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SECRETARY OF THE AIR FORCE**

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Aerospace Medicine

**DRINKING WATER SURVEILLANCE
PROGRAM**

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This publication implements Environmental Protection Agency (EPA) 40 Code of Federal Regulations Part **141-143** (40 CFR 141-143) promulgated under the authority of the Safe Drinking Water Act (SDWA), Department of Defense Instruction (DoDI) 4715.06, *Environmental Compliance in the United States*, DoDI 4715.05, *Environmental Compliance at Installations Outside the United States*, Air Force Policy Directive (AFPD) 48-1, *Aerospace & Operational Medicine Enterprise (AOME)* and AFPD 90-8, *Environmental, Safety, and Occupational Health*. This publication provides guidance and procedures on implementation and management of the drinking water surveillance program throughout the entire Department of the Air Force (DAF). This publication applies to all DAF civilian employees and uniformed members of the Regular Air Force, the Air Force Reserve (AFR), the Air National Guard (ANG), the United States Space Force (USSF), and those with a contractual obligation to abide by the terms of DAF issuances, who operate, maintain, and monitor DAF-owned drinking water systems at locations worldwide. This publication may be supplemented at any level, but all supplements must be routed to the office of primary responsibility (OPR) listed above for coordination prior to certification and approval. Refer recommended changes and questions about this publication to the OPR listed above using the DAF Form 847, *Recommendation for Change of Publication*; route DAF Forms 847 from the field through the appropriate chain of command. The authorities to waive wing/unit level requirements in this publication are identified with a Tier (“T-0, T-1, T-2, T-3”) number following the compliance statement. See DAF Manual (DAFMAN) 90-161, *Publishing Processes and Procedures*, Table A10.1 for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the publication OPR for non-tiered compliance items. Ensure that all

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SUMMARY OF CHANGES

This document has been substantially revised and must be completely reviewed. Major changes include clarification of the Drinking Water Working Group (DWWG) responsibilities, sampling for lead in drinking water at schools and childcare facilities, surveillance of exempt and privatized drinking water systems, and use of the Risk and Resilience Assessment (RRA) to meet the Water Vulnerability Assessment (WVA) requirements.

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Chapter 1

\OVERVIEW

1.1. Overview. This DAFI provides guidance for the implementation and management of the DAF drinking water (DW) surveillance program. This instruction implements and/or supplements DoDI 4715.06, DoDI 4715.05, 40 CFR 141-143 (from here on referred to as SDWA), applicable state and local regulations, the Overseas Environmental Baseline Guidance Document (OEBGD), and applicable Department of Defense (DoD) Final Governing Standards (FGS).

1.2. Applicability. This instruction applies to all DAF bases, including Space Base Deltas and Space Launch Deltas (from here on referred to as DAF installations). Installations in the United States (U.S.) and its territories are required to comply with the most stringent, legally applicable standards (DoD, DAF, federal, state, or local). At installations outside the U.S. and its territories, DoD- and DAF-unique criteria listed in this instruction will be followed in addition to the OEBGD or applicable FGS. Except where stated otherwise, or major command (MAJCOM) and field command (FLDCOM) defined otherwise, this instruction applies to enduring DAF locations. This instruction does not apply to contingency locations; joint guidance, MAJCOM, and/or FLDCOM defined requirements will drive DW quality surveillance for contingency locations.

1.3. Purpose. The purpose of the DAF DW surveillance program is to ensure the safety of the DW provided on all DAF installations and deployment locations. For this instruction, deployment or deployed locations refers to enduring locations (main operating bases and forward operating bases) only. Refer to AF Manual (AFMAN) 48-138, *Sanitary Control and Surveillance of Field Water Supplies*, MAJCOM Bioenvironmental Engineer (BEE), and Defense Centers for Public Health-Dayton (DCPH-D) guidance for contingency locations.

Chapter 2

ROLES AND RESPONSIBILITIES

2.1. Deputy Assistant Secretary of the Air Force for Environment, Safety, and Infrastructure (SAF/IEE).

- 2.1.1. Develops overarching DW program policy for Secretary of the Air Force approval.
- 2.1.2. Provides strategic direction, oversight, and guidance for the DW surveillance program.
- 2.1.3. Acts as liaison for DAF DW issues to the Office of the Secretary of Defense (OSD), Congress and other federal organizations.
- 2.1.4. Collects, analyzes, and reports DAF-wide DW quality performance measures and information to Office of the Secretary of Defense and other external stakeholders.

2.2. Air Force Surgeon General (AF/SG).

- 2.2.1. Serves as the OPR for providing health oversight of DAF DW systems.
- 2.2.2. Ensures DAF DW systems are properly surveyed, sampled, analyzed, and monitored to provide adequate supplies of safe DW to all personnel at DAF installations and deployed locations.
- 2.2.3. Establishes implementation instructions for the DAF DW surveillance program.
- 2.2.4. In coordination with AF/A4C, ensures compliance with applicable regulatory requirements and standards associated with the protection of public health.
- 2.2.5. Ensures AF/SG representation on the DoD SDWA Services Steering Committee (SSC).

2.3. Air Force Medical Readiness Agency Aerospace & Operational Medicine Division (AFMRA/SG3P).

- 2.3.1. Assists AF/SG with developing policy to execute the DAF DW surveillance program.
- 2.3.2. Provides oversight and analysis of present and proposed federal legislation associated with SDWA. For overseas locations, provide recommended updates to OEBGD and FGS regarding safe DW, as well as analysis of proposed changes.
- 2.3.3. Provides consultation on DW surveillance issues to Headquarters Air Force (HAF), SAF/IEE, MAJCOM, FLDCOM, Defense Health Agency (DHA), and other agencies.
- 2.3.4. Assists SAF/IEE with collecting, validating, analyzing, and reporting DAF-wide DW performance measures and information to OSD and other external stakeholders.
- 2.3.5. Serves as the chair of the DoD SDWA SSC on behalf of SAF/IEE.
- 2.3.6. Provides research, guidance, and acquisition support and services, in collaboration with other services to address joint DW issues.

2.4. United States Air Force School of Aerospace Medicine (USAFSAM). For in-garrison installations and deployed locations, develops and teaches curriculum on technical aspects of DW systems, DW science, requirements of the SDWA, DW health risk assessments, and this instruction to BEEs and Bioenvironmental Engineering (BE) technicians, as applicable.

2.5. Defense Centers for Public Health – Dayton (DCPH-D).

- 2.5.1. Provides consultative support for DW surveillance, compliance, water quality, and health risk assessments on DAF installations.
- 2.5.2. Reviews and updates, as necessary, technical guidance documents to assist installations in interpreting and executing the DAF DW surveillance program.
- 2.5.3. Analyzes DAF, MAJCOM/FLDCOM, and installation DW information and data (installations and deployed locations) to identify trends, answer requests for information, and provide summary analysis to the SAF/IEE, HAF, DHA, AF/SG, and MAJCOM/FLDCOM.
- 2.5.4. Assists SAF/IEE, via AFMRA/SG3P, in collecting, validating, analyzing, and reporting DAF-wide DW quality performance measures and information to OSD and other external stakeholders.
- 2.5.5. In coordination with AF Civil Engineer Center (AFCEC) and MAJCOM BEE, analyzes open enforcement actions associated with SDWA surveillance for trend analysis, corrective action, and future preventative measures.
- 2.5.6. Develops, maintains, and utilizes knowledge management tools to analyze, assess, and where applicable, standardize DW surveillance programs (e.g., Environmental Risk Assessment Methodology, Program Maturity Audit System, geospatial analysis, etc.).
- 2.5.7. Develops skills verification training material for DW related tasks included in the comprehensive medical readiness program (CMRP) training platform.
- 2.5.8. Upon request by an installation, reviews commercial (including overseas and deployed locations) laboratory quality assurance and quality control programs.
- 2.5.9. Serves as a member of the DoD SDWA SSC.

2.6. Air Force Director of Civil Engineers (AF/A4C).

- 2.6.1. Provides DW doctrine and policy oversight for DW resource management in accordance with DAFI 90-1701, *Installation Energy and Water Management*, and DAFMAN 32-1067, *Water and Fuel Systems*.
- 2.6.2. Assists SAF/IEE with collecting, validating, analyzing, and reporting DAF-wide DW performance measures and information to OSD and other external stakeholders.

2.7. Air Force Installation and Mission Support Center (AFIMSC).

- 2.7.1. Provides centralized execution and oversight, and technical and contracting support to installations to ensure DW systems are properly designed, constructed, operated, and maintained in order to provide adequate supplies of safe DW to DAF installation personnel, and ensure compliance with federal, state, local, DoD, and DAF regulatory requirements.
- 2.7.2. Assists AF/A4C with collecting, validating, analyzing, and reporting DAF-wide DW performance measures and information to OSD and other external stakeholders.

2.8. Air Force Civil Engineer Center (AFCEC).

- 2.8.1. Issues DW system design, operations, and maintenance guidance, and provide technical assistance to installations.
- 2.8.2. Assists installations in resolving regulatory issues.

2.8.3. Provides DAF representation to federal, state, and local regulators.

2.8.4. Serves as a member of the DoD SDWA SSC.

2.8.5. Maintains DAF database of all DW regulatory open enforcement actions and status (e.g., Enforcement Actions, Spills, and Inspections Environmental Reporting (EASIER)). Confirms closure of open enforcement actions with appropriate regulators upon completion of required corrective actions and training. **(T-1)** Elevates DW surveillance noncompliance and risks of noncompliance to SAF/IEE, AF/A4C, AFMRA/SG3P, and MAJCOM BEE.

2.8.6. Provides AFMRA/SG3P with updates on emerging contaminants that are common or may be at an elevated risk for DW contamination on DAF installations. Partners with AFMRA/SG3P and MAJCOM BEE on monitoring actions installations should execute to assess contamination of DW sources. **(T-2)** Additional monitoring actions (e.g., dealing with emerging contaminants) may include sampling events for the purpose of assisting in health risk assessment and communication for all DAF personnel and customers.

2.8.7. Coordinates with AFMRA/SG3P and MAJCOM BEE on DW information presented to SAF/IEE as part of environmental management reviews, program management reviews, and the environmental programs annual reports to Congress.

2.8.8. Where applicable, provides utilities privatization contract guidance for privatized DW system management and surveillance.

2.9. MAJCOM Commander or equivalent. Designates a medical support professional (usually the MAJCOM BEE) to fulfill the role of “appropriate DoD medical authority” as specified in DoD Manual 4715.05, Volume 3, *Overseas Environmental Baseline Guidance Document: Water*, and country-specific FGSs to address overseas DW requirements and issues.

2.10. MAJCOM Bioenvironmental Engineer (BEE). (**Attachment 4** contains a summary table of roles and responsibilities.)

2.10.1. Supports DAF installations and DHA markets, upon request, to ensure the installation DW surveillance program conforms to this instruction.

2.10.2. Provides consultative guidance and timeline recommendations on DW surveillance, surveys, assessments, and reporting that are not otherwise defined in this instruction (i.e., surveillance and health risk assessment (HRA) of non-Public Water System (PWS) and exempt systems, etc.).

2.10.3. Maintains situational awareness of open enforcement actions and corrective actions associated with SDWA surveillance for DAF-owned systems, and provide consultative support to the installations.

2.10.4. Upon designation, serves as "appropriate DoD medical authority" for DW for AF installations in overseas locations as specified in DoD Manual 4715.05, and applicable FGS.

2.10.5. Serves as the OPR for MAJCOM coordination on country specific FGSs for DW in overseas locations. Defines DW surveillance requirements for contingency locations, and enduring locations outside the scope of the OEBGD and without an FGS.

2.11. The Installation Commander.

2.11.1. Oversees implementation of the installation DW surveillance program. **(T-1)**

2.11.2. Establishes and appoints in writing the chair of an installation Drinking Water Working Group (DWWG). **(T-1)** The chair may be from BE, CE, or other organization competent in the SDWA and familiar with the local DW system.

2.11.3. Approves DW public health notifications for release. **(T-1)** Installation commander may delegate this requirement to the group commander level. DW public notices must be coordinated through medical and CE leadership, Public Affairs (PA), and legal (JA) prior to publishing.

2.12. Bioenvironmental Engineering (BE).

2.12.1. For all DW systems on DAF installations (including Geographically Separated Units (GSUs) with Host Tenant Support Agreement (HTSA) or equivalent).

2.12.1.1. Provides DW HRAs on DAF installations. For privatized systems and installations where DAF is not Base Operations Support Integrator (BOS-I), may provide HRAs at the request of system owner, installation commander, or lead medical authority.

2.12.1.2. Ensures DoD- and DAF-unique surveillance are conducted in accordance with **chapter 3**. **(T-1)** For privatized systems, inform CE of requirements (reference **paragraph 2.12.4** for additional guidance). For installations where DAF is not BOS-I, may provide consultative support upon request (reference **paragraph 2.12.5** for additional guidance).

2.12.1.3. Develops a DW sampling, analysis, and monitoring (SAM) plan that includes the contents described in **paragraph 4.1.**, DAF-unique surveillance described in **paragraph 3.2**, and any additional content required by the primacy agency (i.e., drinking water regulatory agency). **(T-1)** Modified SAM plans may be required for exempt systems, privatized systems, or systems where DAF is not BOS-I, if the DWWG and MAJCOM BEE determines additional surveillance is necessary to ensure the safety of the DW provided to all DAF personnel.

2.12.1.4. Maintains copies of the annual consumer confidence report (CCR), drinking water enforcement actions, and DW anomalies in Defense Occupational and Environmental Health Readiness System (DOEHRS) in accordance with **chapter 5** and applicable DCPH-D technical guidance. **(T-3)**

2.12.1.5. Participates in the DWWG in accordance **attachment 2**. **(T-1)** (For installations where DAF is not BOS-I, participates in an equivalent working group with installation Service lead, if a group exists.)

2.12.1.6. Determines the population served for each installation DW system. **(T-1)** For DAF-owned PWS, follows primacy agency guidance, and accomplish in coordination with the sanitary survey. For exempt DW systems, follows the same procedures used for regulated systems, and updates every three years. Reference DCPH-D technical guidance for additional information. Provides population information to CE upon request.

2.12.1.7. In coordination with the DWWG and with consultation of MAJCOM BEE, determines any additional surveillance, assessment and reporting needs to ensure safe DW and public notification to all personnel at DAF installations and deployed locations. **(T-3)**

2.12.2. For DAF-owned PWSs (including GSUs with HTSA or equivalent), in addition to requirements in **paragraph 2.12.1**.

- 2.12.2.1. Performs DW sampling, surveys, and assessments to meet regulatory requirements and protect public health in accordance with SDWA, state, local, and DoD- and DAF-unique requirements. Will conduct any additional SDWA surveillance monitoring requirements identified by the primacy agency. **(T-0)**
- 2.12.2.2. Maintains DW survey and analytical data records in DOEHRS in accordance with [chapter 5](#) and applicable DCPH-D technical guidance. **(T-1)**
- 2.12.2.3. Ensures sanitary surveys are accomplished in accordance with applicable federal, state, and local regulations, and DoD requirements. **(T-0)** Reference [attachment 3](#) for specific responsibilities.
- 2.12.2.4. Provides DW health risk assessment, consultation, and mitigation measures to installation leadership and customers on health-related matters, questions, and concerns. **(T-1)**
- 2.12.2.5. Interprets results of water analyses and provide results to the appropriate CE, SG, and regulatory authorities according to federal, state, and local regulatory requirements. **(T-0)**
- 2.12.2.6. Notifies installation CE, Public Health (PH), PA, medical leadership, and MAJCOM BEE in the event of public health threat or regulatory noncompliance. **(T-1)**
- 2.12.2.7. In coordination with CE and JA, interacts with primacy agency regulator on DW compliance issues pertaining to sampling, inspections, enforcement actions, and reporting in accordance with [attachment 3](#). **(T-2)**
- 2.12.2.8. Provides CE with DW enforcement actions and inspections for input into EASIER database. **(T-1)**
- 2.12.2.9. Prepares and disseminates public notifications in accordance with SDWA and applicable state and local regulations when DW analyses indicate a potential public health threat or non-compliance with applicable regulations and standards. **(T-0)**
- 2.12.2.10. Prepares, coordinates, and distributes the CCR in accordance with [chapter 5](#) to comply with the requirements of SDWA and applicable state and local regulations. **(T-0)**
- 2.12.2.11. In coordination with the CE, JA, and other DWWG members, initiates requests for waivers, exemptions, and reduced monitoring from the DW primacy agency, when appropriate. For overseas installations, follows the waiver and exemption processes specified in the OEBGD and FGS. **(T-1)**
- 2.12.2.12. Updates WVAs, at a minimum, every five years. **(T-1)** As applicable, incorporate risk and vulnerability action items/control measures into the installation Water Contingency Response Plan (WCRP) and the Enterprise Protection Risk Management (EPRM) tool, or equivalent. **(T-1)** Current RRA, conducted in accordance with DAFI 90-1701, or current sanitary surveys coupled with installation risks, may serve as the WVA update. Where these WVA requirements conflict with other DAFI instructions or manuals, this instruction shall be followed.
- 2.12.2.13. Advises commanders on source water protection opportunities, physical modifications to enhance water treatment and distribution systems, and alternative management practices to meet compliance requirements and enhance DW quality. **(T-1)**

- 2.12.2.14. Conducts reviews of planned repairs, renovations, and modifications to DW systems to assess the need to modify the DW SAM plan. **(T-1)**
- 2.12.2.15. Reviews the CE distribution system flushing and maintenance program to ensure appropriate sampling locations and timing with respect to distribution system maintenance activities, including hydrant maintenance and testing. **(T-3)**
- 2.12.2.16. As necessary, provides water quality sampling, monitoring, and HRA associated with line breaks, distribution system maintenance, water system deficiencies, or any other unusual events. **(T-1)**
- 2.12.2.17. Upon request, assists in the hazard classification of new cross-connections using the most recent Uniform Plumbing Code criteria, designed to provide consumers with safe and sanitary plumbing systems. **(T-1)** Reference DCPH-D technical guidance for additional recommendations on hazard classifications.
- 2.12.2.18. Ensures laboratories perform analyses using required analytical methods for which they are certified in accordance with SDWA, state, and OEBGD/FGS regulations as applicable. **(T-0)**
- 2.12.3. For exempt PWS and Non-PWS on DAF installations (including GSUs with HTSA or equivalent), in addition to requirements in [paragraph 2.12.1](#).
- 2.12.3.1. Verifies water system status and monitoring requirements with assistance from MAJCOM BEE, DCPH-D, AFCEC, CE, and servicing legal office (JA). **(T-2)**
- 2.12.3.2. For systems (and consecutive distribution system components) exempt from regulation under the SDWA or state DW regulations, identifies any monitoring gaps that may put the installation at an elevated health risk. **(T-2)**
- 2.12.3.3. Reports gaps to the DWWG, Aerospace Medicine Council, and Environment, Safety, and Occupational Health (ESOH) Council (AFI 90-801, *Environment, Safety, and Occupational Health Councils*), ensuring concerns are documented in the meeting minutes. **(T-2)**
- 2.12.3.4. Develops DW system gap mitigation courses of action through discussion with MAJCOM BEE, Aerospace Medicine, CE, JA, DWWG, and other stakeholders. Presents suggested courses of action to the installation commander and executes installation commander's desired action. **(T-2)**
- 2.12.3.5. Reports DW quality to customers of non-PWSs and exempt systems. Report formats and timelines may be determined by DWWG, with MAJCOM BEE consultation. **(T-2)**
- 2.12.3.6. Maintains DW survey and analytical data records in the DOEHRS in accordance with [chapter 5](#) and applicable DCPH-D technical guidance. **(T-2)**
- 2.12.4. Privatized DW systems. At installations with privatized water systems, the system owner is responsible for operating and maintaining the DW system. If the system owner holds the permit, the system owner will also be responsible for compliance with the SDWA and DoD- and DAF-unique requirements. System owner responsibility ends at the line of demarcation (i.e., typically about five feet from any facility, building, or home.); therefore, there may be some installations where the DAF retains some DW system responsibilities.

Consult privatization contract to determine the relevant, specific line of demarcation. For privatized drinking water systems, in addition to requirements in [paragraph 2.12.1](#).

2.12.4.1. Conducts DW surveillance that requires sampling inside government owned facilities and government owned homes, if necessary. System owner must structure SAM plan for collection of DW samples outside government owned facilities and government owned homes as much as possible. **(T-1)**

2.12.4.2. Consults with MAJCOM BEE and Aerospace Medicine Council to evaluate health risks of any gaps in DW surveillance (e.g., DAF-unique surveillance), and if necessary, accomplish, assess, report, and document in accordance with [chapter 3](#) and [chapter 5](#). **(T-3)**

2.12.4.3. Provides consultative support to the installation on DW quality and health risk assessments. BE will ensure CE and Contracting Officer Representative (COR) understand the DoD- and DAF-unique requirements. **(T-2)**

2.12.4.4. In circumstances where the privatized system is exempt from regulation under the SDWA or state DW regulations, works with CE to ensure appropriate DoD- and DAF-unique requirements and local requirements are met. **(T-2)** Local requirements may be defined by DWWG in consultation with AFCEC, DCPH-D, MAJCOM BEE, and AFMRA/SG3P.

2.12.4.5. Conducts any DW surveillance of the privatized system at the direction of the installation commander. **(T-3)** Consults with JA prior to sampling non-DAF-owned systems.

2.12.5. For all DAF installations where DAF is not base operations support integrator (BOS-I), in addition to requirements in [paragraph 2.12.1](#).

2.12.5.1. Consults with MAJCOM BEE and Aerospace Medicine Council to evaluate health risks of any gaps in DW surveillance (e.g., DAF-unique surveillance), and if necessary, accomplish, report, and document in accordance with [chapter 3](#) and [chapter 5](#). **(T-3)**

2.12.5.2. Identifies gaps to the DWWG, Aerospace Medicine Council, and Environment, Safety, and Occupational Health (ESOH) Council (AFI 90-801, *Environment, Safety, and Occupational Health Councils*), ensuring concerns are documented in the meeting minutes. **(T-3)**

2.13. Base Civil Engineer (CE).

2.13.1. For all DW systems on DAF installations (including GSUs with HTSA or equivalent).

2.13.1.1. Participates in the DWWG in accordance with [attachment 2](#). **(T-2)**

2.13.1.2. Notifies members of the DWWG of any unusual events affecting the water distribution system that could result in changes to water quality or potability including line breaks, new connections, distribution system maintenance (e.g., cleaning of reservoirs, storage tanks, hydrant flushing, etc.), faulty cross-connections, water treatment plant repairs, and chlorine and fluoride application problems. For DAF-owned systems experiencing any of the aforementioned events, the affected areas of the distribution system will not be placed back into service until approved by BE. **(T-1)**

2.13.1.3. Supports BE in developing and maintaining a SAM plan. (T-2)

2.13.1.4. In coordination with the DWWG and with consultation of AFCEC, determines any additional monitoring, surveillance, and assessment needs to ensure safe DW to all personnel at DAF installations and deployed locations. (T-3)

2.13.2. For DAF-owned PWSs (including GSUs with HTSA or equivalent), in addition to requirements in [paragraph 2.13.1](#).

2.13.2.1. Ensures DAF DW systems are properly designed, constructed, operated, and maintained. (T-1)

2.13.2.2. Ensures compliance with SDWA and applicable state and local regulations associated with infrastructure and operations. (T-0)

2.13.2.3. Develops and implements a wellhead protection plan, source water assessment program, and WCRP associated with operating and maintaining a safe DW system. (T-1)

2.13.2.4. Supports completion of sanitary surveys. (T-0) Reference [attachment 3](#) for specific responsibilities.

2.13.2.5. Supports completion of WVAs. As applicable, incorporates risks and vulnerabilities into the installation WCRP and the EPRM tool, or equivalent. (T-1) Reference [attachment 3](#) for specific responsibilities.

2.13.2.6. Pays for all installation DW system permit fees, service support fees, and all installation certification fees in accordance with primacy agency requirements and in compliance with appropriate waivers of sovereign immunity. (T-1)

2.13.2.7. Conducts daily and periodic DW system monitoring of the source water, product water, and distribution system for proper treatment and adequate disinfection. Conducts any additional distribution system monitoring requirements identified by the primacy agency. (T-1)

2.13.3. Privatized DW systems. At installations with privatized water systems, the system owner is responsible for operating and maintaining the DW system. If the system owner holds the permit, the system owner will also be responsible for compliance with the SDWA and DoD- and DAF-unique requirements. System owner responsibility ends at the line of demarcation (i.e., typically about five feet from any facility, building, or home.); therefore, there may be some installations where the DAF retains some DW system responsibilities. Consult privatization contract to determine the relevant, specific line of demarcation. For privatized PWSs on DAF installations, in addition to requirements in [paragraph 2.13.1](#).

2.13.3.1. Coordinates with local COR to ensure responsibilities are understood by all parties, and all DW surveillance requirements are met. (T-1) These details shall be discussed in the DWWG.

2.13.3.2. In circumstances where the privatized system is exempt from regulation under the SDWA or state DW regulations, works with the COR to ensure appropriate DoD- and DAF-unique requirements and local requirements are met. (T-2) Local requirements may be defined by DWWG in consultation with AFCEC.

2.13.3.3. In circumstances where the privatized system is co-located with privatized housing, coordinates with both utilities privatization and housing privatization CORs to

determine responsible party for meeting SDWA and DoD- and DAF-unique requirements. (T-1)

2.13.3.4. Transfers privatized systems' PWS identification and permits to the system owner. (T-1)

2.14. Child Development Center (CDC) Director/School Age Care (SAC) Coordinator and Department of Defense Dependent Schools (DoDDS)/Domestic Dependent Elementary and Secondary Schools (DDESS) officials.

2.14.1. Coordinates with BE prior to opening a new facility and when plumbing lines or fixtures are modified, added or replaced. (T-3)

2.14.2. Ensures that analytical results for DW lead concentrations from sampling performed in accordance with [paragraph 3.2.2](#) are on file in the CDC, School Age Programs (SAP), Youth Programs (YP), DoDDS, and DDESS administrative offices, respectively. (T-3)

2.15. Public Affairs (PA).

2.15.1. Supports DWWG in development and dissemination of public notices required by SDWA and applicable state and local drinking water regulations (or equivalent for overseas installations). (T-3)

2.15.2. Supports development of the annual CCR (or equivalent). (T-3)

2.16. Servicing Legal Office (JA).

2.16.1. Coordinates with Office of The Judge Advocate General, Operations and International Law Directorate, Environmental Law and Litigation Division on SDWA regulatory requirements applicable to the DAF. For overseas installations, privatized systems, and other non-DAF-owned systems, provides legal advice and support regarding DW requirements and issues. (T-1)

2.16.2. Advises the DWWG.

Chapter 3

GUIDANCE AND PROCEDURES

3.1. Surveillance.

3.1.1. Installation shall conduct DW surveillance in accordance with all DoD, MAJCOM, FLDCOM, combatant command, joint service, DAF, federal, and applicable local primacy agency guidance, and OEBGD/FGS regulations as applicable. **(T-0)** Installation may pursue reduced monitoring via their primacy agency once all criteria for reduced monitoring are met.

3.1.2. Installation will ensure that adequate disinfectant residual monitoring is performed, both at the point of production, and at various points in the distribution system. Treated water shall be tested prior to entry into the distribution system at least daily; however, if the character and variability of the water supply so dictates, installation will test more often and at several locations. Installation will also test at various points in the distribution system during routine DW surveillance (i.e., disinfectant residuals and disinfectant byproducts) or during other investigations as appropriate. For instructions on testing for specific analytes and water quality measures, refer to DCPH-D technical guidance, SDWA, and applicable state/local DW regulations. **(T-0)**

3.1.3. Consecutive Systems. Installations served completely or in part by another public water supplier may have modified surveillance requirements. Consecutive systems may be considered fully or partially regulated if actions such as additional treatment are taken to improve the water quality. Installations with consecutive systems must coordinate with AFCEC and DCPH-D, and both the water supplier and the primacy agency to determine any modified surveillance requirements. Any modification of SDWA requirements must be documented in writing.

3.1.4. Installation will follow applicable regulations for emergency disinfection of water lines, water storage tanks and water treatment facilities. If no primacy agency regulations exist, installation will follow industry standards for disinfection (e.g., American Water Works Association). Reference AFCEC or DCPH-D technical guidance for additional information. **(T-1)**

3.1.5. Overseas installations will coordinate all requests for reduced monitoring under the OEBGD or FGS with the MAJCOM BEE or appropriate DoD medical authority prior to submission to the DoD Lead Environmental Component. **(T-1)**

3.1.6. Fluoridation. In accordance with DoDI 4715.06, installations that own or operate a DW system serving 3,300 persons or more must provide optimally fluoridated water. Overseas installations will fluoridate if applicable, but must comply with OEBGD/FGS policy on fluoridation. For specific instructions on fluoridation of DAF DW systems and associated surveillance, refer to DCPH-D technical guidance; however, primacy agency requirements may take precedence over these recommendations. When fluoride is added to DW, water treatment personnel must monitor product water at frequencies and locations as determined by the primacy agency. **(T-0)**

3.2. Air Force-Unique Surveillance.

3.2.1. Aircraft Watering Points.

3.2.1.1. For installations with aircraft serving more than 25 people daily for at least 60 days a year, perform an annual sanitary survey (or equivalent DW quality survey) and conduct quarterly bacteriological analysis of potable water trucks and watering points to ensure the safety of the DW provided to DAF personnel. **(T-0)** Consult with DCPH-D on whether aircraft watering point sampling and surveys are applicable to your installation, and guidance on execution.

3.2.1.2. In addition to monitoring aircraft watering points, installations housing aircraft with piped potable water systems (e.g., KC-46), perform an annual sanitary survey (or equivalent DW quality survey) of the process and procedures for the supply and maintenance of on-board drinking water, and conduct bacteriological monitoring on a representative number of aircraft quarterly to ensure the safety of the DW provided to DAF personnel. **(T-0)** Consult MAJCOM BEE on representative number of samples.

3.2.1.3. For installations that do not require aircraft watering point sampling, perform a periodic sanitary survey (or equivalent DW quality survey) on how the aircraft gets DW to ensure the safety of the DW provided to DAF personnel. **(T-2)** Consult DCPH-D and MAJCOM BEE on risks of local watering points and recommended surveillance schedules.

3.2.2. Lead in DW at schools. At all DAF-owned CDC, SAP, YP, and DoDDS or DDESS elementary facilities built prior to 2014, installation will ensure all DW outlets used for consumption have been tested for lead. Installation will sample for lead in DW using the protocols specified in the applicable DCPH-D technical guidance or EPA's *3Ts for Reducing Lead in Drinking Water*. Where this instruction conflicts with new or updated primacy agency standards, installations will incorporate new or updated standards as applicable.

3.2.2.1. Installation will sample for lead in DW at outlets known to be or visibly used for consumption. **(T-0)** Outlets that are not used for consumption, such as sinks in janitor's closets or outdoor hose bibs, should not be sampled. If there is potential that these may be used (e.g., janitor closet near kitchens and used for cleaning appliances or outdoor hoses used to fill water jugs for sports activities), post clear signage notifying users that the outlet should not be used for DW or cleaning cookware.

3.2.2.2. When lead sample results exceed the action or trigger levels, installation will use risk assessment principles to determine what, if any, additional sampling should be conducted, and discuss possible mitigation courses of action in the DWWG. **(T-1)**

3.2.2.3. Any corrective actions identified to mitigate sources of lead contamination in DW shall be accomplished, or alternative water provided until corrective actions are accomplished, or the facility closed. **(T-1)**

3.2.2.4. When changes are made to DW sources, treatment, or the distribution system that may increase lead concentrations, installation will resample for lead at affected taps located in CDC, SAP, YP, DDESS, DoDDS, even if not required for compliance with the Lead and Copper Rule (LCR). **(T-1)** Reference DCPH-D technical guidance for recommendations on which changes may drive repeat sampling.

3.2.2.5. Installation will conduct sampling on request for any secondary schools or childcare facilities/homes without current, representative lead results, or at the direction of primacy agency. **(T-0)**

3.2.2.6. Installation shall conduct an annual internal review to ensure lead sampling results are entered into DOEHRS as water samples for each facility built prior to 2014; any identified follow-up actions are closed or in progress; and the most recent annual memorandum prepared in accordance with [paragraph 2.14.2](#) is on file. If installation cannot locate lead sampling results for a particular CDC, SAP, YP, DoDDS, or DDESS facility, the sampling must be re-accomplished and documented in accordance with this instruction. **(T-2)**

3.2.2.7. DoD certified in-home childcare does not qualify as licensed childcare facilities. However, if there are indicators of an increased risk for lead in DW (e.g., lead service line, history of lead in community DW), the home will be sampled for lead and a “lead-in-DW” HRA will be accomplished. **(T-1)** If the installation provides a state-recognized license to the in-home childcare provider, that home qualifies as a childcare facility, and the installation shall conduct a “lead-in-DW” HRA. **(T-0)**

3.2.2.8. Installation shall not collect DW samples in schools or childcare facilities that are not owned, leased to, or operated by DoD, unless legally required to do so by the primacy agency or installation commander. **(T-3)**

3.2.3. Lead and Copper at Overseas Installations.

3.2.3.1. Monitor for or ensure monitoring is performed for lead and copper compliance in housing, schools, childcare centers, and other facilities leased or owned by the U.S. Government regardless of water system ownership, in accordance with the OEBGD or FGS. **(T-1)**

3.2.3.2. As applicable, ensure additional sampling for lead and copper is performed when changes in the water source or water treatment may potentially result in increased lead or copper concentrations, in accordance with the OEBGD or FGS. **(T-1)**

3.2.4. In coordination with the DWWG, installation will evaluate the need to implement DoD- and DAF-unique surveillance on non-PWSs and exempt systems to ensure safe DW for all DAF personnel. **(T-2)** These additional requirements will be included in the installation SAM plan.

3.3. Flushing. In accordance with DAFMAN 32-1067, every 5 years installation will execute a water distribution system flushing program to remove biofilm and deposited material, maintain water quality, meet disinfectant and disinfectant byproduct requirements, and maintain hydraulic conductivity. Installation will coordinate with DWWG on the distribution system flushing program to ensure health concerns and antiterrorism considerations are addressed. **(T-1)**

3.4. Installation Sanitary Surveys.

3.4.1. For continental U.S. water systems (including Hawaii and Alaska), installation will coordinate with the primacy agency for completion of the sanitary survey at least every 3 years for systems using surface water or groundwater under the direct influence of surface water, and every 5 years for systems using groundwater, or systems with outstanding performance based on prior sanitary surveys. **(T-0)** Sanitary deficiencies will be assigned to the responsible organization for correction.

3.4.2. For overseas water systems (excluding Hawaii and Alaska), installation will perform a sanitary survey (or equivalent DW quality survey) at least every 3 years for systems using

surface water or groundwater under the direct influence of surface water, and every 5 years for systems using groundwater as required by the applicable FGS or the OEBGD. **(T-2)** Sanitary deficiencies will be assigned to the responsible organization for correction.

3.4.3. Deployment and Contingency Location Drinking Water Systems. All locations will perform a sanitary survey (or equivalent DW quality survey) in accordance with AFMAN 48-138_IP, MAJCOM BEE guidance, applicable country specific FGS, and DCPH-D technical guidance. **(T-2)**

Chapter 4

SAMPLING, ANALYSIS, AND MONITORING (SAM) PLAN

4.1. Requirements. SAM plans are required for all DW systems on DAF installations and will include the following elements (reference DCPH-D technical guidance for additional instructions on creating SAM plans):

4.1.1. A description and classification (e.g., community/non-community, transient/non-transient, non-PWS, etc.) of all DW system controlled by the installation, to include DW systems of any GSUs supported by the host Wing or Medical Group equivalent with a current HTSA. **(T-2)**

4.1.2. Identification of all DW sampling sites used to protect the health of the population served or ensure compliance with the appropriate guidance and regulations. Geocoordinates will be identified for all sampling points. **(T-2)**

4.1.3. Annual and long-range sampling schedule. **(T-2)**

4.1.4. Identification of support laboratory for each contaminant and a confirmation annually that the laboratory holds the appropriate certification for the analyte(s) in question. Include procedures to verify the laboratory is using the appropriate quality assurance and quality control (QA/QC), achieving the prescribed detection limits, and reporting results in accordance with applicable regulatory requirements. **(T-2)**

4.1.5. Locally developed procedures for conducting the DW surveillance program. These procedures must include a schedule for routine monitoring, monitoring of aircraft watering points, sampling at CDC, SAP, YP, DoDDS, or DDESS facilities, increased monitoring during contingencies or heightened Force Protection Conditions, repeat and investigative sampling when installation violates a National Primary Drinking Water Standard (NPDWS) or other criteria that renders the DW system unsafe for human consumption, and monitoring to be performed before placing new connections, repaired water mains, or storage tanks into use. **(T-2)**

4.1.6. A current map of each water distribution system showing locations of distribution entry points and all surveillance sampling and monitoring points (i.e., bacteriological, chemical, lead and copper, disinfection byproducts, radiological, asbestos, etc.). **(T-2)** Geospatial tools may be used for this requirement.

4.1.7. QA/QC program that includes, but is not limited to, recording periodic equipment calibration data, ensuring personnel training is relevant and current, incorporating proper sample collection techniques, and chain-of-custody discipline to ensure sample integrity. For detailed instructions on building an effective QA/QC program, refer to DCPH-D technical guidance. **(T-2)**

4.2. Exempt PWSs, non-PWSs, privatized systems. SAM plan must state what actions will be taken if a public health risk or other criteria is identified that renders the DW system unsafe for human consumption. **(T-2)** For privatized systems, system owner POCs will be identified that can address any public health risks or concerns. **(T-3)**

Chapter 5

RECORD KEEPING AND REPORTING

5.1. Consumer Confidence Reports (CCR).

5.1.1. DAF-owned or operated PWS classified as community water systems (CWSs) shall issue a CCR by 1 July of each year. **(T-0) Note:** Those CWSs serving a population of 10,000 or greater may be required to issue a CCR twice per year as determined by their primacy agency. **(T-0)**

5.1.2. The CCR will be developed in accordance with guidance from the primacy agency, or DCPH-D technical guidance if no primacy agency guidance exists. DAF installations, including those with privatized DW systems, that receive a CCR from a local water supplier, will provide either the original or modified CCR to the base population, if not already providing their own CCR. If the original CCR is modified for distribution, ensure that modifications do not eliminate regulatory required content. **(T-0)**

5.1.3. Unless otherwise required by the OEBGD or relevant country-specific FGS, and after prior coordination with the appropriate DoD lead environmental component, overseas enduring installations with CWSs that serve at least 15 service connections used by year-round residents, or regularly serve at least 25 year-round residents, will provide a water quality report through appropriate means to inform installation customers by 1 July annually. These water quality reports may be modeled after the CCR or follow a MAJCOM BEE approved format. **(T-1)**

5.2. Other Public Notifications.

5.2.1. Installation will meet all Tier 1, 2, 3 reporting requirements as defined by the SDWA. **(T-0)**

5.2.2. Installation will provide any additional public or community notification, education, or HRA and communication necessary to inform and educate all DAF personnel and customers. **(T-2)** DWWG will determine additional public or community notification or education requirements. MAJCOM BEE will provide consultation, upon request.

5.3. Defense Occupational and Environmental Health Readiness System (DOEHRS).

5.3.1. For all DW systems (excluding non-DAF BOS-I), installation will enter the following analytical data in DOEHRS. Refer to DCPH-D technical guidance for additional data entry processes and instructions.

5.3.1.1. All results of sampling (including non-detects) for NPDWS contaminants. **(T-1)** (For privatized and non-DAF systems, reference [paragraph 5.3.2.](#))

5.3.1.2. Any positive bacteriological samples or any maximum contaminant level (MCL) exceedances. Include results of repeat sampling even if negative or below method reporting limits. **(T-1)** (For privatized and non-DAF systems, reference [paragraph 5.3.2.](#))

5.3.1.3. Any data where a MCL compliance is based on running averages or percentages (e.g., Lead and Copper Rule, Disinfection Byproducts, etc.) **(T-1)** (For privatized and non-DAF systems, reference [paragraph 5.3.2.](#))

5.3.1.4. Any data related to the EPA Unregulated Contaminant Monitoring Rule. **(T-1)**

5.3.1.5. Any data related to exposure pathways identified via the Occupational and Environmental Health Site Surveillance process. **(T-2)**

5.3.1.6. Any DoD or AF unique monitoring requirements. **(T-2)**

5.3.2. For privatized and non-DAF systems, enter all routine and follow-up NPDWS sample results from the current CCR annually. **(T-2)** This requirement will be effective once guidance and electronic data transfer tools are available.

5.3.3. Maintain copies of the annual CCRs and/or water quality reports in DOEHRS for all DW systems. Link survey reports to the current DW exposure pathway(s). Installations are encouraged to upload reports to the DOEHRS document library. **(T-2)**

5.3.4. Maintain copies of DW enforcement actions, DW inspections, and DW surveys (i.e., sanitary surveys, DW HRAs, etc.) in DOEHRS. Link survey reports to the current DW exposure pathway(s). Installations are encouraged to upload reports to the DOEHRS document library. **(T-2)** Reference DCPH-D technical guidance for instructions.

5.3.5. Maintain lead and copper results as samples specific to the CDC, SAP, YP, DoDDS or DDESS in DOEHRS. **(T-1)** Installations are encouraged to upload reports to the DOEHRS document library.

ROBERT I. MILLER
Lieutenant General, USAF, MC, SFS
Surgeon General

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

Public Law 93-523, 88 Stat. 1660 (1974), As Amended, *Safe Drinking Water Act*

Title 40, Code of Federal Regulations, Parts 141 - 143, *National Primary Drinking Water Regulations*

DoDI 4715.05, *Environmental Compliance at Installations Outside the United States*, 1 November 2013

DoDI 4715.06, *Environmental Compliance in the United States*, 4 May 2015

DoDM 4715.05, Volume 3, *Overseas Environmental Baseline Guidance Document: Water*, 29 June 2020

AFPD 48-1, *Aerospace & Operational Medicine Enterprise (AOME)*, 7 June 2019

AFPD 90-8, *Environmental, Safety, & Occupational Health Management and Risk Management*, 23 December 2019

AFI 33-322, *Records Management and Information Governance Program*, 23 March 2020

AFI 90-801, *Environment, Safety, and Occupational Health Councils*, 9 January 2020

AFMAN 48-138_IP, *Sanitary Control and Surveillance of Field Water Supplies*, 1 May 2010

DAFI 90-160, *Publications and Forms Management*, 14 April 2022

DAFI 90-1701, *Installation Energy and Water Management*, 17 December 2020

DAFMAN 90-161, *Publishing Processes and Procedures*, 15 April 2022

DAFMAN 32-1067_DAFGM2022-01, *Water and Fuel Systems*, 19 August 2022

Adopted Forms

DAF Form 847 - Recommendation for Change of Publication

Abbreviations and Acronyms

AF—Air Force

AFI—Air Force Instruction

AFMAN—Air Force Manual

AFR—Air Force Reserve

ANG—Air National Guard

AOME—Aerospace & Operational Medicine Enterprise

AFPD—Air Force Policy Directive

BE—Bioenvironmental Engineering

BEE—Bioenvironmental Engineer

BOS-I—Base Operations Support - Integrator
CCR—Consumer Confidence Report
CDC—Child Development Center
CMRP—Comprehensive Medical Readiness Program
CE—Civil Engineering
CFR—Code of Federal Regulations
COR—Contacting Officer Representative
CWS—Community Water System
DAF—Department of the Air Force
DAFI—Department of the Air Force Instruction
DAFMAN—Department of the Air Force Manual
DDESS—Domestic Dependent Elementary and Secondary Schools
DHA—Defense Health Agency
DoD—Department of Defense
DoDI—Department of Defense Instruction
DoDDS—Department of Defense Dependent Schools
DOEHRS—Defense Occupational and Environmental Health Readiness System
DW—Drinking Water
DWWG—Drinking Water Working Group
EASIER—Enforcement Actions, Spills, and Inspections Environmental Reporting
EPA—Environmental Protection Agency
EPRM—Enterprise Protection Risk Management
ERP—Emergency Response Plan
ESOH—Environment, Safety, and Occupational Health
FLDCOM—Field Command
FGS—Final Governing Standard
FOB—Forward Operating Base
GSU—Geographically Separated Unit
HAF—Headquarters Air Force
HRA—Health Risk Assessment
HTSA—Host Tenant Support Agreement
HVAC—Heating, Ventilation, and Air Conditioning

JA—Servicing Legal Office
LCR—Lead and Copper Rule
MAJCOM—Major Command
MCL—Maximum Contamination Level
MOB—Main Operating Base
MTF—Medical Treatment Facility
N/A—Not applicable
NPDWS—National Primary Drinking Water Standards
OEBGD—Overseas Environmental Baseline Guidance Document
OPR—Office of Primary Responsibility
OSD—Office of Secretary of Defense
PA—Public Affairs
PWS—Public Water System
QA/QC—Quality Assurance and Quality Control
RRA—Risk and Resilience Assessment
SAC—School Age Care
SAM—Sampling, Analysis and Monitoring
SAP—School Age Program
SDWA—Safe Drinking Water Act
SSC—Services Steering Committee
U.S.—United States
USSF—United States Space Force
WCRP—Water Contingency Response Plan
WVA—Water Vulnerability Assessment
YP—Youth Programs

Office Symbols

AF/A4C—AF Director of Civil Engineers
AFCEC—AF Civil Engineer Center
AFIMSC—AF Installations and Mission Support Center
AF/SG—AF Surgeon General
AF/SG3/4—Department of the Air Force Medical Operations Directorate
AFMRA/SG3P—AFMRA Aerospace & Operational Medicine Division

AFMRA/SG3PB—AFMRA Bioenvironmental Engineering Branch

DCPH-D—Defense Centers for Public Health – Dayton

SAF/IEE—Deputy Assistant Secretary of the AF for Environment, Safety, and Infrastructure

USAFSAM—US AF School of Aerospace Medicine

Terms

Aircraft Watering Point—all equipment used to transfer potable water for human consumption to an aircraft. This includes water trucks and carts; jugs, cans, and other containers utilized to deliver potable water to aircraft; and hoses and faucets used to fill those containers and/or trucks. It does not include the aircraft's internal water storage and dispensing system.

Consecutive Drinking Water System—A public water system that receives some or all of its finished drinking water (i.e., treated, ready for consumption) from one or more wholesale systems. Delivery may be through a direct connection or through the distribution system of one or more consecutive systems.

Contingency Locations—Semipermanent, temporary, or initial locations characterized by either enhanced infrastructure with support services consistent with sustained operations, expedient infrastructure with expanded support services beyond Service-organic capabilities, or austere infrastructure with support services limited to only organic capability.

Drinking Water Surveillance—The active sampling, analysis, and monitoring of drinking water to enable a health risk assessment and meet regulatory requirements.

Drinking Water System Classification—The Environmental Protection Agency classifies public water systems according to the number of people they serve, the source of their water, and whether they serve the same customers year-round or on an occasional basis.

Enduring Locations—Locations outside the U.S. that classify as either a main operating base (MOB), forward operating base (FOB), or cooperative security location. MOB has permanently stationed operating forces and robust infrastructure. FOB is a scalable location intended for rotational use by operating forces.

Exempt Public Water System—A public water system that meets all of the following criteria (from 40 CFR 141.3): 1) consists only of distribution and storage facilities; 2) obtains all its water supply from a regulated public water system; 3) does not sell water; and 4) is not a carrier that conveys passengers in interstate commerce. A system is only exempt if it meets both the federal exemption criteria listed in 40 CFR 141.3 and, if located in the United States, all state-level exemption criteria.

Non-Public Water System—A water system that has fewer than 15 service connections or serves fewer than 25 individuals daily on average at least 60 days out of the year.

Primacy Agency—Agency of the state or federal government having primary enforcement responsibility for the Safe Drinking Water Act.

Privatized Drinking Water System—A drinking water system on DAF, including AFR and ANG, installations that has been conveyed to a private or public utility company in conjunction with award of a long-term utility services contract for the operation and maintenance of those systems. The purpose of privatizing a utility system is to restore utility infrastructure to industry

standards for operations, maintenance, recapitalization, health, and safety while achieving a monetary savings over the cost of continued DAF ownership. If the components of a drinking water system are on the installation's real property inventory, then the system is not privatized.

Public Water System—A drinking water system providing water for human consumption through pipes or other constructed conveyances to at least 15 service connections or serves an average of at least 25 people for at least 60 days a year.

Attachment 2

DRINKING WATER WORKING GROUP (DWWG)

A2.1. Purpose. The DWWG meets to address local drinking water issues including, but not limited to, regulatory compliance, protection of public health, DW program management, DW system vulnerabilities, etc. The DWWG will operate under the auspices of the Installation ESOH Council per guidance in AFI 90-801, *Environment, Safety, and Occupational Health Councils*.

A2.2. Chair. The chair may be from BE, CE, or other organization competent in the SDWA and familiar with the local DW system. Chair will lead the DWWG in accordance with this attachment and serve a term of two years.

A2.3. Meetings. The DWWG will meet at least semi-annually.

A2.4. Attendees. BE, CE Operations, CE Installation Management Flight, and owners of privatized DW systems shall have knowledgeable representation at each meeting.

A2.4.1. Other stakeholders may participate and have access to meeting minutes as needed, including, but not limited to, school and childcare program managers; fire and emergency services, PH, Remediation Program Manager, CE heating, ventilation, and air conditioning (HVAC), JA, aerospace medicine, safety, PA, contracting, BOS-I utilities and preventive medicine personnel, the local water utility, and tenant organization representatives.

A2.5. Communication. The DWWG shall establish procedures for interfacing with regulators on DW matters (e.g., enforcement actions, sanitary survey, compliance reporting, requests for sampling waivers or changes, inspections, etc.)

A2.6. Agenda. Agenda items shall include, at a minimum, the following items as applicable:

A2.6.1. DW SAM plan requirements.

A2.6.1.1. Upcoming sampling schedule, including regulatory compliance sampling as well as DoD- and DAF-unique surveillance.

A2.6.1.2. Payment status of sampling, analysis, and operational fees, if applicable.

A2.6.1.3. Primary, alternate, and after-hours points of contact for sampling.

A2.6.2. Changes in DW system population served.

A2.6.3. Accuracy of DW system information in the Water Enterprise Tracking system.

A2.6.4. Enforcement actions, regulatory inspections, WVA and sanitary survey findings. DWWG will determine need for or update to the WVA and sanitary surveys for all installation's DW systems.

A2.6.5. DW regulatory changes and updates.

A2.6.6. Emerging contaminants.

A2.6.7. Source protection, physical components, and condition updates: treatment systems; finished water storage; distribution; pumps, pump facilities and pump controls.

A2.6.8. Water system management and operations updates.

A2.6.8.1. Primary, alternate, and after-hours points of contact for line breaks and other emergencies.

A2.6.9. Status of DW reports and plans, including, but not limited to: CCRs, Distribution System Flushing Plan, WCRP, Fluoride Contingency Plan, Wellhead Protection Plan, Environmental Quality Data Call and metrics, review of hydraulic modeling needs, and review of support agreements affecting DW.

A2.6.10. DW-related construction or renovation projects.

A2.6.11. Backflow prevention and cross-connection surveys.

A2.6.12. Hot water system maintenance and Legionella prevention, if applicable.

A2.6.13. Annual review of Water Dashboard. Recommend accomplishing well before CE requirement to certify prior to 31 December of each year.

A2.6.14. Document exercise of WCRP and initiate any necessary corrective actions and/or updates to the WVA, if applicable.

A2.6.15. If installation is in drought prone areas, discuss water conservation measures.

A2.7. Minutes. Minutes will be recorded for each meeting. Historical minutes will be controlled by the DWWG chair and maintained for 10 years.

Attachment 3

DRINKING WATER SURVEILLANCE AREAS OF RESPONSIBILITY**Table A3.1. Drinking Water Surveillance Areas of Responsibility.**

	CE	BE	PA	AT/SF	JA
AF Owned DW Systems					
SDWA federal, state, and compliance monitoring; DoD- and DAF-unique sampling requirements	S	P			
Public Notification		P	S		S
Privatized Utilities					
Ensure SDWA federal, state, and compliance monitoring; DoD- and DAF-unique sampling requirements	P	S			
Ensure public notification	P		S		
Sanitary Survey					
Regulator coordinator	S	P			
Source (protection, physical components, and condition)	P			S	
Treatment	P				
Distribution	P				
Finished water storage	P				
Pumps/pump facilities and control	P				
Monitoring/reporting/data verification		P			
Water system management/operations	P				
Operator compliance	P				
Water Vulnerability Assessment					
Malevolent act risks	S			P	
Source, pipes and conveyances, collection and intake, treatment, storage, and distribution facilities	P	S			
Physical barriers	S			P	
Electronic, computer, automated systems (includes system security)	P				

Monitoring practices	S	P			
Financial infrastructure	P				
Chemical use, storage, handling	S	P			
System operation and maintenance	P				
Water Contingency Response Plan	P	S			
P – Primary; S – Secondary					

Attachment 4

DRINKING WATER SURVEILLANCE ROLES AND RESPONSIBILITIES SUMMARY

Table A4.1. DAF-owned/Joint Base AF BOS-I.

DW Surveillance Program Elements	DAF-owned/Joint Base AF BOS-I				
	US state/territory		Overseas	Deployed	
	PWS	Exempt PWS & Non PWS	Enduring Location		Contingency / Other Location
Regulatory authority	Primacy agency, DoD, SAF/IEE	SAF/IEE, DWWG, MAJCOM DAFI 48-144 chapter 2.11.3	FGS / OEBGD, DoD, MAJCOM	FGS/OEBGD, DoD, MAJCOM	AFMAN 48-138
Sampling, analysis, & monitoring plan	Lead: BE Support: CE	Lead: BE Support: CE	Lead: BE Support: CE	Lead: BE Support: CE	Lead: BE Support: CE
DW surveillance (exclude DAF-unique & treatment/disinfection)	Lead: BE Support: CE	Lead: BE Support: CE	Lead: BE Support: CE	Lead: BE Support: CE	Lead: BE Support: CE
DAF-unique surveillance requirements	Lead: BE Support: CE	Lead: BE Support: CE	Lead: BE Support: CE	Lead: BE Support: CE	Lead: BE Support: CE
Treatment/disinfection of product water monitoring	Lead: CE Support: Not Applicable (N/A)	Lead: CE Support: N/A	Lead: CE Support: N/A	Lead: CE Support: N/A	Lead: CE Support: N/A
Funding for SAM plan execution	Lead: BE Support: N/A	Lead: BE Support: N/A	Lead: BE Support: N/A	Lead: BE Support: N/A	Lead: BE Support: N/A
Health risk assessment	Lead: BE Support: MAJCOM / DCPH-D	Lead: BE Support: MAJCOM / DCPH-D	Lead: BE Support: MAJCOM / DCPH-D	Lead: BE Support: MAJCOM / DCPH-D	Lead: BE Support: MAJCOM / DCPH-D
Consumer Confidence Report & other public notices	Lead: BE Support: PA/JA	Lead: BE (DW HRA report) Support: N/A	Lead: BE Support: PA/JA	Lead: BE (DW HRA report) Support: N/A	Lead: BE (DW HRA report) Support: N/A
Sanitary Survey	Lead: BE Support: CE	Lead: BE Support: CE	Lead: BE Support: CE	Lead: BE Support: CE	Lead: BE Support: CE
Backflow prevention	Lead: CE Support: AFCEC	Lead: CE Support: AFCEC	Lead: CE Support: AFCEC	Lead: CE Support: AFCEC	Lead: CE Support: AFCEC
EASIER data entry	Lead: CE Support: AFCEC	Lead: CE Support: AFCEC	Lead: CE Support: AFCEC	Lead: CE Support: AFCEC	Lead: CE Support: AFCEC
DOEHRS data entry	Lead: BE Support: DCPH-D	Lead: BE Support: DCPH-D	Lead: BE Support: DCPH-D	Lead: BE Support: DCPH-D	Lead: BE Support: DCPH-D

Table A4.2. Privatized/Joint Base AF Not BOS-I.

DW Surveillance Program Elements	Privatized/Joint Base AF Not BOS-I		
	US state/territory		Overseas
	PWS	Exempt PWS & Non-PWS	
Regulatory authority	Primacy Agency	DAFI 48-144 chapter 2.11.3 , MAJCOM, DWWG	SAF/IEE, DoD, FGS / OEBGD, MAJCOM
Sampling, analysis, & monitoring plan	Lead: Contractor/ Purveyor Support: CE/BE	DWWG determine need Lead: BE Support: CE	Lead: Contractor/Purveyor Support: CE/BE
DW surveillance (excluding DAF-unique and treatment/disinfection of product water)	Lead: Contractor/ Purveyor Support: CE (BE supports privatized if required in facilities homes government owned)	DWWG determine need Lead: BE Support: CE	Lead: Contractor/Purveyor Support: CE (BE supports if req'd in gov't owned facilities/homes)
DAF-unique surveillance requirements	Lead: Contractor/ Purveyor Support: CE (BE supports Joint Base/ Privatized if req'd in gov't owned facilities/homes)	DWWG determine need Lead: BE Support: CE	Lead: Contractor/Purveyor Support: CE (BE supports Joint Base/Privatized if req'd in gov't owned facilities/homes)
Treatment/disinfection of product water monitoring	Lead: Contractor/ Purveyor Support: N/A	Lead: Contractor/ Purveyor Support: N/A	Lead: Contractor/Purveyor Support: N/A
Funding for SAM plan execution	Lead: Contractor/ Purveyor Support: N/A	DWWG determine need Lead: BE Support: N/A	Lead: Contractor/Purveyor Support: N/A
Health risk assessment	Lead: Contractor/ Purveyor Support: BE upon request	DWWG determine need Lead: BE Support: DCPH-D	Lead: Contractor/Purveyor Support: BE upon request
Consumer Confidence Report & other public notices	Lead: Contractor/ Purveyor Support: N/A	DWWG determine need Lead: BE Support: PA/JA	Lead: Contractor/Purveyor Support: CE/JA (BE DAF-unique only)
Sanitary Survey	Lead: Contractor/ Purveyor Support: CE/BE	DWWG determine need Lead: BE Support: CE	Lead: Contractor/Purveyor Support: CE/BE
Backflow prevention	Lead: Contractor/ Purveyor Support: CE	Lead: CE Support: AFCEC	Lead: Contractor/Purveyor Support: CE
EASIER data entry	Lead: N/A Support: N/A	Lead: N/A Support: N/A	Lead: N/A Support: N/A
DOEHRS data entry	Lead: N/A Support: N/A	Lead: BE Support: DCPH-D	Lead: N/A Support: N/A