondary standards (including limits for BOD, TSS, pH, and percent pollutant removal), and must contain numeric limits for all of these parameters (or authorized alternatives) in accordance with the secondary treatment regulations at 40 CFR Part 133. POTWs are routinely reviewed as they are put on public notice, and a POTW permit was also reviewed as part of the PQR. These reviews indicate that Iowa is correctly establishing technology-based permit limits for POTWs.

2. TBELs for Non-POTW Dischargers

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 (NSPS) for new sources. 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. If ELGs are not available, a permit must include requirements at least as stringent as BAT/BCT developed on a case-by-case using best professional judgment (BPJ) in accordance with the criteria outlined at 40 CFR 125.3(d).

Region 7 routinely reviews industrial permits. In the Permit Rationales permit writers identify applicable ELGs and document the calculation of permit limits. IDNR has been very consistent in properly applying promulgated ELGs.

EPA did a full review of a power plant permit: Muscatine Power and Water. The permit derivation followed the existing Steam Electric ELG correctly and those calculations were clearly explained. The permit contains WQ-based limits for heat and a schedule to meet those limits, and an allowance for a 316(a) variance study. The permit writer made a BPJ determination that the existing intake structure was the appropriate BAT. The BPJ BAT analysis did go through all the steps required by 40 CFR 125.3.

The permit did however fail to include TBELs for the Flue Gas Desulfurization (FGD) waste stream. The permit writer deferred on making a decision on treatment and required monitoring so that a BAT decision could be made in the next permit cycle. The need for making a decision as to whether the facility is using BAT has been discussed with IDNR permitting personnel and they have agreed to doing this on future permits. The question of appropriate BAT will be settled when the final Steam Electric ELG is promulgated. The guideline has been formally proposed and is open for public comment.

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 such “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.

The PQR for IDNR assessed the processes employed by permit writers and water quality modelers to implement these requirements. Specifically, the PQR reviewed permits, fact sheets, 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 total maximum daily loads (TMDLs).

One ongoing issue of concern is related to the UAA effort noted above. Many hundreds of reclassifications of Iowa waterbodies have been disapproved by EPA yet IDNR continues to develop permit limits based on the disapproved use. The following gives a common example of the type of situation where this is a concern: IDNR, based on a UAA, changes the classification of a waterbody from primary contact recreation to secondary contact recreation. EPA disapproves of the change in classification, but IDNR develops *E. coli* effluent limits based on secondary contact use, instead of primary contact use because that is how the state standards now classify the waterbody. EPA has objected to this practice even to the point of taking over issuance of a permit but the practice remains.

There is another common problem related to *E. coli* limits in Iowa: Clean Water Act regulations at 40 CFR 122.45(d) require that permits for continuously discharging publically owned treatment works contain short-term limits in addition to monthly permit limits unless impracticable. IDNR used to include short-term *E. coli* limits in appropriate permits until a regulatory change disallowed using the Iowa single sample maximum criteria for *E. coli*, as an end-of-pipe limit. This prohibition does not, however, preclude the IDNR from using other appropriate short-term limits. This lack of short-term limits for *E. coli* is one of the issues to be addressed in the WLAP revision discussed above.

Another *E. coli* issue is related to assumed die-off rates used in deriving permit limits. Iowa uses an outdated die-off rate based on studies of fecal coliform die-off. As part of the WLAP revision process EPA has encouraged Iowa to use more protective die-off assumptions based on more recent *E. coli* die-off studies.

The final *E. coli* issue also relates to die-off. IDNR in its modeling of *E. coli* die-off assumes extremely long amounts of time for *E. coli* to reach downstream recreation areas. These assumptions will only be valid when a stream is at very low flows. If a stream is flowing at a more average flow rate this assumption may not be protective. EPA encourages IDNR to revisit this assumption during adoption of the new WLAP.

EPA has ongoing concerns about Iowa assumptions related to Chlorine decay. These assumptions can produce permit limits which are not protective of aquatic life under some conditions. EPA has been encouraging IDNR to use more conservative assumptions related to Chlorine decay. One of the permits reviewed highlighted this concern. The Valero – Charles City facility discharges through a long pipe (5749 feet), and permit limits for TRC are 4.45 mg/L Monthly Average and 4.56 mg/L Daily Maximum. The limits are based on the assumption that Chlorine will decay in a discharge pipe the same way it would in flowing stream, which seems doubtful. It should be noted that the facility dechlorinates the city water used in cooling so actual discharge values should be much lower than the calculated water quality-based limit.

D. Monitoring and Reporting

NPDES regulations at 40 CFR 122.41(j) require permittees 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 with a frequency dependent on the nature and effect of the discharge.

IDNR has an innovative approach to E. coli sampling requirements. Many smaller facilities are not required to sample often enough to get a good statistical geometric mean. In order to overcome this problem and not burden small facilities with excessive sampling, IDNR requires smaller facilities to collect and analyze a minimum of five samples in one calendar month during a 3-month period. No more than one sample can be collected on any one day, and there must be a minimum of two days between each sample, and no more than two samples may be collected in a period of seven consecutive days. Due to factors such as size of treatment plant and/or type of waste treated, none of the permits reviewed as part of this PQR contained these provisions.

Iowa permits do not contain provisions for chronic WET monitoring (including those permits reviewed as part of this PQR). This has been an unmet action item for many years. Proposals to include chronic toxicity have not been submitted to the Governor's office for approval to begin rulemaking, however, IDNR plans to propose WET rules in fiscal year 2014. The proposed rules are detailed in IDNR's Draft Fiscal Year 2014 Regulatory Plan.

E. Standard and Special Conditions

Federal regulations at 40 CFR 122.41 require that all NPDES permits, including NPDES general 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 such as pollutant management plan or a 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 EPA reviewed each standard condition for implementation in each permit as required by 40 CFR 122.41. It was noted that IA's Standard Condition number 14 entitled "other noncompliance" does not contain the requirement that written submissions of noncompliance contain a description of noncompliance and its cause; the period of noncompliance, including

exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance as required by 40 CFR 122.41(1)(7). IDNR must include these provisions in its Standard Conditions and has indicated that it is in the process of including these requirements in the standard conditions.

Requirements tailored to an individual facility, such as compliance schedules for upgrading a plant or meeting tighter effluent limits, are found in the special conditions section of a 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 CFR 124.5). Iowa permitting procedures include all of these required components. For certain types of permits the permittee is responsible for putting a public notice of the permitting action in a local newspaper, and documentation that this has been done is submitted to IDNR and kept in the facility files. Draft permits and permit rationales are placed on the internet and anyone who wants to be notified of permit related actions is automatically sent an electronic notice. If comments are submitted on the draft permit they are posted along with the Department's response to those comments. All final permits and permit modifications (including those reviewed during the PQR) can also be accessed by the public over the internet.

G. Administrative Record

The administrative record is the foundation that supports the NPDES permit. If EPA issues the permit, 40 CFR 124.9 identifies the required content of the administrative record for a draft permit and 40 CFR 124.18 identifies the requirements for a final permit. 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.

Current regulations require that fact sheets include information regarding the type of facility or activity permitted, the type and quantity of pollutants discharged, the technical, statutory, and regulatory basis for permit conditions, the basis and calculations for effluent limits and conditions, the reasons for application of certain specific limits, rationales for variances or alternatives, contact information, and procedures for issuing the final permit. Generally, the administrative record includes the permit application, the draft permit, any fact sheet or statement of basis, documents cited in the fact sheet or statement of basis, and other documents contained in the supporting file for the permit.

The quality of Iowa permit rationales (fact sheets and statement of basis) has been improving over the years by including more and more information about how permit limits were derived

and better descriptions of the facility, and concerns unique to the facility. In general Iowa permits and the associated permit rationales provide a clear description of the permitted facility, including a description of the wastes being treated and the treatment processes involved. While receiving waterbodies are identified, their status as impaired or meeting standards is not always identified (as was found with the Sioux City MS4 permit). If a facility discharges to an impaired waterbody then the permit rationale always needs to state so. Another area that could be improved is a more consistent identification of whether lagoons are continuously discharging or are controlled discharge lagoons.

1. Documentation of Effluent Limitations

Permit records for POTWs and industrial facilities should contain comprehensive documentation of the development of all effluent limitations. Technology-based effluent limits should include assessment of applicable standards, data used in developing effluent limitations, and actual calculations used to develop effluent limitations. The procedures implemented for determining the need for water quality-based effluent limitations as well as the procedures explaining the basis for establishing, or for not establishing, water quality-based effluent limitations should be clear and straight forward. The permit writer should adequately document changes from the previous permit, ensure draft and final limitations match (unless the basis for a change is documented), and include all supporting documentation in the permit file.

IDNR permits, are backed by the documentation required by regulation, but instances where permit rationales should have contained more information were found during this PQR and have been noted in other parts of this report. Facility descriptions are usually complete and clearly written. The permit records contain facility location (Section, Township, Range), maps of facilities and receiving streams, and flow maps for industrial facilities. Receiving streams are described succinctly and applicable levels of protection are described in the permit rationale. The permit writer also prepares a review document that summarizes monitoring data from the last permit cycle.

During the PQR the following was found with regard to permit documentation: Documentation follows the permit development process. Permit writers make the assessment of applicable SIC Code and determine if an Effluent Limitation Guideline applies. The permit writer creates a list of pollutants of concern, and the Waste Load Allocations (WLAs) are calculated by Water Quality specialists. The WLA procedures are highly regimented and the approaches are established in rule referenced procedures. The permit writer then develops the permit using the Technology-based Effluent Limits (TBEL) and Water Quality-based Effluent Limits (WQBEL) calculations. Fact sheets detail the limited parameters with a pollutant by pollutant discussion of the rationale for the limit (or monitoring requirement). Fact sheets contain a description of any changes in limits as permits are renewed with a reason for the new limit.

For small data sets IDNR does not use EPA's recommended statistical procedure for determining reasonable potential but instead uses some rules of thumb which can cause problems in some instances. For example, during routine permit reviews (ie. reviews which were not part of this this PQR) examples have been noted where if a facility only has one or two analyses of *E. coli* then the permits routinely require only monitoring for *E. coli* even if one of the samples is high enough to clearly show that a facility is capable of discharging *E. coli* in high enough concentrations to violate water quality criteria. IDNR has been implementing this

practice for several years now such that some facilities which, due to this practice, were required to monitor for E. coli by a previous permit are now having their permits reissued with E. coli limits based on the monitoring data from the previous permit. None of the permits reviewed as part of this PQR were affected by this issue.

Permit limits for POTWs and industrial facilities are calculated in units consistent with the applicable effluent guidelines. Permit limits are stated in term of mass and concentration for all parameters (except pH and temperature).

H. National Topic Areas

National topic areas are aspects of the NPDES permit program that warrant review based on the specific requirements applicable to the selected topic areas. These topic areas have been determined to be important on a national scale. National topic areas are reviewed for all state PQRs. The national topics areas are: nutrients, pesticides, pretreatment and stormwater.

1. Nutrients

For more than a decade, both nitrogen and phosphorus pollution has consistently ranked as one of the top causes of degradation of surface waters in the U.S. Since 1998, EPA has worked at reducing the levels and impacts of nutrient pollution. A key part in this effort has been the support EPA has provided to States to encourage the development, adoption and implementation of numeric nutrient criteria as part of their water quality standards (see the EPA's *National Strategy for the Development of Regional Nutrient Criteria*). As pointed out in EPA's prior comments regarding IA' nutrient reduction strategy dated January 9, 2013, EPA views numeric criteria as important tools for effective water quality management of nutrient pollution and does not believe that the portion of IA's strategy addressing "Numeric Criteria Limitations" reflects EPA's current thinking about numeric criteria development and implementation.

In a 2011 memo to the EPA regions titled *Working in Partnerships with States to Address Nitrogen and Phosphorus Pollution through use of a Framework for State Nutrient Reductions*, the Agency announced a framework for managing nitrogen and phosphorus pollution that, in part, relies on the use of NPDES permits to reduce nutrient loading in targeted or priority watersheds. To assess how nutrients are addressed in the Iowa NPDES program, EPA Region 7 reviewed a permit with nutrient concerns permits and Iowa's new Nutrient Reduction Strategy.

The 2008 Gulf Hypoxia Action Plan calls for a 45% reduction in N and P. Iowa's Nutrient Reduction Strategy follows EPA's 2011 guidance for developing state frameworks. The point source aspect of the Strategy focuses on the 102 Major POTWs in the state, and 28 industrial sources with significant nutrient discharges – All 130 facility permits will require technically and economically feasible changes for nutrient removal. Minor POTWs are not a direct focus of the plan, but may receive permits that call for nutrient reduction if they are causing or contributing to an impairment. The Strategy targets a 66% reduction in current N discharge from all point sources, and a 75% reduction in current P discharge from all point sources. This will be an overall reduction of 4% N and 16% P from all nutrient sources (point and non-point). The reductions are achieved through requiring effluent to meet nutrient levels achievable through Biological Nutrient Removal technology. The strategy envisions the reductions being achieved over the course of a couple of permit cycles for most facilities and sooner for facilities with capacity already in place. Iowa has begun issuing permits which contain the requirements

called for in the strategy however none of those permits happened to be reviewed as part of this PQR.

2. Pesticides

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 (National Cotton Council of America v. EPA, 553 F.3d 927 (6th Circuit 2009)) in which the Court vacated EPA's 2006 Final Rule on Aquatic Pesticides (71 Fed. Reg. 68483, November 27, 2006) and found that point source discharges of biological pesticides and chemical pesticides that leave a residue, into waters of the U.S. were pollutants under the CWA. The federal PGP applies where the EPA is the permitting authority. Approximately 40 authorized state NPDES authorities have issued state pesticide general permits as of November 2011.

Background

On January 7, 2009, the Sixth Circuit Court vacated the EPA's 2006 NPDES Pesticides Rule under a plain language reading of the CWA. National Cotton Council of America v. EPA, 553 F.3d 927 (6th Circuit 2009). The Court held that the CWA unambiguously includes "biological pesticides" and "chemical pesticides" with residuals within its definition of "pollutant." In response to this decision, on April 9, 2009, EPA requested a two-year stay of the mandate to provide the Agency time to develop general permits, to assist NPDES-authorized states to develop their NPDES permits, and to provide outreach and education to the regulated community. On June 8, 2009, the Sixth Circuit Court granted EPA the two-year stay of the mandate. On March 28, 2011, the U.S. Court of Appeals for the Sixth Circuit granted EPA's request for an extension to allow more time for pesticide operators to obtain permits for pesticide discharges into U.S. waters. The court's decision extended the deadline for when permits would be required from April 9, 2011 to October 31, 2011.

As a result of the Court's decision to vacate the 2006 NPDES Pesticides Rule, NPDES permits are required for discharges of biological pesticides and of chemical pesticides that leave a residue, to waters of the United States. EPA proposed a draft pesticide general permit on June 4, 2010 to cover certain discharges resulting from pesticide applications. EPA Regional offices and state NPDES authorities may issue additional general permits or individual permits if needed.

The Environmental Protection Commission adopted the Final Rule concerning the Iowa Pesticide General Permit (PGP) in a meeting on January 18, 2011. The Iowa PGP for Point Source Discharges to Waters of the United States from the Application of Pesticides became effective March 30, 2011. On April 24, 2013 the Iowa Governor signed Bill Number: HF 311, DNR Water Related Code Change Bill, to clarify that the proper use of aquatic pesticides in Iowa is not prohibited. This was the only remaining obstacle in state law preventing the state NPDES permitting authority from fully implementing the federal NPDES requirements.

Findings

Iowa was the first of the Region 7 states to develop a draft permit for review and served as a model for the remaining three states. Their final permit aligns closely with the federal Pesticide General Permit. The PGP is available to operators for the application of 1) biological pesticides and 2) chemical pesticides which leave a residue (hereinafter collectively "pesticides") that result in

a discharge to waters of the United States (U.S.). In addition to a PGP, Iowa has pesticide applicators laws that assist in controlling discharges from pesticide applications.

The Iowa PGP does not provide coverage for discharges from pesticide applications that are to Outstanding National Resource Waters (ONRW), impaired waters, shallow wells, and endangered and threatened species and critical habitats. It also does not provide coverage for discharges from pesticide applications that are covered by another permit and discharges that are one half mile from drinking water intake structures. Iowa staff will evaluate these discharges on a case-by-case basis to determine if an individual permit is required for coverage. IDNR has not issued any individual permits for discharges from pesticide applications at this time.

If a permittee meets the threshold criteria in the PGP, they must submit a Notice of Intent. Iowa has received five (5) NOIs to date. These NOIs are paper submittals and Iowa has no plans to develop an electronic system.

The PGP requires annual reporting and pesticide discharge management plans from permittee who are required to submit NOI. The permittee must submit their annual report no later than February 15 for all pesticide activities covered under the permit occurring during the previous calendar year. The permittee submits the plan to state staff for review as needed. The PGP does not require ambient water quality monitoring because the Iowa Geological Survey Bureau collects monitoring data that is available to IDNR upon request.

The PGP does include permitting requirements for discharges associated with declared pest emergencies and serves as a extra layer of protection since it is difficult to know when a vector virus will affect a community. This is not a requirement since the federal and state PGPs were developed using Best Professional Judgments (BPJ). A declared pest emergency is an event defined by a public declaration by a federal agency, state, or local government of a pest problem determined to require control through application of a pesticide beginning less than ten days after identification of the need for pest control. This public declaration may be based on: (1) Significant risk to human health; (2) Significant economic loss; or (3) Significant risk to: (i) Endangered species, (ii) Threatened species, (iii) Beneficial organisms, or (iv) The environment.

IDNR has two staff committed to administering NPDES permits for discharges from pesticide applications. These two individuals held 7-8 public meetings throughout the state during the rulemaking process and currently maintain a PGP web page

<http://www.iowadnr.gov/InsideDNR/RegulatoryWater/NPDESWastewaterPermitting/NPDESGeneralPermits/GP7Pesticides.aspx>) which is updated as necessary.

3. Pretreatment

The general pretreatment regulations (40 CFR 403) establish responsibilities of federal, state, and local government, industry and the public to implement pretreatment standards to control pollutants from industrial users which may cause pass through or interfere with POTW treatment processes or which may contaminate sewage sludge.

Background

The goal of this pretreatment program review was to assess the status of the pretreatment program in Iowa, as well as assess specific language in POTW NPDES permits. With respect to NPDES permits, focus was placed on the following regulatory requirements for pretreatment activities and pretreatment programs:

- 40 CFR 122.42(b) (POTW requirements to notify Director of new pollutants or change in discharge);
- 40 CFR 122.44(j) (Pretreatment Programs for POTWs);
- 40 CFR 403.8 (Pretreatment Program Requirements: Development and Implementation by POTW);
- 40 CFR 403.9 (POTW Pretreatment Program and/or Authorization to revise Pretreatment Standards: Submission for Approval);
- 40 CFR 403.12(i) (Annual POTW Reports); and
- 40 CFR 403.18 (Modification of POTW Pretreatment Program).

The PQR also summarizes the following: program oversight, which includes the number of audits and inspections conducted; number of significant industrial users (SIUs) in approved pretreatment programs; number of categorical industrial users (CIUs) discharging to municipalities that do not have approved pretreatment programs; and the status of implementation of changes to the general pretreatment regulations at 40 CFR part 403 adopted on October 14, 2005.

The State of Iowa was authorized to implement the Pretreatment program on June 3, 1981. Individual POTW program approvals primarily occurred in the 1983 through 1985 time frame when 19 cities applied for and were granted implementation authorization. Two additional programs were approved by 1995 bringing the total to 21. Below is a table of statistics based on State records, semiannual reports on compliance to the Region, and annual reports submitted by Approved Pretreatment Program cities.

State of Iowa Pretreatment Program at a Glance 2012	
Number of Approved program cities	21
Number of SIUs in Program cities	225
Number of non Categorical SIUs in Program Cities	127
Percent non-Categorical SIUs in Program Cities with unexpired permits, Dec 31, 2012	100%
Number of Categorical SIUs in Program Cities	98
Percent Categorical SIUs in Program Cities with unexpired permits, Dec 31, 2012	100%
Number of SIUs in non-approved Cities	167
Number of CIUs in non-approved Cities	57
Number of PCIs/PCAs in FY2012	10
Date State Program updated for Streamlining Regulations	11/15/06

Program Strengths

The IDNR implements its authorized Pretreatment program by splitting duties between the Pretreatment Coordinator in the Des Moines Central Office and wastewater inspectors in the six field offices. In general, the Pretreatment Coordinator is responsible for Pretreatment implementation NPDES permit language, Treatment Agreement review and approval, and fulfilling reporting requirements to EPA Region 7. The Pretreatment Coordinator also receives all annual reports submitted by the 21 Pretreatment Program Cities.

The field offices inspect industries outside Pretreatment cities and conduct Pretreatment audits or inspections. In general, IDNR does not place much distinction between an audit or a PCI. The goal of the CMS strategy is for each approved Pretreatment city to receive one audit and two PCIs in a five year span. This equates to 63 total Pretreatment inspections for the 21 cities in the five year period, or an annual average of 12.6. In FY2012, IDNR inspected 7 Pretreatment cities while EPA inspected 3, for a total of ten, slightly less than the CMS goal on average. However, there are three or four Pretreatment cities that have had significant losses in SIUs and they do not need the same level of oversight as they used to. The IDNR does a good job prioritizing those cities that need a Pretreatment inspection in any given year.

Iowa was the first state in Region 7 to adopt the Streamlining Pretreatment Regulation Changes of November 14, 2005. The state adopted the EPA regulations by reference on November 15, 2006. Consequently, they have legal authority for both the mandatory regulation changes as well as the optional ones. They ensure that all Program cities adopt or will adopt the changes through permit implementation language

Iowa is ahead of the national curve in identifying and regulating SIUs outside Pretreatment program cities. Not only do they know and regulate Categorical industries, but also non-Categorical SIUs. They use Treatment Agreements (TAs) between the SIU and city to establish limits and requirements. The efficacy of the TA is discussed in a later section of this report.

Critical Findings

As part of the PQR analysis for Pretreatment implementation requirements, five permits were selected, three from Pretreatment program cities, and two from non-program cities. The two non-program cities were chosen at random; neither one had TAs with contributing industries.

Pretreatment implementation requirements, whether for program or non-program cities, is covered in a section of the permit entitled Major Contributing Industries, Limitations, Monitoring, and Reporting Requirements; however, depending on if the permit holder is authorized to implement a Pretreatment program, the language differs somewhat.

Non-Program Cities

Both of the non-program cities' (Janesville and Rock Valley) permits were issued in 2010 and use the term "Significant Industrial Users" (new definition) rather than the outdated Major Contributing Industry (old definition). The city is required to notify IDNR 180 days prior to accepting wastes from an SIU; 60 days prior to "expansion, production increase, or process modification" that would affect an existing treatment agreement; notify 10 days prior to any commitment to accept waste from a new SIU. The notification is to include a new or revised treatment agreement for the department to review and approve. There are two other provisions

on the Major Contributing Industries page. One requires the city to ensure that all users of the facility are in compliance with various sections of the Clean Water Act; the other requires that the city “limit and monitor” pollutants for each SIU if such limits are included in the city’s permit, and to report those results to IDNR monthly.

In general this language satisfactorily establishes requirements for any non-Pretreatment city to notify the IDNR of new SIUs (SIU as defined by the General Pretreatment Regulations); establish treatment agreements with those SIUs, the limits of which are approved by IDNR; and enforce those limits through monitoring and reporting.

For those cities where the IDNR may wish to require that a Pretreatment program be developed, the permit’s Standard Conditions contains a clause at Permit Modification, Suspension, or Revocation which allows that the permit may be “modified...” for those reasons specified in state code 567-64.3(11) IAC. A review of 567-64.3(11) IAC found that it allows for modification for any Cause listed in 40 CFR 122.62. Referring to 40 CFR 122.62 found that 122.62(9) provides that a permit can be modified to require the development of a Pretreatment program.

Pretreatment Program Cities

Three permits for Pretreatment program cities were randomly selected from the universe of 21. Two of the permits had been issued recently (Clinton and Ottumwa), while one was expired (Sioux City). Implementation language is very similar in some regards to the non-program cities. Requirements are found on the same Major Contributing Industries page with the first two requirements identical. The first requirement specifies that IDNR is to be notified of any SIU; notified of any changes at an SIU that modifies a treatment agreement along with the modified TA, and notified of any new SIU along with the treatment agreement submitted with the notification. The problem is that none of this applies nor is enforced. It is IDNR’s practice that the 21 Pretreatment program cities do not need treatment agreements with their SIUs because all of the cities have permitting authority. Program cities are required to develop local limits (which IDNR approves) and use them to establish permit requirements in lieu of treatment agreements. Consequently, all Pretreatment cities are in violation of this requirement of their NPDES permit. This could be changed by simply adding a qualifier in the first sentence: “Unless you are required to implement a Pretreatment program approved by the IDNR...then you are required to notify...”

Up to four other significant Pretreatment requirements are established in this section of the permit: the requirement to reevaluate local limits, the requirement to submit annual reports on Pretreatment activities by March 1 of each year, the requirement to evaluate the city’s program with regards to the streamlining rule, and the requirement to implement the city’s approved program.

The permit’s language for reevaluating local limits is very well written and comprehensive. There can be no confusion of what is required. At the time of permit issuance, a specific date is inserted into the requirement so it is clearly known when the work must be submitted. This is easier to track by both IDNR and the permit holder.

For those cities that have not yet revised their Sewer Use Ordinances to incorporate the mandatory Pretreatment streamlining rule modifications, the IDNR includes a requirement in

this section. The requirement is given a due date certain whereby the city is to provide an analysis of where their SUO is lacking and a proposal for modification.

Program implementation is required by one simple sentence: “You shall continue to implement the pretreatment program approved [date] and any amendments thereto.” While reviewing Sioux City and Ottumwa permits it was noticed that the data for both was June 12, 1984. Knowing that it would be highly unlikely for two programs to have been approved on the same day, the PQR review was expanded to look at this clause in all 21 Pretreatment city permits. What was found was that fully 11 of the permits referred to approval dates that did not agree with those on file at Region 7. Below is a table showing the status of each Pretreatment city and the current permit’s expiration date. The IDNR needs to verify the Region’s record of approval dates and compare them to those that are included in each Pretreatment city permit, and make corrections as needed.

There is concern that these cities with citations to the wrong Pretreatment Program approval date do not have an NPDES permit requirement for program implementation. The IDNR should consider adding a sentence or clause to the implementation requirement that also requires implementation of the General Pretreatment Regulations at 40 CFR Part 403.

Comparison of Program Approval Dates and NPDES Permit Language			
Pretreatment Program City	Approval Date Cited in Permit	Actual Approval Date	Expiration Date/Permit Status
Ames	10/11/83	10/11/83	08/31/15
Ankeny	06/12/84	01/30/89	Expired 09/23/09
Boone	10/16/95	10/16/95	Expired 05/26/08
Burlington	No reference	10/06/83	09/24/2013
Cedar Falls	08/19/85	08/19/85	01/04/14
Cedar Rapids	10/19/84	10/29/84	01/04/2016
Clinton	03/14/84	10/27/83	08/31/17
Council Bluffs	10/11/83	10/11/83	Expired 03/08/2012
Davenport	07/23/02	09/01/83	Expired 07/07/2008
Des Moines	10/11/83	10/11/83	04/27/15
Dubuque	09/29/83	09/29/83	07/14/03
Fort Dodge	01/30/84	01/30/84	03/26/14
Fort Madison	10/05/83	10/05/83	12/31/15
Iowa City	01/30/89	02/29/84	Expired 12/26/05
Keokuk	06/10/84	08/04/83	03/31/17

Comparison of Program Approval Dates and NPDES Permit Language			
Pretreatment Program City	Approval Date Cited in Permit	Actual Approval Date	Expiration Date/Permit Status
Marshalltown	06/12/84	09/26/83	Expired 09/20/09
Mason City	06/12/84	10/04/83	Expired 01/27/07
Muscatine	10/14/83	10/14/83	01/07/14
Ottumwa	06/12/84	12/13/83	09/30/17
Sioux City	06/12/84	06/12/84	Expired 10/24/11
Waterloo	06/12/84	03/12/84	02/28/15

Industries Outside Pretreatment Cities - Treatment Agreement Analysis

Prior to receiving authorization to administer the Pretreatment program on June 3, 1981 the IDNR developed the concept of a treatment agreement between the receiving POTW and industrial user as a way of controlling indirect dischargers. The original TA was written around the definition of “Major Contributing Industry,” which was similar to the Pretreatment program’s Significant Industrial User, the main difference being that a non-Categorical Major Contributing Industry was defined as having a flow rate of 50,000 gallons or more per average workday while the corresponding requirement of the SIU is 25,000 gallons per day of process flow. The definition of Major Contributing Industry has been renamed “Significant Industrial User” and redefined to bring the flow threshold in line with the Pretreatment definition of SIU.

A Treatment Agreement contains limits developed between the industry and the receiving POTW with review and approval by IDNR. This agreement is then written into the POTW’s NPDES permit, the implementation and enforcement of which becomes a permit requirement. Regulation of the discharger is therefore achieved through two mechanisms: the agreement (contract) between the industry and POTW, and the NPDES permit requirement for the city to enforce that contract. The NPDES permit, when modified to require implementation of the TA, establishes sampling requirements as deemed appropriate by IDNR of the industry by the receiving POTW. Consequently, an analysis regarding whether regulation of the industrial discharge with respect to requirements of 40 CFR 403.8(f)(1)(iii) is adequate requires evaluating both the agreement between the industry and city (DNR Form 31) and the city’s NPDES permit. To perform this evaluation, which constitutes Section IV of the PQR checklist, the questions from the checklist are reproduced in Appendix E and an explanation is given there of their applicability.

4. Stormwater

Background

The NPDES program requires stormwater discharges from certain construction sites, industrial activities, and municipal separate storm sewer systems (MS4s) to be permitted. Any state which is authorized to implement the NPDES program automatically assumes responsibility for the stormwater program also.

IDNR is fully implementing all aspects of the federally mandated stormwater program. Stormwater permits are written at the central office in Des Moines, and the central office has a comprehensive website set up to assist with the permitting needs of the regulated community. Authorizations to discharge under the general permits are granted by the central office. All enforcement and other follow-up activity after a permit is issued are handled out of the six IDNR field offices.

Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s)

The NPDES program requires stormwater discharges from certain municipal separate storm sewer systems (MS4s), industrial activities, and construction sites to be permitted. Iowa has two phase I MS4s, Des Moines and Cedar Rapids, both of which have current permits. The 2010 census has brought at least six new MS4s under regulation. These MS4s have been notified and are submitting applications for permit coverage. With the addition of these new MS4s there will be approximately 50 regulated small MS4s in Iowa. IDNR issues individual permits to these MS4s instead of covering them all under a general permit. There are currently two Phase II MS4s with expired permits due to a state restriction on reissuing permits to permit holders who are out of compliance. The program is working to resolve these issues so that the permits can be renewed. The individual permits contain specific requirements for the six minimum measures required by 40 CFR 122.34.

As with the other stormwater permits, the permits are written by the central office but all follow-up work is done by the field offices, including receipt and review of annual reports and ordinances developed to meet permit conditions. If annual reports are not submitted, the field offices are responsible for notifying the MS4. Field offices are performing MS4 audits on a routine basis. The recent addition of staff to the Iowa stormwater program will allow for improved compliance assistance outreach efforts. The current plan is for the senior stormwater staff person to visit each MS4 in order bring about improvements to all programs and develop more consistency among IA MS4s.

A MS4 permit was reviewed as part of this program review. The only deficiency noted was that one of the MS4 receiving streams was on the state 303(b) list for impairment, but neither the permit nor the permit rationale made any reference to this impairment. Whenever there is a discharge to any impaired waterbody, the permit rationale should always discuss the impairment and whether/how the permit addresses the impairment. The 40 CFR 122.34 (b)(2) requirement to comply with state and local public notice requirements is not contained in the permit, however no state or local public notice requirements related to stormwater exist. Regardless, IDNR indicated that they intend to include the provision in all reissued permits.

General Permits for Stormwater Discharges Associated with Industrial Activity (GP#1 and #5)

IDNR's has two general industrial stormwater permits both issued Oct. 1, 2012. One permit covers asphalt plants, concrete batch plants, rock crushing plants, and construction sand and gravel facilities (there are currently 564 facilities covered by this permit). The other general permit covers all other industrial stormwater facilities except those facilities which have stormwater provisions in their individual NPDES permits (there are currently 1,564 facilities

covered by this permit). The central office issues the two general permits and is responsible for authorizing facilities under the general permits, and the field office performs any follow-up after authorization. Each field office is responsible for developing and implementing its own inspection program. There have been recent efforts which will promote consistency across field offices, such as inspection training.

Most facilities are not required to submit the required Stormwater Pollution Prevention Plan (SWPPP) unless notified by the department that they have to do so, however, facilities located within the jurisdiction of permitted MS4s are required to send a copy of their SWPPP to the MS4.

General Permit for Stormwater Discharges from Construction Activity (GP#2)

Reissuance of the general construction permit occurred on Oct 1, 2012, and there are currently 3,719 construction projects covered by the permit, with an average of around 2,000 new projects seeking coverage per year. The current permit addresses the new requirements of the construction stormwater effluent guidelines except the 40 CFR 450.21(a)(4) requirement to minimize the disturbance of steep slopes. IDNR did not include the requirement because “steep” and “minimize” are not defined, however IDNR has indicated that the provision will be included in the reissued permit. They will also clarify in the reissued permit which types of typical construction/development discharges are not covered by the permit.

Applications for coverage under the general construction stormwater permit are submitted to the central office where basic information is logged into a state database. The central office then processes the application and issues coverage under the general permit. Any inspections that might occur are initiated out of the field offices. The general permit does not require the permittee to submit the Stormwater Pollution Prevention Plan (SWPPP) unless the department requests it. If a notice of termination is not submitted for the project in a timely manner, then the central office sends out a letter of warning to either renew the permit or submit a notice of termination.

Overall, the construction stormwater permitting program appears to be running well and no problems were noted during the review.

IV. REGIONAL TOPIC AREA FINDINGS

A. Ethanol Producing Facilities

The ethanol industry has grown very quickly in the past decade. Iowa is now the largest producer of ethanol in the nation. Annual production capacity is 3.7 billion gallons, using more than 1.3 billion bushels of corn. About 30% of Iowa’s corn crop is used to make ethanol. The Dried Distillers Grain (DDG) left over from the process is a major source of feed for the livestock industry.

The early generation plants were constructed very quickly and regulators struggled with appropriate permits for the new industry. In 2007, Region 7 produced a manual: Environmental Laws Applicable to Construction and Operation of Ethanol Plants. In the first round of permits

there was difficulty understanding the nature of the discharges, most permits were written with only a speculative description on discharge quality and no prior effluent monitoring. Ethanol production is not covered by an Effluent Limitation Guideline (ELG), so permit writers had to use Best Professional Judgment (BPJ) to set technology-based limits.

EPA headquarters considered developing ELGs for the Ethanol and Biodiesel industries. In 2008, Regions 5 and 7 arranged a tour of a group of facilities in Iowa and Illinois. Headquarters decided not to pursue the ELG process, so permit writers must still use BPJ in setting technology limits. The purpose of this review was to see if permits are being written in a consistent and appropriate way.

Our review showed that the industry has changed greatly over the last decade. The biggest change is in water consumption. Ethanol plants use significant amounts of water. Many facilities use well water and treat the water using reverse osmosis (RO), the RO reject water volume is one gallon per 3-4 gallons of permeate water to feed the process. First generation facilities used 4-6 gallons of process water to produce one gallon of ethanol, but modern facilities use about 2.8 gallons water/gallon ethanol. The process water is consumptively used, lost to low quality steam from the distillation process and from the drying of DDG. The drop in water use is due to more efficiency of heat recycle within the newer, larger facilities. The economics of energy conservation has given the new facilities a significant fiscal advantage and most of the older, smaller facilities have gone out of business.

With newer facilities, the only discharges are non-process water from RO reject and from cooling tower blowdown. Region 7 states have had concerns with these discharges. Both discharges will have concentrated amounts of groundwater minerals and can contain toxic levels of Total Dissolved Solids (TDS). There are a number of facilities that have constructed long pipelines to carry discharges to a stream with enough flow to allow dilution and compliance with state water quality standards.

The permits we reviewed had complete applications and were drafted in a uniform manner even though written by two different permit writers. The permit development documents were very complete in their calculation of water quality-based limits for pollutants of concern, including the additives used in the cooling water blowdown. The permit rationales did not include a discussion of BPJ technology-based limits for RO reject water and cooling tower blowdown. This omission did not affect the final permit limits: it would be easy to show that capture of these minerals would be difficult and costly, but that factor should be mentioned.

Ethanol facility fact sheets contain a thorough assessment of water quality and permits contain appropriate water quality based limits. Ethanol permits should contain BPJ technology assessments for non-process water discharges.

V. ACTION ITEMS

This section provides a summary of the main findings of the review and provides proposed action items to improve Iowa NPDES permit programs. This list of proposed action items will serve as the basis for ongoing discussions between EPA Region 7 and Iowa as well as between

EPA Region 7 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 state's or Region's NPDES permit program.

The critical findings and recommended actions proposed 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 or may serve as a roadmap for modifications to the Region's program management.

A. Basic Facility Information and Permit Application

No deficiencies were noted during the program review.

B. Technology-based Effluent Limitations

Category 1 – TBELs are required for all permits, even in cases like Flue Gas Desulfurization where final effluent guidelines have not been promulgated.

Category 1 - TBELs determinations (and associated documentation) are required for non-process waste water discharges (e.g. RO reject water at ethanol plants).

C. Water Quality-Based Effluent Limitations

Category 1 – As required by 40 CFR 122.45(d) Iowa needs to start including short-term limits for *E. coli* in all continuously discharging publically owned treatment works permits that have *E. coli* limits.

Category 1 – As required by 40 CFR §122.44(d) Iowa must establish water quality-based limits if the possibility of criteria violations is clear, even if that possibility is only established by limited data.

Category 1 – Iowa must establish limits based on EPA approved uses for receiving waterbodies, not on disapproved uses.

Category 2- Iowa needs to establish and implement the new Wasteload Allocation Procedures (WLAP) as expeditiously as possible in order that permitting procedures which will produce limits that are fully protective of water quality standards.

D. Monitoring and Reporting

Category 1- A long-standing unmet action item is the need for IDNR to include chronic non-lethal WET protection in its permits.

E. Standard and Special Conditions

Category 1 – Iowa needs to include all the requirements of 40 CFR 122.41(l)(7) in its standard conditions. This includes the requirement that written submissions of noncompliance contain a description of noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

F. Administrative Process

No deficiencies were noted during the program review.

G. Documentation

Category 2- Permit rationales need to always identify if a facility discharges to an impaired waterbody and also whether a lagoon is continuously discharging or a controlled discharge lagoon.

H. National Topic Areas

Proposed actions items for core topic areas are provided below.

1. Nutrients

Category 2 – EPA views the adoption of numeric nutrient criteria as an important tool for effective water quality management of nutrient pollution.

2. Pesticides

No deficiencies were noted during the program review.

3. Pretreatment

Category 1 - IDNR needs to ensure that the correct program approval dates are included in each Pretreatment city permit since the only statement in the permit that requires Pretreatment implementation hinges on the cited date.

Category 1 - IDNR should ensure that all Treatment Agreements are incorporated into the POTWs' NPDES permits as expeditiously as possible.

Category 2 – To keep Pretreatment cities from being in unintentional violation with permit Pretreatment implementation language, IDNR should modify the “Major Contributing Industries” provisions that require approved Pretreatment program cities to submit treatment agreements for the Department to review, since this is not done in practice.

Category 2 - IDNR should consider adding a sentence or clause to the permit Pretreatment implementation language that also cites implementation of the General Pretreatment Regulations at 40 CFR Part 403. This would ensure that a permit that refers to a wrong approval date would still have Pretreatment implementation requirements.

4. Stormwater

Category 1 – At reissuance of General Permit #2 (Stormwater Discharges from Construction Activity), IDNR must address the provisions of 40 CFR 450.21(a)(4) regarding the minimization the disturbance to steep slopes.

Category 1 – Reissued MS4 permits must include the requirements of 40 CFR 122.34 (b)(2) requiring compliance with state and local public notice requirements.

Category 2 - During the process of reissuing the next iteration of GP #1, IDNR should add more specificity and clarity to the language for notifications, frequencies, and deadlines, in order to make those provisions more enforceable by regulatory bodies.

Category 2 - At reissuance of General Permit #2 (Stormwater Discharges from Construction Activity), IDNR will explicitly state in the permit that certain common construction related discharges are prohibited, including those specified in 40 CFR 450.21(d)(1), 450.21(d)(3), 450.21(e), and 450.21(d)(2).

Note: The lack of discussion of an impaired waterbody discharged to by an MS4 permit reviewed as part of this PQR is addressed in the action item section “G. Documentation” above.

I. Regional Topic Area

Proposed action items for special focus areas are provided below.

1. Ethanol Facilities

No deficiencies specific to ethanol facilities were noted during the program review. The lack of TBELs found for an ethanol facility is addressed in the action items for “ B. Technology-based Effluent Limitations” above.

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

Reviews cover:

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

EPA conducts SRF reviews in three phases:

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

EPA builds consultation into the SRF to ensure that EPA and the state understand the causes of issues and agree on actions needed to address them. SRF reports capture the agreements developed during the review process in order to facilitate program improvements. EPA also uses the information in the reports to develop a better understanding of enforcement and compliance nationwide, and to identify issues that require a national response.

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

Each state's programs are reviewed once every four years. The first round of SRF reviews began in FY 2004. The third round of reviews began in FY 2013 and will continue through FY 2017.

II. SRF Review Process

Review period: Federal Fiscal Year 2012

Key dates:

- Kickoff letter sent to state: March 29, 2013
- Kickoff meeting conducted: January 2013 via multiple conference calls
- Data metric analysis and file selection list sent to state: March 23, 2013
- On-site file review conducted: July 15-18, 2013
- Draft report sent to state: September 13, 2013
- Draft report response sent from state to EPA: November 14, 2013
- Report finalized: March 24, 2013

State and EPA key contacts for review:

- EPA Region 7 PQR lead reviewer: Mark Matthews
- EPA Region 7 SRF Clean Water Act lead reviewer: Michael Boeglin
- EPA Region 7 SRF coordinator: Kevin Barthol
- IDNR Environmental Services Division lead contact for the review: Dennis Ostwinkle

Notes on the scope of this SRF review:

The context of the CWA-NPDES program review excludes the Concentrated Animal Feeding Operations (CAFO) program, which EPA thoroughly reviewed in 2011 in response to a Petition for Withdrawal of the NPDES Program Authorization from the State of Iowa. The petition alleges that Iowa's NPDES CAFO program does not meet the requirements of the Clean Water Act. On September 11, 2013, EPA and IDNR signed a Work Plan Agreement to correct deficiencies in Iowa's CWA permit and compliance program for CAFOs.

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 last SRF review
- Follow-up conversations with state agency personnel
- Review of previous SRF reports, Memoranda of Agreement (MOAs), or other data sources
- Additional information collected to determine an issue's severity and root causes

There are three categories of findings:

Meets or Exceeds Expectations: Describes a situation where no performance deficiency is identified or where a state has performed beyond expectations.

Area for State Attention: An activity, process, or policy that one or more SRF metrics show as a minor problem. The state should correct the issue without additional EPA oversight. EPA may make recommendations to improve performance, but it will not monitor these recommendations for completion until the next SRF review.

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

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

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

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

Clean Water Act Findings

Element 1 — Data																																										
Finding 1-1	Meets or Exceeds Expectations																																									
Summary	Entry of data for permit limits, DMRs, and inspections meets or exceeds national program expectations.																																									
Explanation	<p>Permit limits and DMRs were present in ICIS for nearly all major facilities, exceeding the national goal for these metrics in FFY 2012. For non-major facilities, the same data were present in ICIS at rates that exceed the national averages. Since the end of FFY 2012, IDNR has encountered new obstacles to complete and accurate batching of DMR data to ICIS, and EPA encourages the state to use its ample capabilities to consistently review audit reports that are available following all batch attempts.</p> <p>Inspections at major and individually permitted minor facilities were present in ICIS as required by program guidance, with two isolated exceptions: one inspection for a major facility (Webster City) was missing, and one inspection for a minor facility (Poet Biorefining) was mis-coded as a Compliance Evaluation Inspection rather than a Compliance Sampling Inspection. The missing inspection represents just 2% of the 46 inspections reviewed by EPA, making its absence an aberration from the state’s otherwise effective procedure for logging inspection data.</p>																																									
Relevant metrics	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>1b1 Permit limit rate for major facilities</td> <td>95%</td> <td>98.3%</td> <td>124</td> <td>124</td> <td>100%</td> </tr> <tr> <td>1b2 DMR entry rate for major facilities</td> <td>95%</td> <td>97.9%</td> <td>2413</td> <td>2484</td> <td>97.1%</td> </tr> <tr> <td>2b Files reviewed where data are accurately reflected in the national data system</td> <td></td> <td></td> <td>35</td> <td>47</td> <td>74.5%</td> </tr> <tr> <td>5a Inspection coverage of NPDES majors</td> <td></td> <td>57.6%</td> <td>62</td> <td>124</td> <td>50%</td> </tr> <tr> <td>5b1 Inspection coverage of NPDES non-majors with individual permits</td> <td></td> <td>25.6%</td> <td>387</td> <td>1501</td> <td>25.8%</td> </tr> </tbody> </table>						Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	1b1 Permit limit rate for major facilities	95%	98.3%	124	124	100%	1b2 DMR entry rate for major facilities	95%	97.9%	2413	2484	97.1%	2b Files reviewed where data are accurately reflected in the national data system			35	47	74.5%	5a Inspection coverage of NPDES majors		57.6%	62	124	50%	5b1 Inspection coverage of NPDES non-majors with individual permits		25.6%	387	1501	25.8%
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State Response	Agreed																																									
Recommendation	None																																									

Element 1 — Data

Finding 1-2	Area for State Improvement					
Summary	Permit status codes for wastewater facility records in ICIS are frequently inaccurate.					
Explanation	<p>EPA reviewed 25 individually permitted wastewater facilities with permit records in ICIS. 15 of those 25 records have a Permit Status Code of “Effective.” The remaining 10 records have a Permit Status Code of “Expired,” which would signify that the permit expiration date has elapsed and the permittee has not submitted its reapplication. In such circumstances, the terms of the permit are no longer in force and the facility is no longer authorized to discharge. In contrast, the Permit Status Code of “Administratively Continued” is the appropriate choice when the permit expiration date has elapsed and the permittee has in fact submitted its reapplication. In those circumstances, the terms of the permit remain in force while the state takes steps to reissue the permit. EPA discussed this matter with IDNR and understands that IDNR considers non-submittal of a permit reapplication to be an enforcement priority and addresses that violation when it occurs. Non-submittal does not apply to any of the 10 facilities characterized as “Expired,” however, making this code inaccurate and misleading in the national database. 7 of the 10 instances were major facilities, and only one major facility that EPA reviewed had a Permit Status Code of “Effective” rather than “Expired.” A correct Permit Status Code is important so that the national, publicly available database does not show those facilities as being unauthorized to discharge. Currently, ICIS characterizes 648 Iowa permittees as having expired permits.</p>					
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
	2b Files reviewed where data are accurately reflected in the national data system			35	47	74.5%
State Response	<p>IDNR transfers the data on permit application receipt from our permit database (NPDS) to ICIS in a batch upload. IDNR is unsure why the Permit Status Code is “Expired” in ICIS for 648 permits, and IDNR will investigate this to determine the cause and a possible solution. IDNR plans to correct the data (the permit application receipt dates and the Permit Status Codes) using the current batch upload process within the next few months.</p>					

Recommendation

IDNR should evaluate all 648 permit records in ICIS that currently show “Expired” in the Permit Status Code, with priority given to majors, and change the code to “Administratively Continued” if IDNR has in fact received the facility’s permit reapplication. IDNR should conduct this evaluation and make the resulting changes by May 1, 2014, and report to EPA on the completion status at that time. Once EPA is satisfied that state action has addressed the underlying concern, EPA will consider this recommendation complete.

Element 1 — Data

Finding 1-3

Area for State Improvement

Summary

Violation linkages to formal enforcement actions taken against major facilities, as well as some Notices of Violation, were missing from ICIS.

Explanation

IDNR entered formal enforcement actions into ICIS for four majors in FFY 2012, but none of those records were linked to the underlying violations. Enforcement action violation codes are required in ICIS for major facilities, as set out in the 2007 ICIS Addendum to the 1985 PCS Policy Statement.

EPA reviewed 32 NOVs, 6 of which were not present in ICIS (Cresco, Webster City, Roquette, Emmetsburg, Ringsted, Valero Renewables). The first four of these facilities are majors or P.L. 92-500 grant-awarded minor facilities, for which basic data on informal actions are required in ICIS per the source cited above. While EPA commends IDNR for batching 430 NOVs to ICIS for major and non-major facilities over the course of FFY 2012, the 6 missing NOVs represent 19% of the NOVs reviewed by EPA. Assuming the files reviewed are representative of the universe of facilities regulated by IDNR, EPA raises the concern that there may be many other NOVs that have been issued but are not publicly accounted for in the national database.

Relevant metrics

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
2b Files reviewed where data are accurately reflected in the national data system			35	47	74.5%
2a1 Number of formal enforcement actions, taken against major facilities, with enforcement violation type codes entered					0
Choose an item.					

State Response

It is not known if EPA used an appropriate statistical sampling method to conclude or assume that there are many other NOVs in the universe of facilities. The IDNR now has a Field Office Compliance Database (FOCD) where all inspections, NOVs, other compliance type letters and other data are entered. This data is then populated into the NPDS database from which NOV data is uploaded to ICIS. IDNR is still working on the upgrade to the NPDS database. IDNR staff will become more proficient at entering this data to include all NOVs. IDNR has not been able to link violations to formal enforcement actions. EPA stated that assistance is available to make

	<p>sure these linkages are made directly in ICIS. IDNR agrees that it can work with EPA to make these linkages. This requirement is only for Major wastewater facilities. IDNR agrees to start this process as soon as possible but no later than 1 June 2014 if the promised assistance with the linkages has been made available by EPA to IDNR sufficiently prior to that date and allow IDNR to train, test and verify that the process works. EPA agreed linkages will not be completed for past enforcement actions.</p>
Recommendation	<p>By June 1, 2014, IDNR should report to EPA on what it has done to tighten up its procedures for entry and batching of NOV's in the state and federal databases. Regarding violation linkages to formal enforcement actions, EPA can assist the state in making these linkages directly in ICIS after the state enforcement data is batched to ICIS, given that the state database does not have the means to make linkages and that only a very small number of facilities are affected by this requirement. Upon batching an enforcement action to ICIS for a major facility, IDNR should provide the needed information to EPA on underlying violations.</p>

Element 2 — Inspections

Finding 2-1	Area for State Attention			
Summary	IDNR met or exceeded its inspection targets for all NPDES program areas in FFY 2012, with one minor exception for MS4 inspections and audits.			
Explanation	As summarized in the metrics table below, the number of inspections and audits that IDNR conducted in FFY 2012 meets or exceeds the number negotiated in the Compliance Monitoring Strategy (CMS) for all NPDES program areas except MS4 Phase II audits and inspections, in which IDNR conducted one inspection fewer than the negotiated CMS commitment. EPA notes that IDNR's level of effort to inspect MS4s leads the states in Region 7. The inspection commitment for CAFOs is not evaluated here, given that the CAFO program was outside the scope of this SRF review.			
Relevant metrics	Metric ID Number and Description	State CMS commitment	State # conducted	State % or #
	4a1 Pretreatment compliance inspections and audits	10	10	100%
	4a2 Significant Industrial User inspections for SIUs discharging to non-authorized POTWs	25	30	120%
	4a4 Major CSO inspections	3	4	133%
	4a7 Phase I & II MS4 audits or inspections	5	4	80%
	4a8 Industrial stormwater inspections	5	44	880%
	4a9 Phase I and II stormwater construction inspections	112	135	121%
	4a10 Medium and large permitted NPDES CAFO inspections	-	-	-
	5a Inspection coverage of NPDES majors	59	61	103%
	5b1 Inspection coverage of NPDES non-majors with individual permits	137	362	264%
Choose an item.				
State Response	Agreed			
Recommendation	None			

Element 2 — Inspections

Finding 2-2	Area for State Improvement					
Summary	Inspection reports do not consistently describe what the inspectors observe with respect to regulatory requirements or include pretreatment sampling data, and wastewater inspectors do not consistently collect samples that comport with permit-required techniques.					
Explanation	<p>Inspection reports consistently reflect inspectors’ thorough knowledge of facilities and regulated processes. However, many inspection reports do not describe – in checklists or narrative – which, if any, features of the facility were reviewed during the visit and what the inspectors’ observations of those features and processes were with respect to regulatory requirements. Features not consistently observed, based on EPA’s oversight inspections, include laboratory records, calibration techniques, and integrity of composite samplers. Some stormwater inspection reports do not articulate whether the purpose of the inspection was to investigate a complaint or conduct a routine evaluation, and it is difficult to determine if the facility’s Storm Water Pollution Prevention Plan was reviewed when the GP #1 or GP #2 checklist was not used in the inspection report.</p> <p>In at least 5 inspections, the effluent and/or receiving waterbody was not observed; however, the report template, which requests information on these characteristics, does not justify why these important features were omitted. For 6 of the 10 pretreatment inspection reports reviewed, the report did not include a copy of the industry’s complete sampling data for the period of time covered by the inspection, although an additional 3 facilities had print outs of violations attached to the report. Only for inspections conducted in Field Office 2 did EPA see all sampling data for the review period in the reports. Finally, IDNR does not consistently collect samples during wastewater inspections, despite that the state’s wastewater facility inspection procedure calls for sampling to be done whenever a discharge occurs during the inspection. Samples were collected at two mechanical facilities during EPA’s oversight inspections, one via the grab method and the other as composites. However, both facilities’ permits require composite samples, and IDNR’s method should comport with that required in the permit in order to generate enforceable data.</p>					
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
	6a Inspection reports reviewed that provide sufficient documentation to determine compliance	100%		36	46	78.3%
State Response	There were a number of recommendations in this metric. The main point of the lack of adequately describing the observations made at the facility will					

be corrected with checklists and narrative descriptions. IDNR may update its checklist or include in narrative portion of the report to include such things as lab record review, calibration techniques if applicable and an inspection of the composite sampler if one is used. Since IDNR does not conduct the composite sampling it will request training from its contractor for things to look for. It was found that some inspectors do not make a notation of whether the receiving stream was observed. There is a check box on the inspection checklist for this observation. It is just a matter of the inspector ensuring this task is performed if possible. Sometimes weather conditions or other circumstances may prevent this observation but if that is the case then IDNR will comment in the report. It was noted that some storm water inspections do not differentiate between routine inspections and complaint investigations. IDNR will update our checklist to reflect this difference in inspections. There was a comment about inspectors collecting grab samples when the permit requires composite sampling. This is because the IDNR contracts for 30 composite sampling events each year. Because IDNR conducts many more inspections each year, its inspectors periodically collect a grab sample. Although it is just a snap shot sample it can help IDNR determine if further compliance actions or follow-ups are warranted. There is not sufficient funding available for testing and staff time to provide for composite sampling for all inspections.

IDNR will make the changes notes above and supply a sample inspection report for wastewater, pretreatment and storm water by 1 October 2014.

Recommendation

IDNR should consistently use narrative and checklists in inspection reports for all NPDES program areas to describe which facility processes were evaluated, the purpose of the inspection or investigation, and what the inspectors' observations were relative to requirements. Pretreatment inspection reports should consistently include all of the industry's sampling data for the time period reviewed, not just the violations. This ensures that the inspector can determine if the facility is in Significant Noncompliance as required by 40 CFR 403(8)(f)(vii). By October 1, 2014, IDNR should provide to EPA an example inspection report for each of wastewater, pretreatment, and stormwater that captures this information. The pretreatment inspection report should be from a field office other than FO#2. Once EPA is satisfied that state actions have addressed this deficiency, EPA will mark this recommendation complete.

Element 3 — Violations

Finding 3-1	Meets or Exceeds Expectations					
Summary	IDNR consistently and accurately identifies violations as SNC, according to state and federal criteria, during inspections and record review for major and non-major direct dischargers.					
Explanation	One of the majors reviewed by EPA had a Single Event Violation (SEV) discovered during a state inspection, and IDNR accurately identified it as Significant Non-Compliance (SNC). Three of the majors reviewed by EPA had DMR violations constituting SNC, and IDNR accurately identified those as SNC as well. More broadly, compliance officers in all program areas except pretreatment accurately and consistently applied the state and federal criteria for SNC to violations that were identified during record review (e.g. self-reported incidents and DMR violations) and inspections for both majors and non-majors. EPA observed use of the SNC label in NOV's and inspection reports. To address the exception for pretreatment, please see Finding 3-2 below.					
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
	8b1 Single-event violations accurately identified as SNC or non-SNC	100%		5	5	100%
	8a2 Percentage of major facilities in SNC		20.6%	19	124	15.3%
	7d1 Major facilities in noncompliance		60.3%	66	124	53.2%
State Response	Agreed					
Recommendation	None					

Element 3 — Violations

Finding 3-2	Area for State Improvement
Summary	Violations that constitute Significant Noncompliance at significant industrial users outside Pretreatment Program cities are not identified as such by IDNR during inspections.
Explanation	None of the 10 inspection reports reviewed by EPA utilized the term Significant Noncompliance, although 1 facility (Jet Company) had discharged to the Publicly Owned Treatment Works at levels constituting SNC. The General Pretreatment Regulations require facilities be evaluated for SNC, and all Iowa Pretreatment Program cities do so. In addition, every six months, IDNR submits a report to EPA Region 7 identifying those industries outside Pretreatment cities that are in SNC. This list, compiled by the Central Office, is also sent to the Field Offices for their information. However, it does not appear that IDNR pretreatment inspectors consider this information before doing inspections or during the inspection.
Relevant metrics	This finding constitutes an area of concern generally under Element 3 for which there are no relevant metrics applicable to the Pretreatment Program.
State Response	The field staff has not consistently reviewed the compliance status of significant industrial users. There is a report submitted to EPA once every six months so field staff will take that report and determine if further action is warranted based on the compliance status. IDNR will complete this task no later than 1 June 2014.
Recommendation	Field office compliance officers should evaluate industrial users outside program cities for SNC every six months and report it to the IDNR Central Office, which will help field office staff to develop a habit of using the SNC concept. In addition, inspectors should identify SNC violations in the inspection reports and in NOV's issued to industrial users. IDNR should implement these changes and report to EPA on the completion status by September 1, 2014. Once EPA is satisfied that state actions have addressed this deficiency, EPA will mark this recommendation complete.

Element 3 — Violations

Finding 3-3	Area for State Improvement												
Summary	Industrial user inspection reports do not inform facilities with effluent violations that they are required to resample and resubmit within 30 days, if their established sampling frequency is less frequently than monthly.												
Explanation	Whether it is the industry performing self monitoring, or the TA city doing the compliance monitoring, for facilities where monitoring is routinely less than monthly (e.g. Pengo Corporation in Laurens) a violation of a discharge standard requires that the facility (or TA city) notify the control authority within 24 hours of the violation, and then resample and resubmit the results within 30 days of the violation. These federal requirements are specified in the General Pretreatment Regulations at 40 CFR 403.12(g)(2) and apply regardless of whether the industrial user’s Treatment Agreement is incorporated into the municipality’s NPDES permit.												
Relevant metrics	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>7e Inspection reports reviewed that led to an accurate compliance determination</td> <td>100%</td> <td></td> <td>34</td> <td>44</td> <td>77.3%</td> </tr> </tbody> </table>	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	7e Inspection reports reviewed that led to an accurate compliance determination	100%		34	44	77.3%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #								
7e Inspection reports reviewed that led to an accurate compliance determination	100%		34	44	77.3%								
State Response	IDNR will work to ensure the requirements specified in 40 CFR 403.12(g)(2) are met.												
Recommendation	By May 1, 2014, IDNR should provide EPA with an example of an industrial user inspection report that identifies monitoring violations and informs the industrial user of its requirements to notify, resample, and resubmit following such violations. IDNR should implement this change in all field offices. Once EPA is satisfied that state actions have addressed this deficiency, EPA will mark this recommendation complete.												

Element 3 — Violations

Finding 3-4	Area for State Improvement																	
Summary	IDNR does not consistently make compliance determinations based on inspections, as communicated through inspection reports and cover letters.																	
Explanation	<p>10 of the 46 inspection reports reviewed by EPA did not lead to a compliance determination that was communicated in the facility file (e.g. via the inspection report, cover letter, Notice of Violation (NOV), memo to file, or other means). In these cases, the inspection reports describe deficiencies or potential deficiencies but do not articulate whether they were violations that needed correction. Furthermore, in some of the cases where a compliance determination was made, the underlying violation is clearly described, but elsewhere in the report there are other deficiencies or potential deficiencies not clearly articulated as violations needing correction (if indeed they were violations). In both scenarios, the uncertain compliance status stems from use of ambiguous language in reports and cover letters. For example, many cover letters written in multiple field offices direct the reader to “Requirements” and “Recommendations” that are “self explanatory,” or they direct the reader to “improvements and required actions that must be completed in order to comply with the IAC [Iowa Administrative Code].” In the sections of the report titled “Requirements” and “Recommendations,” however, the language suggests that the facility must maintain the status quo rather than correct a problem. Frequently used language includes “continue to operate...” and “reports must be submitted [by a certain time]...” without any explicit language elsewhere in the report saying that the facility had failed to do these things. With the exception of the City of Coralville MS4, all facilities for which a compliance determination was not made are wastewater and pretreatment facilities (i.e. not stormwater), and they are distributed across all six field offices.</p>																	
Relevant metrics	<table border="1"> <thead> <tr> <th data-bbox="483 1430 1011 1497">Metric ID Number and Description</th> <th data-bbox="1027 1430 1101 1497">Natl Goal</th> <th data-bbox="1109 1430 1198 1497">Natl Avg</th> <th data-bbox="1206 1430 1279 1497">State N</th> <th data-bbox="1287 1430 1360 1497">State D</th> <th data-bbox="1369 1430 1442 1497">State % or #</th> </tr> </thead> <tbody> <tr> <td data-bbox="483 1518 1011 1581">7e Inspection reports reviewed that led to an accurate compliance determination</td> <td data-bbox="1027 1518 1101 1581">100%</td> <td data-bbox="1109 1518 1198 1581"></td> <td data-bbox="1206 1518 1279 1581">34</td> <td data-bbox="1287 1518 1360 1581">44</td> <td data-bbox="1369 1518 1442 1581">77.3%</td> </tr> </tbody> </table>	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	7e Inspection reports reviewed that led to an accurate compliance determination	100%		34	44	77.3%	Natl Goal	Natl Avg	State N	State D	State % or #
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #													
7e Inspection reports reviewed that led to an accurate compliance determination	100%		34	44	77.3%													

| **State Response** | This issue concerns the lack of a compliance determination in the inspection report of wastewater facilities. IDNR will discuss this recommendation with its Senior wastewater review staff in all six field offices and ensure a compliance determination is noted in each report. IDNR will start working on this issue as soon as possible and will submit an inspection report for a wastewater facility and a pretreatment inspection report by 1 October 2014. | | | | | |

Recommendation

IDNR should consistently articulate in reports, cover letters, or NOVs any violations that are discovered via inspection. If a deficiency is found and constitutes a violation, IDNR should explicitly state that the facility failed to meet a given requirement and assert that correction of the violation is expected. A model report and cover letter EPA reviewed that articulate this type of determination is Olds Municipal Utilities. By October 1, 2014 IDNR should report to EPA on changes that have been implemented and provide an inspection report for each of wastewater and pretreatment that exemplifies these improvements.

Element 3 — Violations

Finding 3-5	Area for State Improvement																	
Summary	Permit compliance schedule milestones in ICIS are not consistently maintained with current dates for milestone completion or deliverable receipt, and file contents do not reflect whether deliverables were ever received.																	
Explanation	<p>The Data Metric Analysis for FFY 2012 revealed 68 non-major facilities with permit compliance schedule violations showing overdue milestones in ICIS. EPA reviewed 5 of these facilities during the on-site file review and did not find any records on completion status of the schedules' requirements. The primary concern is that some of these facilities are out of compliance with their permit schedules, in which case it would appear that the state is not working sufficiently with those facilities to get them back on track and to take enforcement where appropriate. One of the 5 facilities reviewed, and likely several others among the 68 total, was a municipal P.L. 92-500 grant recipient, for which accurate data on permit compliance schedules is required in ICIS per the EPA's 2007 document, "ICIS Addendum to the Appendix of the 1985 PCS Policy Statement." Based on the length of time that has elapsed since many of the milestones were due, it appears likely that the database has not been updated. In addition, this metric's value has increased since the past two years' Data Metric Analyses. In 2011, the value for metric 7c was 21 facilities, and in 2010 it was 27. Several new deliverables may have become due for some facilities in FFY 2012 to cause the jump to 68, for which legitimate violations might be the case. For others, something in the state database and/or ICIS may have faulted to inaccurately show schedule violations.</p>																	
Relevant metrics	<table border="1"> <thead> <tr> <th data-bbox="483 1312 1019 1392">Metric ID Number and Description</th> <th data-bbox="1024 1312 1105 1392">Natl Goal</th> <th data-bbox="1110 1312 1192 1392">Natl Avg</th> <th data-bbox="1196 1312 1278 1392">State N</th> <th data-bbox="1282 1312 1364 1392">State D</th> <th data-bbox="1369 1312 1446 1392">State % or #</th> </tr> </thead> <tbody> <tr> <td data-bbox="483 1398 1019 1440">7c1 Permit compliance schedule violations</td> <td data-bbox="1024 1398 1105 1440"></td> <td data-bbox="1110 1398 1192 1440"></td> <td data-bbox="1196 1398 1278 1440">68</td> <td data-bbox="1282 1398 1364 1440"></td> <td data-bbox="1369 1398 1446 1440"></td> </tr> </tbody> </table>						Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	7c1 Permit compliance schedule violations			68		
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #													
7c1 Permit compliance schedule violations			68															
State Response	<p>The permit compliance milestones in ICIS are an accurate reflection of the permit compliance milestone dates that have been entered into the state permit database (NPDS). All completed milestone information is entered into NPDS as soon as it is received, and all past milestone data in NPDS is correct. Ideally if the milestone date is missing from ICIS, it means that the facility has not completed that milestone. Missing permit compliance milestones are tracked, and enforcement staff in the Field Offices are working to get these facilities back in compliance. Areas of inconsistency will be investigated per EPA's recommendation.</p>																	

Recommendation

IDNR should investigate the permit schedule violations to determine whether the required deliverables have been received. If they have in fact been received, the state should enter or batch an appropriate code to override the violation flags in ICIS. If the deliverables have not been received for any facilities, the state should work with those facilities to ensure that proper documentation is filed and take enforcement where a more formal remedy is appropriate. IDNR should complete this investigation and initiate corrective actions by May 1, 2014. By that date, IDNR should report to EPA on the outcome of its actions and provide a plan for monitoring the receipt of future schedule deliverables and logging the corresponding data into state and federal databases.

Element 4 — Enforcement

Finding 4-1	Meets or Exceeds Expectations																	
Summary	Formal and informal enforcement actions require a return to compliance.																	
Explanation	<p>All 6 administrative orders that EPA reviewed under metric 9 required a return to compliance by a specified date. In addition, all Notices of Violation (NOVs) requested that the facility take corrective actions, with 26 of 29 requesting the facility to submit a response to IDNR within a specified time period. EPA notes that 13 of the 29 NOVs reviewed did not result in the violator returning to compliance and needed enforcement escalation to resolve the noncompliance, which was executed in some fashion in most cases. Most of those unsuccessful NOVs are a reflection on the circumstances of the cases rather than on how well they were written. An evaluation of timely and appropriate use of escalation is addressed in Finding 4-2 as a separate matter.</p>																	
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9a Percentage of enforcement responses that return or will return source in violation to compliance	100%		22	35	62.9%													
State Response	Agreed																	
Recommendation	None																	

Element 4 — Enforcement

Finding 4-2	Area for State Improvement											
Summary	IDNR does not consistently escalate matters of ongoing noncompliance in a timely and appropriate manner in accordance with state and federal guidance.											
Explanation	<p>All administrative actions and initial NOVs that EPA reviewed were used appropriately to address noncompliance. In 6 of the files, IDNR used second and even third NOVs to address ongoing or very similar violations. According to the state’s EMS guidance, IDNR field offices may use successive NOVs to address recurrent noncompliance without further escalation, provided the underlying violation(s) does not meet a state enforcement priority. In 7 cases, however, including the 6 with successive NOVs, one of the following circumstances applied, resulting in noncompliance not being addressed in a timely and/or appropriate manner: 1) the duration between issuance of successive NOVs exceeded the 90-day goal provided in the EMS (ex: Quad County Corn Processors, Clearview Mobile Home Park, Northwood Hotel Ventures); 2) IDNR eventually issued an administrative order or sent a draft consent order, but it followed identification of the underlying violation by one to two years (ex: Emmetsburg, TK Enterprises); or 3) the underlying violation(s) was never resolved, based on records in the facility file (ex: Dakota City, Guttenberg). For cases in the second set of circumstances, issuance of administrative orders was delayed by either a prolonged period before referral of the matters to Legal Services (TK Enterprises) or the time taken to develop a draft consent order (Emmetsburg). EPA also notes here that for one facility, City of Minden, the file reflects a DMR review by the field office that identified a long sequence of ongoing effluent violations; however, IDNR has not visited or sent any correspondence to the City during the past five years.</p>											
Relevant metrics	<table border="1"> <thead> <tr> <th data-bbox="467 1409 1019 1507">Metric ID Number and Description</th> <th data-bbox="1019 1409 1105 1507">Natl Goal</th> <th data-bbox="1105 1409 1198 1507">Natl Avg</th> <th data-bbox="1198 1409 1268 1507">State N</th> <th data-bbox="1268 1409 1360 1507">State D</th> <th data-bbox="1360 1409 1446 1507">State % or #</th> </tr> </thead> </table>	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #					
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #							
	10b Enforcement responses reviewed that address violations in a timely and appropriate manner	100%		27	38	71%*						
	*In the metric calculation for 10b above, note that the numerator and denominator include formal and informal actions, and for several facilities the state used at least one of each to address violations.											
State Response	The Field Services & Compliance Bureau will conduct refresher training on our Enforcement Management System to ensure guidance is followed related to enforcement actions. The Legal Services Bureau notes that the											

	<p>attorney working on the Emmetsburg case was on maternity leave for a significant period of time during this relevant timeframe. The Legal Services Bureau will continue to strive to meet its commitments set out in the Enforcement Management System, including reassigning cases, as appropriate, if personnel are on medical or other extended leave.</p>
Recommendation	<p>IDNR should ensure that matters of ongoing noncompliance are escalated from the field offices to Legal Services in a timely manner and resolved by prompt formal enforcement actions when appropriate. By October 1, 2014, IDNR should report to EPA on what improvements have been implemented to ensure that this happens. Once EPA is satisfied that state action has resolved this concern, the recommended action will be marked complete.</p>

Element 4 — Enforcement

Finding 4-3	Area for State Improvement																	
Summary	NOVs for Discharge Monitoring Report (DMR) and other self-reported violations are not consistently issued in a timely manner following facilities' submission of the violation reports.																	
Explanation	<p>IDNR field office staff review facility records once every six months in order to identify late DMRs, effluent limit violations, and other self-reported violations such as Sanitary Sewer Overflows and bypasses. A review of facility files reveals that IDNR appropriately identifies violations and issues NOVs as a result of these records reviews. The frequency of doing so only once every two quarters, however, compromises IDNR's ability to respond in a timely manner to missing DMRs, late DMRs, and effluent limit exceedances that constitute wastewater enforcement priorities. As examples, NOVs were sent following 6-month DMR reviews for Guttenberg, Emmetsburg, and Dakota City. In the case of Dakota City, ammonia exceedances during the period of July through December 2011 that constitute SNC under state guidance were not addressed until April 2012. Going further with this example, the same facility could have plausibly had SNC exceedances only during the April through September 2011 period, but IDNR would not have identified the SNC pattern and addressed the violations until the first quarter of 2012 if record reviews were conducted only every six months.</p>																	
Relevant metrics	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>10b Enforcement responses reviewed that address violations in a timely and appropriate manner</td> <td>100%</td> <td></td> <td>27</td> <td>38</td> <td>71%</td> </tr> </tbody> </table>						Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	10b Enforcement responses reviewed that address violations in a timely and appropriate manner	100%		27	38	71%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #													
10b Enforcement responses reviewed that address violations in a timely and appropriate manner	100%		27	38	71%													
State Response	<p>The state NPDS database is still undergoing an upgrade. Once the database is functioning properly field staff will be able to run a compliance summary for facilities in their respective region each quarter. At least one regional office has been running a quarterly compliance check. IDNR will make this change once the new database is able to produce accurate queries. Assuming the database can run these reports IDNR will start this quarterly compliance summary by 1 October 2014. If IDNR's database is not functioning properly and is delayed longer IDNR reserves the right to extend this date.</p>																	
Recommendation	<p>In order to identify and respond to self-reported violations in a timely manner, including SNC, IDNR field office staff should review facilities' self-monitoring reports at least once quarterly. This practice would ensure</p>																	

that a pattern of SNC that materialized over a six-month period could be addressed within approximately six months of the beginning of the SNC pattern. IDNR should report to EPA on changes to its record review practices by October 1, 2014. Once EPA is satisfied that state action has addressed the underlying concern, this recommendation will be considered complete.

Element 5 — Penalties

Finding 5-1	Meets or Exceeds Expectations					
Summary	Penalty actions account for the gravity and economic benefit of violations, and most enforcement files document the difference between initial and final penalty amounts.					
Explanation	EPA reviewed 7 penalty actions processed or executed during the FFY 2012 period. All 7 actions included detailed documentation of the rationale for an economic benefit component of the penalties. Four of the penalty actions could be evaluated for documentation of any difference between proposed and collected penalties, and all 4 enforcement case files justified the difference.					
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
	11a Penalty calculations reviewed that consider and include gravity and economic benefit	100%		7	7	100%
	12a Documentation of the difference between initial and final penalty and rationale	100%		4	4	100%
State Response	Agreed					
Recommendation	None					

Element 5 — Penalties

Finding 5-2	Meets or Exceeds Expectations					
Summary	Facility files with closed penalty actions consistently include proof of penalty payment.					
Explanation	EPA reviewed 7 penalty actions processed or executed during the FFY 2012 period. Five of these actions had due dates for penalty payment prior to the date of EPA’s review and could be evaluated on whether the file contained documentation showing the state collected the penalty. All 5 files included proof of penalty payment. The other 2 of 7 actions were based on compliance monitoring activities in FFY 2012 but were not executed far enough in advance for the penalty due date to pass before EPA’s review.					
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
	12b Penalties collected	100%		5	5	100%
State Response	Agreed					
Recommendation	None					

Element 5 — Penalties

Finding 5-3	Area for State Attention																							
Summary	Iowa law imposes a cap of \$10,000 on administrative penalties, which effectively limits the number of penalty actions the state can take that confer deterrent and punitive effects. The \$10,000 cap does not meet federal expectations for obtaining and implementing a NPDES program and needs to be addressed.																							
Explanation	The state pursues most of its enforcement in the administrative arena, which imposes a statutory maximum penalty of \$10,000. Any proposed penalty larger than this cap must be approved by the Iowa Environmental Commission and executed by the state Attorney General (AG). However, IDNR understands that only certain cases above this cap will pass muster before the Commission and AG, which effectively limits both the number of penalty actions and size of penalties the state of Iowa will collect. EPA makes this a finding due to concern about Iowa’s ability to use penalty actions as effective deterrent and punitive tools.																							
Relevant metrics	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>1g1 Number of enforcement actions with penalties</td> <td></td> <td></td> <td></td> <td></td> <td>11</td> </tr> <tr> <td>1g2 Total penalties assessed</td> <td></td> <td></td> <td></td> <td></td> <td>\$71,600</td> </tr> </tbody> </table>						Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	1g1 Number of enforcement actions with penalties					11	1g2 Total penalties assessed					\$71,600
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #																			
1g1 Number of enforcement actions with penalties					11																			
1g2 Total penalties assessed					\$71,600																			
State Response	IDNR disagrees with EPA’s statements and believes that its compliance and enforcement program protects human health and the environment, and that when enforcement becomes necessary, those actions serve as an appropriate and effective deterrent to further violations.																							
Recommendation	IDNR is encouraged to work with other entities in the state to gain the ability to use penalty actions as a more effective deterrent to violations. EPA encourages IDNR to work with appropriate entities in the state to raise the statutory cap on administrative penalties so it is no less stringent than the federal requirements for implementing the authorized NPDES program.																							

Appendix A: SRF File Selection

Files are selected according to a standard protocol using a web-based file selection tool combined with other protocols when state data is not available in EPA's national database. These protocols are designed to provide consistency and transparency to the process.

File Selection Process

EPA Region 7 followed the File Selection Protocol to select 52 files for the on-site State Review Framework (SRF) enforcement review. This list includes 48 facility files that were chosen to be one or more of the following: 1) representative of Iowa's NPDES compliance monitoring and enforcement activity in federal fiscal year 2012; 2) files that overlap with the permitting program's selections for the Permit Quality Review core review; and/or 3) files from a special topic area selected by the permitting and enforcement teams. The ethanol industry was selected as the special topic area. The remaining 4 of 52 files were chosen as supplemental files to help EPA Region 7 better understand whether any potential areas of concern identified via the Data Metrics Analysis are substantiated. All 52 files and their rationale for selection are listed in Enclosure 3.

The 48 representative files were chosen to provide a cross-section of permit types and, within each permit type, to represent facilities that were subject to an inspection or an enforcement action. Altogether, 28 files were selected as representative inspections and 20 as representative of formal or informal enforcement. Facilities were also chosen to represent the variety of compliance history information in the national program database and to ensure roughly even representation of IDNR's six field offices.

The choice of particular facilities within each representative category was random and drawn using the Online Tracking Information System (OTIS) SRF File Selection Tool when possible. Core program majors, minors, and MS4s were selected using the OTIS tool. The national program database did not have records for pretreatment facilities, industrial stormwater sites, or construction stormwater sites; therefore, EPA Region 7 had to randomly select files from facility and activity lists provided by IDNR. For representative SSO communities, EPA Region 7 will review information in the files for the selected major facilities and discuss tracking of SSOs with IDNR staff.

The 4 supplemental files were selected to enable EPA Region 7 to better understand the nature of 2 potential concerns identified in the Data Metric Analysis. The 2 potential concerns, preceded by their associated metric and followed by the number of supplemental files, are as follows:

- 7c: Facilities with unresolved permit schedule violations (3); and
- 8a2: SNC rate—Major facilities in SNC (1).

For all representative and supplemental file selections, EPA Region 7 plans to review all compliance monitoring and enforcement information that is present in IDNR's records. For example, if an inspection file has an enforcement action associated with it, both activities will be reviewed (and vice-versa when a selected enforcement action has an associated inspection

record). The time period of interest is FFY 2012, but if the activity for which a facility was selected has an associated activity dated prior to or subsequent to this period of interest, EPA Region 7 will review the associated activity as well.

File Selection Table for Iowa SRF Enforcement Review, CWA FFY 2012

Permit #	Facility Name	Field Office	Selection Rationale
Core Program - Majors			
IA0000051	John Deere Dubuque Works	1	Representative Inspection + PQR core
IA0036625	Webster City STP	2	Representative Enforcement (NOV)
IA0043095	Sioux City STP	3	Representative Enforcement (order) + PQR core
IA0004308	Walter Scott, Jr. Energy Center	4	Representative Inspection + PQR core
IA0029025	Atlantic STP	4	Representative Inspection
IA0038610	Marshalltown Water Pollution Control	5	Representative Enforcement (order)
IA0000256	Roquette America, Inc.	6	Representative Enforcement (NOV) + PQR core
Core Program - Minors			
IA0022284	Guttenberg City of	1	Representative Enforcement (NOV)
IA0080357	Center Junction STP	1	Representative Enforcement (order)
IA0048003	Dakota City STP	2	Representative Enforcement (NOV)
IA0080403	Valero Renewables	2	Representative Enforcement (NOV) + ethanol
IA0081272	Flint Hills Resource Renewables	2	Representative Inspection + ethanol
IA0021580	Emmetsburg STP	3	Representative Enforcement (order)
IA0076813	Quad County Corn Processors	3	Representative Inspection + ethanol
IA0057436	Ringsted STP	3	Representative Inspection
IA0080209	Valero Renewables	3	Representative Enforcement (NOV) + ethanol
IA0080063	Poet Biorefining	4	Representative Inspection + ethanol
IA0081647	Tracy STP (Mahaska Rural Water System)	5	Representative Inspection
	Chamness Technology, Inc.	5	Representative Enforcement (order)
IA0003387	Cryotech Deicing Technology	6	Representative Inspection
IA0065633	Clearview Mobile Home Park - Ripleys Inc.	6	Representative Enforcement (NOV)
Pretreatment			
	Eaton Corp. (Belmond)	2	IU Inspection
	Hormel Foods (Algona)	2	IU Inspection
	Jet Company (Humboldt)	2	IU Inspection
	North Iowa Produce (Stacyville)	2	IU Inspection
	Richelieu Foods (Grundy Center)	2	IU Inspection
	Aero Race (Estherville)	3	IU Inspection
	Estherville Foods (Estherville)	3	IU Inspection
	Hawarden Machine (Hawarden)	3	IU Inspection
	Pengo Corp. (Laurens)	3	IU Inspection
	TG Industries (Armstrong)	3	IU Inspection
	Ring-O-Matic (Pella)	5	IU Inspection
MS4			
IA0078662	Sioux City, City of	3	Representative Enforcement (order) + PQR core
IA0078646	Coralville, City of	6	Representative Inspection
Stormwater - Construction			
	Leo Simon	1	Representative Enforcement (NOV)
	Sumner High School	1	Representative Inspection

Permit #	Facility Name	Field Office	Selection Rationale
	Northwood Hotel Ventures, LLC	2	Representative Enforcement (order)
	Clay County - Bridge & Grading w/ Shoulder	3	Representative Enforcement (NOV)
	Sabre Industries, Inc.	3	Representative Inspection
	Platinum Grain, LLC - Construction	3	Representative Inspection
	Haley Heights Additions	6	Representative Enforcement (NOV)
	Sandhill Estates - Part 1	6	Representative Inspection
Stormwater - Industrial			
	Welden Aggregates, Inc.	2	Representative Enforcement (NOV)
	Sheldon Regional Airport	3	Representative Enforcement (NOV)
	Petersen Mfg Co., Inc.	4	Representative Inspection + PQR core
	Iowa State University Heating Plant	5	Representative Inspection
	Terry Phillips, dba TK Enterprises	6	Representative Enforcement (order)
	Hickory Grove Auto	6	Representative Inspection
Supplemental Files for Particular Metrics			
IA0021334	Cresco City of STP	1	Supplemental - Metric 8a
IA0030945	Clarion City of STP	2	Supplemental - Metric 7c
IA0048330	Minden City of STP	4	Supplemental - Metric 7c
IA0074560	Olds Municipal Utilities	6	Supplemental - Metric 7c

Appendix B: File Review Summaries for the SRF Review

Major facilities, wastewater

John Deere – Dubuque Works (IA0000051)

Inspection date(s) and # days to report: 5/31/2012 (14)

Inspection notes: The inspection report for a routine inspection did not include a checklist but relied entirely on narrative. The inspector describes very thoroughly how the facility's operation works but doesn't discuss whether the various treatment components of the plant were running satisfactorily. There is no mention of permit status or whether sampling was done. The latter part of the narrative lists requirements that must be met but doesn't indicate whether any violations exist relative to those requirements. For these reasons, the reader could not determine the compliance status of the facility.

Enforcement action date(s): None

Enforcement action notes: None

Other notes: No violations were found in the file. This facility was also selected for Permit Quality Review (PQR) cross-review by the State Review Framework (SRF) enforcement team. No issues of enforceability were identified in this review.

Webster City Sewage Treatment Plant (STP) (IA0036625)

Inspection date(s) and # days to report: 5/16/2012 (36)

Inspection notes: The Iowa Department of Natural Resources (IDNR) performed a routine inspection on 5/16/2012, producing a report that used a Wastewater Treatment Facility Inspection checklist as well as the Facility Evaluation checklist to indicate which features of the facility were evaluated and the results of that evaluation. The first of those checklists does not indicate who representing the facility was present for the inspection. The narrative portion of the report describes operation and maintenance shortcomings that should be corrected, particularly regarding a digester cover and primary clarifier effluent trough. However, neither the report nor the cover letter transmitting the report to the facility states definitively that these deficiencies are violations. In fact, the cover letter refers to "Recommendations for operation improvements and required actions that must be completed in order to comply with the Iowa Administrative Code." The reader is left not knowing whether IDNR considers the deficiencies actionable violations.

Enforcement action date(s): Notices of Violation (NOVs) – 7/30/2012, 2/7/2013

Enforcement action notes: IDNR issued the first NOV to address Total Residual Chlorine and copper exceedances constituting Significant Non-Compliance (SNC) that occurred in January through June 2012. It was sent in a timely fashion following the end of the six-month record review period and notifies the facility that SNC occurred, but it does not require a response from the facility. The second NOV responds to a record review for the July through December 2012 reporting period and addresses late Monthly Operating Report receipt for the months of September, October, November, and December. It does not, however, respond to exceedances for copper in October through December 2012, which warranted some type of response. Referral for formal enforcement might have been appropriate as well if the source of the copper in the collection system were still present. Evidence outside the file suggests, though, that the prevalent source(s) of copper in the City are no longer in business.

Other notes: No violations were found in the file.

Sioux City STP (IA0043095)

This facility was selected to be a representative formal enforcement action, but EPA determined shortly before the on-site review that IDNR's administrative action against the City did not actually cite any Clean Water Act violations. Deemed outside the scope of the program review, EPA did not review this file and was unable to identify any other formal enforcement actions at other major facilities to replace it.

Walter Scott, Jr. Energy Center (IA0004308)

Inspection date(s) and # days to report: 11/2/2011 (36)

Inspection notes: An industrial wastewater inspection report includes detailed information about the nature of the facility and reviewed Discharge Monitoring Reports (DMRs) from the previous twelve months. The report does not indicate whether the inspector walked through the facility at all and lacked a description of the inspector's observations relative to permit requirements. The facility was clearly indicated to be out of compliance, however, because the report states that three Total Suspended Solids exceedances constitute SNC and the facility was also in noncompliance for several bypasses. The report cover letter requests a plan for addressing TSS from Outfall 004.

Enforcement action date(s): None

Enforcement action notes: None

Other notes: This facility was also selected for PQR cross-review by the SRF enforcement team. EPA did not identify any issues of permit enforceability. In addition, ICIS-NPDES has flagged this facility for SNC due to DMR non-receipt through all four quarters of FFY 2012. An analysis of DMR receipt in the state's files for FFY 2012 demonstrates that all DMRs were received on time, with the exception of August 2012. EPA's experience working with IDNR on power plan DMR data over the course of several years corroborates the long-standing problem of illegitimate non-receipt violations that the state needs to correct.

Atlantic STP (IA0029025)

Inspection date(s) and # days to report: 9/27/2012 (7)

Inspection notes: The inspection report for this facility includes a checklist accompanied by a detailed narrative describing the inspector's on-site activities and observations. The report answers questions about the facility's handling of sludge, providing a good evaluation against those requirements. Ammonia exceedances from May 2012 are also listed in the report. The report and its cover letter, however, do not clearly indicate whether there were any violations needing correction. The "Requirements" section at the end of the report, which is referenced in the cover letter, lists routine items that the facility needs to perform but that do not seem to pertain to any observed deficiencies. The reader is left uncertain about the facility's compliance status.

Enforcement action date(s): None

Enforcement action notes: None

Other notes: None

Marshalltown (IA0038610)

Inspection date(s) and # days to report: 12/30/2009; 12/7/2011 (both reports completed within 45 days)

Inspection notes: This facility has a history of sanitary sewer overflows when hydraulic capacity is exceeded. The inspection has a detailed description of the treatment processes, but it does not describe the industrial users nor is there a description of the receiving waters.

Enforcement action date(s): NOV – 1/2012; Administrative Order – 1/2012

Enforcement action notes: The NOV cited violations of the effluent limitations set forth in the City's NPDES Permit, but the Administrative Order only focused on SSOs and bypassing. Previously issued NOV's referenced in the national databases for March 2010 and February 2011 do not appear in the facility file, leaving the reviewer unable to determine how they might relate to the violations addressed in the order and/or the 2009 inspection report.

Other notes: None

Roquette America, Inc (IA0000256)

Inspection date(s) and # days to report: None

Inspection notes: None

Enforcement action date(s): Numerous NOV's were issued for noncompliance with effluent limits, mostly Biological Oxygen Demand (BOD) and TSS. The 6/3/2013 NOV for reported bypasses is not present in the Integrated Compliance Information System (ICIS).

Enforcement action notes: EPA and the Department of Justice entered into a consent decree with RAI in November 2012.

Other notes: This facility has a long history of noncompliance with effluent limits, mostly BOD and TSS.

Non-major facilities, wastewater

Guttenberg STP (IA0022284)

Inspection date(s) and # days to report: None

Inspection notes: None

Enforcement action date(s): NOV – 10/12/2011

Enforcement action notes: IDNR sent the NOV to address DMR monthly average violations for Carbonaceous Biological Oxygen Demand (CBOD) and E. coli between January and June 2011. This DMR review in October represents a three-month lag from July 15, the end of the DMR review period. It additionally represents an eight-month lag from the beginning of the review period (e.g. February 15, when the January DMR was first available for review). Furthermore, the subsequent quarter of DMRs, for July through September 2011, show an even greater number of violations than the earlier periods, and those DMRs had not yet received a response from the IDNR field office as of the date of record review.

Other notes: This facility has old permit schedule violations appearing in ICIS, dating back to 2000 and earlier, that have not been closed out and addressed by IDNR.

Center Junction STP (IA0080357)

Inspection date(s) and # days to report: None

Inspection notes: None

Enforcement action date(s): NOV – 5/3/2012; Administrative Order – 9/13/2012

Enforcement action notes: IDNR issued an NOV in response to a permit renewal application that had not been received by its due date of 3/13/2012. After more time elapsed without application submittal, the central office promptly referred the matter to Legal Services for formal

enforcement. Although the application was ultimately received on 8/17/2012, IDNR proceeded to issue the order, which required payment of an administrative penalty of \$800. The penalty amount included economic benefit (\$100), gravity (\$200), and culpability (\$500), which are described thoroughly in the body of the order. The penalty was required to be paid in full within 30 days of execution of the order, and the facility file included documentation showing that the penalty was paid.

Other notes: This facility has old permit schedule violations appearing in ICIS, dating back to 2000 and earlier, that have not been closed out or addressed by IDNR.

Dakota City STP (IA-0048003)

Inspection date(s) and # days to report: 7/20/2012 (5)

Inspection notes: The inspector documented several violations. The inspection report was transmitted to the facility on 7/25/2012 with an NOV.

Enforcement action date(s): NOVs – 2/22/2011, 4/18/2012, 7/25/2012

Enforcement action notes: The 7/25/2012 NOV required the City to: comply with effluent limits, take action to eliminate the need to bypass (SSOs), repair the lime grit and mechanical screens not functioning at the time of the inspection, and keep required sludge application records. Although the NOV requires that the facility comply with the four items described above, it does not require the City to provide a response to the NOV. The City did not respond to the NOV.

Other notes: Because there was no response to the NOV it is not known if the city took action to return to compliance. Other correspondence in the file indicates that the City bypassed (SSOs) in 2013 (5/25-5/31 from EO basin, and 5/25-26 from 3 manholes). An NOV was issued to the City on 2/22/2011 as the result of a 2/3/2011 inspection. The inspection noted several violations including bypassing (SSOs). An NOV was issued on 4/18/2012 following a 6 month DMR review. Also, the 7/25/2012 NOV is for bypassing (SSOs), among other violations. The City's history with SSOs extends back to at least 2008 when a citizen complained about basement back-ups dating back to 2005. An inspection performed on 11/3/09 also noted bypassing (SSOs), although no NOV was issued. The City completed an upgrade in 2012 using SRF funds. One of the main purposes of the project was to eliminate the need to have SSOs. IDNR completed a final inspection of the upgrade on 3/7/2013 and declared the project complete. The City has had SSOs since the last regular inspection and after completion of the upgrade. It appears the problems have not been adequately addressed and this facility is a good candidate for an escalation of the enforcement response.

Valero Renewables (IA0080403)

Inspection date(s) and # days to report: 5/18/2012 (5)

Inspection notes: The inspection report did not utilize a checklist but clearly articulated the facility's features, which activities were conducted, and observations made relative to permit requirements. The report states that the permit will expire on 12/3/2011, which is a date that was already in the past. The inspector might have copied that statement from the previous inspection report two years earlier without checking the narrative for accuracy. The report includes a summary of recent DMR compliance and notes that past instances of late reporting have not recurred. The report lists three required actions in the summary section. Those actions are referenced in the cover letter, saying they "must be completed in order to comply with the [Iowa

Administrative Code].” This choice of language suggests that the facility is out of compliance, but nowhere do the documents explicitly articulate specific violations.

Enforcement action date(s): NOV – 4/4/2012

Enforcement action notes: IDNR issued an NOV to address late submittal of DMRs. This was an appropriate use of informal enforcement but took place more than six months after the DMR was due for receipt.

Other notes: This facility was selected as a non-major traditional wastewater discharger that also represents the selected special focus area, ethanol facilities. This facility has a simple permit without any unusual or concerning provisions.

Flint Hills Resource Renewables (IA-0081272)

Inspection date(s) and # days to report: 1/4/2012 (7)

Inspection notes: The inspector found the facility to be in compliance with its permit requirements with one exception. Upon issuance of the permit in 2008, the facility was required to complete one-time sampling for various parameters. The sampling had never been done. The inspection report was transmitted to the facility with a cover letter on 1/11/2012.

Enforcement action date(s): None

Enforcement action notes: None

Other notes: The facility sent IDNR the results of its sampling on 2/24/2012. This facility was selected as a non-major traditional wastewater discharger that also represents the selected special focus area, ethanol facilities. This facility’s permit did not have any unusual or concerning provisions.

Emmetsburg STP (IA0021580)

Inspection date(s) and # days to report: 12/16/2010 (46)

Inspection notes: The report for this non-sampling inspection identified an operational problem with the facility’s sludge digester aeration system and flagged a long line of ammonia exceedances. The cover letter for the report served as a notice of referral for formal enforcement, identifying the ammonia violations as Significant Non-Compliance. In this way, the compliance determination for the facility was clear.

Enforcement action date(s): NOVs – 8/6/2009, 4/30/2010; Administrative Consent Order (ACO) – 2/20/2012

Enforcement action notes: Both NOVs were issued in response to recurring ammonia effluent limit exceedances that IDNR considered SNC and that began in April 2009. Through the process of issuing the NOVs and corresponding with the City, IDNR received notice in May 2010—following the second NOV—that the City intended to disconnect the industrial contributor responsible for the effluent violations. However, IDNR did not seek verification that this path to resolution happened, and in October 2010 the City informed IDNR that it was instead taking the approach of instituting a treatment agreement with the industry. This approach initially failed, however, as became known in December 2010. Finally, in the cover letter for the December 2010 inspection report, IDNR notified the City that Legal Services would consider the matter for formal enforcement. Considering the chain of actions by the state, the first NOV was an appropriate informal mechanism, but by the time the second NOV was issued more than nine months after the first full quarter of recurrent violations, the IDNR field office should have escalated the matter to Legal Services. By the time the penalty order was ultimately issued in

February 2012—almost three years after the initial ammonia violation and thirteen months after referral to Legal Services—the contributing industry had already ceased operation.

The penalty action itself was well justified in its consideration of gravity, culpability, and omission of economic benefit. The settlement penalty amount was also well justified, and the facility file included proof of penalty payment.

Other notes: None

Quad County Corn Processors (IA0076813)

Inspection date(s) and # days to report: 10/19/2011 (within 45 days)

Inspection notes: This facility has had a long history of failing Acute WET testing and the report thoroughly explained the TRE requirements in the Facility's Permit. Although the report stated that the overall facility was in good condition, it did not contain a description of the investigative activities performed during the inspection or a summary of the facility layout. The checklist for the condition of receiving water was filled in, but the report itself did not describe the receiving water observation.

Enforcement action date(s): NOVs—10/26/2010, 5/2/2011, 11/30/2011, 11/7/2012

Enforcement action notes: According to documents in the file, this facility has had a history of violating Acute Wet testing as far back as Sept 2007, but formal enforcement has not been pursued nor were there documents in the file to illustrate that the facility has resolved the toxicity in its effluent.

Other notes: This facility was selected as a non-major traditional wastewater discharger that also represents the selected special focus area, ethanol facilities. The facility permit did not pose any unusual or concerning provisions.

Ringsted WWTF (IA0057436)

Inspection date(s) and # days to report: 6/5/2012 (within 45 days)

Inspection notes: Although deficiencies such as a TSS violation and green effluent were noted by the inspector, the waterbody was not observed. Despite noted deficiencies, the report does not contain a compliance determination for the facility nor provide any recommendations to the facility regarding the discolored effluent. Instead, the report commends the WWTF operator for the care and maintenance of the facility.

Enforcement action date(s): NOV – 8/06/2009

Enforcement action notes: The NOV addressed a TSS violation.

Other notes: None

Valero Renewables (IA0080208)

Inspection date(s) and # days to report: 5/22/2013 (within 45 days)

Inspection notes: There was no discussion of receiving waters or outfalls, nor was there a discussion of the field activities conducted on-site.

Enforcement action date(s): NOVs – 8/1/2012, 11/7/2012, 5/23/2013

Enforcement action notes: The first two NOVs addressed sulfate violations in April and July 2012, which were corrected as documented by a letter from the facility in August 2012 that was responsive to the first NOV. As of the date of the facility's letter, the sulfate violation of July 2012 had already been corrected and has not recurred, although IDNR addressed it nonetheless in its November NOV.

Other notes: This facility was selected as a non-major traditional wastewater discharger that also represents the selected special focus area, ethanol facilities. The facility's permit does not present any concern with enforceability.

Poet Biorefining (IA0080063)

Inspection date(s) and # days to report: 10/11/2011 (36)

Inspection notes: The inspection report included an industrial wastewater inspection checklist and narrative descriptions of facility features and field activities that were conducted. The report lacks definitive descriptions, however, of observations relative to regulatory requirements. Language does not clearly state whether there were any problems with particular facility features. Following are three examples of unclear language in this regard: 1) The report says the permit reapplication was due 9/15/2011, but it doesn't say whether the application was received and received on time; 2) The report narrative includes a section titled "Requirements" that says what the facility needs to do to be in compliance, but there is no evidence that any of these items were not actually performed satisfactorily; and 3) The narrative says "All meters should be routinely cleaned to assure accurate readings," but the reader is not given any evidence that meters were not properly cleaned. The cover letter for the report says the facility was found to be in compliance, which seems to indicate that none of the examples above constituted violations; however, a clear description of observations and findings is nonetheless important but found to be lacking in this report.

One additional note about the inspection report is that the inspector indicates in the checklist that receiving waters were not observed. Because observation of receiving waters is an essential component of a comprehensive facility evaluation, the report needs to specify any extenuating circumstances that prevent such observation.

Enforcement action date(s): None

Enforcement action notes: None

Other notes: This facility was selected as a non-major traditional wastewater discharger that also represents the selected special focus area, ethanol facilities. This facility has a simple permit with one outfall and without any unusual or concerning provisions.

Tracy WWTF (IA0081647)

Inspection date(s) and # days to report: 12/16/2011 (within 45 days)

Inspection notes: None

Enforcement action date(s): None

Enforcement action notes: None

Other notes: This WWTP, owned by Mahaska Rural Water, had only started connecting homes at the time of inspection and had not yet discharged.

Chamness Technology, Inc. (IA)

Inspection date(s) and # days to report: 9/2/2009 (within 45 days)

Inspection notes: There was little discussion in the report concerning the condition of the receiving water or its distance from the facility's ponds.

Enforcement action date(s): 2 AOs issued in 2008 and 2009; referred to AG's office in 2010 and Judicial Order issued in 11/2011.

Enforcement action notes: The Judicial Order required a penalty in the amount of \$30,000.

Other notes: None

Cryotech Deicing Technology (IA0003387)

Inspection date(s) and # days to report: 6/7/2012 (within 45 days)

Inspection notes: The inspection report did not provide a description/observation of the receiving water. There was little detail provided in the report.

Enforcement action date(s): None

Enforcement action notes: None

Other notes: None

Clearview MHP (IA0065633)

Inspection date(s) and # days to report: 11/14/2012 (within 45 days)

Inspection notes: The inspection report does not contain a description/observation of receiving water.

Enforcement action date(s): AO – 2008; NOVs – 2/10/2011; 11/23/2011; 11/21/2012

Enforcement action notes: After a significant number of effluent limit violations, IDNR used the series of NOVs to require the Mobile Home Park to hook up to the City of Muscatine's WWTP, which will resolve the violations. The state had already taken enforcement in 2008 for similar issues, and it appeared that IDNR was unwilling to commit additional enforcement resources to this tiny mobile home park community.

Other notes: None

Pretreatment industries

Eaton Corp., Belmond

Inspection date(s) and # days to report: 08/22/2012 (18)

Inspection notes: The inspection was well done and comprehensive. As part of the inspection report, two years of sampling data, with violations highlighted, was included. The violations were discussed in the inspection report and one could refer to the attached data to determine if they constituted SNC.

Enforcement action date(s): None

Enforcement action notes: No enforcement resulted from this inspection.

Other notes: The inspection report notes that the treatment agreement between the City of Belmond and Eaton contains limits lower than the applicable 40 C.F.R Part 433 Metal Finishing standards because the sampling location also contains dilution water. This is a correct application of the Combined Wastetream Formula as required by 40 C.F.R. 403.6.

Hormel Foods, Algona

Inspection date(s) and # days to report: 01/31/2012 (8)

Inspection notes: The inspection report contained a print-out of two year's worth of sampling data ending December 2011. The facility's compliance status can be determined from this data. The inspection report identified BOD violations in November and December 2011 and notes that Hormel had recently added two more production lines. While the data were not yet available for January 2012, the industry speculated that they would violate that month, too.

Enforcement action date(s): None

Enforcement action notes: There was no enforcement action resulting from this inspection although there probably should have been. While the November and December BOD violations were the only ones in the two year BOD data set, they were associated with a plant expansion. Consequently, they should not have been construed as isolated violations, especially when the industry speculated that January, too, would be out of compliance.

Other notes: The industry addressed the noncompliance by approaching the city for higher Treatment Agreement limits. These were granted by the city in August 2012 by doubling the allowable loading from Hormel. From the file I was not able to tell whether IDNR had approved the treatment agreement change, although there was a letter to IDNR requesting approval from the city. However, the city's permit has been expired since August 2006 so it will have to be reissued with the new TA limits for them to be effective, assuming they have been approved.

Jet Company, Humbolt

Inspection date(s) and # days to report: 05/09/2012 (9)

Inspection notes: The inspection report was sufficiently descriptive to understand the facility's operations and regulated process. Two year's worth of data was attached to the report so that the industry's compliance status could be determined. The inspection discussed the recent violations and how the industry had responded by installing a zeolite treatment system in October 2011.

Enforcement action date(s): 5/18/2012

Enforcement action notes: The inspection transmittal letter identified itself as a Notice of Violation.

Other notes: Jet Company is one of the industries whose compliance status IDNR reports to EPA every six months. The report that covers the time period when the inspection was done, shows the Jet facility to be in SNC because of zinc violations, however, the inspector does not discuss this in the report. Further discussion with IDNR staff indicated that the term SNC is not calculated or used by Field Office inspectors. Rather, it is determined by IDNR Central Office for purposes of reporting to EPA. The Field Office inspectors should be aware of how to calculate SNC and should apply it to all Pretreatment industry data sets.

North Iowa Produce, Stacyville

Inspection date(s) and # days to report: 02/06/2012 (9)

Inspection notes: North Iowa Produce began discharging in 2010. A treatment agreement was signed between the city and industry and incorporated into the City's NPDES permit on 7/1/2011. This was the first inspection done with the TA in force. The inspection noted minor violations of the TA but nothing that would constitute SNC.

Enforcement action date(s): None

Enforcement action notes: No enforcement was taken as a result of the inspection.

Other notes: Stacyville is a small town (pop 500) and its permit did not require influent sampling prior to North Iowa Produce going on line. Hence, the limits for the treatment agreement were derived based on population served rather than existing measured load. The TA establishes daily maximum BOD and TSS loads of 52 and 7.2 lbs/day, respectively. Anticipated flows from the IU were around 4,000 gallons per day. At the time of the February 2012 inspection, these were roughly levels seen from North Iowa Produce. However, review of DMRs from the city in late 2012 and early 2013 showed much higher loads coming from the industry. Flows as high as 20,000 gpd have since been reported. BOD concentrations, which are measured by composite samples, were reported in the several thousand milligrams per liter range. While

the TA limits are expressed only in mass, recent high flow or high concentration discharges have resulted in discharges of 99.65, 512, and 3107 lbs/day of BOD, well above the limit of 52 lb/d. From the file it is not clear how frequently these discharges occur. It is also possible that the sampling is not being performed correctly and erroneous levels are being measured. The city is now required to monitor its influent once per quarter. However, until more is known about the actual load coming from North Iowa Produce, the IDNR may want to require the city to perform more frequent monitoring.

Richelieu Foods, Grundy Center

Inspection date(s) and # days to report: 02/08/2012 (21)

Inspection notes: The facility has a treatment agreement with Grundy Center for treatment of wastewater resulting from the manufacturing of salad dressings and sauces. The city's permit expired in 2005 but remains in effect. The inspection noted frequent pH violations leading to the city and Richelieu Foods to negotiate a lower pH limit. However, that limit will not be enforceable until the city's NPDES permit is reissued containing the new treatment agreement between the two parties. Generally, the inspection report was well written. All violations since the last inspection were discussed; however, because a table of all sample values was not attached to the inspection, it could not be determined if the facility should be considered in SNC. The inspection report did not say whether the violations constituted SNC or not.

Enforcement action date(s): None

Enforcement action notes: No enforcement action was taken as a result of the inspection.

Other notes: Richelieu Foods recently had an NPDES permit for land application of its EAF float but has not renewed it because they are now taking this wastestream, which is high in oil and grease, to CP Bioenergies at the Amana Colonies, where presumably the BTU content is being recovered.

Aero Race Wheels, Estherville

Inspection date(s) and # days to report: 02/03/2012 (20)

Inspection notes: The document consulted did not appear to be an inspection report as it was not in a format similar to others reviewed. It appeared more to be a printout of a summary of observations that are kept in a state database or something similar. There was no inspection report transmittal letter in the file so it is not known if the industry ever received a copy. OTIS contains an entry for a Pretreatment IU inspection on 2/3/2012. There was mention in the document that the city has sampled Aero and believes they can meet the TA limits; however, there was no attached list of sampling values.

Enforcement action date(s): None

Enforcement action notes: None

Other notes: Aero Race Wheels is subject to the 40 CFR Part 433 Metal Finishing standards because of a conversion coating operation performed in the manufacturing of steel wheels. A treatment agreement was signed between the city and Aero on 3/12/2010; however, when the City's NPDES permit was modified on 2/1/2011, the TA was not included. This facility is not reported to EPA on the semiannual report on compliance for Categorical industries. There were no sampling data in the file to review to determine if this facility is meeting its Categorical standards. The reviewer could not determine sampling frequency or if sampling is even routinely done.

Hawarden Machine, Hawarden

Inspection date(s) and # days to report: Can't tell. There is an entry in EPA's OTIS database showing a IDNR CEI done on 8/14/2012, however, there was no document in the file that looked to be an inspection report or checklist. There was a document in the file dated 8/14/2012 that appeared to be a printout of Hawarden Machine's monitoring values for 2012.

Inspection notes: None available to review.

Enforcement action date(s): None observed. OTIS showed no enforcement actions taken against the city in 2012.

Enforcement action notes: None.

Other notes: The Hawarden permit, which expired 7/12/2011, does not contain a TA for Hawarden Machine. There was a TA in the facility's file with an effective date of March 2009. Because it has not yet been incorporated into the city's NPDES permit, the compliance status of this industry is not reported to EPA semiannually. From the above mentioned print out of Hawarden Machine data dated 8/14/2012, it appears they may have had a zinc violation of 14.3 mg/l vs. a monthly average limit of 1.48 mg/l. There is no evidence that any enforcement has been taken. Consulted during the program review was a list of TA holders in the IDNR system. Hawarden Machine was not on that list so it does not appear to be fully incorporated into the IDNR universe of Categorical industries.

Pengo Corporation, Laurens

Inspection date(s) and # days to report: 6/27/2012 (6)

Inspection notes: The inspection identifies Pengo as subject to the Categorical standard for Metal Finishing because they perform a phosphate conversion coating process. Presumably the regulated process is an iron phosphating operation rather than a zinc phosphating operation as there was only one zinc violation in the two-year violation data attached to the inspection report. The violation cited was a sample value of 3.3 mg/l vs. a monthly average limit of 1.48 mg/l, and a daily maximum limit of 2.61 taken in July 2011. The TA specifies semi-annual sampling but the General Pretreatment Regulations require that any time a violation occurs, the facility is required to resample and resubmit results within 30 days. This requirement was not discussed in the inspection report, even though more frequent monitoring was discussed. However, since Pengo's compliance status is reported to EPA semiannually, the status for that time period was Infrequent Noncompliance, suggesting that at least three other samples had been taken in three additional months during the six-month reporting period, all showing compliance with the 1.48 mg/l monthly average. This could not be verified, however, because the data printout attached to the inspection report was only for violations, not all samples taken during the time period.

Enforcement action date(s): NOV – 11/07/2012

Enforcement action notes: The enforcement action of 11/7/2012 was not for the violation discussed during the inspection of 6/27/2012 but for a sample taken in July 2012. That sample was a violation of the zinc monthly average limit (1.60 vs. 1.48 mg/l limit). Because the city holds the NPDES permit containing the TA, the NOV was sent to them. Documents in the file indicate that city met with Pengo and obtained a commitment for coming into full compliance. Included in the correspondence in response to the NOV was a document from Pengo (undated) addressing the July 2011 violation that had been the subject of the June 2012 inspection report.

Other notes: The city's NPDES permit expired 7/16/2005. The inspection report of June 2012 noted, however, that it was soon to be reissued and may be modified to contain monthly sampling requirements of Pengo's discharge.

TG Industries, Armstrong

Inspection date(s) and # days to report: 9/18/2012 (2)

Inspection notes: The inspection report consisted of two pages. The first page is a form that identifies the facility, its regulated operations, flows, treatment type. The second page contained a short discussion of the wastestream generated, how it is treated and stored, and how it is hauled to the City of Armstrong. There was no discussion of sampling frequency or values or an attached table of sampling events, as I had observed for other inspection reports.

Enforcement action date(s): None

Enforcement action notes: No enforcement action resulted from this inspection.

Other notes: The City of Armstrong's permit expired in 2006 and the TA with TG Industries was signed in 2007. Consequently, the TA and sampling requirements are not enforceable through an NPDES permit. Nevertheless, as a Categorical Industry, TG Industries has sampling and reporting requirements to IDNR established by the General Pretreatment Regulations. Moreover, because of the industry's Categorical status, they should be included in the semi-annual report on compliance that IDNR submits to EPA for all Categorical Industries Outside Pretreatment Cities, which at present, they are not.

Ring-O-Matic, Pella

Inspection date(s) and # days to report: 3/16/2012 (3)

Inspection notes: The inspection report was a four page narrative only – no accompanying checklist. The report contained a comprehensive review of the industry's manufacturing and regulated processes. The report presented a table of violations from the previous two years. However, because there was no discussion of the total number of samples taken, it could not be determined if the facility was in Significant Non Compliance. The report notes that a treatment agreement was signed in August 2007 but has not yet been incorporated into the City's NPDES permit, which expired 11/24/2011. Despite that there is no NPDES enforcement authority of the TA, the city was found to be taking an active role in working with Ring-O-Matic to achieve compliance.

Enforcement action date(s): NOV – 11/01/2012

Enforcement action notes: This is not a IDNR enforcement action but rather one issued to the industry by the City of Pella. There is no record in OTIS of IDNR issuing an NOV to the city but that is likely because there is no NPDES authority to do so until the city's permit is re-issued. In this case, the state could have issued an NOV directly to the industry as they are the Control Authority under the General Pretreatment Regulations.

Other notes: The inspection report was transmitted to the industry on 3/9/2012 but it did not also contain an NOV, even though it did contain a table of violations. The industry responded by letter 3/29/2012 addressing all of the recommendations contained in the report. One of the inspection report's recommendations was for the industry to increase its monitoring to monthly, which they implemented. There was no further information in the file to indicate the results of this increased sampling and if the industry was achieving compliance with its Categorical standards. Because this facility's TA is not yet incorporated into the city permit, IDNR is not reporting the compliance status to EPA in its semiannual compliance report on Categorical industries.

Municipal Separate Storm Sewer Systems (MS4)

City of Coralville (IA-0078646)

Inspection date(s) and # days to report: 11/7/2011 & 12/2/2011 (42 days from 12/2/2011)

Inspection notes: IDNR conducted an inspection on 11/7/2011 and continued the inspection on 12/2/2011. The report is a narrative discussion of the City's MS4 program arranged by program component. The report makes several recommendations to improve the program but does not discuss each of the permit's specific requirements. It is not possible to determine from the report if the City was in compliance with the permit's requirements at the time of the inspections. The inspection report was transmitted to the City on 1/13/2012 with the suggestion that the City comply with the recommendations in the report.

Enforcement action date(s): None

Enforcement action notes: None

Other notes: None

Sioux City MS4 (IA-0078662)

Inspection date(s) and # days to report: 11/17/2010 (34)

Inspection notes: The site was inspected on 11/17/2010 and several deficiencies were found, including failure to review the SWPPP, failure to conduct construction site inspections, and failure to implement the IDDE program. The inspection report was transmitted on 12/21/2010 with an NOV. The NOV does not give a date for response verifying steps were taken to return to compliance; rather, it informs the City that the matter was referred to Legal Services because of ongoing violations (similar violations were documented during a 2008 inspection).

Enforcement action date(s): The case was referred to the legal department on 12/29/2010. An ACO dated 3/12/2012 was in the file.

Enforcement action notes: The ACO cites the violations cited above. A check in the amount of \$30,000 was in the file. \$10,000 of the penalty is for MS4 violations. This action was part of a larger action including air, solid waste and waste transfer violations. The file contains documentation stating that the City achieved compliance with its MS4 permit. The original penalty calculation was \$5,000, but the amount was raised to \$10,000 when the ACO was issued. The penalty calculation includes a gravity component of \$3,000, an economic benefit component of \$4,000, and \$3,000 for culpability. The full \$10,000 penalty was collected. The settlement memo states the full amount was collected, the state has a better relationship with the City as a result of the action, and IDNR does not expect the violations will be repeated.

Other notes: None

Stormwater – Construction

Leo Simon Seeding & Sod

Inspection date(s) and # days to report: 6/25/2012 (2)

Inspection notes: The file consisted only of a one-page NOV. The NOV letter states that an inspector was at the site on 6/25/2012, observed more than one acre of disturbance, and the operator must apply for a permit within thirty days.

Enforcement action date(s): NOV – 6/27/2012

Enforcement action notes: There was nothing in the file indicating that a permit was issued.

Other notes: None

Sumner High School (IA-18624-18399)

Inspection date(s) and # days to report: 9/6/2012 (6)

Inspection notes: Construction at the site was complete at the time IDNR staff visited. The inspector documented no remaining disturbed areas and suggested the site operator submit a notice of termination, which was done the following week.

Enforcement action date(s): None

Enforcement action notes: None

Other notes: There is no formal inspection report for this site and therefore no transmittal of the inspection report. The inspector only wrote a memo to the file which was completed six days after the site visit. The other item in the file was a copy of the letter from the operator requesting termination of the permit.

Northwood Hotel Ventures, LLC (IA-18533-18309)

Inspection date(s) and # days to report: 10/27/2010 (2) & 5/26/2011 (5)

Inspection notes: Both inspections revealed deficiencies. The first inspection report documents the failure to document self site inspection reports over the life of the project to date and the failure to have contractor certification statements on file. In response to these findings, an NOV and the inspection report were sent to the facility on 10/29/2010. There was no documentation in the file indicating the facility returned to compliance after this inspection.

A second inspection was performed on 5/26/2011. The inspection documented the permit expired on 5/17/2011, sediment had been transported offsite, failure to install controls on the northwest portion of the site, and no documented self site inspections for the life of the project. An NOV was issued to the site on 5/31/2011 for failure to document self site inspections, failure to maintain controls, and failure to renew the permit. The case was referred to the Legal Services Bureau for formal action. Legal Services sent a draft ACO to the facility in 9/2011 citing no self site inspections had been documented and the failure to renew the permit. A fully executed ACO dated 2/14/2012 was in the file.

Enforcement action date(s): Fully executed ACO dated 2/14/2012 preceded by an NOV dated 5/31/2011 and an NOV dated 10/29/2010.

Enforcement action notes: In addition to the fully executed ACO dated 2/14/2012, the file contains a copy of a check for \$2,000 dated 2/10/2012. The original penalty demand was \$2,825. This figure is comprised of a \$1200 gravity component, a \$1500 culpability component and an economic benefit component of \$125 for failure to document self site inspections. A memo in the file justifies a reduction in penalty from \$2,825 to \$2,000 stating the amount was reduced in the interest of settling and avoiding the cost of additional staff time that would be involved in proceeding to a unilateral order with the possibility of appeal and hearing. The memo further states that the recovered amount recoups economic benefit and also serves as a sufficient deterrent.

The file contains a copy of the renewed permit authorization. However, there is no documentation in the file indicating if self site inspections were ever performed at this site.

Other notes: None

Clay County Bridge (IA-18004-17777)

Inspection date(s) and # days to report: July 13, 16, 27, & 30, 2012 (2)

Inspection notes: The inspector visited the site several times and documented “failure to install adequate controls, inadequate site inspections, failure to have contractor certification statements, SWPPP not available onsite, and failure to update SWPPP to document changes onsite.” An NOV and the inspection report were transmitted to the facility on 8/1/2012.

Enforcement action date(s): NOV – 8/1/2012

Enforcement action notes: The NOV states, “Corrective action must be complete 8/6/2012.” However, there is nothing in the file to document a return to compliance.

Other notes: The site was visited four times. The final visit was 7/30/2012. This date was used as the date of inspection for calculating the number of days to complete the report.

Sabre Industries, Inc. (IA-21865-21626)

Inspection date(s) and # days to report: 7/11/2012 (1)

Inspection notes: The inspection revealed several violations: inspection records not available during inspection (sent to inspector after inspection), failure to install BMPs, and failure to update and amend the SWPPP. The inspection report and NOV were sent to the facility the day after the inspection.

Enforcement action date(s): NOV – 7/12/2012.

Enforcement action notes: A note in the file dated 8/1/2012 stated that the inspector visited the site and observed that the deficiencies had been corrected.

Other notes: None

Platinum Grain, LLC (IA-21288-21056)

Inspection date(s) and # days to report: 8/3/2012 (14)

Inspection notes: The facility was found to be in compliance and this finding corresponds with the inspector’s observations. The inspection report was transmitted to the facility with a cover letter on 8/17/2012.

Enforcement action date(s): None

Enforcement action notes: None

Other notes: None

Haley Heights Addition (IA-21764-21530)

Inspection date(s) and # days to report: 8/27/2012 (8)

Inspection notes: The inspector documented “failure to install sufficient controls to prevent non-stormwater discharge from the site (sediment was observed offsite and in the creek) and failure to stabilize topsoil piles ASAP.” The inspection was transmitted with an NOV on 9/4/2012.

Enforcement action date(s): NOV – 9/4/2012

Enforcement action notes: A follow-up letter to the facility dated 9/19/2012 states IDNR visited the site, sufficient controls had been added, and the facility returned to compliance.

Other notes: Discrepancy: NOV letter dated 8/31/2012, but the attached inspection report is dated 9/4/2012. The 9/4 date was used in calculating the “# days to report” above.

Sandhill Estates (NER111779)

Inspection date(s) and # days to report: 8/22/2012 (14)

Inspection notes: The facility was found to be in compliance as reflected in the inspector’s observations documented on the inspection checklist.

Enforcement action date(s): None

Enforcement action notes: None

Other notes: The only items in the file were two copies of the completed inspection checklist and three digital photographs printed on one piece of paper. There was no transmittal letter or other indication that the facility was made aware of the inspection findings.

Stormwater – Industrial (non-construction)

Welden Aggregates (IA-22618-22374)

Inspection date(s) and # days to report: 7/18/2012 (no report; 13 days to file memo)

Inspection notes: IDNR conducted a complaint investigation on 7/18/2012 in response to a 7/16/2012 complaint. The investigation revealed the facility had no permit and discharged non-stormwater to the receiving stream. IDNR issued an NOV on 8/3/2012 requiring the facility to apply for, receive, and comply with the appropriate stormwater general permit.

Enforcement action date(s): NOV – 8/3/2012

Enforcement action notes: In response to the NOV the facility owner decided to cease quarrying and just sell stockpiles. By ceasing the quarrying operation the owner said the milk-colored discharge would stop. The owner was informed that he still needed GP#3. IA-22618-22374 (GP #3 for quarrying operations) was authorized on 10/3/2012.

Other notes: The inspection was done as a complaint investigation and a formal inspection report was not completed. The memo to file that contained the findings was reviewed and contained most of what would have been in an inspection report. Please refer to the “NPDES Inspection File Evaluation Checklist.”

Sheldon Regional Airport (IA-22618-22374)

Inspection date(s) and # days to report: 8/8/2012 (7)

Inspection notes: IDNR conducted an inspection on 8/8/2012 and documented the following violations: failure to update the SWPPP to reflect site conditions; failure to inspect; incomplete SWPPP (no site map); failure to conduct employee training; and failure to sign the SWPPP certification. The inspection was transmitted to the facility with an NOV on 8/16/2012. The NOV stated that all violations must be corrected in 30 days.

Enforcement action date(s): NOV – 8/16/2012

Enforcement action notes: In response to the NOV, the facility sent a letter and documentation to IDNR on 9/10/2012 demonstrating that all violations had been corrected.

Other notes: None

Petersen Manufacturing Co., Inc. (IA-1723-1576)

Inspection date(s) and # days to report: 8/29/2012 (1)

Inspection notes: The inspector found compliance with permit requirements with the exception that the facility “had not kept records of annual visual inspections in recent years but will begin.” The inspection checklist was marked “NC” (noncompliance) for that requirement. The inspection report was transmitted with a cover letter on 8/31/2012. The cover letter states “the report should be self-explanatory.”

Enforcement action date(s): None

Enforcement action notes: None

Other notes: None

Iowa State University Heating Plant (IA-0623-0437)

Inspection date(s) and # days to report: 3/8/2012 (36)

Inspection notes: The stormwater inspection was performed in conjunction with a wastewater inspection. A checklist was not used. The stormwater discussion is a one-page narrative. The facility was found to be in compliance. The inspection report discusses the facility areas inspected by the inspector and also discusses the facility's sampling results, but it does not include a discussion of the SWPPP requirements and annual site inspection.

Enforcement action date(s): None

Enforcement action notes: None

Other notes: None

Terry Phillips, dba TK Enterprises (N/A)

Inspection date(s) and # days to report: 2/17/2011 (no report sent)

Inspection notes: The site was inspected as the result of an air complaint received on 2/15/2011. The inspector noted numerous air, solid waste, and stormwater violations. The site had no permits. On 2/24/2011 IDNR sent a complaint (air terminology for a document much like a NOV) requiring, with regard to NPDES, that the facility apply for and receive GP #1. This was the only inspection, although there were numerous site visits after the original complaint investigation. The purpose of the site visits was to try to have contact with Mr. Phillips and to determine if site conditions were the same. Based on the site visits, it appears Mr. Phillips continued to conduct the same activities, although he never applied for or received the appropriate permits. It also appeared that he made no effort to comply with the terms of the permits were he to have them. In addition to the numerous site visits, IDNR sent Mr. Phillips several letters and other correspondence reminding him of the permitting requirements and that he was out of compliance and risked further legal action.

Enforcement action date(s): Complaint sent 2/24/2011. A draft ACO including a penalty of \$7,000 was sent on 1/20/2012. No response was received. A unilateral final order was sent 3/15/2012. The order required payment of a \$7,000 penalty.

Enforcement action notes: Mr. Phillips never responded to any correspondence from IDNR. The unpaid penalty order was turned over to the Dept. of Revenue on 9/21/2012. A memo in the file dated sometime in June 2013 states that IDNR was going to try to talk to Mr. Phillips one last time to let him know he needs to comply with the AO to prevent having the compliance portion of the order turned over to the AG. A memo dated 7/10/2013 states that the AO was not appealed, Mr. Phillips failed to comply with the order, and the \$7,000 penalty remained unpaid, although collection had been turned over to the Department of Revenue.

Hickory Grove Auto (IA-2694-2968)

Inspection date(s) and # days to report: 2/8/2012 (16)

Inspection notes: The inspector observed minor deficiencies (failure to have complete SWPPP on site and failure to train staff annually). The inspection report was sent to the facility on 2/24/2012 with a cover letter that detailed the violations observed during the inspection.

Enforcement action date(s): None

Enforcement action notes: None

Other notes: The facility sent IDNR a complete copy of the SWPPP and a sign-in sheet from training that was conducted for employees after the DNR inspection.

Supplemental files for evaluating particular SRF metrics

Cresco STP (IA0021334)

Inspection date(s) and # days to report: None

Inspection notes: None

Enforcement action date(s): NOV – 10/26/2012

Enforcement action notes: IDNR issued the NOV in response to 14 effluent limit violations at the City between January and September 2012, some of which constituted SNC according to state and federal definitions. The NOV was issued timely relative to the violations during the April through September quarters but not relative to the violation in the January-March quarter. A return to compliance was achieved via submission and implementation of the City's Plan of Action that was requested by the NOV. Once the NOV was issued, IDNR worked promptly with the City to obtain a satisfactory Plan of Action. The state adhered to its Enforcement Management System guidance in the choice of tools for responding to this noncompliance.

Other notes: This facility was selected as a supplemental file because it was a major in SNC during the fourth quarter of FFY 2012. File review indicates that the state responded appropriately to the legitimate noncompliance.

Clarion STP (IA0030945)

Inspection date(s) and # days to report: 9/26/2012

Inspection notes: IDNR performed a non-sampling inspection at the City and sent a report that included two thorough checklists and narrative describing violations found during the inspection. The inspector lists the results of a review of the past two years of DMRs. Historic CBOD violations were linked to Clarion Packaging, but the report notes that this contributor was cut off from the collection system 6 months prior to the inspection and that loadings to the treatment plant have consistently been below design capacity since then. One exception to the report's clarity of observations is the inspector's notation in the checklist that effluent was green. Because the effluent did not appear clear, the report should elaborate on whether the color green is problematic or not in this situation; however, such explanation was absent. The report also lacks a listing of "persons interviewed" in the checklist, and the narrative does not provide a comprehensive accounting of who represented the facility.

Enforcement action date(s): NOV – 10/16/2012

Enforcement action notes: The cover letter to the inspection report also served as an NOV in response to bypasses at the treatment plant, although the body of the report discusses only one bypass that occurred 18 months prior to the inspection. An NOV in response to this one bypass would have better served its purpose if it had been issued within a few months of the incident. Also, the NOV does not request a response from the facility regarding this violation; however, a response might not be necessary given the long lapse since occurrence of the violation.

Other notes: This facility was selected as a supplemental file because it has multiple permit schedule milestones marked as unachieved and late, constituting violations in ICIS. Review of the facility file did not uncover any documents discussing receipt or review of deliverables pursuant to the compliance schedule. Therefore, this evaluation of permit schedule deliverables tracking by IDNR is inconclusive.

Minden STP (IA0048330)

Inspection date(s) and # days to report: None

Inspection notes: None

Enforcement action date(s): None

Enforcement action notes: Although there were no informal or formal enforcement records to review in this file, EPA notes that the compliance record for this facility in ICIS shows recurrent flow violations and scattered Total Suspended Solids violations before, during, and after the FFY 2012 period. The most recent DMR review by the IDNR field office, however, took place 5/31/2011 and covered the period June 2005 through February 2011. On the field office review sheet, IDNR highlighted numerous violations but did not respond to the facility in any way. Not only did these effluent violations warrant some type of response, but the state appears to be reviewing this facility for compliance on a very infrequent basis.

Other notes: This facility was selected as a supplemental file because it has multiple permit schedule milestones marked as unachieved and late, constituting violations in ICIS. Review of the facility file did not uncover any documents discussing receipt or review of deliverables pursuant to the compliance schedule. Therefore, this evaluation of permit schedule deliverables tracking by IDNR is inconclusive. Furthermore, the milestone dates in the permit do not match the milestone dates in ICIS, suggesting that the dates were not entered or batched accurately.

Olds Municipal Utilities (IA0074560)

Inspection date(s) and # days to report: 10/5/2012 (5)

Inspection notes: The inspection report made use of two inspection checklists, one being the standard wastewater treatment facility inspection checklist and the second being a facility evaluation checklist with room for notation on the satisfactory or non-satisfactory condition of a wide array of facility features. Accompanied by narrative, these checklists thoroughly accounted for the inspector's field activities and observations relative to regulatory requirements. To summarize the findings, a "Violations" section accompanied the standard "Requirements" and "Recommendations" sections found in reports for many facilities. The one violation found was a monthly average TSS exceedance in the April-June 2012 quarter.

Enforcement action date(s): 10/10/2012

Enforcement action notes: The NOV was incorporated into the inspection report cover letter for the 10/5/2012 inspection. It addressed the monthly average TSS exceedance discussed above. Although the NOV did not ask for a response from the facility, the City sent a responsive email to IDNR 29 days later and did not repeat the underlying violation.

Other notes: This facility was selected as a supplemental file because it has multiple permit schedule milestones marked as unachieved and late, constituting violations in ICIS. Only one of the five milestones in the permit did not appear as a violation in ICIS. Review of the facility file did not return any documents discussing receipt or review of deliverables pursuant to the compliance schedule. Therefore, this evaluation of permit schedule deliverables tracking by IDNR is inconclusive.

Appendix C: Iowa Compliance and Enforcement Program Overview

A. Overview of Iowa's Program

A1. Program Structure and Roles/Responsibilities

The NPDES program in Iowa is implemented by IDNR's Environmental Services Division (ESD) and Legal Services Bureau (LSB). Within ESD, the Water Quality Bureau is located in the Des Moines central office and is responsible for issuing and renewing all NPDES permits. The Field Services and Compliance Bureau (FSCB) within ESD ensures compliance with and enforces Iowa's authorized NPDES program. Most of the work conducted in FSCB takes place in IDNR's six field offices scattered geographically throughout the state. FSCB conducts compliance inspections, issues informal enforcement, and refers cases of noncompliance warranting formal enforcement to the LSB, which is located in IDNR's central office. For a detailed description of the process IDNR follows to take any enforcement and to escalate cases of noncompliance to formal enforcement, refer to Section A4 below.

The FSCB divides the responsibility for coordinating compliance and enforcement of environmental programs across the six field offices, with each field office supervisor uniquely responsible for one or more media program components. Within the NPDES program, compliance and enforcement for wastewater, stormwater, and pretreatment are coordinated by the Field Office #6 supervisor. Compliance and enforcement at CAFOs are coordinated by the Field Office #3 supervisor.

A2. Staffing, Resources, and Training

The FSCB has 21 full-time equivalent staff, funded by IDNR's Environmental Performance Partnership Grant from EPA, assigned to compliance and enforcement duties for wastewater and AFOs. These duties include inspections, reviewing DMRs, and other NPDES field activities. IDNR provides its own funding for staff in the stormwater program. Staff in each field office assigned to NPDES duties perform approximately 65 planned inspections per person per year, in addition to investigating complaints, performing work requests, and providing technical assistance either in person or via the phone. The FSCB has not had any recent vacancies that were not pegged for refilling.

The LSB consists of ten attorneys and one administrative assistant who handle all legal matters that are confronted by the Department. This number includes the chief legal counsel. The LSB did not have any unfilled vacancies at the time of this report.

The FSCB provides on-the-job training, whereby new employees learn how to conduct inspections by shadowing experienced staff. After some period of shadowing, a new staff member learns how to write inspection reports for inspections conducted by experienced staff. After a couple of months, a staff member begins to conduct inspections with oversight from experienced staff and writes their own reports. Upon mastering this, they graduate to conducting their own independent inspections, first at simple facilities like lagoons and eventually at

mechanical and more complex facilities. FSCB also send their new staff to weeklong wastewater operator courses and, for stormwater inspectors, to erosion and sediment control courses. Each field office also has periodic meetings to discuss current issues within each NPDES program area, which fosters continuous career growth.

A3. Data Reporting and Tracking Systems

IDNR maintains databases for each of the three primary program areas regulated under the Clean Water Act (e.g. wastewater, stormwater, and CAFOs), which the central and field offices use to manage information about facilities, permits, and compliance monitoring. The NPDS database, houses information for individually permitted municipal facilities, industrial facilities, MS4s and CAFOs, and the Wastewater Permit Information Exchange (WWPIE) database displays all the individual NPDES permits and associated permit documents. Aside from these four program-specific databases, IDNR also tracks field office activities, including inspections, investigations, NOVs, incidents, complaints, and compliance follow-up, in a single Field Office Database called FOCD. FOCD is publically-accessible and is used as a catalog of documents that are shared between facilities and IDNR. Because there is an overlap between some of the information tracked in the program-specific databases and the FOCD, IDNR consolidated some of the functions in NPDS and FOCD to eliminate double entry.

The Information Technology Bureau (ITB), within IDNR's Management Services Division, maintains the NPDS database and is responsible for entering all Water Enforcement National Database (WENDB) data elements required to be populated in ICIS. To enter WENDB data into ICIS, ITB converts data in NPDS to XML files and uploads, or "batches" those files to ICIS via EPA's Interim Data Exchange Flow (IDEF) –Central Data Exchange (CDX) system. If any data in the XML files is rejected by the IDEF-CDX interface, ITB is responsible for ensuring that errors are corrected (with the assistance of staff in the NPDES section) and that the batching process is repeated until the data is properly and accurately uploaded. Audit reports are generated by IDEF-CDX at the state's request to facilitate identification of data points responsible for any batching errors.

Iowa, along with all other states, has migrated its NPDES data from the Permit Compliance System to ICIS. Iowa executed this migration between November 2012 and January 2013. IDNR submitted an application to the EPA Headquarters offices in February of 2010 to be certified compliant with the Cross-Media Electronic Reporting Regulation (CROMERR), which sets the standard for security and integrity of program management data collected and maintained by EPA and the states. EPA rejected the application, as it has for several states. EPA is currently working in partnership with the Environmental Council of the States to resolve the issues underlying the CROMERR application rejection for Iowa and other states.

A4. Enforcement Policy and Escalation Process

The guidance that IDNR follows to assure compliance and conduct enforcement is described in the Department's Enforcement Management System (EMS) document, which was last revised May 2013. To better understand the state's protocol for escalating non-compliance to enforcement, EPA discussed this matter with management from the FSCB and LSB during the

program review. For the purpose of this overview, informal enforcement includes Notices of Violation (NOVs), Letters of Noncompliance (LNC), and similar warning letters, while formal enforcement includes administrative consent orders, administrative orders, and judicial orders.

Field office personnel discover NPDES violations through inspections, complaint investigations, and review of DMRs and other self-reported information. Upon discovery, the EMS calls for IDNR to issue an NOV to the facility for significant violations (e.g. ones that cause environmental harm, create a human health or environmental emergency, that involve a repeat offender, etc.) or an LNC for non-significant violations. As EPA verified by reviewing facility files, IDNR's NOV's and LNC's usually require the facility to respond with a statement of corrective actions taken to prevent recurrence of the violation. According to the EMS, significant violations may warrant immediate escalation of the matter; otherwise, IDNR monitors the facility's compliance until 90 days following issuance of the NOV or LNC. During this period, field office staff might revisit the facility, offer technical assistance, monitor DMRs, etc.

If the facility does not return to compliance within ninety days following issuance of the NOV, or if any violation was deemed to merit immediate escalation, IDNR evaluates the violation against the Department's enforcement priorities, which are specific to each program area and described in the EMS. If the violation does not meet these priorities, the EMS calls for IDNR staff to continue working with the facility through means of informal enforcement and compliance monitoring. If the violation does meet these priorities, the field office forwards a summary of violations and evidence to the field office supervisor responsible for coordinating the relevant component of the NPDES program (i.e. the Field Office #3 or #6 supervisor for CAFOs or wastewater/stormwater). The inspector, field office supervisor, and FSCB bureau chief then decide whether to refer the case to LSB.

If FSCB decides to proceed with a referral, the EMS states that the coordinating field office should prepare a complete referral package within ten days and forward the package to LSB. The referral package is to follow the template provided in the EMS, which includes a description, history, and chronology of the violations as well as a penalty recommendation with justifications for economic benefit, gravity, and culpability. IDNR is subject to a statutory cap of \$10,000 for administrative penalties; therefore, if FSCB determines that a penalty in excess of \$10,000 is warranted, FSCB recommends in the referral that the case be pursued judicially by the state Attorney General (AG).

Upon receipt of the referral package, the chief legal counsel of LSB forwards the referral package to the AG, regardless of whether the recommended penalty exceeds \$10,000. The AG retains the prerogative to take or reject any case of its choosing. If the AG does not elect to take the case, the \$10,000 cap on penalty becomes effective and the case must proceed administratively within IDNR. The LSB attempts to settle cases on consent, although unilateral compliance orders are employed for exceptions such as emergency orders or when respondents have a history of unresponsiveness or recalcitrance. The EMS provides that LSB should send the respondent an initial draft consent order or a compliance order within 90 days of attorney assignment and that settlements on consent orders should be negotiated within 120 days of respondent's receipt of the draft consent order.

Because most enforcement cases initiated by IDNR proceed administratively, the statutory penalty cap imposes an effective limit on how much economic benefit the state can recoup from violators. For this reason, FSCB and LSB believe that a practical approach for estimating avoided and delayed costs of noncompliance is more appropriate than devoting additional time to using a model akin to EPA's BEN model, which, as the state has found, often produces economic benefit that far exceeds the \$10,000 statutory cap. IDNR's alternative approach is to memorialize in legal penalty orders the calculations showing estimates of real-world avoided and/or delayed costs while tempering those estimations with the reality that the extent of penalty is limited. EPA's review of this approach in practice is included within the SRF Findings and Recommendations section of the report.

B. State Procedures, Priorities, and Activities within Specific NPDES Program Areas

Iowa's enforcement priorities for wastewater, stormwater, and CAFOs are described in detail in Part XII of the May 2013 EMS document and summarized here. Enforcement priorities are considered when IDNR decides whether to escalate continuing noncompliance to formal enforcement. IDNR management emphasized during the on-site program review that these priorities are frequently revised, but they provide an adequate summary of the priorities that guided the agency's work in FFY 2012. This section also discusses important aspects of how the state implements its NPDES program for the aforementioned program components as well as for the pretreatment program. Noteworthy activities that IDNR has conducted through its implementation of these program components are also discussed.

B1. Wastewater

IDNR applies its wastewater enforcement priorities to both major and minor dischargers. The priorities are significant effluent violations (i.e. exceeding monthly average limits four out of six consecutive months), failure to comply with compliance schedules in permits and administrative orders, and failure to obtain or renew an NPDES permit. The Department's definition of significant effluent violations closely resembles the federal definition of SNC for majors as it is applied using technical review criteria and the guideline for chronic violations. EPA considered both the state and federal definition of significant noncompliance with respect to effluent limit violations when reviewing IDNR's identification of and response to violations.

IDNR has two core components of its wastewater compliance monitoring program. The first is routine inspection of major and non-major dischargers, which is conducted in accordance with the Compliance Monitoring Strategy (CMS) negotiated annually with EPA. Under the FFY 2012 CMS, IDNR (with some EPA help) agreed to inspect one-half of the state's majors and approximately one-tenth of the traditional minors. EPA reviewed Iowa's actual outputs against these and other CMS commitments under Element 2 of the SRF review.

To document routine compliance inspections, IDNR inspectors across all field offices use some variation of the wastewater treatment facility inspection report template, which provides a table with text fields, some checklist items, and space for narrative observations. As discussed in the SRF Findings and Recommendations, EPA found notable variation among field offices in the

extent to which all components of the template are used, including supportive narrative, and whether an additional checklist was used as part of the facility evaluation.

The second component of IDNR's compliance monitoring program for wastewater is routine review of facility-reported compliance information. FSCB management stated that field office compliance personnel are instructed to review DMRs, SSO and bypass reports, and other facility reports at least once every six months. Upon review, their procedure is to follow the state EMS guidance in response to any violations that are discovered. EPA reviewed the efficacy of this program component under Element 3 of the SRF review.

In previous versions of the state EMS, SSOs and bypasses were considered an enforcement priority if they resulted from a rain event with intensity and duration lower than the five-year frequency curve listed in the Iowa Administrative Code or if the SSOs/bypasses resulted from mechanical failure or acts beyond the owner's control. Under the current EMS, SSOs and bypasses are not a specific enforcement priority and IDNR no longer maintains a list of priority SSO cities for tracking of collection system activities. However, field office staff are instructed to record all reported SSOs and bypasses, including wet weather incidents, in the Field Office Database as Single Event Violations, although such SEVs are not batched or otherwise entered into ICIS. In addition, SSOs are stressed among field office staff as items needing follow-up during six-month record reviews.

B2. Pretreatment

The Iowa Pretreatment Program consists of 21 cities with approved programs and approximately 50 SIUs regulated by the state in non-Pretreatment program cities. Most pretreatment activities are performed by the six field offices, including all industrial inspections, PCIs, and Pretreatment audits. The principle activities of IDNR's central office are collecting and processing annual reports, permitting industries in non-Pretreatment cities through Treatment Agreements (TAs), and entering inspection and annual report data into PCS.

Through agreements with EPA, the state conducts audits and PCIs at Pretreatment program cities at prescribed frequencies, and IDNR reviews annual reports submitted by all Pretreatment program cities. IDNR also regulates approximately 50 Categorical SIUs in cities that do not have approved Pretreatment programs. IDNR reports the compliance status of these industries to EPA semi-annually on a calendar year basis.

The Pretreatment facilities chosen for review under the SRF were taken from a list of Pretreatment inspections for FFY 2012 kept by IDNR. Originally eleven industries were chosen, however, one turned out to be a "visit" that occurred while the city to which it discharged was being inspected. Therefore, the following are observations and evaluations of ten inspection reports for Significant Industrial Users located outside Pretreatment Program cities.

From the list of facilities inspected in FFY 2012, no regard was made with respect to the city having an expired permit or an existing treatment agreement. In fact, some names on the list were not familiar to the Regional Pretreatment Coordinator, and they were chosen for that reason. In all, seven of the ten facilities reviewed were subject to Categorical Pretreatment

Standards, while the remaining three facilities are considered Significant Industrial Users based on their loading to the city.

Five of seven of the Categorical facilities reviewed turned out to have TAs with the receiving Publicly Owned Treatment Works (POTW) that were not enforceable because they had not been incorporated into the receiving city's NPDES permit. Categorical industries in this circumstance are not reported to EPA in IDNR's semiannual report on SIU compliance status, although they should be. Even though the TA may not yet be enforceable, the Categorical industry still has federal discharge limits and reporting requirements established in the General Pretreatment Regulations that they must fulfill to IDNR, as IDNR is the SIU's Control Authority.

The ten reports reviewed came from three Field Offices. There was a marked difference in approach depending on Field Office. For instance, one FO wrote only a narrative report, another filled out a basic form containing essential information and then wrote a short description of the inspection. One FO barely documented the inspection at all. Some inspection reports contained a printout of all samples taken over a two year period while other inspection reports only contained a printout of violations. EPA recommends in the SRF Findings and Recommendations part of this report that attaching the printout of all samples be the standard as it allows for the calculation of SNC.

B3. Stormwater

The state's stormwater coordinator is in the central office in Des Moines and writes all of the stormwater permits. There is a general permit for construction, two general permits for industrial, and individual permits issued to MS4s. Compliance monitoring is done by the field offices and enforcement is initiated in the field offices as well. NOV's are issued from the field offices. If it is deemed necessary to escalate the enforcement response and issue an administrative order or administrative order on consent, the case is referred to the central office.

The state's enforcement priorities for stormwater include operation without a permit, and failure to have a SWPPP. Any of these violations become a heightened priority if a facility fails to implement Best Management Practices (BMPs) and thereby creates adverse off-site impacts to the environment.

Based on the files available for review and the documents EPA was provided on numbers and types of inspections performed and NOV's issued, it appears that the emphasis placed on compliance monitoring of stormwater permits varies among the field offices. Some field offices appear to be very proactive in performing stormwater inspections while others appear only or mostly to respond to complaints.

IDNR's compliance monitoring for construction stormwater consists of investigations in response to complaints and routine inspections, although the emphasis placed on each type of inspection varies by field office. Field offices 2, 3, and 6 conduct the vast majority of inspections and investigations of stormwater facilities. The other field offices did very few stormwater inspections in FFY 2012.

IDNR has greatly increased the occurrence of routine inspections of facilities holding the state's industrial stormwater permits. In contrast to the findings of the previous review, it appeared that many more stand-alone inspections occurred at these facilities rather than inspections occurring in conjunction with an inspection of another NPDES permit held by the facility or in response to a complaint.

The SRF file review included review of two MS4 communities. The state appears to perform routine inspections of MS4 cities, both targeted inspections and inspections based on complaints.

The state's stormwater permit writer explained that additional resources were to be added to the stormwater permitting program which would allow him to perform assistance visits to stormwater permit holders, especially to MS4 cities. It is anticipated that this increased effort will lead to more compliant and effective stormwater programs. The increase in staff will also allow the current program coordinator more time to train field office staff on the requirements of the stormwater permits and what constitutes an adequate program.

B4. Concentrated Animal Feeding Operations (CAFOs)

IDNR's CAFO compliance and enforcement program was not evaluated as part of this SRF review, due to EPA's recent evaluation of the program in response to a CAFO program withdrawal petition.

Appendix D: Pretreatment Checklist

1. Statement of duration (≤ 5 years) Yes No

Form 31 does not contain any duration limit, only an effective date. However, the city's NPDES permit, which contains the requirement to implement the TA, has a duration not exceeding 5 years. Reissued city permits would receive review by IDNR for adequacy of any existing TA and would be reauthorized accordingly.

2. Statement of nontransferability. Yes No

There is no prohibition in Form 31 for transferability and no language in the city's NPDES restricting the transfer of a TA.

3. Applicable effluent limits (local limits, categorical standards, Best Management Practices) Yes No

Both Form 31 and the city's NPDES permit list the pollutants and their discharge limits.

4. Identification of pollutants to be monitored Yes No

Form 31 lists the pollutants and the pollutant level. Only the NPDES permit, which contains the same limits, identifies their sampling frequency.

5. Sampling frequency Yes No

The sampling frequency is in the city's NPDES permit and thus implies that the sampling requirement is assigned to the city. There is nothing, however, that prevents the city from requiring the SIU perform the sampling requirement.

6. Does the permit grant a waiver for pollutants not present? Yes No

Neither Form 31 nor the city's NPDES permit grant a sampling waiver for pollutants not present. IDNR, however, has adopted the Streamlining Regulations and could exercise that provision if they desired. It could not be transferred to the city as the city is not a Control Authority, but could be utilized by IDNR at time of the city's NPDES permit issuance when it determines the sampling frequency for each pollutant.

- a. If so, does the POTW have the authority to grant the waiver?

No, nor should it have.

- b. Did the POTW document its process for granting the waiver? NA

7. Sampling locations/discharge points Yes No

Form 31 does not specifically state where the discharge limits apply. However, the city's NPDES permit identifies the sampling location. Since the city is held to measuring the pollutants at a specified location, by extension, any violations would be considered violations of the TA. While the monitoring location is identified in the city's NPDES permit, the description is very generic and general. For instance, the Laurens permit which contains the Pengo Corporation TA limits (a Metal Finishing Categorical industry) identifies the monitoring location as "PRIOR TO DISCHARGE TO CITY SEWER." There is no reference to whether this is after treatment, only applicable to a specific process, or the entire discharge from the plant, including dilution water.

8. Sample types (grab or composite) Yes No

The city's NPDES permit identifies the sample type.

9. Reporting requirements (including all monitoring results) Yes No

The city's NPDES permit requires monthly reporting and requires that all "data including calculated results" be reported.

10. Record-keeping requirements Yes No

There is no record keeping requirement in the TA. The city's NPDES permit requires retention for a minimum of three years "all paper and electronic records of monitoring activities and results..." Although it does not specifically identify monitoring activities in support of TA limits, the statement is broad enough to capture that requirement.

11. Statement of applicable civil and criminal penalties Yes No

Form 31 does not identify the applicability of civil or criminal penalties. The city's NPDES permit does not specifically identify the applicability of penalties, although it could be buried in one of the general references to Iowa code. Any such reference, however, would apply only to the city. There may be a reference in the city's Sewer Use Ordinance concerning violations of a TA, but the provisions would not be federally enforceable as the city is not a duly constituted Control Authority.

12. Compliance schedules Yes No

None of the permits reviewed contained compliance schedules for TA industries to achieve compliance. However, with limits that apply to the industry in the city's NPDES permit, a violation by the industry of those limits becomes a violation by the city of its NPDES permit. IDNR has been known to issue NOVs requiring cities to require the TA industry to meet the TA limits or face further enforcement of their NPDES permit.

13. Notice of slug loading Yes No

There is no mechanism in the TA Form 31 to require the industry to report slug loads to either the city or IDNR.

14. Notification of spills, bypasses, upsets, etc. Yes No

There is no mechanism in the TA to require the industry to notify either the city or IDNR of any spills, bypasses, or upsets.

15. Notification of significant change in discharge Yes No

TA Form 31 requires the industry to notify the city of any anticipated “increase in pollutants...” “sufficiently in advance of the increase” so that the city and industry can redraft a new treatment agreement and submit it to IDNR for approval at least 60 days prior to the increase. Form 31 also states that “[a]ny proposed expansion, production increase, or process modification” that may result in a change” to a previous TA requires a new TA be executed. The Notification of Significant Change in Discharge requirement could be strengthened in Form 31, if the notification was expanded from an “anticipated increase in pollutants” to include the “proposed expansion, production increase, or process modification.”

16. 24-hour notification of violation/resample requirement Yes No

The NPDES permit, which contains the monitoring requirements, does not contain this provision.

17. Slug discharge control plan, if determined by the POTW to be necessary Yes No

This requirement does not appear in the city’s NDPEs permit, however, since the POTW is not the Control Authority, the statement would have to establish that the city must require of the TA industry a slug discharge control plan if *IDNR* determines it to be necessary.

STATE REVIEW FRAMEWORK

Iowa

**Resource Conservation and Recovery Act
Implementation in Federal Fiscal Year 2012**

**U.S. Environmental Protection Agency
Region 7, Kansas City**

**Final Report
January 13, 2014**

Executive Summary

Introduction

EPA Headquarters enforcement staff conducted a State Review Framework (SRF) enforcement program oversight review of the EPA Region 7 RCRA direct implementation program for Iowa.

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

Areas of Strong Performance

- **Finding 2-1:** Inspection reports were timely, complete and sufficient to determine compliance.
- **Finding 3-1:** Region 7 identified and documented violations appropriately and make accurate compliance determinations.
- **Finding 4-1:** Region 7 enforcement actions reviewed were generally appropriate and usually return facilities back to compliance within reasonable time frames.
- **Finding 5-1:** Region 7 does a good job at documenting and collecting penalties.

Priority Issues to Address

- There are not priority issues for Region 7 to address.

Most Significant RCRA Subtitle C Program Issues

- Region 7 has no significant issues to address.

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I. Background on the State Review Framework

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

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

Reviews cover:

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

EPA conducts SRF reviews in three phases:

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

EPA builds consultation into the SRF to ensure that EPA and states understand the causes of issues and agree, to the degree possible, on actions needed to address them. SRF reports capture the agreements developed during the review process in order to facilitate program improvements. EPA also uses the information in the reports to develop a better understanding of enforcement and compliance nationwide, and to identify issues that require a national response.

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

Each state's programs are reviewed once every five years. The first round of SRF reviews began in FY 2004. The third round of reviews began in FY 2013 and will continue through FY 2017.

II. SRF Review Process

Review period: *FY2012*

Key dates:

- Data metric analysis and file selection list sent to R7: September 3, 2013
- On-site file review conducted: November 18-21, 2013
- Draft report sent to EPA Region 7: December 2, 2013
- Report finalized: January 13, 2014

Region 7 and EPA HQ key contacts for review:

EPA Region 7 SRF Coordinator: Kevin Barthol

EPA HQ Lead Reviewer: Chad Carbone

EPA HQ Lead Reviewer: Tom Ripp

III. SRF Findings

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

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

There are three categories of findings:

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

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

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

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

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

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

Resource Conservation and Recovery Act Findings

Element 1 — Data

Finding 1-1 Area for State Attention

Summary Region 7 maintains its data on the IOWA RCRA program. However, some minor inaccuracies were found during the review.

Explanation 21 out of 30 files reviewed had complete and accurate data that matched all information in the detailed facility reports from the national data system of record. Inaccuracies found in 9 remaining files included items such as inconsistent dates and informal actions that were not entered into the data system. These discrepancies were minor. It appears that some data is entered late because it is not a priority for data entry or it may be a communications issue between different branches. It is possible that regular checks of their “WEMM Inspection Report/Enforcement Case Process Checklist” cover sheet and/or RCRAInfo and ICIS reports to identify late, missing or incorrect information could help.

Relevant metrics

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
2a Long-standing secondary violators	N/A	N/A	N/A	114	N/A
2b Complete and accurate entry of mandatory data	100%	94.2%	21	30	70%

State Response

Recommendation

Element 2 — Inspections

Finding 2-1 Meets or Exceeds Expectations

Summary Region 7 writes inspection reports that are timely and complete and sufficient to determine compliance. Appropriate TSDf and LQG coverage is also being maintained.

Explanation All of the inspection reports reviewed were completed well and within EPA’s recommended timeframe. The average length of time to complete an inspection report was 41 days. The time frame for completion of all reports was between 16 and 62 days.

The inspection reports clearly document the activities at the facility (e.g. production processes, maintenance activities, etc.) that may generate waste and clearly identify the waste streams generated as being hazardous waste or not. This portion of the inspection reports is helpful for case development if needed or by providing subsequent inspectors with necessary pre-inspection information regarding processes and waste generated at this facility. Having said this, EPA headquarters recommends that Region 7 modifies its reports so that they follow EPA policy and identify findings as “potential” violations rather than “violations.”

Two-year TSDf inspection coverage in the national data system shows 7 out of 12 TSDfs (58.3%) were inspected compared to a national goal of 100%. However, 5 of the 12 TSDfs were not true TSDfs and were listed in the data system because they had unusual one-time (clean-up) events temporarily causing them to be categorized as TSDfs. The actual universe value for the region should be 7 instead of 12.

Annual and five-year inspection coverage for LQGs is also at or above national goals.

Relevant metrics

Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
5a Two-year inspection coverage of operating TSDfs	100%	94.2%	7	12	58.3%
5b Annual inspection coverage of LQGs	20%	23.7%	32	123	26%
5c Five-year inspection coverage of LQGs	100%	69%	116	123	94.3%
6a Inspection reports complete and sufficient to	100%	N/A	27	27	100%

	determine compliance					
	6b Timeliness of inspection report completion	100%	N/A	26	26	100%

State Response

Recommendation

Element 3 — Violations

Finding 3-1 Meets or Exceeds Expectations

Summary Reviewed files accurately identify violations and compliance determinations were accurate.

Explanation 27 out of 28 inspection reports that were reviewed lead to appropriate compliance determinations. Based on EPA headquarters interpretation of the Civil Enforcement Response Policy, we felt that one facility's violations should have been identified as SNC, not secondary violations.

Relevant metrics	Metric ID Number and Description	Natl	Natl	State	State	State
		Goal	Avg	N	D	% or #
	7a Accurate compliance determinations	100%	N/A	27	28	96%
	7b Violations found during inspections	N/A	34%	58	72	80.6%
	8a SNC identification rate	N/A	2.2%	6	72	8.3%
	8b Timeliness of SNC determinations	100%	49.2%	9	12	75%
	8c Appropriate SNC determinations	100%	N/A	27	28	96.4%

State Response

Recommendation

Element 4 — Enforcement

Finding 4-1 Meets or Exceeds Expectations

Summary Enforcement actions are generally appropriate and usually return facilities back to compliance within reasonable time frames.

Explanation Region 7 enforcement actions usually return facilities to compliance quickly. However, some facilities, and particularly those in SNC, sometimes take longer to come back into compliance. EPA HQ believes one contributing factor for these instances is that Region 7 favors taking informal action while it gathers more information to develop a formal case for SNC situations. Overall, this process is still efficient and effective and HQ does not think any additional delays are substantial.

Relevant metrics	Metric ID Number and Description	Natl	Natl	State	State	State
		Goal	Avg	N	D	% or #
	9a Enforcement that returns violators to compliance	100%	N/A	20	24	83.3%
	10a Timely enforcement taken to address SNC	80%	22.2%	1	6	16.7%
	10b Appropriate enforcement taken to address violations	100%	N/A	18	23	78.3%

State Response

Recommendation

Element 5 — Penalties

Finding 5-1 Meets or Exceeds Expectations

Summary Region 7 documents and collects penalties.

Explanation All Region 7’s formal enforcement actions included some documentation in the files regarding penalties and their collection. However, 3 of the 7 files were missing documentation of the difference between initial and final penalties and two files were missing documentation of collection. Region 7 explained the reason for missing documentation may be because the control process for these documents had recently changed. The documents that explain the difference between initial and final penalties are signed by the Waste Enforcement and Materials Management Branch Chief, but are now kept by regional counsel. The penalty collection documentation is now kept electronically and the enforcement program must request email verification from the region’s financial records office. Region 7 was able to provide proof that documentation did exist and penalties were collected in all instances, but some of this information was missing from the files themselves, thus the values for metric 12a and 12b below.

As discussed during the file review, EPA HQ also encourages Region 7 to use the Agency’s new expedited settlement policy to increase the number of penalties the region collects and to increase the deterrence effect of enforcement actions at facilities with recurring noncompliance.

Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
	11a Penalty calculations include gravity and economic benefit	100%	N/A	7	7	100%
	12a Documentation on difference between initial and final penalty	100%	N/A	4	7	57.1%
	12b Penalties collected	100%	N/A	6	7	85.7%

State Response

Recommendation