

1. Instructions This is the second round of data collection for the new DoD Safe Drinking Water Act Metric. The reporting period for this data call is the second half of calendar year (CY) 2003. In past years this information was collected through the CNO Consumer Confidence Report Data Call. The new metric will collect compliance information by tracking instances of public notification. The new metric tracks both primary and consecutive systems, whether they are regulated by the SDWA or they are unregulated. The new metric also tracks overseas installations compliance with the Overseas Environmental Baseline Guidance Document (OEBGD) or the applicable Final Governing Standard (FGS). In addition information on the status of drinking water system vulnerability assessments will be collected through this data call. All of this data will be reported to DoD in the Environmental Quality In-Progress Review Report.

The SDWA Metric spreadsheet contains a list of all Navy installation water systems in the Navy Water/Wastewater Database maintained by NFESC. After the list of installation water systems there is a series of questions that will collect data regarding public notification. Use the definitions in section 2 of this document when updating the SDWA Metric spreadsheet. There is an additional SDWA spreadsheet that will be used to collect information on the status of drinking water system vulnerability assessments (VA). Please update the spreadsheets by following these steps:

1. Review the list of installations for completeness. Ensure that all installations that should be included are included. The SDWA Metric Spreadsheet should contain all regulated systems but we know that not all unregulated consecutive systems are listed. Ensure that all installation consecutive water systems in your region are included on the list. Do not include systems that are not used for human consumption. Add and/or update installation contact information as necessary in the spreadsheet. Be sure to verify permit information for your system. For installations that should be removed please make a comment stating why the installation should be removed in the comment column, e.g. it is a BRAC installation and has closed.
2. Fill in the SDWA Metric Spreadsheet with installation public notification information for the second half of CY 2003. Carefully follow the definition of compliance in the Definitions section of these instructions. Provide a written explanation of noncompliance and corrective measures completed or planned in the comments column. Be sure to state if the problem has been resolved and/or if you have completed any root cause analysis.
3. Fill in the SDWA Vulnerability Assessment Spreadsheet with information on the status of your drinking water system vulnerability assessment. Please verify completion dates and whether the VA needs to be turned into EPA or not. VAs need to be turned into EPA for all Community Water Systems that serve greater than 3,300 people.
4. Return electronic copy of updated spreadsheets to Ken Kaempffe at NFESC, ken.kaempffe@navy.mil.

For Overseas Installations. Please answer the public notification questions in accordance with OEBGD/FGS requirements for public notification.

2. Definitions

Appropriate DoD Medical Authority. The medical professional designated by the in-theater component commander (overseas) or the installation commander (U.S.) to be responsible for resolving medical issues necessary to provide safe drinking water at the component's installations.

Drinking Water Management Costs. For the purposes of this metric, drinking water management is defined as non-recurring environmental compliance costs, noting that this is only one part of the management costs. Drinking water management does not include permitting, sampling/analysis/monitoring; inspections; and training.

DoD Population Served. Number of people who are provided water by a DoD public water system (regulated and unregulated). Installations will use the population reported to their regulator from their drinking water permit. To determine a fixed number for the population served by an unregulated DoD public water system, use the highest daily average population served by that system during the year. Determine the public water system population by counting the total number of year-round residents plus the average number of regular consumers served (same persons), per day, during the month plus the average number of transient consumers served per day, during the month.

DoD Public Water System. A public water system (regulated or unregulated) located on a fixed installation controlled by the DoD.

Drinking Water Requirements. Statutory mandates in accordance with federal, state, and/or local drinking water regulations or permits or the OEBGD/FGS.

Fixed Installation. A public water system at a location with permanently constructed (non-mobile) facilities.

Final Governing Standards (FGS). The primary definitive set of criteria and standards applicable to Department of Defense (DoD) components located overseas at permanent base force structure installations and facilities. The FGS are developed by the DoD designated Executive Agent for a specific country, and incorporate provisions of minimum standards established by DoD in the Overseas Environmental Baseline Guidance Document (OEBGD) and those of the Host Nation. Summarily, the FGS are a set of country specific environmental standards developed via a comparative analysis of applicable Host Nation standards with those in the OEBGD. The FGS incorporate the "more protective" standard, and include appropriate hazardous waste definitions and criteria for all DoD components in a particular host country.

Installation. A base, camp, post, station, yard, center, homeport facility for any ship, or other activity under the jurisdiction of the Secretary of a military department or the Department of Defense which is located within any of the several States, the District of Columbia, the Commonwealth of Puerto Rico, American Samoa, the Virgin Islands, or Guam. This includes any leased facility where a military department or DoD activity has real property maintenance requirements. Military departments or DoD activities that for economy or other reasons are located within the confines of another installation and occupying portions of the land, buildings, structures of the main installation are considered to be tenants. Tenants on installations should

report through their component headquarters reporting system. Such term does not include any facility used primarily for civil works, rivers, and harbors, projects, or flood control projects. Overseas installations are defined as permanent, base force structure facilities under the operational control of the Secretary of a military department or the Department of Defense that is located outside the United States and outside any territory, commonwealth or possession of the United States. Installations overseas do NOT include temporary, contingency operation or deployment support facilities. Tenants on overseas installations should report through their component headquarters reporting systems. (Sources: 10 U.S. Code, Sections 2687(e) and 2801(c) (2))

NOTE: Include Government-owned, Contractor-operated (GOCO) installations, and stand-alone National Guard and Reserve Centers.

Maximum Contaminant Level (MCL). The maximum permissible level of a contaminant in water that is delivered to any user of a public water system (except for turbidity for which the maximum permissible level is measured after filtration).

Notification Requirements Overseas. When a DoD public water system is out of compliance as set forth in the OEBGD/FGS potable water criteria, the operator will notify the appropriate DoD medical authority and installation personnel (U.S. and host nation). The notice will provide a clear and readily understandable explanation of the violation, any potential adverse health effects, the population at risk, the steps taken to correct the system violation, the necessity for seeking alternative water supply, if any, and any preventive measures the consumer should take until the violation is corrected. The appropriate DoD medical authority will coordinate notification of host authorities in cases where off-installation populations are at risk.

Non-Public Water System (NPWS). A system that does not meet the definition of a public water system; for example, a well serving a building with less than 25 people or a system with less than 15 service connections serving less than 25 people.

Nonrecurring Compliance Cost. Environmental compliance costs identified as obligated/executed for the Safe Drinking Water Act entry at Tab E of the POM Preparation Instructions. This includes, but is not limited to, investments for new requirements or upgrades to existing systems that meet or maintain existing compliance with the Safe Drinking Water Act.

Overseas. Outside any territory, possession or commonwealth of the United States. This does not include contingency operations, training deployments, or the operations of military vessels and aircraft.

Overseas Environmental Baseline Guidance Document (OEBGD). A DoD guidance document that prescribes minimum environmental standards for compliance at overseas (permanent, base force structure) installations. The OEBGD is used by the designated Executive Agent to conduct a comparative analysis of the standards contained therein to those of the Host Nation, with the more protective standard becoming the definitive criteria, as established in the country specific Final Governing Standards (FGS).

Permit. A written authorization, license, or equivalent control document issued by a regulator allowing the holder authority to perform certain tasks or operate certain facilities not forbidden by law, but prohibited without the authority of such document. Drinking water permits are required for most types of public water supplies whether the source is surface or groundwater.

Potable Water. Water that has been examined and treated to meet the standards of the Safe Drinking Water Act or OEBGD/FGS (which ever is applicable), and has been approved as drinkable by the appropriate DoD medical authority.

Privatized Water System. A DoD public water system where the ownership, operation, maintenance, and improvements of the drinking water system is transferred to a municipal, private, local, or regional water authority. The installation becomes a drinking water customer, not a drinking water provider.

Provide Drinking Water. DoD public water systems that produce, procure, or distribute drinking water for human consumption. This specifically excludes NPWSs.

Public Water System (PWS). A system for providing piped water to the public for human consumption, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days of the year. This also includes any collection, treatment, storage, and distribution facilities under control of the operator of such systems, and any collection or pretreatment storage facilities not under such control that are used primarily in connection with such systems. A regulated PWS includes both "community water systems" and "non-community systems" as described below:

1. **Community Water System (CWS)** -- a regulated public water system that serves at least 15 service connections used by year-round residents, or which regularly serves at least 25 year round residents.
2. **Non-Community Water System** -- a regulated public water system that serves the public, but does not serve that same people year-round. There are two types of non-community systems:
 - (a) **Non-transient, Non-community Water System** -- a regulated public water system that supplies water to at least 25 of the same people at least six months per year, but not year-round. Some examples are schools, factories, office buildings, and hospitals that have their own water systems.
 - (b) **Transient, Non-Community Water System (TNCWS)** -- A regulated public water system that provides water to at least 25 persons (but not the same 25) over six months per year. Some examples are a gas station, motel, and campground where people do not remain for long period of time yet these establishments have their own water source.

An unregulated PWS is a water system that meets the definition of a PWS but is not considered a regulated PWS, and is therefore not subject to 40 CFR Part 141, the “National Primary Drinking Water Regulations” if it meets all of the following criteria:

1. Receives its water from another regulated PWS.
2. Does not provide any additional treatment to the water.
3. Does not sell any of the water it receives.
4. Does not supply the water to commercial carriers conveying passengers in interstate commerce.

Note: Some states may impose requirements more stringent than those listed above (i.e., 40 CFR 141.3, “Coverage”). Due to the SDWA waiver of sovereign immunity, these additional requirements apply to DoD PWS.

Regular Consumers (Same Persons). Terminology used in determining classification of a public water system. A regular public water system consumer who does not reside at a place served by the water system, but has a regular opportunity to consume water produced by the system (e.g. children at school, employees at workplace).

Same Persons. See “Regular Consumers”

“Sell” Drinking Water. A distributor of water for human consumption "sells" water within the meaning of the SDWA if it charges consumers for the water as a separate item or bills separately for the water it provides. Conversely, if the distributor includes the charges for water in the rental fee, then the system is not selling water within the context of the SDWA. For the purpose of complying with the SDWA, DoD PWSs "sell" drinking water when they charge non-federal consumers (e.g. public schools, state-operated prisons, private industry, banks and credit unions, non-DoD operated/franchised restaurants, etc.) for drinking water. However, for the purpose of complying with the SDWA, the exchange of funds between Component organizations or other federal agencies (i.e. federal consumers) is considered an internal allocation of funds within the executive branch of the government and not selling. If a federal facility rental agreement with a non-federal consumer bills separately for the water consumed, then it is “selling.” However, if a federal facility rental agreement with a non-federal consumer includes water production/consumption costs, then it is not “selling” water within the context of the SDWA. DoD PWSs, that are exempt from the SDWA, and yet charge non-federal consumers for drinking water, should either modify current billing practices or comply with the SDWA as a non-exempt PWS. Some state laws may impose requirements beyond those of the SDWA (i.e. 40 CFR Part 141.3), and because of the structure of the SWDA these requirements will apply to federal agencies.

Tier 1 and 2 Public Notification. The Safe Drinking Water Act requires Public Notification Regulations for regulated public water systems (40 CFR Part 141, subpart Q). See the EPA web stie for more information on this Rule: <http://www.epa.gov/safewater/pn.html> . Public notification helps ensure that consumers will always know if there is a problem with their drinking water. There are categories or tiers of public notification.

Tier 1 public notification is issued for violations and situations with significant potential to have serious adverse effects on human health as a result of short-term exposure. Notice is required within 24 hours of violation. Tier 1 public notification is required for the following:

- Fecal coliform maximum contaminant level (MCL) violation or failure to test for fecal contamination after total coliform test is positive
- Nitrate/nitrite/combined nitrate and nitrite MCL violation or failure to take confirmation sample
- Chlorine dioxide maximum residual distribution level (MRDL) violation in distribution system or failure to take repeat samples in distribution system
- Exceedance of maximum allowable turbidity level resulting in an MCL or treatment technique (TT) violation, when the State or EPA determines a Tier 1 notice is warranted
- Special public notice for non-community water systems with nitrate exceedances between 10 mg/l and 20 mg/l, when allowed to exceed MCL (10mg/l) by the State
- Waterborne disease outbreak or other waterborne emergency
- Other situations as determined by the primacy agency

Tier 2 public notification is issued for other violations and situations (not included in Tier 1) with the potential to have serious, but not immediate, adverse effects on human health. Notice is required within 30 days, or as soon as possible, with extension of up to three months for resolved violations at the discretion of the State or primacy agency. Tier 2 public notification is required for the following:

- All other MCL, MRDL, and TT violations not identified as a Tier 1 notice
- Monitoring and testing procedure violations, when primacy agency requires a Tier 2 notice
- Failure to comply with variance and exemption conditions

Transient Consumer. An individual who has the opportunity to consume water from a public water system, but who does not fit the definition of a residential or regular consumer.

Water for Human Consumption. Water that is ingested, or absorbed into the human body by dermal contact or through inhalation. Human consumption includes such normal uses as bathing, cooking, drinking, showering, dishwashing, and oral hygiene. If a public water system provides water for these types of uses, then, it is providing water for human consumption under the SDWA. The SDWA applies even if a system maintains that they do not provide water for human consumption (e.g. through a consumer contract, etc.), but the actual consumer use demonstrates human consumption is prevalent within their public water system.

Year-Round Resident. An individual whose primary residence is served by the public water system in question. The individual need not live at the residence for 365 days a year for it to be considered a year-round residence.

The following is an example of how to calculate the DoD SDWA Metric:

A DoD installation has one non-PWS and two DoD unregulated PWS and two DoD regulated PWS under its control including:

Non-PWS:

1. One non-PWS system serving 6 people

Regulated PWS:

2. One regulated CWS serving 5,000 people
3. One regulated TNCWS located 50 miles away at an installation-owned recreational facility serving 95 people

Unregulated PWS:

4. One unregulated PWS (customer only) located on non-contiguous installation property serving the installation-DoD housing area serving 2,500 people
5. One unregulated PWS (privatized) serving a nearby installation bombing range serving 35 people.

Given Information: The CWS had zero Tier 1 or 2 violations. The TNCWS had three Tier 1 violations and one Tier 2 violation. The unregulated PWS (customer only) system had one Tier 1 violation reported by the supplier (this information should be collected from the supplier's Public Notice distributed to the installation). The privatized system had only one Tier 2 violation reported by the supplier.

Solution:

Do not include system #1 (i.e., non-PWS). This DoD metric does not cover non-PWS (less than 25 people potentially exposed).

The installation would be required to report the following information:

1. Regulated DoD Public Water System Population:

- a. The total number of DoD people served by each regulated DoD public water system.
 $= (5,000 + 95) = 5,095$
- b. The total number of DoD people served by any regulated DoD public water system that required a Tier 1 or 2 notification (US and its territories) or a notification in accordance with FGS/OEBGD (overseas).
 $= 95$ or 1.9% (i.e., $95/5,095$)

2. Unregulated DoD Public Water System Population:

- a. The total number of DoD people served by each unregulated DoD public water system.

$$= (2,500 + 35) = 2,535$$

b. The total number of DoD people served by any unregulated DoD public water system that receive a Tier 1 or Tier 2 notification (US and its territories) or a notification in accordance with FGS/OEBGD from their water supplier.

$$= (2,500 + 35) = 2,535 \text{ or } 100\%.$$

3. SDWA Compliance Metric

Goal – Ensure we consistently provide safe drinking water to protect the health of people living and working on our installations. Better manage the cost of drinking water programs. Make appropriate investments in pollution prevention.

Metric – Percent of DoD population served by DoD public water systems that meet established drinking water requirements and annual cost of managing drinking water.

Activities That Must Report

1. United States and its territories. All installations that provide drinking water (under Safe Drinking Water Act).
2. Overseas. All installations that provide drinking water (see Final Governing Standards (FGS) or Overseas Environmental Baseline Guidance Document (OEBGD) or international treaties).

What to Report

1. Regulated DoD Public Water System Population:
 - a. The total number of DoD people served by each regulated DoD public water system.
 - b. The total number of DoD people served by any regulated DoD public water system that required a Tier 1 or Tier 2 notification (US and its territories) or a similar notification (eg. Tier 1 or 2) in accordance with FGS/OEBGD (Overseas).
2. Unregulated DoD Public Water System Population:
 - a. The total number of DoD people served by each unregulated DoD public water system.
 - b. The total number of DoD people served by any unregulated DoD public water system that received a Tier 1 or Tier 2 notification (US and its territories) or a similar notification (i.e. Tier 1 or 2) in accordance with FGS/OEBGD (Overseas) from their water supplier.

UNIT – Number of people

3. Cost of Drinking Water Management – As reported in President’s Budget (Exhibit PB-28).

- Non-Recurring Compliance Investment – Safe Drinking Water Act

UNIT -- Thousands of Dollars (\$)

Reporting Period -- Calendar Year

Potential Data Sources

1. Consumer Confidence Reports
2. Public Notices issued by DoD public water system or its supplier
3. President's Budget (Exhibit PB-28)

Additional Information

An example of the metric is in the Safe Drinking Water Metric definitions.