

Introduction to State Review Framework Data Metrics Spreadsheet Clean Water Act

Background on CWA NPDES Program

In 1972, the Clean Water Act (CWA) was enacted. One important element of the CWA is to prohibit the discharge of pollutants from point sources into waters of the United States, unless authorized by a permit. CWA Section 402 created the National Pollutant Discharge Elimination System (NPDES) permit program. The program gives the EPA the authority to regulate discharges into the nation's waters by setting limits on the effluent that can be introduced into a body of water from an operating and permitted facility. EPA can authorize states to be the primary regulatory agency administering the NPDES program. When a state is authorized, basic program management responsibilities are outlined in the regulations. For example, the regulatory authority is required to track and monitor the compliance status of all NPDES facilities. Although a state may be the primary regulatory agency administering the NPDES program, EPA retains oversight and can initiate enforcement actions. There are five states (AK, ID, MA, NH, NM, DC), Puerto Rico, the Pacific territories, and tribal lands where EPA remains the permitting authority. The State Review Framework (SRF) is a tool designed to evaluate the performance of the regulatory agency administering the NPDES program.

As part of the NPDES program, facilities are designated as either a Major or a Non-Major permittee. A major municipal facility includes those with design flows of greater than one million gallons per day and facilities with EPA and State approved industrial pretreatment programs. Major industrial facilities are determined based on specific ratings criteria developed by the EPA and State. Major facilities are required to provide data to the regulatory authority and national database on compliance status on a routine basis. A non-major permittee is any permittee in the NPDES program that is not classified as a major permittee. The information that the regulatory authorities is required to report to the national data system is dependent on the designation of a facility as a major or non-major. For example, there are approximately 6,600 majors and about 39,000 non-majors that have individual permits. EPA has required states to enter DMR data for only the 6,600 largest dischargers in the country, while strongly suggesting that data for smaller sources be entered.

Basic Information on the CWA State Review Framework Data Metrics Spreadsheet

The data metrics spreadsheet provides basic information on the definition of the data metric and what the metric is evaluating. The spreadsheet also identifies whether the information for a particular data metric is required to be reported to the national data system. Although EPA does not require all data to be reported to the national data system, the regulatory authority is responsible for determining and tracking compliance status and enforcement and maintaining data on compliance status. Data metrics that are required to be reported to the national data system will provide a fairly complete picture of this part of the NPDES program. Often times, when a data metric is not required to be reported to the national data system, the regulatory authority has more complete data that will be provided to the EPA at the time the state review begins. To obtain more complete data on the metrics that are not required to be reported to the national data system, the state should be contacted directly.

Final: Clean Water Act Data Metrics Spreadsheet (Public Version 1.0)

Metric #	Name	Description	Guidance, Requirement or Goal	Universe	EPA and State Data Combined Region/State or State-only Data?	Original Source of Data Provided by EPA	Metric Type
1. Data Completeness. Degree to which the Minimum Data Requirements are complete.							
1a1	Active facility universe counts accurate for all NPDES permit types	1a1. Number of NPDES majors with individual permits	Region and state should agree on active universe. This data is required to be reported to the national data system.	All major facilities with individual permits.	EPA and State Data Combined	PCS or ICIS-NPDES	Data Quality
1a2		1a2. Number of NPDES majors with general permits (Regions only)	Universe should be correct. This data is required to be reported to the national data system.	All major facilities with general permits.	EPA and State Data Combined	PCS or ICIS-NPDES	Data Quality (Regional-only metric)
1a3		1a3. Number of NPDES non-majors with individual permits	Region and state should agree on active universe. This data is required to be reported to the national data system.	All non-major facilities with individual permits	EPA and State Data Combined	PCS or ICIS-NPDES	Data Quality
1a4		1a4. Number of NPDES non-majors with general permits	Region and state should agree on active universe. This data is required to be reported to the national data system.	All non-major facilities with general permits	EPA and State Data Combined	PCS or ICIS-NPDES	Data Quality

Metric #	Name	Description	Guidance, Requirement or Goal	Universe	EPA and State Data Combined Region/State or State-only Data?	Original Source of Data Provided by EPA	Metric Type
1b1	Majors permit limits and DMR entry complete	1b1. Of majors with individual permits, the percent with permit limits present in the national database	95% entry standard for majors. This data is required to be reported to the national data system.	Active majors with individual permits	EPA and State Data Combined	PCS or ICIS-NPDES	Goal
1b2		1b2. DMR entry rate for those majors with individual permits present in the national database. This DMR entry rate will be expressed as the percentage of major facility outfalls for which DMR data was entered for each month (for a particular quarter).	95% entry standard for majors. This data is required to be reported to the national data system.	Active majors with individual permits	EPA and State Data Combined	PCS or ICIS-NPDES	Goal
1b3		1b3. Of majors with individual permits, percent with DMR data in the national database	95% entry standard for DMRs for major facilities. This data is required to be reported to the national data system.	Active majors with individual permits	EPA and State Data Combined	PCS or ICIS-NPDES	Goal
1b4		1b4. Rate of manual override of RNC/SNC of major facilities to a compliant status	Rate of manual override of RNC/SNC of major facilities to a compliant status (i.e., not RNC/SNC).	Active majors	EPA and State Data Combined	PCS or ICIS-NPDES	Data Quality

Metric #	Name	Description	Guidance, Requirement or Goal	Universe	EPA and State Data Combined Region/State or State-only Data?	Original Source of Data Provided by EPA	Metric Type
1c1	Non-majors permit limits and DMR entry	1c1. Of non-majors with individual permits, the percent with permit limits present in the national database (informational only)	This is not currently a required field for non-major facilities in the national data system.	Active non-majors with individual permits	EPA and State Data Combined	PCS or ICIS-NPDES	Informational-only
1c2		1c2. DMR entry rate for those non-majors with individual permits in the national database. This DMR entry rate will be expressed as the percentage of non-major facility outfalls for which DMR data was entered for each month (for a particular quarter).		Active non-majors with individual permits	EPA and State Data Combined	PCS or ICIS-NPDES	Informational-only
1c3		1c3. Of non-majors with individual permits, percentage with DMR data in the national database	This is not a required field for non-major facilities in the national data system.	Active non-majors with individual permits	EPA and State Data Combined	PCS or ICIS-NPDES	Informational-only

Metric #	Name	Description	Guidance, Requirement or Goal	Universe	EPA and State Data Combined Region/State or State-only Data?	Original Source of Data Provided by EPA	Metric Type
1d1	Quality of violation data at non-major facilities with individual permits (and that are expected to regularly submit DMRs)	1d1. Noncompliance rate in database at non-major facilities (with individual permits) in fiscal year (informational only)	Data are not currently required in the national data systems for non-major facilities for 1d1 and 1d3; however, these metrics provide a general sense of the quality of the data in the system (which is particularly important given these data are shown in ECHO).	Non-majors with individual permits (and that are expected to regularly submit DMRs)	EPA and State Data Combined	PCS or ICIS-NPDES	Informational-only
1d2		1d2. Noncompliance rate reported to EPA for non-major facilities (with individual permits) under the Annual Noncompliance Report (ANCR)		Non-majors with individual permits (and that are expected to regularly submit DMRs)	EPA and State Data Combined	ANCR	Informational-only
1d3		1d3. Number of non-major facilities in database with DMR non-receipt for every quarter in three continuous years		Non-major facilities with individual permits (and that are expected to regularly submit DMRs)	EPA and State Data Combined	PCS or ICIS-NPDES	Informational-only

Metric #	Name	Description	Guidance, Requirement or Goal	Universe	EPA and State Data Combined Region/State or State-only Data?	Original Source of Data Provided by EPA	Metric Type
1e1	Informal actions counts complete	1e1. Number of major facilities with informal actions in FFY	This data is required to be reported to the national data system.	Major facilities	State-only (with Region-only provided)	PCS or ICIS-NPDES	Data Quality
1e2		1e2. Total number of state informal actions issued to major facilities in FY	This data is required to be reported to the national data system.	Major facilities	State-only (with Region-only provided)	PCS or ICIS-NPDES	Data Quality
1e3		1e3. Number of non-major facilities with informal actions in FFY	Required data for P.L. 92-500 non-major facilities (essentially those non-major POTWs which received grant assistance under the Clean Water Act), but not for other non-majors	Non-major facilities	State-only (with Region-only also provided)	PCS or ICIS-NPDES	Data quality metric for P.L. 92-500 non-majors; informational only for other non-majors
1e4	Informal actions counts complete	1e4. Total number of state informal actions issued to non-major facilities in FFY	Required data for P.L. 92-500 non-major facilities (essentially those non-major POTWs which received grant assistance under the Clean Water Act), but not for other non-majors	Non-major facilities	State-only (with Region-only also provided)	PCS or ICIS-NPDES	Data quality metric for P.L. 92-500 non-majors; informational only for other non-majors

Metric #	Name	Description	Guidance, Requirement or Goal	Universe	EPA and State Data Combined Region/State or State-only Data?	Original Source of Data Provided by EPA	Metric Type
1f1	Formal action counts complete	1f1. Number of major facilities with formal actions	This data is required to be reported to the national data system.	Major facilities	State-only (with Region-only also provided)	PCS or ICIS-NPDES	Data Quality
1f2		1f2. Total number of formal actions taken against major facilities	This data is required to be reported to the national data system.	Major facilities	State-only (with Region-only also provided)	PCS or ICIS-NPDES	Data Quality
1f3		1f3. Number of non-major facilities with formal actions	Required data for P.L. 92-500 non- major facilities, but not for other non-majors	Non-major facilities	State-only (with Region-only also provided)	PCS or ICIS-NPDES	Data quality metric for P.L. 92-500 non-majors; informational only for other non-majors
1f4		1f4. Total number of formal actions taken against non-major facilities	Required data for P.L. 92-500 non-major facilities, but not for other non-majors	Non-major facilities	State-only (with Region-only also provided)	PCS or ICIS-NPDES	Data quality metric for P.L. 92-500 non-majors; informational only for other non-majors

Metric #	Name	Description	Guidance, Requirement or Goal	Universe	EPA and State Data Combined Region/State or State-only Data?	Original Source of Data Provided by EPA	Metric Type
1g1	Assessed penalties complete	1g1. Number of enforcement actions with penalties	States are required to enter penalty data for judicial actions; EPA is required to enter data for judicial and	All facilities	State-only (with Region-only also provided)	PCS or ICIS-NPDES	Data Quality
1g2		1g2. Total state penalties					Data Quality
1g3	Penalties normally included with enforcement actions	1g3. Total penalties assessed pursuant to civil judicial settlements (three-year average).	Data entry is required for states and Regions	All facilities with penalties from civil judicial actions.	State-only (with Region-only also provided)	PCS or ICIS-NPDES	Data Quality
1g4		1g4. Total penalties assessed pursuant to administrative actions (three-year average).	Data entry is not currently required except for Regions.	All facilities with penalties from admin. actions	State-only (with Region-only also provided)	PCS or ICIS-NPDES	Informational-only
1g5	No activity indicator (penalties) **	1g5. No penalties taken by state in fiscal year. If state is not entering penalties to PCS or ICIS-NPDES, Regions should request information.	States are required to enter judicial actions. Regions are required to enter both judicial and administrative actions.	All facilities	State-only (with Region-only also provided)	PCS or ICIS-NPDES	Data Quality

Metric #	Name	Description	Guidance, Requirement or Goal	Universe	EPA and State Data Combined Region/State or State-only Data?	Original Source of Data Provided by EPA	Metric Type
2. Data Accuracy. Degree to which the Minimum Data Requirements are accurate. (example correct codes used,							
2a	Number of formal enforcement actions, taken against major facilities, with enforcement violation type (EVTP in PCS or equivalent in ICIS-NPDES) codes entered.	2a. Number of formal enforcement actions, taken against major facilities, with enforcement violation type (EVTP in PCS or equivalent in ICIS-NPDES) codes entered.	The Region should ensure that all enforcement actions are properly linked to violations noted in PCS or ICIS-NPDES.	All major facilities with formal enforcement actions	State-only (with Region-only also provided)	PCS or ICIS-NPDES	Data Quality
3. Timeliness of Data Entry. Degree to which the Minimum Data Requirements are timely.							
3a	Percent change in data metrics	3a Percent change in each of the data metrics that represent required data	The two data sets are reviewed and the number of changes, as well as the magnitude of the changes for data metrics that represent required data elements is reported.	all data metrics	State only	PCS or ICIS-NPDES	Review Indicator
4. Completion of Commitments. Degree to which all enforcement/compliance commitments in relevant agreements							
There are no data metrics fro Element 4							
5. Inspection Coverage. Degree to which state completed the universe of planned inspections/compliance evaluations							
5a	Inspection coverage - NPDES majors	Inspections at NPDES majors with individual permits or general permits.	Goal has been to inspect 100 percent of the majors annually, or inspecting as few as 70% of the majors, as long as there is a two-for-one inspection of minors for each major not inspected. Beginning in 2009, the state is evaluated against the inspection coverage agreed upon between the EPA and state. If there is not a coverage agreed upon between EPA and the state then the national goal applies.	Active NPDES majors with individual or general permits	State-only (but separate region-only and EPA and State Data Combined % also provided)	PCS or ICIS-NPDES	Goal

Metric #	Name	Description	Guidance, Requirement or Goal	Universe	EPA and State Data Combined Region/State or State-only Data?	Original Source of Data Provided by EPA	Metric Type
5b1	Inspection coverage - NPDES non-majors	Inspections at NPDES non-majors with individual permits, excluding those permits which address <u>solely</u> stormwater, pretreatment, CAFOs, or CSOs. The CMS will apply nationally beginning in FFY 2009, but several states have begun implementing the CMS prior to that fiscal year. Under the CMS, the goal is 100% inspection coverage within a five-year period.	In FY 2007 and FY 2008, the state is evaluated against relevant commitments. After FY 2008, the goal is that which is established between EPA and the state. Where the goal has not been established between the EPA and state, the goals in the national guidance will apply (20%).	Active NPDES non-majors with individual permits, excluding those permits which address solely stormwater, pretreatment, CAFOs, or CSOs.	State-only (but separate region-only and EPA and State Data Combined % also provided)	PCS or ICIS-NPDES	Goal.
5b2		Inspections at NPDES non-majors with general permits, excluding those permits which address solely stormwater, pretreatment, CAFOs, or CSOs. The CMS will apply nationally beginning in FFY 2009, but several states have begun implementing the CMS prior to that fiscal year. Under the CMS, the goal is 100% inspection coverage within a five-year period.		Active traditional non-majors with general permits			

Metric #	Name	Description	Guidance, Requirement or Goal	Universe	EPA and State Data Combined Region/State or State-only Data?	Original Source of Data Provided by EPA	Metric Type
5c	Other inspections performed (beyond facilities indicated in 5a and 5b) (Coverage)	Prior to implementation of the CMS, this is a review indicator metric. It provides inspection coverage for NPDES permittees that do not have effluent limits and DMRs. In some cases, states may agree to inspection percentages for such other majors and non-majors in PPAs, PPGs, or, prior to implementation of the CMS, may be meeting basic goals by "trading" major for non-major inspections.	In FY 2007 and FY 2008, the state is evaluated against relevant commitments. After FY 2008, the goal is that which is established between EPA and the state. Where the goal has not been established between the EPA and state, the goals in the national guidance will apply (20%).	Active NPDES non-majors whose permits address solely stormwater, pretreatment, CAFOs, or CSOs.	State-only (but separate region-only and EPA and State Data Combined % also provided)	PCS or ICIS-NPDES	Review indicator metric prior to FY2008; goal after FY2008
6. Quality of Inspection or Compliance Evaluation Reports. Degree to which inspection or compliance evaluation							
There are no data metrics for Element 6							
7. Identification of Alleged Violations. Degree to which compliance determinations are accurately made and promptly							
7a1	Number of single-event violations reported to national system (non-automated violations arising from inspections and compliance monitoring)	7a1. Number of single-event violations at active majors. This measure assesses whether violations determined by means other than automated discharge-to-limits comparisons are being reported and tracked in PCS/ICIS-NPDES.	States are required to report single event violations to the national data system for major facilities. Violations found at non-major facilities are not required to be reported to the national data system, except for POTWs with approved local pretreatment programs. However, states are required to make and track compliance status at non-major facilities.	Active majors	EPA and State Data Combined (IDEA does not provide ability to separate EPA from state)	PCS or ICIS-NPDES	Data Quality
7a2		7a2. Number of single-event violations at non-majors. This measure assesses whether violations determined by means other than DMRs are being reported and tracked in PCS/ICIS-NPDES		Active non-majors	EPA and State Data Combined (IDEA does not provide ability to separate EPA from state)	PCS or ICIS-NPDES	Informational-only

Metric #	Name	Description	Guidance, Requirement or Goal	Universe	EPA and State Data Combined Region/State or State-only Data?	Original Source of Data Provided by EPA	Metric Type
7b	Compliance schedule violations	7b. Of the number of permittees with compliance schedule milestones scheduled to be met in the FFY, the percentage of facilities with unresolved compliance schedule violations, as of the end of the fiscal year.	Compliance schedules are required to be reported to the national data system for major permits.	All facilities with compliance schedule milestones in that FFY and those with unresolved compliance schedule violations, as of the end of the fiscal year.	EPA and State Data Combined	PCS or ICIS-NPDES	Data Quality
7c	Permit schedule violations	7c. Of the number of permittees with permit schedule milestones scheduled to be met in the FFY, the percentage of facilities with unresolved permit schedule violations, as of the end of the fiscal year.	Permit schedules are required to be reported to the national data system for major permits.	All facilities with permit schedule milestones in that FFY and those with unresolved permit schedule violations, as of the end of the fiscal year.	EPA and State Data Combined	PCS or ICIS-NPDES	Data Quality
7d	Percentage of major facilities with DMR violations reported to the national database	7d. Percentage of major facilities with DMR violations reported to the national database.	States are required to enter DMR data to the national data system for major facilities.	Active majors	EPA and State Data Combined	PCS or ICIS-NPDES	Data Quality

Metric #	Name	Description	Guidance, Requirement or Goal	Universe	EPA and State Data Combined Region/State or State-only Data?	Original Source of Data Provided by EPA	Metric Type
8. Identification of SNC and HPV. Degree to which the state accurately identifies significant noncompliance/high							
8a1	Frequency of SNC	8a1. Active major facilities in SNC during reporting year	This data is required to be reported to the national data system.	Active majors	EPA and State Data Combined (PCS does not provide ability to separate EPA from state)	PCS or ICIS-NPDES	Review indicator metric
8a2		8a2. Percent of active major facilities in SNC during the reporting year	This data is required to be reported to the national data system.	Active majors	EPA and State Data Combined (PCS does not provide ability to separate EPA from state)	PCS or ICIS-NPDES, and IDEA	Review indicator metric
8d	Wet Weather SNC placeholder (particularly for non-authorized states)	Metric(s) likely to be developed in the future.					
9. Enforcement Actions Promote Return to Compliance. Degree to which state enforcement actions include required							
There are no data metrics from Element 9							
10. Timely and Appropriate Action. Degree to which a state takes timely and appropriate enforcement actions in							
10a	Major facilities without timely action as appropriate	% of major facilities for which enforcement actions were not taken before two consecutive quarters of QNCR effluent violation at same pipe for the same parameter was reported or two consecutive quarters of the same non effluent SNC violation was recorded	The number of facilities without timely action should not exceed 2% of active major universe throughout the fiscal year.	Majors	EPA and State Data Combined	PCS or ICIS-NPDES	Goal
11. Penalty Calculation Method. Degree to which state documents in its files that initial penalty calculation includes							
There are no data metrics from Element 11							
12. Final Penalty Assessment and Collection. Degree to which differences between initial and final penalty are							
12a.	Penalties assessed.	Please refer to metric 1g5. If zero penalties have been taken by the state (as verified by data pulls or subsequent					

Acronyms and Notes	
ANCR	Annual Non-compliance Report for non-major facilities
CAFO	Concentrated Animal Feeding Operation
CMS	Compliance Monitoring Strategy
CSO	Combined Sewer Overflow
CWA	Clean Water Act
DMR	Discharge Monitoring Report
EMS	Enforcement Management System
EVTP	Enforcement Violation Type
FFY	Federal Fiscal Year (October 1 and ending September 30)
ICIS-NPDES	Integrated Compliance Information System – National Pollutant Discharge Elimination System
Majors	A “major” NPDES permit discharge is either 1) a publicly owned treatment works (POTW) with a design flow of 1 million gallon/day or with an approved industrial pretreatment program, or 2) a non-POTW a score of 80 or greater as determined by the NPDES Permit Rating Worksheet score. The Worksheet scores facilities on toxic pollutant potential, flow/stream flow volume, conventional pollutants, water quality factors, proximity to coastal waters, and proximity to drinking water supplies. The comprehensive Worksheet can be found at: www.epa.gov/npdes/pubs/owm0116.pdf .
Manual Overrides	Regarding manual overrides, there may be legitimate reasons for such overrides in infrequent circumstances; however, excessive use of such overrides may be indicative of other problems that EPA will discuss with states.
NPDES	National Pollutant Discharge Elimination System
PCS	Permit Compliance System.
PL 92-500	This was the first Clean Water Act, enacted in 1972. Public Law 92-500 facilities are POTWs that received some federal grant assistance under the Clean Water Act.
POTW	Publicly Owned Treatment Works
QNCR	Quarterly Noncompliance Report
RNC	Reportable Noncompliance
SNC	Significant Noncompliance
SSO	Sanitary Sewer Overflow
WENCB	Water Enforcement National Data Base