

January 16, 2018

Data Quality Record for Strategic Measures

Strategic Measure Text: By September 30, 2022, reduce the number of community water systems out of compliance with health-based standards to 2,700.

Goal Number/Objective: Goal 1: Core Mission/Objective 1.2: Provide for Clean and Safe Water

NPM Lead: Office of Water (OW)

The FY 2022 target of 2,700 systems represents a 25% reduction (from FY 2017 baseline and universe). The federal & state effort will target the 900-high risk and most challenging systems that consistently have co-occurring/multiple health-based (HB) violations including: the Surface Water Treatment Rule, the Stage 1 and/or Stage 2 Disinfection Byproduct Rule(s), Arsenic and the Total Coliform Rules, as well as those systems that fail to satisfy monitoring and reporting requirements as well as the serious single health-based violation group. Annual systems w/HB violations are ~ 3,600 – 3,800 with approximately 300 having some co-occurrence of the aforementioned HB regulations. Actions related to targeted technical assistance and strengthening state capacity to address these non-compliant systems.

1a. Purpose of Strategic Measure:

Community water system non-compliance with health-based measures is important to reflect the protection of the Nation's public health associated with the delivery of safe drinking water (meeting the National Primary Drinking Water Regulations) by the more than 50,000 community water systems.

1b. Performance Measure Term Definitions:

- Community water system (CWS): A public water system that supplies water to the same population year-round.
- Health-based standard: The Maximum Contaminant Levels (MCLs) or treatment technique permissible of an enforceable contaminant in water delivered to users of a public water system.

1c. Unit of Measure: The total number of community water systems out of compliance.

2a. Data Source:

- Relevant information system: Data is derived from the Safe Drinking Water Information System (SDWIS) Federal (Fed) Data Warehouse. The SDWIS Fed Data Warehouse contains compliance information about public water systems and their violations of the NPDWRs as reported to EPA by the primacy agencies.
- Entity that reports data to the system: Data are provided by agencies with primacy (primary enforcement authority) for the Public Water System Supervision (PWSS) program. These agencies are either: States, EPA for non-delegated states or territories, and the Navajo Nation Indian tribe, the only tribe with primacy.
- Frequency of reporting primary data: Primacy agencies collect the data from the community water systems, determine compliance, and report a subset of the data to EPA (a subset of the inventory data and summary violations). Primacy Agencies' submit data quarterly to the data warehouse.
- Reference to Quality Assurance Project Plan: The SDWIS/Fed equivalent of a quality assurance project plan is the Drinking Water Data Quality Improvement Plan. This plan includes implementation of the Data Quality Matrix which, on a quarterly basis, assigns numerical data quality scores to each primacy agency. Additionally, the SDWIS FedRep 3.5 Requirements document ensures that specific types of data quality are adhered to. For example, the SDWIS/FedRep Validation Tool ensures each document conforms to the business rules established for federally reportable drinking water data. Individual business objects that conform to the established business rules are accepted. Those business objects that do not conform are rejected. For each documented validation that the business object fails to conform, a status message is created containing sufficient information for the user to locate and correct the data in the primacy agency's database.

2b. Data needed for interpretation of (calculated) Performance Result:

Measure	Universe	FY 2013 Result	FY 2014 Result	FY 2015 Result	FY 2016 Result	FY 2022 Target
Number of community water systems out of compliance with health-based standards.	See Results (total # of systems)	4,633 (51,145)	4,682 (50,808)	5,050 (50,546)	4,817 (50,366)	2,700

- Universe: The universe is the total number of community water systems, just over 50,000 (fluctuates annually).
- Baseline: The baseline represents the number of community water systems out of compliance in a specified year. The FY 2017 baseline is 3,600 systems out of compliance.
- Frequency of Reporting: Quarterly

3. Methodology:

The EPA Office of Ground Water and Drinking Water (headquarters) calculates this measure using data reported in the SDWIS Fed Data Warehouse-FED and provides the results to EPA regions. This measure includes federally-regulated contaminants of the following violation types: Maximum Contaminant Level, Maximum Residual Disinfection Limit, and Treatment Technique violations. It includes any violations from currently open and closed community water systems (CWSs) that overlap any part of the most recent four quarters.

4. Data Limitations/Qualifications:

States report data to EPA from their state databases after making a determination of violation. In some cases, an individual state's submission can be incomplete due to technical issues in the data transfer or because the state's violation determination was not loaded into their data system.

5. Technical Contact:

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6. Certification Statement/Signature

I certify the information in this DQR is complete and accurate.

DAA Signature 