

# **STATE REVIEW FRAMEWORK**

## **Missouri**

**Clean Water Act, Clean Air Act, and  
Resource Conservation and Recovery Act  
Implementation in Federal Fiscal Year 2024**

**U.S. Environmental Protection Agency  
Region 7**

**Final Report  
May 05, 2026**

# I. Introduction

## A. Overview of the State Review Framework

The State Review Framework (SRF) is a key mechanism for EPA oversight, providing a nationally consistent process for reviewing the performance of state delegated compliance and enforcement programs under three core federal statutes: Clean Air Act, Clean Water Act, and Resource Conservation and Recovery Act. Through SRF, EPA periodically reviews such programs using a standardized set of metrics to evaluate their performance against performance standards laid out in federal statute, EPA regulations, policy, and guidance. When states do not achieve standards, the EPA will work with them to improve performance.

Established in 2004, the review was developed jointly by EPA and Environmental Council of the States (ECOS) in response to calls both inside and outside the agency for improved, more consistent oversight of state delegated programs. The goals of the review that were agreed upon at its formation remain relevant and unchanged today:

1. Ensure delegated and EPA-run programs meet federal policy and baseline performance standards
2. Promote fair and consistent enforcement necessary to protect human health and the environment
3. Promote equitable treatment and level interstate playing field for business
4. Provide transparency with publicly available data and reports

## B. The Review Process

The review is conducted on a rolling five-year cycle such that all programs are reviewed approximately once every five years. The EPA evaluates programs on a one-year period of performance, typically the one-year prior to review, using a standard set of metrics to make findings on performance in five areas (elements) around which the report is organized: data, inspections, violations, enforcement, and penalties. Wherever program performance is found to deviate significantly from federal policy or standards, the EPA will issue recommendations for corrective action which are monitored by EPA until completed and program performance improves.

The SRF is currently in its 5th Round (FY2024-2028) of reviews, preceded by Round 4 (FY2018-23), Round 3 (FY2012-2017), Round 2 (2008-2011), and Round 1 (FY2004-2007). Additional information and final reports can be found at the EPA website under [State Review Framework](#).

# II. Navigating the Report

The final report contains the results and relevant information from the review including EPA and program contact information, metric values, performance findings and explanations, program

responses, and EPA recommendations for corrective action where any significant deficiencies in performance were found.

## A. Metrics

There are two general types of metrics used to assess program performance. The first are **data metrics**, which reflect verified inspection and enforcement data from the national data systems of each media, or statute. The second, and generally more significant, are **file metrics**, which are derived from the review of individual facility files in order to determine if the program is performing their compliance and enforcement responsibilities adequately.

Other information considered by EPA to make performance findings in addition to the metrics includes results from previous SRF reviews, data metrics from the years in-between reviews, multi-year metric trends.

## B. Performance Findings

The EPA makes findings on performance in five program areas:

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

Though performance generally varies across a spectrum, for the purposes of conducting a standardized review, SRF categorizes performance into three findings levels:

**Meets or Exceeds:** No issues are found. Base standards of performance are met or exceeded.

**Area for Attention:** Minor issues are found. One or more metrics indicates performance issues related to quality, process, or policy. The implementing agency is considered able to correct the issue without additional EPA oversight.

**Area for Improvement:** Significant issues are found. One or more metrics indicates routine and/or widespread performance issues related to quality, process, or policy. A recommendation for corrective action is issued which contains specific actions and schedule for completion. The EPA monitors implementation until completion.

## C. Recommendations for Corrective Action

Whenever the EPA makes a finding on performance of *Area for Improvement*, the EPA will include a recommendation for corrective action, or recommendation, in the report. The purpose of recommendations is to address significant performance issues and bring program performance back in line with federal policy and standards. All recommendations should include specific actions and a schedule for completion, and their implementation is monitored by the EPA until completion.

### **III. Review Process Information**

#### **Clean Water Act (CWA)**

#### **Clean Water Act (CWA) Key dates:**

- File selection list sent to MDNR: June 2, 2025
- Data Metric Analysis sent to MDNR: May 15, 2025
- Entrance interview conducted: No entrance interview was conducted as files were reviewed virtually.
- File review conducted: Starting approximately in early September and ending in late November 2025.
- Exit interview conducted: No exit interview was conducted as files were reviewed virtually.
- Draft report sent to MDNR for comment: February 25, 2026
- Final report issued:

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

- Kurt Schaefer, MDNR, Director
- Art Goodin, MDNR, Director, Division of Environmental Quality
- Heather Peters, MDNR, Director, Water Protection Program
- Joe Clayton, MDNR, Environmental Program Manager
- Jacob Westen, MDNR, Legal Counsel, General Counsel's Office
- Erin Kleffner, EPA, R7 Enforcement and Compliance Assurance Division (ECAD)
- Cynthia Sans, EPA, R7 ECAD
- Seth Draper, EPA, R7 ECAD
- Lantz Tipton, EPA, R7 ECAD
- Naji Ahmad, EPA, R7 ECAD
- Stephen Pollard, EPA, ECAD
- Melissa Bagley, EPA, R7 Office of Regional Counsel
- Kyle Youngs, EPA Region 7 SRF Coordinator

#### **Clean Air Act (CAA)**

#### **Clean Air Act (CAA)**

- File selection list sent to MoDNR: June 17, 2025
- Data Metric Analysis sent to MoDNR: June 17, 2025
- Entrance interview conducted: August 11, 2025
- File review conducted: August 11, 2025 to August 22, 2025
- Exit interview conducted: September 4, 2025
- Draft report sent to headquarters: December 30, 2025
- Draft report sent to MoDNR: February 25, 2026
- Final report issued: TBD

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

- Lyndsay Boyd, MoDNR, Compliance and Enforcement Section Chief
- Shelby Miller, MoDNR, General Sources Unit Chief
- Kyle Youngs, EPA Region 7, SRF Review Lead and SRF Coordinator
- Joe Terriquez, EPA Region 7, Air Compliance and Enforcement Section
- Cassandra Mance, EPA Region 7, Air Compliance and Enforcement Section
- Luke Rodriguez, EPA Region 7, Air Compliance and Enforcement Section
- Christopher Appier, EPA Region 7, Air Compliance and Enforcement Section

**Resource Conservation and Recovery Act (RCRA)**

**Key dates:**

- File selection list and Data Metric Analysis sent to the MDNR: April 22, 2025
- Entrance interview conducted: August 11, 2025
- File review conducted (*Note: The MDNR uploaded the files to a MDNR Secure file sharing site for review*): August 13 through September 3, 2025
- Exit interview conducted: September 19, 2025
- Draft report sent to MDNR: February 25, 2026
- Final report issued:

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

- MDNR/HWP Compliance and Enforcement Section Chief: Michael Parris
- MDNR/HWP Compliance and Enforcement Unit Chief: Brandon Backus
- EPA Region 7 ECAD Chemical Branch Chief: Candace Bednar
- EPA Region 7 ECAD Chemical Branch RCRA Section Chief: Vacant
- EPA Region 7 Missouri RCRA Coordinator: Marc Matthews
- EPA Region 7 Reviewers: Marc Matthews and Donald Melton
- EPA Region 7 SRF Coordinator: Kyle Youngs

# Executive Summary

## Clean Water Act (CWA)

### Areas of Strong Performance

The following are aspects of the program that, according to the review, are being implemented at a high level:

The following are aspects of the program that, according to the review, are being implemented at a high level:

- MDNR permit data entry rate for major and non-major facilities is meeting the national goal.
- MDNR met Compliance Monitoring Strategy (CMS) inspection commitments for FY24.
- MDNR inspection reports were complete and sufficient to determine compliance.
- Inspection reports reviewed during the FY2024 review were determined to have made accurate compliance determinations.
- MDNR files contained adequate information to explain the difference between the initial and final penalty in the files reviewed.
- MDNR documents penalty payment information adequately.

### Priority Issues to Address

The following are aspects of the program that, according to the review, are not meeting federal standards and should be prioritized for management attention:

The following are aspects of the program that, according to the review, are not meeting federal standards and should be prioritized for management attention:

- Data found in ECHO/ICIS did not accurately reflect data contained in MDNR review files.
- MDNR has not resolved the disposition of inspection field notes, checklists, and other materials gathered to create a finalized inspection report.
- Inspection reports do not consistently meet the 30-day deadline for transmittal.
- MDNR's informal and formal enforcement actions do not always bring a facility back into compliance.
- Enforcement actions reviewed by EPA did not meet the state enforcement response procedures defined by their PACE manual.
- MDNR did not always adequately calculate penalty with economic benefit.

## Clean Air Act (CAA)

### Areas of Strong Performance

The following are aspects of the program that, according to the review, are being implemented at a high level:

- MoDNR's reporting of compliance monitoring minimum data requirements (MDRs) is overall timely
- MoDNR's reporting of stack tests and stack test results is overall timely.
- MoDNR's reporting of enforcement MDRs is overall timely.
- MoDNR's full compliance evaluation (FCE) coverage of major facilities is meeting expectations.
- MoDNR's FCE coverage of synthetic minor 80% sources (SM-80s) is meeting expectations.
- MoDNR's review of Title V annual compliance certifications completed is meeting expectations.
- MoDNR's HPV identification is overall timely.
- MoDNR's compliance monitoring reports (CMRs) or facility files reviewed provide sufficient documentation to determine compliance of the facility.
- MoDNR's accurate compliance and HPV determinations are meeting expectations.
- MoDNR's formal enforcement responses include required corrective actions that will return the facility to compliance.
- MoDNR's timeliness of addressing HPVs is meeting expectations.
- MoDNR is addressing and/or removing HPVs consistent with HPV policy.
- MoDNR's HPV case development contains required policy elements.

### **Priority Issues to Address**

The following are aspects of the program that, according to the review, are not meeting federal standards and should be prioritized for management attention:

- MoDNR's timely reporting of HPV determinations needs attention.
- MoDNR's documentation of FCE Elements needs attention.

### **Resource Conservation and Recovery Act Findings (RCRA)**

#### **Areas of Strong Performance**

The following are aspects of the program that, according to the review, are being implemented at a high level:

- \* The MDNR is meeting the annual inspection coverage for active LQGs.
- \* The MDNR is effective at identifying violations of the hazardous waste program the inspection reports are complete and sufficient to determine compliance.
- \* The MDNR is making accurate compliance determinations

### **Priority Issues to Address**

The following are aspects of the program that, according to the review, are not meeting federal standards and should be prioritized for management attention:

- The MDNR fell short of meeting the two-year inspection coverage for operating TSDFs.
- The MDNR is seeing data entry concerns with informal action not being entered, entering incorrect addresses, and not updating name changes.
- The timeliness of inspection report completion often times does not meet the EPA's final Interim Policy on Inspection Report Timeliness and Standardization completion deadline requirements of 60 days and rarely meets the MDNR ERP requirement of 30 days.
- The MDNR is not consistently identifying facilities as SNC in the national database, which contributes to the agency not taking formal actions.
- Facilities with identified violations are not returned to compliance with regulatory requirements in a timely manner or the return to compliance is not being documented.
- The MDNR's initial enforcement response to violations through a cover letter conveying the inspection report is appropriate. It is effective at returning some facilities to compliance with the regulatory requirements. However, in many instances, the MDNR chose not to pursue formal enforcement.
- The MDNR does not typically pursue economic benefit.
- The program file did not include documentation of penalty reduction in the formal enforcement case reviewed.
- Of the 18 inspection reports EPA felt should have been referred for formal enforcement, the MDNR indicated that 6 of cases were being moved to enforcement.

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## **End Executive Summary**

# Clean Water Act Findings

## CWA Element 1 - Data

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### Finding 1-1

Meets or Exceeds Expectations

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### Recurring Issue:

No

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### Summary:

MDNR permit data entry rate for major and non-major facilities meets the national goal.

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### Explanation:

Out of 2,128 major and non-major facilities, 2,127 had data entered. Out of 35,398 major and non-major facilities, 34,625 had DMRs entered. MDNR data entry for permit limits and discharge monitoring reports is above the national goal.

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### Relevant metrics:

| Metric ID Number and Description  | Natl Goal | Natl Avg | State N | State D | State % |
|---|-----------|----------|---------|---------|---------|
| 1b5 Permit limit data entry rate for major and non-major facilities                       | 95%       | 99.9%    | 2127    | 2128    | 100%    |
| 1b6 Discharge monitoring report (DMR) data entry rate for major and non-major facilities. | 95%       | 95.9%    | 34625   | 35398   | 97.8%   |

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### State Response:

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## CWA Element 1 - Data

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**Finding 1-2**

Area for Improvement

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**Recurring Issue:**

Recurring from Round 3

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**Summary:**

Data found in ECHO/ICIS did not reflect data contained in MDNR review files.

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**Explanation:**

EPA compared the file review information with what is shown in Enforcement and Compliance History Online (ECHO)/Integrated Compliance Information System (ICIS) and found that some data was missing or inaccurate. EPA's review revealed that 34 out of 59 files reviewed had some type of data error. Findings include:

- Incorrect date or improperly categorized inspection (i.e. inspection listed as compliance evaluation inspection when sampling had been conducted).
- Incorrect permit and/or facility information such as UTM coordinates instead of latitude/longitude, incorrect or conflicting facility name and address.
- Expired permits not fully terminated, resulting in tracked violations for late Discharge Monitoring Reports (DMRs) and compliance monitoring reporting.
- Missing compliance determination letters such as Letter of Warning (LOW), Unsatisfactory Findings (UF), and Notices of Violation (NOV).
- Violations identified during inspections are entered under more generic SEVs such as D0017-Violation Specified in Comment when specific or programmatic SEVs would be more accurate.
- Single Event Violations (SEV) are listed as date of compliance determination correspondence rather than the date violation.
- SEVs are entered with the "D Manual Other" Reportable Non-Compliance (RNC) detection code. Because of this, SEVs that should be reported as Significant Non-Compliance (SNC) in ICIS/ECHO are not being correctly flagged.
- ICIS/ECHO violations, including facility-reported DMR exceedances, were marked as "resolved" for the quarter in which an inspection was conducted. While this may be appropriate for violations resolved through complying actions or sampling as it relates to monthly or weekly averages, this is inappropriate for other limitations such as daily maximums or calculated percent removals without influent sampling.
- Missing enforcement actions and penalty information. Penalty information includes only the amount assessed and does not include the amount actually collected [\[1\]](#).

This is a repeat finding from Round 3 (Finding 1-1) and Round 4 (Finding 1-2). MDNR has completed a data workplan to address missing data entry elements according to SRF Round 4 recommendations but has not completed remediation measures outlined in the FY20 contractor analysis. Of the findings listed above, inaccurate SEV dates and missing compliance determination letters were found to be the most common issue.

As described above, SEV dates are entered as the date of correspondence rather than the date of violation. In most instances, this resulted in the SEV being delayed to a different month or quarter. For accuracy, SEVs should be entered as the date of violation. Additionally, SEVs for effluent violations, unauthorized bypasses, unpermitted discharges, and pass-through are not being reported with the correct RNC detection code as described above. As a result, facilities are not being flagged for SNC. These violations should be reported with the correct RNC detection code and include all 4 RNC fields as required by the NPDES eRule [\[2\]](#),[\[3\]](#).

Previous discussions with MDNR indicated that UF letters are entered into Missouri's Clean Water Information Systems (MoCWIS) but are not entered into ICIS. According to MDNR's Procedures for Assistance, Compliance, and Enforcement (PACE) Manual, UF letters are issued for Group 2 or 3 violations and require a response. Section 4.5.2 of the PACE Manual describes Group 2 violations as serious violations that must be corrected to avoid referral to program enforcement. LOWs, which also encompass Group 2 violations, are entered into both MoCWIS and ICIS. EPA regulations require states, tribes, and territories to provide EPA with information regarding formal and informal enforcement actions for all NPDES-regulated entities.[\[4\]](#) "The final rule does not differentiate reporting requirements between formal enforcement actions and informal enforcement actions."[\[5\]](#) In order to give a full picture of compliance at a facility, UF letters must be entered into ICIS.

Additionally, it has been previously noted that compliance determination letters have been entered after the facility has completed required compliance actions. Section 4 of the PACE manual states that facilities have 180 days post-inspection to complete complying actions; however, this may be extended if the facility is showing progress towards compliance. Delayed compliance determination entry was again found to be the case, and it is unclear if this practice has impacted the overall finding in this area. According to 40 CFR §127.23(c)(1), timely means electronic transfer within 40 days of the completed activity or receipt of report from a NPDES permittee or entity.

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[\[1\]](#) See 40 CFR Part 127 Appendix A

[\[2\]](#) See 40 CFR Part 127 Appendix A

[3] Data Entry Guidance and Technical Papers, <https://www.epa.gov/compliance/data-entry-guidance-and-technical-papers>

[4] See 30 July 2013; 78 FR 46042

[5] See “Comment Response Document for the NPDES Electronic Reporting Rule (Final Rule), 14 September 2015, DCN 0218, EPA Docket Number EPA-HQ-OECA-2009-0274, Page 583.

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**Relevant metrics:**

| Metric ID Number and Description   | Natl Goal | Natl Avg | State N | State D | State % |
|--|-----------|----------|---------|---------|---------|
| 2b Files reviewed where data are accurately reflected in the national data system [GOAL] | 100%      |          | 25      | 59      | 42.4%   |

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**State Response:**

*Please provide specific examples for permitted facilities. MDNR's*

*MoCWIS database is coded to automatically translate UTM coordinates into latitude and longitude.*

*Additionally, with the updated CMS this year, the department is now using the inspection categories provided in the CMS submitted to EPA, which typically does not determine inspection type based on whether sampling has occurred or not. For the 'incorrect' inspection date, is this a difference between the actual field visit or the compliance report date, or is this a data entry issue?*

*While we do not have the specific examples noted of the missing compliance determination records, one possible explanation may be a delay in drafting, finalizing, or issuing the records due to our current understaffing. Many positions are being held vacant due to a lack of federal or state funding to fully support these activities.*

*The department will review the specific finding of SEVs entered with "D Manual Other" to determine the underlying transfer error in the data collected and the ICIS/ECHO reporting.*

*The department does not have the specific examples noted of the penalty only listing the amount assessed and not the amount collected but will review this information. The department may have calculated the assessed penalty but may not have the amount collected available until the penalty payment is actually made (which may be significantly later than the assessed penalty is calculated or the agreement is signed).*

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**Recommendation:**

| Rec # | Due Date   | Recommendation  |
|-------|------------|---|
| 1     | 09/30/2028 | <p>MDNR must ensure that all data associated with their compliance inspections, correspondence, and enforcement actions are accurately and timely entered and reflected in the national database. MDNR will provide the following to EPA:</p> <ol style="list-style-type: none"><li>1. By January 1, 2027, MDNR shall re-evaluate and update their data workplan submitted as part of the Round 4 SRF to address missing data entry elements in ICIS/ECHO. This plan should be in accordance with EPA data sharing guidance and include an updated SOP for data entry and violation resolution. This workplan should include updated interim milestone dates to achieve accurate data by September 30, 2028.</li><li>2. MDNR should work with EPA’s contractor, Headquarters, and the Region’s data coordinator to achieve measures outlined in the workplan.</li><li>3. Reports shall be submitted to EPA quarterly (January 28, April 28, July 28, and October 28) on the actions taken to address this finding.</li><li>4. If by September 30, 2028, EPA reviews MDNR data and finds that data entry is complete and accurate (at least 85% or greater), this recommendation will be closed.</li></ol> |

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**CWA Element 2 - Inspections**

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**Finding 2-1**

Meets or Exceeds Expectations

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**Recurring Issue:**

No

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**Summary:**

MDNR met CMS inspection commitments for FY24 except for 4a2 which was short a single inspection due to a change in status of facility originally selected for inspection.

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**Explanation:**

The EPA compared the reported FY2024 CMS end-of-year numbers from MDNR to annual commitments made at the beginning of the year in its CMS alternative plan. As summarized in the table below, MDNR met its inspection commitments for FY2024.

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**Relevant metrics:**

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| <b>Metric ID Number and Description</b>  | <b>Natl Goal</b>     | <b>Natl Avg</b> | <b>State N</b> | <b>State D</b> | <b>State %</b> |
|--|----------------------|-----------------|----------------|----------------|----------------|
| 4a1 Number of pretreatment compliance inspections and audits at approved local pretreatment programs. [GOAL]                       | 100% CMS%            |                 | 30             | 30             | 100%           |
| 4a2 EPA or state Significant Industrial User inspections for SIUs discharging to nonauthorized POTWs                               | 100% CMS%            |                 | 26             | 27             | 96.3%          |
| 4a4 Number of CSO inspections. [GOAL]  | 100% CMS%            |                 | 1              | 1              |                |
| 4a5 Number of SSO inspections. [GOAL]  | 100% CMS%            |                 | 46             | 40             | 115%           |
| 4a7 Number of Phase I and II MS4 audits or inspections. [GOAL]   | 100% CMS%            |                 | 32             | 31             | 103.2%         |
| 4a8 Number of industrial stormwater inspections. [GOAL]  | 100% CMS%            |                 | 296            | 256            | 115.6%         |
| 4a9 Number of Phase I and Phase II construction stormwater inspections. [GOAL]   | 100% of commitments% |                 | 252            | 252            | 100%           |
| 4a10 Number of comprehensive inspections of large and medium NPDES permitted concentrated animal feeding operations (CAFOs) [GOAL] | 100% CMS%            |                 | 25             | 24             | 104.2%         |
| 5a1 Percentage of NPDES major facilities with individual or general permits inspected  | 100% CMS%            |                 | 84             | 83             | 101.2%         |
| 5b Inspections coverage of NPDES non-majors (individual and general permits) [GOAL]  | 100% CMS%            |                 | 640            | 632            | 101.3%         |

**State Response:**

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## CWA Element 2 - Inspections

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### Finding 2-2

Meets or Exceeds Expectations

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### Recurring Issue:

No

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### Summary:

MDNR inspection reports were complete and sufficient to determine compliance.

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### Explanation:

MDNR achieved a high percentage level of inspection reports that were largely complete and sufficient to determine compliance. Some minor deficiencies were noted including lack of current conditions and inadequate documentation such as lack of photos of specific conditions or findings.

Specific to pretreatment, it was identified that a pretreatment compliance audit completed only 1 of 2 required industrial user oversight inspections. During another pretreatment compliance audit/inspection, it was also noted that inspectors failed to evaluate sludge metals concentrations to determine if the industrial pretreatment program was adequate.

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### Relevant metrics:

| Metric ID Number and Description   | Natl Goal | Natl Avg | State N | State D | State % |
|--|-----------|----------|---------|---------|---------|
| 6a Inspection reports complete and sufficient to assess permit requirements at the facility and document inspector observations. | 100%%     |          | 49      | 53      | 92.5%   |

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### State Response:

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## CWA Element 2 - Inspections

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### Finding 2-3

Area for Improvement

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### Recurring Issue:

Recurring from Round 3

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### Summary:

MDNR has not resolved the disposition of inspection field notes, checklists, and other materials gathered to create a finalized inspection report.

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### Explanation:

This is an open item from Round 3 (Finding 2-3) and Round 4 (2-3). Once an inspection report is finalized, field notes, checklists, and other documentation are destroyed. Post-Field Procedures in Section 4.1 of the July 1, 2024, PACE manual specifies, “Delete working papers, extra photographs, and other documentation once the relevant information is incorporated into and the final report is completed.” Section 4.1 of the PACE manual also specifies that proper documentation is essential for team members to make strong and legally defensible cases. MDNR had previously indicated an in-field application was being developed to collect inspection data; however, MDNR’s most recent SRF Report prior to the start of the Round 5 review notes “Department staff, including legal counsel, have reviewed the current policies for records disposition and find the retention requirements comply with the Missouri Sunshine Law and implementing regulations. As such, no changes will be made to our PACE manual.” It remains EPA’s opinion that field notes, checklists, and other documentation meet the definition of a record in the State of Missouri<sup>[1]</sup> and should be preserved as they have significant legal and evidentiary value. This finding remains open<sup>[2]</sup>.

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<sup>[1]</sup> RSMo 109.210(5)

<sup>[2]</sup> See CWA SRF FY19 for EPA response to comments, <https://www.epa.gov/system/files/documents/2022-02/srf-rd4-rev-mo.pdf>

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### Relevant metrics:

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| Metric ID Number and Description   | Natl Goal | Natl Avg | State N | State D | State % |
|--|-----------|----------|---------|---------|---------|
| 6a-dispos. Inspection report completeness for documentation report retention (carryover) | 100%      |          | 0       | 53      | 0%      |

**State Response:**

*The department's position on retention of field notes and other informal materials remains unchanged.*

**Recommendation:**

| Rec # | Due Date   | Recommendation  |
|-------|------------|---|
| 1     | 09/30/2028 | <p>MDNR should ensure their record retention procedures meet State law and EPA regulations. MDNR will provide the following to EPA:</p> <ol style="list-style-type: none"> <li>1. By June 1, 2027, submit to EPA a plan to address the disposition of inspection notes, checklists, and other materials used to create an inspection report. Include in this plan a timetable to consult with MDNR attorney/counsel to ensure record disposition/retention meets State record keeping requirements and EPA regulations.</li> <li>2. Reports shall be submitted to EPA quarterly (January 28, April 28, July 28, and October 28) on the actions taken to address this finding.</li> <li>3. Correct/update wording in the PACE manual, submit to EPA for review. Include revisions with a quarterly update.</li> </ol> <p>4) If by September 30, 2028, EPA reviews the disposition of 5 closed inspection reports and associated documentation (records/checklists/fieldnotes etc.) and finds the inspections have proper documentation/records retention at a performance level of 85% or greater, the region will close this finding otherwise, this recommendation will remain open.</p> |

**CWA Element 2 - Inspections**

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**Finding 2-4**Area for Attention

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**Recurring Issue:**No

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**Summary:**

Inspection reports do not consistently meet the 30-day deadline for transmittal.

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**Explanation:**

EPA reviewed 55 inspection reports for timeliness in accordance with MDNR's PACE manual transmittal goal of 30 days. For the Round 5 review, MDNR averaged 31 days for report transmittal. Time to transmittal ranged from 1 to 164 days with 74.5% of inspections transmitted within the 30-day window. Removing a set of 3 grouped inspections with transmittals over 100 days resulted in an average of 23 days with 79% of inspections transmitted within the 30-day window. For the last review (Round 4), the average time to complete a report was 24 days with 75.9% of reports meeting the 30-day timeframe.

There may be extenuating circumstances that result in an inspection report transmittal beyond 30 days. This is reflected in Section 4.1 of the PACE manual: "If staff anticipates the report cannot be written, administratively reviewed, and mailed within 30 days of the completion of the field activity, notice and justification must be provided to supervisory staff." EPA encourages MDNR to work toward a minimum goal of at least 85% of inspection transmittals within the 30-day window.

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**Relevant metrics:**

| Metric ID Number and Description                     | Natl Goal | Natl Avg | State N | State D | State % |
|--|-----------|----------|---------|---------|---------|
| 6b Timeliness of inspection report completion [GOAL] | 100%      |          | 41      | 55      | 74.5%   |

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**State Response:**

*MDNR will strive for at least 85% of inspection transmittals within the 30-day window. However, as long as MDNR remains underfunded and understaffed, we will continue to fall short of this goal.*

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**CWA Element 3 - Violations**

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**Finding 3-1**

Meets or Exceeds Expectations

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**Recurring Issue:**

No

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**Summary:**

Inspection reports reviewed during the FY2024 review were determined to have made accurate compliance determinations.

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**Explanation:**

Of the 55 inspection reports reviewed, 54 were determined to have accurate compliance determinations.

While above the national average, it is worth noting MDNR's significant improvement in the 8a3 Review Indicator from the Round 4 SRF Review (23.3% to 8.6%).

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**Relevant metrics:**

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| <b>Metric ID Number and Description</b>  | <b>Natl Goal</b> | <b>Natl Avg</b> | <b>State N</b> | <b>State D</b> | <b>State %</b> |
|--|------------------|-----------------|----------------|----------------|----------------|
| 7e Accuracy of compliance determinations [GOAL]  | 100%             |                 | 54             | 55             |                |
| 7j1 Number of major and non-major NPDES facilities with new single-event violations reported that began in the review year                     |                  |                 | 2009           |                | 2009           |
| 7k1 Major and non-major facilities in noncompliance.   |                  | 13.7%           | 4639           | 11846          | 39.2%          |
| 8a3 Percentage of active major facilities in SNC and non-major individual permit facilities in Category I noncompliance during the fiscal year |                  | 4.3%            | 953            | 11048          | 8.6%           |

**State Response:**

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**CWA Element 4 - Enforcement**

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**Finding 4-1**

Area for Improvement

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**Recurring Issue:**

Recurring from Round 3

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**Summary:**

For metric 9a, MDNR's informal and formal enforcement actions do not always bring a facility back into compliance. This is an area for attention. For metric 10b, enforcement actions reviewed by EPA did not meet the state enforcement response procedures defined by their PACE manual. This is an area for improvement.

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**Explanation:**

Out of 36 formal and informal enforcement actions reviewed, EPA was able to determine that 26 facilities returned to compliance, yielding a 72.7 % compliance rate. For the remaining

files, there was either insufficient information in the file and/or the facility's response was not adequate to determine if the facility had corrected all issues and achieved compliance. This has been an area for attention over the last 2 reviews. For Round 4, this finding was also at 72.2%. EPA requests that MDNR ensure facilities submit enough information to substantiate that noncompliance has been fully addressed and retain file documentation that clearly shows the facility has returned to compliance.

Out of 35 enforcement files reviewed, EPA determined that 22 addressed violations in a timely and appropriate manner. The remaining 13 files did not use the proper enforcement response as laid out in the PACE manual.

Relevant sections of the PACE manual include:

- Section 4: Violations identified through compliance actions are required to be addressed within 180 days from the date of the inspection or investigation. Additional time beyond 180 days may be granted provided the entity is demonstrating progress toward compliance and the extension is mutually agreed upon by region and program team members.
- Section 4.5.5: Team members may use Compliance Agreements (CA) to achieve compliance with regulated entities and may include extended timeframes if necessary to ensure compliance due to extenuating circumstances. If an entity has an effective CA, additional LOW/NOV/RNOVs are not issued to the entity unless the entity is not in compliance with the CA. The offer of a CA is only made when there is a documented willingness from the entity to comply and the entity has the ability and resources to either correct the violation(s) or achieve compliance but cannot achieve compliance within the 180-day timeframe and the potential impacts to human health and the environment are limited.
- Section 4.7.5: For Group 2 and/or Group 3 violations the regional office has determined through prior consultation with program enforcement to be appropriate to be resolved through a compliance agreement monitored by the regional office, the regional office may utilize an additional 185 days beyond the standard 180-day compliance timeframe (for a total of 365 days) to allow the entity time to pursue voluntary compliance prior to referral to program enforcement.
- Section 5.5: Formal enforcement actions should be completed within 270 days of the referral for enforcement. Additional time beyond 270 days may be allowed if the entity is demonstrating progress towards compliance and approved by program management. Group 1 violations will be referred for enforcement action immediately. Group 2 and 3 violations will be elevated to program enforcement through the standard process for compliance actions.

The most common 10b findings from the file review include:

- MDNR did not follow the PACE manual noncompliance process. For instance, facilities received Letters of Warning (LOWs) and Notices of Violations (NOVs) for Group 1 violations. Additionally, a UF letter was issued for a program audit with significant deficiencies when a LOW would have been more appropriate.

- Section 2 of the PACE manual specifies that facilities will receive a NOV for not completing required actions contained in a LOW. Those who receive a NOV and do not achieve compliance within 180 days will be issued a referral NOV (RNOV) to program enforcement. Facilities with a pattern of repeated noncompliance were continually issued LOWs and NOVs, remaining out of compliance with no referral for formal enforcement.
- MDNR did not meet the 180-day time frame for informal or 270-day time frame for formal enforcement actions. For example, a facility was referred to enforcement in 2017; however, MDNR did not achieve a signed formal enforcement order until 2024.

MDNR allows for the use of flexibility and enforcement discretion; however, appropriate enforcement escalation should be applied in cases where a facility has recurring noncompliance. This often indicates a pervasive issue that needs to be fully addressed. EPA suggests adding an escalation policy to address facilities that are repeatedly receiving UF, LOW, and NOV letters.

The 2019 SRF Review found an overall downward trend for the 2015-2019 period. This trend appears to have leveled off with the number of enforcement actions largely holding steady over the last 5-year period. MDNR has adopted a policy of increased emphasis on compliance assistance including the use of CAs.

It is recognized that informal CAs can be useful to avoid delays associated with drafting, approving, and negotiating an Administrative Order on Consent. No files with regional CAs were selected for Round 5 review so the successfulness of CAs in lieu of formal enforcement is unknown. As part of this Finding, EPA is requesting additional CA files for review.

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[1] Given Finding 1-2 above, this table may not be fully reflective of all state actions taken.

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**Relevant metrics:**

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| Metric ID Number and Description  | Natl Goal | Natl Avg | State N | State D | State % |
|---|-----------|----------|---------|---------|---------|
| 9a Percentage of enforcement responses that returned, or will return, a source in violation to compliance [GOAL]  | 100%      |          | 26      | 36      | 72.2%   |
| 10a1 Percentage of major individually permitted NPDES facilities with formal enforcement action taken in a timely manner in response to late DMR SNC violations |           | 28.6%    | 0       | 0       | 0       |
| 10b Enforcement responses reviewed that address violations in a timely and appropriate manner.  |           |          | 22      | 35      | 62.9%   |

**State Response:**

*Please provide specific examples. However, the department acknowledges that not all timeframes established within the PACE manual are being consistently met. As long as the department remains underfunded and must hold positions vacant, we anticipate that our goal time frames established within PACE and other internal policies may continue to be exceeded. We are working on mechanisms to streamline our enforcement process, including a "triage" system to identify sites needing the most time-sensitive or significant attention and using better practices to increase efficiency of enforcement actions for more standard violations and associated enforcement actions.*

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**Recommendation:**

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| Rec # | Due Date   | Recommendation   |
|-------|------------|--|
| 1     | 09/30/2028 | <p>MDNR should ensure staff are following the PACE manual and pursue appropriate enforcement based on the severity, period of time, and recurrence of noncompliance. MDNR will provide the following to the EPA:</p> <ol style="list-style-type: none"> <li>1. By March 31, 2027, MDNR will draft and submit to EPA an updated PACE manual that incorporates an escalation policy or addition to a violations group for facilities with recurring noncompliance.</li> <li>2. Reports shall be submitted to EPA quarterly (January 28, April 28, July 28, and October 28) on the actions taken to address this finding.</li> <li>3. Provide examples with documentation of 7 enforcement actions that adhere to the PACE manual. Examples of 2 formal enforcement and 2 standard informal actions should be from those taken in FY27-FY28. Examples of 3 regional CAs should be actions taken from FY25 forward. Examples should provide documentation that the facility successfully returned to compliance. If unable to provide formal actions that demonstrate a return to compliance due to long-term complying actions, examples should demonstrate significant progress has been made towards compliance.</li> </ol> <p>If by September 30, 2028, EPA reviews 7 actions and finds that proper follow-up has been completed upon review of provided documentation to a compliance level at 85% or greater, this finding will be closed. Otherwise, the recommendation will remain open until the next quarter/fiscal year upon which 7 more actions will be reviewed.</p> |

**CWA Element 5 - Penalties**

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**Finding 5-1**

Area for Improvement

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**Recurring Issue:**

Recurring from Round 3

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**Summary:**

MDNR did not always adequately calculate penalty with economic benefit.

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**Explanation:**

Out of the 12 files EPA reviewed, 7 had penalties which were appropriately calculated and documented.

During the previous Round 3 and Round 4 SRF reviews, EPA made recommendations to revise and consistently document and implement a penalty matrix including economic benefit. MDNR has made several improvements to standardize penalty calculations. This has led to consistent base penalty calculations and penalty justification documentation. However, during this review it was noted in multiple files that the economic benefit calculation is too simplistic to adequately account for the economic advantage entities received as part of their noncompliance.[\[1\]](#),[\[2\]](#)

MDNR's economic benefit worksheet only assesses economic benefit from missed permit sampling, missed DMR submittals, and unpaid permit fees. This overly narrow approach has led to instances where entities were assessed \$0 or a very small economic benefit when the actual economic benefit was substantial. For example, a \$0 economic benefit was assessed for a facility when it should have included cost savings from inadequate operation and maintenance and/or delayed facility upgrades necessary to meet permitted limits. In another example, a facility was assessed a \$0 economic benefit despite neglecting to install and operate an adequate treatment system.

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[\[1\]](#) PACE Manual Section 5.1.2 *“Penalties serve several purposes, including minimizing the effect of violations on human health and the environment, encouraging a swift return to compliance, removing any economic advantage that might have come about through violations, and deterring the entity and others from similar acts.”*

[\[2\]](#) Oversight of State and Local Penalty Assessments: Revisions to the Policy Framework for State/EPA Enforcement Agreements (1993), <https://www.epa.gov/sites/default/files/2013-11/documents/oversgt-penal-mem.pdf>.

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**Relevant metrics:**

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| Metric ID Number and Description  | Natl Goal | Natl Avg | State N | State D | State % |
|---|-----------|----------|---------|---------|---------|
| 11a Penalty calculations reviewed that document and include gravity and economic benefit [GOAL] | 100%      |          | 7       | 12      | 58.3%   |

**State Response:**

*We agree, the economic benefit calculation portion of the penalty matrix is overly narrow. MDNR will undertake improvements to the economic benefit worksheet to adequately captures an accurate economic benefit when entities have gained one. The department anticipates working on the penalty assessment rule in the future and will consider this feedback during that rule review. However, the economic benefit calculation suggested in this finding are often some of the most subjective calculations (cost of what their operations or maintenance should have been, potential costs of improvement, rather than established costs like sampling or permitting costs), which often leads to extended debates or narratives on this component of the penalty matrix. With a significant backlog of enforcement actions, as noted above, and a priority focus on addressing noncompliance, the department must consider the value of extended economic benefit debates versus the potential time allocated instead to a focus on timely compliance actions, as noted in the findings above.*

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**Recommendation:**

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| Rec # | Due Date   | Recommendation  |
|-------|------------|---|
| 1     | 09/30/2029 | <p>MDNR has already developed a penalty matrix worksheet that includes economic benefit. MDNR should evaluate and expand the economic benefit portion of the penalty worksheet to more fully assess economic benefit derived from noncompliance.</p> <ol style="list-style-type: none"> <li>1. Reports shall be submitted to EPA quarterly (January 28, April 28, July 28, and October 28) on the actions taken to address this finding.</li> <li>2. By March 31, 2027, MDNR will draft and submit to EPA the penalty matrix with a revised and expanded economic benefit section.</li> <li>3. MDNR will provide examples with documentation of 5 penalty actions that were completed using the revised economic benefit form.</li> </ol> <p>If by September 30, 2029, EPA reviews 5 enforcement actions and finds that the economic benefit was adequately calculated/justified at a level of 85% or greater, this finding will be closed. Otherwise, the recommendation will remain open until the next quarter/fiscal year upon which 5 more enforcement actions will be reviewed.</p> |

## CWA Element 5 - Penalties

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### Finding 5-2

Meets or Exceeds Expectations

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### Recurring Issue:

No

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### Summary:

MDNR files adequately contained information that explained the difference between the initial and final penalty in the files reviewed.

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### Explanation:

Out of 8 files EPA reviewed, 7 contained a rationale for difference between initial and final penalty. The remaining file contained documentation for the original file and reductions made; however, a \$0 penalty was documented in ICIS/ECHO. No documentation was found for either

a further reduction and/or withdrawal of the penalty or potential penalty non-payment. As \$0 was entered, it is assumed the penalty was reduced with no further documentation.

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**Relevant metrics:**

| <b>Metric ID Number and Description</b>  | <b>Natl Goal</b> | <b>Natl Avg</b> | <b>State N</b> | <b>State D</b> | <b>State %</b> |
|--|------------------|-----------------|----------------|----------------|----------------|
| 12a Documentation of rationale for difference between initial penalty calculation and final penalty [GOAL] | 100%             |                 | 7              | 8              | 87.5%          |

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**State Response:**

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**CWA Element 5 - Penalties**

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**Finding 5-3**

Meets or Exceeds Expectations

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**Recurring Issue:**

No

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**Summary:**

MDNR adequately documents penalty payment information.

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**Explanation:**

EPA reviewed 10 files for appropriate documentation of penalty collection. For 9 of 10 files, documentation (emails, cancelled checks, memos) was adequately provided. The remaining file contained documentation for one installment payment and did not document if the facility completed the rest of the payments.

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**Relevant metrics:**

| <b>Metric ID Number and Description</b> | <b>Natl Goal</b> | <b>Natl Avg</b> | <b>State N</b> | <b>State D</b> | <b>State %</b> |
|---|------------------|-----------------|----------------|----------------|----------------|
| 12b Penalties collected [GOAL]          | 100%             |                 | 9              | 10             | 90%            |

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**State Response:**

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# Clean Air Act Findings

## CAA Element 1 - Data

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### **Finding 1-1**

Meets or Exceeds Expectations

---

### **Recurring Issue:**

No

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### **Summary:**

MoDNR's reporting of compliance monitoring MDRs, stack tests, stack test results, and enforcement MDRs is overall timely.

MoDNR's substantive MDR data is accurately reflected in ICIS-AIR. When discrepancies were identified, the majority involved stack test dates recorded in the physical files not matching those entered into the ICIS-AIR system.

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### **Explanation:**

EPA notes that data within the files reviewed were accurately reflected in the national data system (metric 2b) was 85.7%

EPA notes that MoDNR's reporting of compliance monitoring MDRs (metric 3b1) was 92.2%.

EPA notes that MoDNR's reporting of stack tests and stack test results (metric 3b2) was 86.7%.

EPA notes that MoDNR's reporting of enforcement MDR (metric 3b3) was 97.0%.

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### **Relevant metrics:**

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| <b>Metric ID Number and Description</b>  | <b>Natl Goal</b> | <b>Natl Avg</b> | <b>State N</b> | <b>State D</b> | <b>State %</b> |
|--|------------------|-----------------|----------------|----------------|----------------|
| 2b Files reviewed where data are accurately reflected in the national data system [GOAL] | 100%             |                 | 24             | 28             | 85.7%          |
| 3b1 Timely reporting of compliance monitoring MDRs [GOAL]                                | 100%             | 78.3%           | 378            | 410            | 92.2%          |
| 3b2 Timely reporting of stack test dates and results [GOAL]                              | 100%             | 51.8%           | 196            | 226            | 86.7%          |
| 3b3 Timely reporting of enforcement MDRs [GOAL]  | 100%             | 82.6%           | 159            | 164            | 97%            |

**State Response:**

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**CAA Element 1 - Data**

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**Finding 1-2**

Area for Attention

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**Recurring Issue:**

No

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**Summary:**

MoDNR's timely reporting of HPV determinations needs attention.

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**Explanation:**

EPA notes that MoDNR's timely reporting of HPV determinations (metric 3a2) was 50.0% in FY2024. Due to such a small sample size of 2 HPVs reported to ICIS-Air, metric 3a2 was reviewed for FY2023, FY2022, and FY2021. For FY2023, MoDNR reported 2 out of 2 HPVs within 60 days of HPV determination. For FY2022, MoDNR reported 10 out of 11 HPVs within 60 days of HPV determination. For FY2021, MoDNR reported 3 out of 4 HPVs within 60 days of HPV determination. The average for metric 3a2 from FY2021 to FY2024 was 84.2%.

EPA suggests MoDNR incorporate data entry procedures and file management practices to have better oversight of HPV determination reporting.

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**Relevant metrics:**

| <b>Metric ID Number and Description</b>           | <b>Natl Goal</b> | <b>Natl Avg</b> | <b>State N</b> | <b>State D</b> | <b>State %</b> |
|---|------------------|-----------------|----------------|----------------|----------------|
| 3a2 Timely reporting of HPV determinations [GOAL] | 100%             | 53.4%           | 1              | 2              | 50%            |

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**State Response:**

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**CAA Element 2 - Inspections**

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**Finding 2-1**

Meets or Exceeds Expectations

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**Recurring Issue:**

No

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**Summary:**

MoDNR demonstrates proficiency in FCE coverage of major facilities and SM-80 facilities, document review, and comprehensive report documentation.

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**Explanation:**

MoDNR's FCE coverage for CAA major facilities (metric 5a) was 97.2% and FCE coverage for CAA SM-80 facilities (metric 5b) was 91.7%. Missouri had no minor source facilities listed within their CMS plan, therefore, no FCEs were done at minor source facilities (metric 5c).

Review of Title V annual compliance certifications (metric 5e) was 100%.

MoDNR's review of CMRs and files that provide sufficient documentation to determine compliance is also near the national goal (metric 6b – 100%).

---

**Relevant metrics:**

| <b>Metric ID Number and Description</b>   | <b>Natl Goal</b> | <b>Natl Avg</b> | <b>State N</b> | <b>State D</b> | <b>State %</b> |
|---|------------------|-----------------|----------------|----------------|----------------|
| 5a FCE coverage: majors and mega-sites [GOAL]   | 100%             | 85.9%           | 141            | 145            | 97.2%          |
| 5b FCE coverage: SM-80s [GOAL]  | 100%             | 91.3%           | 44             | 48             | 91.7%          |
| 5c FCE coverage: minors and synthetic minors (non-SM 80s) that are part of CMS plan or alternative CMS Plan [GOAL]                                      | 100%             |                 | 0              | 0              | 0              |
| 5e Reviews of Title V annual compliance certifications completed [GOAL]   | 100%             | 97.2%           | 223            | 223            | 100%           |
| 6b Compliance monitoring reports (CMRs) or facility files reviewed that provide sufficient documentation to determine compliance of the facility [GOAL] | 100%             |                 | 20             | 20             | 100%           |

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**State Response:**

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**CAA Element 2 - Inspections**

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**Finding 2-2**

Area for Attention

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**Recurring Issue:**

No

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**Summary:**

In 80% of the files reviewed, FCE elements in inspection reports were properly documented.

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**Explanation:**

In Missouri's inspection report documentation of FCE elements (metric 6a – 80%), compliance issues are usually summarized succinctly in the narrative section. The reports clearly specify the steps required for facilities to return to compliance. However, the EPA noted variability in report quality across district offices. The most effective reports feature robust, detailed narratives that link data and offer transparency to both the regulated community and the public. Commonly missing elements in the inspection reports included visible emissions observations, process rate assessments, and control device assessments.

To improve the quality and completeness of their inspection reports, EPA suggests that MoDNR implement a standardized checklist or template that ensures all critical elements are consistently documented during inspections.

---

**Relevant metrics:**

| Metric ID Number and Description        | Natl Goal | Natl Avg | State N | State D | State % |
|---|-----------|----------|---------|---------|---------|
| 6a Documentation of FCE elements [GOAL] | 100%      |          | 16      | 20      | 80%     |

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**State Response:**

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**CAA Element 3 - Violations**

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**Finding 3-1**

Meets or Exceeds Expectations

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**Recurring Issue:**

No

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**Summary:**

MoDNR did a thorough and comprehensive job in making HPV and FRV determinations and timely identified HPVs.

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**Explanation:**

All goal metrics were greater than or equal to 95%, with metrics 7a and 13 achieving 100%.

MoDNR discusses HPV identification and HPV cases with Region 7 staff during regularly scheduled conference calls and maintain an excellent working relationship with solid communication practices. The state is proficient in accurately identifying violations, as well as interpreting and applying the FRV and HPV policy.

---

**Relevant metrics:**

| Metric ID Number and Description                                    | Natl Goal | Natl Avg | State N | State D | State % |
|---|-----------|----------|---------|---------|---------|
| 7a Accurate compliance determinations [GOAL]                        | 100%      |          | 28      | 28      | 100%    |
| 7a1 FRV 'discovery rate' based on inspections at active CMS sources |           | 9.1%     | 67      | 378     | 17.7%   |
| 8a HPV discovery rate at majors                                     |           | 2.2%     | 2       | 232     | .9%     |
| 8c Accuracy of HPV determinations [GOAL]                            | 100%      |          | 19      | 20      | 95%     |
| 13 Timeliness of HPV Identification [GOAL]                          | 100%      |          | 2       | 2       | 100%    |

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**State Response:**

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**CAA Element 4 - Enforcement**

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**Finding 4-1**

Meets or Exceeds Expectations

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**Recurring Issue:**

No

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**Summary:**

MoDNR implements an excellent enforcement program with respect to HPV case development and timeliness.

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**Explanation:**

With respect to MoDNR's formal enforcement responses (Metric 9a – 100%), the state provided facilities with appropriate corrective actions and specified timelines to ensure their return to compliance.

Regarding the state's timeliness of addressing HPV's (Metric 10a – 100%), though MoDNR did not always address HPV within 180 days, the state did have a case development and resolution timeline within 225 days of Day Zero.

Regarding the state's performance addressing and/or removing HPVs consistent with HPV policy (metric 10b-100%), EPA finds through file review and discussion with the state, MODNR applies the policy correctly.

Regarding the state's performance case development and resolution (metric 14-100%), EPA finds the MoDNR demonstrates a successful performance in this area.

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**Relevant metrics:**

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| <b>Metric ID Number and Description</b>  | <b>Natl Goal</b> | <b>Natl Avg</b> | <b>State N</b> | <b>State D</b> | <b>State %</b> |
|--|------------------|-----------------|----------------|----------------|----------------|
| 9a Formal enforcement responses that include required corrective action that will return the facility to compliance in a specified time frame or the facility fixed the problem without a compliance schedule [GOAL] | 100%             |                 | 18             | 18             | 100%           |
| 10a Timeliness of addressing HPVs or alternatively having a case development and resolution timeline in place  | 100%             |                 | 7              | 7              | 100%           |
| 10a1 Rate of Addressing HPVs within 180 days   |                  | 38.1%           | 0              | 2              | 0%             |
| 10b Percent of HPVs that have been addressed or removed consistent with the HPV Policy [GOAL]  | 100%             |                 | 4              | 4              | 100%           |
| 10b1 Rate of managing HPVs without formal enforcement action   |                  | 10.6%           | 0              | 2              | 0%             |
| 14 HPV case development and resolution timeline in place when required that contains required policy elements [GOAL]   | 100%             |                 | 6              | 6              | 100%           |

**State Response:**

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**CAA Element 5 - Penalties**

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**Finding 5-1**

Meets or Exceeds Expectations

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**Recurring Issue:**

No

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**Summary:**

All penalty calculations reviewed included both a gravity component and an economic benefit component.

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**Explanation:**

All eight penalties collected had documentation to show that the penalty was paid (metric 12b – 100%). Seven of the eight penalty calculations reviewed included both a gravity component and an economic benefit component (metric 11a – 87.5%).

---

**Relevant metrics:**

| <b>Metric ID Number and Description</b>  | <b>Natl Goal</b> | <b>Natl Avg</b> | <b>State N</b> | <b>State D</b> | <b>State %</b> |
|--|------------------|-----------------|----------------|----------------|----------------|
| 11a Penalty calculations reviewed that document gravity and economic benefit [GOAL]                        | 100%             |                 | 7              | 8              | 87.5%          |
| 12a Documentation of rationale for difference between initial penalty calculation and final penalty [GOAL] | 100%             |                 | 7              | 7              | 100%           |
| 12b Penalties collected [GOAL]   | 100%             |                 | 8              | 8              | 100%           |

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**State Response:**

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# Resource Conservation and Recovery Act Findings

## RCRA Element 1 - Data

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### Finding 1-1

Area for Attention

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### Recurring Issue:

No

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### Summary:

The MDNR made vast improvement in Round 4 from the Round 3 Program Review where this Element was noted as an area for state improvement. However, in Round 5 EPA has found that this element is now an area for State attention.

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### Explanation:

Of the 33 facility files reviewed, 6 were noted as having some date errors or missing data when comparing the file information to RCRAInfo. The issues in this Round arose from one facility's address was incorrect; one facility had a name change noted in the files but were not corrected; and four facility files reviewed did not have informal actions entered in RCRAInfo.

---

### Relevant metrics:

| Metric ID Number and Description                  | Natl Goal | Natl Avg | State N | State D | State % |
|---|-----------|----------|---------|---------|---------|
| 2b Complete and accurate entry of mandatory data. | 100%      |          | 27      | 33      | 81.8%   |

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### State Response:

The State would request facility and/or file names of the six which were noted as having date errors or incorrect/missing file information for review.

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## RCRA Element 2 - Inspections

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### **Finding 2-1**

Area for Attention

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### **Recurring Issue:**

No

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### **Summary:**

Inspection reports contained sufficient detail and documentation to determine compliance status of the facility. Missouri is meeting the annual inspection coverage for LQGs but is falling off on the two-year coverage for operating TSDFs.

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### **Explanation:**

According to the SRF evaluation criteria, the inspection report should include a narrative discussion that explains the overall nature of the facility's activities, the manufacturing and waste management practices, the generation and handling of wastes, describes the apparent violations and the documentation supporting the determination that the violation exists. All necessary documentation to provide evidence of the violations should also be attached to the inspection report.

All but two of the inspection reports that had been completed contained information necessary to determine compliance status. This information included a description of the facility's overall operations and waste management activities, verification of the generator status of the facility, and citing specific violations noted on the attached checklists.

Missouri is meeting the annual inspection coverage for LQGs by attaining 87% of the National goal but is falling off on the two-year coverage for operating TSDFs by only inspecting 14 of the 18 facilities.

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### **Relevant metrics:**

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| <b>Metric ID Number and Description</b>   | <b>Natl Goal</b> | <b>Natl Avg</b> | <b>State N</b> | <b>State D</b> | <b>State %</b> |
|---|------------------|-----------------|----------------|----------------|----------------|
| 5a Two-year inspection coverage of operating TSDFs [GOAL]   | 100%             | 88.1%           | 14             | 18             | 77.8%          |
| 5b1 Annual inspection coverage of LQGs and reverse distributor (RD) universes combined using RCRAInfo universe [GOAL] | 20%              | 9.7%            | 75             | 430            | 17.4%          |
| 6a Inspection reports sufficient to determine compliance.   | 100%             |                 | 30             | 32             | 93.8%          |

**State Response:**

The State appreciates the comment and will continue to look for areas to improve in our RCRA inspections but disagrees with the explanation that only 14 of the state's total 18 active permitted TSDF facilities were inspected across a two federal fiscal year period. Missouri has 17 facilities with active treatment, storage, and/or disposal Missouri Hazardous Waste Management Facility permits, not 18 as stated in the finding. A table representing those, as well as Missouri inspection dates, can be found below.

Cells were highlighted to illustrate apparent anomalies. Under USEPA's December 6, 2021 Issuance of Revised Resource Conservation and Recovery Act Compliance Monitoring Strategy memorandum Missouri's goal for inspecting non-government TSDFs is 50% of the universe. All but one of Missouri's active permitted TSDF is a non-government, meaning that universe of non-government active permitted TSDFs in Missouri is 16. In each year since Federal Fiscal Year 2023 Missouri has inspected at least 8 active permitted TSDFs. Under the above-referenced memorandum there is no state goal which pertains to Federal Government TSDFs.

While guidance appears to indicate that any combination of active TSDFs inspected which results in a total number of inspections equaling 50% of total non-government TSDFs within the state is acceptable, Missouri's own internal goal is to ensure each active TSDF within the state is inspected at a frequency equal to every other Federal Fiscal Year.

**RCRA Element 2 - Inspections**

**Finding 2-2**  
Area for Improvement

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**Recurring Issue:**

Recurring from Round 3

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**Summary:**

The timeliness of inspection report completion often times does not meet the EPA's final Interim Policy on Inspection Report Timeliness and Standardization that was issued in 2018 of 60 days (83.87%) and only meets roughly half of the MDNR requirement of 30 days (58.1%).

---

**Explanation:**

The inspector signs the inspection reports, but the inspector does not date the report upon completion. Therefore, the timeliness of report completion was calculated based upon the date that the report was sent to the facility. The MDNR's internal policy is to have the reports completed within 30 days of the inspection whereas the EPA Region 7 policy allows for 60 days and the National Enforcement Response Policy allows for 150 days. Only 18 of the 31 inspections met the 30-day MDNR timeline and 26 of the 31 met the 60-day EPA policy timeline.

The average for the report turn-around for the 31 facilities was 38 days which is an improvement from Round 4 which showed 69 days.

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**Relevant metrics:**

| Metric ID Number and Description                     | Natl Goal | Natl Avg | State N | State D | State % |
|--|-----------|----------|---------|---------|---------|
| 6b Timeliness of inspection report completion [GOAL] | 100%      |          | 18      | 31      | 58.1%   |

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**State Response:**

EPA has documented improvement by the State from Round 4 to Round 5 of this Element. The State will continue to work on ways to decrease report writing turnaround.

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**Recommendation:**

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| Rec # | Due Date   | Recommendation  |
|-------|------------|---|
| 1     | 06/30/2027 | <p>The MDNR should ensure that inspection reports are issued to the facility within 60 days and dated at the time of inspector signature (30 days for MDNR requirements).</p> <ul style="list-style-type: none"> <li>• The MDNR shall submit a plan(s) to the EPA to address this finding within 90 days of the final report date.</li> <li>• The EPA and the MDNR staff will discuss progress in implementing the plan during monthly coordination calls.</li> </ul> <p>This recommendation will be deemed completed upon:</p> <p>By the end of FY2026, the EPA will review a selection of 15 inspection reports to determine if the 60-day timeline is being met. If it is found that the inspection report completion meets or exceeds expectations rate of 85% or greater, this recommendation will be closed, if not this will be evaluated the following year(s).</p> |

### RCRA Element 3 - Violations

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#### Finding 3-1

Meets or Exceeds Expectations

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#### Recurring Issue:

No

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#### Summary:

The inspection reports and checklists reviewed indicated that the inspections were thorough. The inspection reports adequately cited and documented the violations.

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#### Explanation:

The use of the inspection templates (checklists) noted in the SRF Round 3 findings appear to have helped the inspection staff to ensure comprehensive inspections. All violations noted in the inspection and associated checklists are brought forward for enforcement follow-up and return to compliance. One inspection report consisted of a checklist which had numerous sections that were not evaluated due to lack of knowledge of facility staff. Responses from the facility help identify some of the violations cited, but it is difficult to coordinate the violations documented in RCRAInfo with the notations on the checklist.

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**Relevant metrics:**

| <b>Metric ID Number and Description</b>         | <b>Natl Goal</b> | <b>Natl Avg</b> | <b>State N</b> | <b>State D</b> | <b>State %</b> |
|---|------------------|-----------------|----------------|----------------|----------------|
| 7a Accurate compliance determinations<br>[GOAL] | 100%             |                 | 32             | 33             | 97%            |

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**State Response:**

The State will continue to build on successes from previous years with regard to determining and assessing violations.

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**RCRA Element 3 - Violations**

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**Finding 3-2**

Area for Improvement

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**Recurring Issue:**

No

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**Summary:**

The MDNR did not assign SNC determinations in RCRAInfo with an SNY evaluation for facilities with a large number of violations or permitting violations which warrant the SNC designations. Missouri still has a large number of Long Standing Secondary Violators at 58 which is a large reduction from the 156 Long Standing Secondary Violators identified in Round 4.

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**Explanation:**

EPA used the definition of a Significant Non-compliers (SNCs) in EPA's December 2003 Hazardous Waste Civil Enforcement Response Policy (ERP) when reviewing the facility files. EPA determined that there were 14 facilities that should have receive formal enforcement but had not been designated as SNC during this review period which is an increase from the 7 facilities identified in Round 4.

In many of the instances where numerous violations were discovered, the MDNR appears to have moved from enforcement to compliance assistance recently as can be seen from the lack of formal actions taken during the review period.

The large number of Long-Standing Secondary Violators (58) is concerning but is an improvement from the 156 noted during Round 4. The 2003 *Hazardous Waste Civil Enforcement Response Policy* states that agencies should consider redesignating SVs as SNC if the violator does not return to compliance in 240 days.

The EPA suggests the MDNR Regional and Central offices should communicate more regularly regarding facilities that are found to be substantially out of compliance with the regulations. Facilities that meet the definition of SNC should be referred for enforcement without delay. The MDNR Regional and Central offices should review the list of violators that do not return to compliance in 240 days to determine whether data entry problems, SNC designation issues, or SVs unaddressed by enforcement exist. The MDNR and the EPA will review the current status on monthly coordination calls.

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**Relevant metrics:**

| Metric ID Number and Description         | Natl Goal | Natl Avg | State N | State D | State % |
|--|-----------|----------|---------|---------|---------|
| 2a Long-standing secondary violators     |           |          | 58      |         | 58      |
| 8c Appropriate SNC determinations [GOAL] | 100%      |          | 19      | 33      | 57.6%   |

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**State Response:**

The State presumes that the EPA views a SNC designation as an indication to pursue formal enforcement action including administrative/civil penalties against the subject facility. The State focuses on opportunities to utilize compliance assistance. Missouri has reduced instances of Longstanding Secondary Violators by 63% since Round 4 of the SRF and will continue to work toward the goal of reducing them further.

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**Recommendation:**

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| Rec # | Due Date   | Recommendation   |
|-------|------------|--|
| 1     | 06/30/2027 | <p>The EPA suggests the MDNR Regional and Central offices should review inspection reports and follow the SNC guidance in the ERP with facilities that are found to be substantially out of compliance with the regulations.</p> <p>Facilities that meet the definition of SNC should be referred for enforcement without delay. The MDNR Regional and Central offices should review the list of violators that do not return to compliance in 240 days to determine whether data entry problems, SNC designation issues, or SVs unaddressed by enforcement exist.</p> <p>The MDNR and the EPA will review the current status on coordination calls.</p> <ul style="list-style-type: none"> <li>• The MDNR shall submit a plan(s) to the EPA to address this finding within 90 days of the final report date.</li> <li>• The EPA and the MDNR staff will discuss progress in implementing the plan during monthly coordination calls.</li> </ul> <p>This recommendation will be deemed completed upon:</p> <p>By the end of FY2026, the EPA will review a selection of 15 inspection reports with multiple potential findings to determine if the MDNR is placing facilities in SNC status when appropriate. If it is found that the SNC identification meets or exceeds expectations rate of 85% or greater, this recommendation will be closed, if not this will be evaluated the following year(s).</p> |

### RCRA Element 3 - Violations

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#### Finding 3-3

Area for Improvement

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#### Recurring Issue:

Recurring from Round 3

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#### Summary:

When significant violations are noted the MDNR does not follow the Enforcement Response Policy with regard to determining a facility's SNC classification.

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**Explanation:**

MDNR continues to fail to make SNC determinations per the ERP on many of the facilities that have caused actual exposure or a substantial likelihood of exposure to hazardous waste or hazardous waste constituents; are chronic or recalcitrant violators; or deviate substantially from the terms of a permit, order, agreement or from RCRA statutory or regulatory requirements. By Day 240, secondary violations (those cited by MDNR) are required to return to compliance. By Day 240, MDNR should issue its unilateral or initial orders to the designated SNCs, if appropriate, (Orders which follow NOV's are considered initial orders in this instance.)

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**Relevant metrics:**

| Metric ID Number and Description                     | Natl Goal | Natl Avg | State N | State D | State % |
|--|-----------|----------|---------|---------|---------|
| 7b Violations found during CEI and FCI inspections   |           | 41.9%    | 261     | 467     | 55.9%   |
| 8a SNC identification rate at sites with CEI and FCI |           | 2%       | 0       | 838     | 0%      |
| 8b Timeliness of SNC determinations [GOAL]           | 100%      | 86.5%    | 0       | 0       | 0       |

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**State Response:**

The State presumes that EPA views a SNC designation as an indication of formal enforcement action including administrative/civil penalties against the subject facility. The State focuses on opportunities to utilize compliance assistance. For the State, "significant violations" refers to the set of violations that have been determined to be Group 1 violations per the State's Procedures for Assistance, Compliance, and Enforcement (PACE). Group 1 violations may be cited by a Regional Office inspector during an initial inspection and result in a Regional Office Notice of Violation that does not result in formal enforcement action. If a violation is not corrected or reoccurs, then a Regional Office inspector may choose to refer the facility/violations for formal enforcement action. The State chooses to exercise its compliance assistance philosophy.

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**Recommendation:**

| Rec # | Due Date   | Recommendation  |
|-------|------------|---|
| 1     | 06/30/2027 | <p>The EPA recommends Missouri evaluate current SNC determination procedures with the goal of significantly improving timeliness in determining and recording SNC. To achieve this goal, EPA recommends Missouri:</p> <ul style="list-style-type: none"> <li>• Review and update the Procedures for Assistance, Compliance, and Enforcement (PACE)</li> <li>• Discuss SNCs and potential SNC with EPA on monthly conference calls.</li> </ul> <p>This recommendation will be deemed completed upon:</p> <p>Implementation and achievement of 85% or greater in Annual Data Metric Analysis metric 8b. The EPA will review MDNR FY26 frozen data in order to determine progress. If the FY26 data does not meet this threshold, the EPA will review subsequent years data until met.</p> |

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## RCRA Element 4 - Enforcement

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### Finding 4-1

Area for Attention

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### Recurring Issue:

No

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### Summary:

The MDNR's initial enforcement response to violations through a cover letter conveying the inspection report is adequate. It is effective at returning some facilities to compliance with the regulatory requirements through compliance assistance rather than formal enforcement actions. However, from the files reviewed, it is evident that the MDNR chose not to pursue formal enforcement when necessary.

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### Explanation:

In many instances, the facilities had a significant number of violations cited during the inspections and should have been considered SNCs. This ties into Finding 3-2 and 3-3 covering metrics 8a,

8b, and 8c. However, informal enforcement returned some of the facilities to compliance within a short period of time. The MDNR appears to have moved from enforcement to compliance assistance recently as can be seen from the lack of formal actions taken during the review period.

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**Relevant metrics:**

| Metric ID Number and Description                     | Natl Goal | Natl Avg | State N | State D | State % |
|--|-----------|----------|---------|---------|---------|
| 9a Enforcement that returns violators to compliance. |           | 100%     | 25      | 33      | 75.8%   |

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**State Response:**

The State will continue to train and maintain expectations regarding report detail and quality and look for opportunities to improve as necessary. The EPA's report indicates that the rate by which the State's enforcement returns sites to compliance is 75.80%. Based on that rate, the State considers the use of compliance assistance to be an effective enforcement tool. The State will continue to look for opportunities to pursue formal enforcement actions when appropriate.

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**RCRA Element 4 - Enforcement**

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**Finding 4-2**

Area for Improvement

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**Recurring Issue:**

Recurring from Round 3

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**Summary:**

The MDNR is not identifying facilities with significant violations as a significant non-compliers and is not taking formal enforcement action where warranted.

To reiterate, it appears that the MDNR has chosen not to pursue formal enforcement when

necessary.

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**Explanation:**

The MDNR appears to have moved from enforcement to compliance assistance as can be seen from the lack of formal actions taken during the review period. MDNR has numerous facilities in the unaddressed SNC category; specifically, during this review period, there is one open inspection at a permitted facility where formal action should have been pursued which is almost two years old and the facility is still out of compliance. Documentation in the file indicates formal action is being pursued. In many instances, the facilities had a significant number of violations cited during the inspections and should have been considered a SNC. Informal enforcement actions typically returned the facility to compliance.

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**Relevant metrics:**

| <b>Metric ID Number and Description</b>                        | <b>Natl Goal</b> | <b>Natl Avg</b> | <b>State N</b> | <b>State D</b> | <b>State %</b> |
|--|------------------|-----------------|----------------|----------------|----------------|
| 10a Timely enforcement taken to address SNC [GOAL]             | 80%              | 83.5%           | 0              | 0              | 0              |
| 10b Appropriate enforcement taken to address violations [GOAL] | 100%             |                 | 17             | 33             | 51.5%          |

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**State Response:**

The State focuses on compliance assistance but utilizes enforcement when appropriate.

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**Recommendation:**

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| Rec # | Due Date   | Recommendation  |
|-------|------------|---|
| 1     | 06/30/2027 | <p>The MDNR should review the current version of the Federal Hazardous Waste Civil Enforcement Response Policy (ERP) for guidance.</p> <p>For each inspection determine if the violations meet the criteria and if the criteria are met, place the facility in SNC status.</p> <p>Additionally, if violations are not addressed within the guidance's timeframes a facility should be placed in SNC status..</p> <ul style="list-style-type: none"> <li>• The MDNR shall submit a plan(s) to the EPA to address this finding within 90 days of the final report date.</li> <li>• The EPA and the MDNR staff will discuss progress in implementing the plan during monthly coordination calls.</li> </ul> <p>This recommendation will be deemed completed upon:</p> <p>By the end of FY2026, the EPA will review a selection of 15 inspection reports with multiple potential findings to determine if it appears the MDNR is consistently making SNC determinations at the meet or exceeds expectations rate of 85% or greater.</p> <p>If the goal is met, this recommendation will be closed, if not this will be evaluated the following year(s).</p> |

## RCRA Element 5 - Penalties

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### Finding 5-1

Area for Improvement

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### Recurring Issue:

Recurring from Round 3

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### Summary:

The file reviewed contained a penalty calculation in the file which only included the gravity component; economic benefit was not addressed. Discussions with staff at the MDNR indicated economic benefit is not pursued.

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**Explanation:**

For metric 11a there was only one file that contained a penalty calculation to review. The penalty calculation only included the gravity component; economic benefit was not addressed. MDNR staff stated they do not take economic benefit.

For metric 12a, there was no mention of a reduction and there was no documentation showing an initially calculated penalty versus a negotiated penalty.

Additionally, there is a significant difference between the Federal penalty matrix and the MDNR's penalty matrix.

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**Relevant metrics:**

| Metric ID Number and Description  | Natl Goal | Natl Avg | State N | State D | State % |
|---|-----------|----------|---------|---------|---------|
| 11a Gravity and economic benefit [GOAL]   | 100%      |          | 0       | 1       | 0%      |
| 12a Documentation of rationale for difference between proposed penalty calculation and final penalty. | 100%      |          | 0       | 1       | 0%      |

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**State Response:**

The penalty and accompanying Order reviewed by EPA in SRF Round 5 was calculated prior to the initiation of SRF Round 4. The State will utilize considerations of economic benefit where appropriate in future penalty calculations.

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**Recommendation:**

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| Rec # | Due Date   | Recommendation  |
|-------|------------|---|
| 1     | 06/30/2027 | <p>The EPA recommends that the MDNR revise the standard penalty calculation and documentation format, to include a specific section for penalty reduction justification to ensure that this information is consistently documented and economic benefit to ensure that this component of the penalty calculation is considered.</p> <ul style="list-style-type: none"> <li>The EPA and the MDNR staff will discuss progress in implementing the plan during monthly coordination calls.</li> </ul> <p>This recommendation will be deemed completed upon:</p> <p>By the end of FY2026, the EPA will review a selection of up to 5 penalty sheets to determine if the MDNR is consistently documenting gravity and economic benefit calculations at the meet or exceeds expectations rate of 85% or greater. If the goal is met, this recommendation will be closed, if not this will be evaluated the following year(s).</p> |

## RCRA Element 5 - Penalties

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### Finding 5-2

Area for Improvement

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### Recurring Issue:

No

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### Summary:

The file reviewed did not contain documentation of penalty collection.

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### Explanation:

The facility file was missing documentation of penalty collection. It was noted in Round 3 of the SRF, that the HWP coordinates with the DEQ Finance Department to provide documentation of penalty payment for the program files, thereby prompting a memo to close out the enforcement case if all other actions under the Settlement Agreement or Order have been completed.

Continued use of the HWP standard format should be promoted by the MDNR management.

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**Relevant metrics:**

| <b>Metric ID Number and Description</b> | <b>Natl Goal</b> | <b>Natl Avg</b> | <b>State N</b> | <b>State D</b> | <b>State %</b> |
|---|------------------|-----------------|----------------|----------------|----------------|
| 12b Penalty collection [GOAL]           | 100%             |                 | 0              | 1              |                |

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**State Response:**

Currently, the State receives penalty payments (i.e., checks) through the DEQ Finance Department (aka, Division of Administrative Services), who then notifies the HWP that the penalty payment was received. The HWP then notates that a penalty payment was received in its tracking database. The HWP does not retain an electronic copy of penalty payments. The State would request EPA indicate what the appropriate documentation for penalty collection would be to ensure future documentation is adequate.

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**Recommendation:**

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| Rec # | Due Date   | Recommendation  |
|-------|------------|---|
| 1     | 06/30/2027 | <p>The EPA recommends that the MDNR Hazardous Waste Program coordinates with the DEQ Finance Department to provide documentation of penalty payment for the program files, thereby prompting a memo to close out the enforcement case if all other actions under the Settlement Agreement or Order have been completed.</p> <p>Continued use of the HWP standard format should be promoted by the MDNR management.</p> <p>This recommendation will be deemed completed upon:</p> <p>By the end of FY2026, the EPA will review a selection of up to 5 penalty sheets to determine if the MDNR is consistently documenting gravity and economic benefit calculations at the meet or exceeds expectations rate of 85% or greater. If the goal is met, this recommendation will be closed, if not this will be evaluated the following year(s).</p> |