Department of Defense Drinking Water Compliance Program for Fiscal Year 2016



December 2017

Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics

The estimated cost of this report or study for the Department of Defense is approximately \$11,000 in Fiscal Years 2017 and 2018. This includes \$2,100 in expenses and \$8,900 in DoD labor.

Cost estimate generated on October 24, 2017, RefID: 2-1F83A94

I. Congressional Reporting Requirement

As required by House Report 114-577, page 278, accompanying H.R. 5293, the Department of Defense (DoD) Appropriations Bill, 2017, DoD is to submit to the congressional defense committees a report on the current water quality status of military bases worldwide. This report is due not later than 90 days after enactment and should outline the current procedures that are in place to provide safe drinking water if the current water supply is deemed unhealthy.

II. DoD Policy Oversight

DoD complies with Federal and state drinking water standards and requirements the same as a public water system (PWS). A PWS defined under Safe Drinking Water Act (SDWA) regulations is a drinking water system that provides water for human consumption to at least 15 service connections or an average of 25 persons daily at least 60 days out of the year. DoD's SDWA compliance requirement is identified in DoD Instruction (DoDI) 4715.06, "Environmental Compliance in the United States," dated May 4, 2015. The overseas compliance policy is in DoDI 4715.05, "Environmental Compliance at Installations Outside the United States," dated November 1, 2013. As established in these DoDI, DoD will achieve, maintain, and monitor compliance with applicable environmental requirements to include the SDWA and its drinking water quality requirements.

The Assistant Secretary of Defense for Energy, Installations, and Environment (ASD(EI&E)) provides guidance and oversight of the DoD Component's environmental compliance programs. The term "DoD Components" for this report refers to the Army, Navy, Marine Corps (USMC), Air Force, and Defense Logistics Agency (DLA). The DoD Components are required to plan, program, and budget to achieve and maintain compliance with environmental regulations and requirements both in the United States and overseas. Overseas installations comply with the Final Governing Standard (FGS), Overseas Environmental Baseline Guidance Document (OEBGD), or host nation agreements that protect human health and the environment of the foreign country. The OEBGD is the base document that applies the U.S. standards (including SDWA) to overseas installations. The FGS reconciles the requirements of applicable international agreements and host nation environmental standards with the OEBGD. The more protective requirement applies.

DoD Components regularly monitor compliance with the Federal, state, and overseas drinking water standards and requirements. The monitoring includes sampling, testing, and reporting drinking water quality to the appropriate officials. If there is non-compliance with a drinking water requirement, the DoD regulated PWS (defined below) will take the necessary actions to resolve the non-compliance quickly and bring the system back into compliance to avoid any health risks. This includes customer notifications, retesting, investigating the cause of source of contamination, flushing out sections of the distribution system, making repairs on equipment, improving treatment, or providing alternative water.

The ASD(EI&E) establishes performance metrics to provide oversight and monitoring of various environmental programs. For over 20 years, the DoD Components have collected the data for the metrics and report to office of the ASD(EI&E) annually. For compliance with the SDWA,

the performance metric is to determine the percentage of the DoD population served by DoD public water systems that meet established health-based drinking water standards (or maximum contaminant levels). The Environmental Protection Agency (EPA) sets maximum contaminant levels (MCLs) under the National Primary Drinking Water Regulations to protect against contaminants that may be found in drinking water. States adopt these MCLs or they can establish more restrictive standards. DoD complies with the EPA or state standard. DoD's performance metric applies to DoD drinking water systems worldwide. For this report the following definitions are used:

Definitions

- A. <u>DoD Regulated PWS</u> A public water system that is owned by DoD, regulated by the EPA or a state, and is subject to the SDWA National Primary Drinking Water Regulations (NPDWR). This also includes DoD overseas drinking water systems subject to OEBGD, FGS, or international treaties.
- B. Other DoD PWS A non-DoD public water system (i.e., municipality or a private company) that provides drinking water directly to the DoD installation. This system's owner is also regulated by the EPA or state, and is subject to NPDWRs.
- C. <u>Health based standards</u> Standards developed by EPA (or the state) under the SDWA referred to as the NPDWR. These regulations set MCLs and treatment requirements for drinking water contaminants that protect against public health risks.

DoD Components regularly collect information to include the population served by the PWS, health based violation(s), the duration and actions taken for the violation, and the population associated with the violation. Even if a DoD regulated PWS is out of compliance for a short duration such as a day, the installation is considered out of compliance for the entire year.

III. PERFORMANCE

DoD Compliance Summary for Fiscal Year (FY) 2106

Table 1 and Figure 2 provide the DoD Summary of the FY 2016 SDWA metric for installations worldwide. For FY 2016, DoD provided drinking water to over 2.6 million people at installations in the U.S., U.S. Territories, and overseas (Table 1). In FY 2016, about 89 percent of the DoD population served by DoD PWS received drinking water that met the EPA or state health based drinking water standards. This is comparable to the national average of 92 percent for other public water systems in the U.S. For the remaining 11 percent of the population where the drinking water did not meet a health based standard at some point during FY 2016, the affected population was notified, and actions were taken to get the drinking water system back into compliance and avoid any health risks. If the system was not able to be brought back into compliance, the installation provided alternative drinking water until the problem was corrected. In addition, Table 1 indicates that over one million DoD personnel received drinking water from other public or private drinking water systems. For these other or non-DoD PWS, 99 percent of the DoD population served by a system received drinking water meeting health based standards.

This rate is higher than the national average of 92 percent. DoD's metric is based on the notifications of a health-based violation the installation receives from the non-DoD PWS provider. It is not received from an EPA or state database, so some discrepancies could occur. DoD also believes this higher rate of compliance could be that installation personnel may not always be aware of non-compliance notifications received from the non-DoD PWS and therefore, notifications could be under reported. DoD is reviewing this metric.

Table 1: FY16 DoD SDWA Compliance Summary Data for regulated DoD PWS and other DoD PWS.

Regulated DoD PWS (US, Territories, & Overseas)	Total population served	2,601,446
	Population meeting health based standards	2,309,265
	% Compliance	88.8%
Other DoD PWS (US & Territories)	Total population served	1,008,416
	Population meeting health based standards	1,007,308
	% Compliance	99.9%

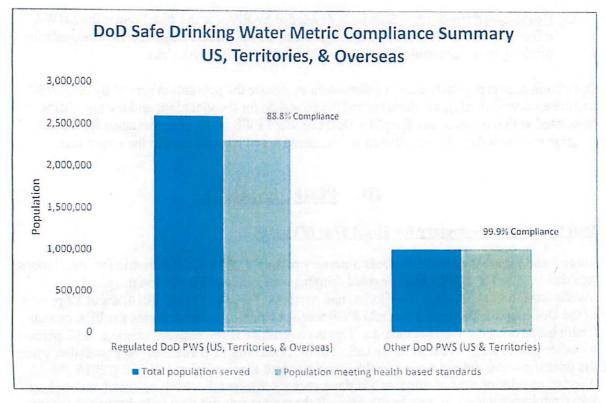


Figure 2: This figure shows the FY16 DoD-wide SDWA population meeting health based standards in relation to the total population served for regulated DoD PWS and other DoD PWS.