Enclosure (2) – Navy's Response to EPA Comments on CCC/BFP Draft Dated March 2025

1) Section 1.1 Applicability discusses containment and isolation protection concepts. Second paragraph, second sentence is confusing: "This [containment protection] is primarily achieved through protection internally and/or at the facility service line." (emphasis added) Would you explain what this means?

> **Navy's Response -** The JBPHH CCC/BFP Program will provide containment-level protection of the PWS. This sentence is incorrect. The text "internally and/or" has been removed.

2) Are air gaps reviewed annually or at a frequency at which an assembly is tested for a similar hazard? Are air gaps included in Section 5.1 Recordkeeping?

> **Navy's Response -** AGs should be included in the CCC/BFP Program and shall be inspected annually, at minimum, per requirements of Section 11-21-8(b) of the HAR. Language reflecting this has been added to Subsection 4.2 (renamed "Assembly Testing and Device Inspection/Replacement"). Under Subsection 5.1, AGs have been added to the example types for BFP assembly and device inventory records.

3) Section 4.2 states that containment-level non-testable BFP devices under this program will be replaced within every 5 to 10 years. Question: how are replacement dates tracked? Section 5.1 does not include installation date as information tracked, and record retention is 5 years.

> **Navy's Response -** Installation dates for non-testable BFP devices will be included in the inventory to be maintained via IBM® Maximo®. This information will allow the asset management program to produce work orders regarding replacement. Installation dates have been added to the list of BFP assembly/device inventory details in Subsection 5.1.
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> The inventory is a "living document", maintained via Maximo®, that is continuously updated as BFP assemblies/devices are added, removed, and updated. This is currently being performed by JBPHH PWD personnel. The 5-year minimum records retention requirement is more applicable to "static documents" (e.g., survey reports, test reports, training certifications).

4) Table 3-2 includes a list of facility types and BFP assemblies and devices applicable for hazard level. Recognizing this is not meant to be a complete list, a facility listed in California's CCC Policy Handbook Appendix D: High Hazard Premises lists airports, suggest including airport in Table 3-2 if an airport is a customer.

> **Navy's Response -** The JBPHH PWS does supply drinking water to several facilities/equipment associated with the airfield at Hickam Air Force Base, which were included in the 2022 containment-level CCC/BFP survey. Hazard classifications and existing/proposed BFP assemblies/devices were as follows:
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> - Airport Terminals – Contamination – RP
> - Hangars (maintenance spaces) – Contamination – RP
> - Hangars (office spaces) – Pollution – DCVA

- Hush Houses – Contamination – RP

These facilities have been added to Table 3-2 and classified as listed. Other airfield-related facilities/equipment already listed in the table include fire protection, fire stations, irrigation, wash racks, and water storage tanks.

5) We noted that clustered privatized housing (housing tracts leased, operated and maintained by non- Navy entities) are also not included in Table 3-2. The CCC/BFP plan appears to state that there will be containment level BFP at entry points to privatized, non-Navy run housing tracts. We'd like to discuss this with you to clarify our understanding, and ensure the Plan is clear on what may be required.

Navy's Response - Non-Navy housing areas serviced by the JBPHH PWS include distribution systems that are owned, operated, and maintained by a non-Navy entity (i.e., Army Aliamanu Military Reservation, consecutive system, PWS ID HI0000337) and those that are owned, operated, and maintained by JBPHH, up to the service lines as they enter the housing structures (i.e., Ohana Military Communities, Hickam Communities). Text has been added to the paragraph after Table 3-2 to note these different scenarios.

For the former, containment-level BFP will be provided at the interconnection with the non-Navy distribution system. Following recommendations from the 2022 CCC/BFP survey, these interconnections have been added to Table 3-2 ("Non-Navy Consecutive PWSs for Housing") and classified as "Pollution" hazards (DCVA).

For the latter, single-family housing units are identified as low-risk pollution sources and will not require containment-level BFP (see paragraph following Table 3-2). Nevertheless, multi-family housing units have been added to Table 3-2 and classified as "Pollution" hazards (DCVA). Other housing-related equipment (e.g., fire protection, irrigation) are already listed in the table.

6) The Naval Facilities Engineering Systems Command Headquarters Business Process Management System B-24.10, Cross-Connection Control and Backflow Prevention, section 24.10.4 Testing, Certification, and Surveying state "Because the certification interval for the BFPAs will depend on the hazard classification, perform testing and certification for high-hazard BFPAs every six months, at a minimum. Low hazard BFPAs will be tested and certified every twelve months, at a minimum." Question: Will backflow prevention assemblies of highest hazard classified facilities be tested every 6 months?

Navy's Response - The JBPHH CCC/BFP Program will include annual testing of all BFP assemblies, regardless of classification, in accordance with Section 11-21-8(b) of the HAR and other current industry standards (e.g., Section 603.4.2 of the IAPMO's *2024 Uniform Plumbing Code*, Section 312.11.2 of the ICC's *2024 International Plumbing Code*, the USC FCCCHR [https://fccchr.usc.edu/_downloads/FRD%20Archives/MEMO.Annual%20Field%20Testi

ng.pdf]). The Navy currently does inspect a select number of high hazard BFPAs more frequently and will consider expanding these efforts as resourcing allows.

7) Are there measures (communication /outreach strategies, forms, SOPs, other measures) to ensure entities needing temporary service contact the BFP program? Note that the Naval Facilities Engineering Systems Command Headquarters Business Process Management System B-24.10, Cross Connection Control and Backflow Prevention, 24.10.3 Procedures for Design and Selection state "Ensure construction activities are performed with appropriate BFP assemblies for temporary water hookups."

Navy's Response - Refer to the attached SOP titled "NAVFAC Hawaii Water Utilities Technical Requirements for Contractors Requesting Temporary Water Services". This document has been added to the CCC/BFP Program Plan as Appendix D (shifting previous Appendices D, E, and F to E, F, and G). Subsection 4.5 has been revised to reference this SOP.

8) Section 4.1 Installation Surveys states (highlight added): "In 2022, NAVFAC PAC contracted AH/BC to conduct a containment-level baseline CCC/BFP survey of the JBPHH system, performed under Contract No. N62470-19-D4001, Task Order No. N6274222F0110. The survey reviewed all service line connections to facilities, sites, equipment, and non-FFHC systems (e.g., irrigation) and identified over 3,300 existing BFP assemblies and devices, over 1,100 proposed assemblies and devices (for unprotected or under- protected cross-connections), and over 300 additional findings (e.g., mechanism relocation, improper tagging, repairs, missing components). The data from this survey was formatted for integration into an existing database of system components, maintained via International Business Machines Corporation (IBM®) Maximo® Application Suite (Maximo®) software (see Subsection 5." Request: Please explain what this highlighted sentence means, and if and how the unprotected or under protect cross connections; and other findings requiring repair, have been or will be addressed.

Navy's Response - In the 2022 containment-level CCC/BFP survey report, there were 1,167 instances of the following:

- **Priority Group 1 (288):** High hazard (i.e., contamination/health) facilities/equipment with no containment-level BFP
- **Priority Group 2 (480):** High hazard facilities/equipment with low hazard (i.e., pollution/non-health) containment-level BFP (e.g., DCVAs)
- **Priority Group 3 (399):** Low hazard facilities/equipment with no containment-level BFP

The proposed corrective actions for these instances were to install appropriate BFP assemblies. In the same report, there were 362 instances of the following:

- **Priority Group 4 (211):** Inappropriately installed containment-level BFP assemblies/devices
- **Priority Group 5 (151):** Damaged and/or unnecessary containment-level BFP assemblies/devices

Proposed corrective actions for these instances varied depending on the observed issues and are documented as such in the CCC/BFP survey report.

JBPHH PWD personnel based out of the Hickam AFB work center (WHJP61) have addressed Priority Groups 3 to 5 in their AOR. The PWD UM Division attempted to initiate a project to address remaining findings, but it was cancelled due to a number of reasons. The current plan is to establish the CCC/BFP Program Manager and then have that person address outstanding findings. A follow-up summary of current progress of these corrective actions can be provided by the Navy, if desired, as separate communication and not be included in the CCC/BFP Program Plan. Text has been added to this subsection explaining how current and future CCC/BFP survey findings will be addressed.

9) What authority does the PWS have to terminate water service to a facility, including non-Navy facilities as described in 5.2.4 Violations.

Navy's Response - The JBPHH PWS is owned and operated by the Navy. Installation-level responsibility falls on the ICO, who can delegate the authority to implement and enforce the CCC/BFP Program to the CCC/BFP Program Manager. The Navy intends to formalize the process later via a Navy Instruction. As currently drafted, the decision to terminate water service is recommended by the CCC/BFP Program Manager and approved by the PWO. The ICO designates the CCC/BFP Program Manager "in writing," effectively providing approval for the manager to implement the program, including termination recommendations. The PWO serves "as the designated representative for the ICO and PWS owner (i.e., Navy) in all matters pertaining to the JBPHH CCC/BFP program." The Navy Instruction will set forth local area policies, giving authority for enforcement to the installation. The Navy notes that the ICO currently has the authority to terminate water service to a facility and the aforementioned procedure could still be generally executed today, if needed.

This issue is specifically applicable to Navy and non-Navy systems that impact the ability of Navy-owned containment-level BFP assemblies/devices from protecting the JBPHH PWS. This includes, but is not limited to, unauthorized modifications/connections to the BFP assembly/device, installation of bypass lines, and installation of service connections upstream of the containment-level BFP assembly/device. This can also apply to situations where CCC/BFP personnel are having difficulty accessing a containment-level BFP assembly/device that requires coordination from the facility manager (e.g., BFP assembly/device behind fence line, inside a padlocked enclosure, or the building mechanical room).

10) Are compliance and enforcement with requirements for testing backflow prevention assemblies handled differently for facilities operated by Navy, Air Force (Hickam), and

non-Navy or Air Force facilities? If yes, should there be different procedures such as how violations are handled?

Navy's Response - No. JBPHH is a single PWS (PWS ID HI0000360) owned, operated, and maintained by one entity (Navy). The CCC/BFP program will be implemented and enforced by a single individual, the CCC/BFP Program Manager. Even with multiple DoD and non-DoD users, the CCC/BFP program has been and will continue to be the responsibility of the Navy up to service connection to a building or facility or at an interconnection with a non-Navy distribution system (e.g., Aliamanu). All BFP assemblies covered under this program are intended to provide containment-level protection of the PWS and will be tested and maintained by Navy personnel.

CCC/BFP responsibility at non-Navy facilities downstream of Navy-owned service connections are outside the scope of this program. Future isolation-level protection applications within this CCC/BFP program would only include Navy-owned facilities.

11) The provided draft plan lacks the following:

a. The inventory list of devices and assemblies.

b. The schedule and record of inspections, repairs, and installations.

c. The defined plan for implementation

Navy's Response - Subsection 5.1 discusses the BFP assembly/device inventory as a required record for the JBPHH CCC/BFP program, noting that it will be maintained via IBM® Maximo®. The inventory is a "living document" that is continuously updated as assemblies/devices are added, removed, and updated. This will be completed under the direction of the CCC/BFP Program Manager by in-house PWD personnel per the subsection. Inclusion of this ever-changing list in the CCC/BFP Program Plan is not recommended. Text has been added to the subsection to note that the CCC/BFP Program Manager will review the inventory annually to ensure that all assemblies are tested annually and all devices are replaced as scheduled.

Required frequencies for JBPHH CCC/BFP program activities are listed in the CCC/BFP Program Plan as follows:

- CCC/BFP surveys – Every 5 years (Subsection 4.1)
- BFP assembly testing – Annually (Subsection 4.2)
- BFP device replacement – Every 5 to 10 years (Subsection 4.2)
- AG inspections – Annually (Subsection 4.2)
- BFP assembly repair/replacement purchase request – Within 7 days of identifying defect (Subsection 4.3)

Details regarding implementation of the CCC/BFP program is not recommended for inclusion in the CCC/BFP Program Plan. Separate communication/documentation detailing implementation will be provided.