Enclosure (4) – Response to U.S. Environmental Protection Agency Comments on Draft Unidirectional Flushing Plan dated March 2025

Comments –

1. ***There are some contingencies in the plan for leaks or valves not working. A few others to consider: Have all valves been exercised recently? Will this be done prior to flushing or during the flushing process? Are crews being sent with a back option to flush other areas if there is something that prevents flushing at the primary locations for the day?***

   Navy Response - AH and JBPHH PWD validated and exercised around 3222 main line distribution system valves. All valves identified for use in the UDF plan were located, cleaned, and exercised to verify operability. No hydrant isolation or service line valves were validated/exercised because they are not needed for the plan. Therefore, the probability of having valve issues while implementing the UDF plan is very low. As a backup, if the flushing crew encounters a water main out of service, or can't locate a required valve, the crew will be instructed to skip to the next loop in the sequence. In addition, please be advised that AH is under contract to assist JBPHH PWD with implementing the UDF plan for the first 90 workdays, which is approximately one half of all loops in the UDF plan. AH will make sure that the procedures are followed, and that appropriate data is captured, recorded, and logged.

2. ***The SOP includes a two-day prior notice of flushing to the plant. Will the overall process be closely coordinated enough to remove the need for this step? Or make it a "verify" step? Would a daily/weekly discussion of the schedule be appropriate as part of the overall process?***

   Navy Response - Before developing the UDF plan, AH met with the (b) (3) (A) Production Department to discuss the UDF plan. The (b) (3) (A) Production Department informed AH that they would need 2 days advance notice before flushing begins in a certain area. This will allow the production department to increase the water production to (b) (3) (A) provide sufficient water and pressure to the system when executing the UDF plan. Furthermore, the UDF plan will not be performed during peak demand season (b) (3) (A). When the UDF plan is performed continuously, the Production Department will be notified at the beginning and end of each day.

3. ***Include a reminder of the valve/hydrant slow opening times in the SOP.***

   Navy Response - The valve slow opening time is mentioned on page 3-16 bullets 4.a and 4.b of the SOP. The hydrant opening and closing is mentioned on page 3-17 bullet 6.g and 8.a. AH added a specific mention in the SOP to the amount of time to complete a full

turn for both valves and hydrants. See page 3-15 bullet 1.e., page 3-19 section 3.5 bullet 2.f. and section 3.6 bullet 1.b.

4. ***Please review the SOP language for grammar and clarity. There were a few mistakes that might lead to confusion with following the SOP (if this version is used directly in the field).***

   Navy Response - AH redid the Flushing SOP by making it clearer. AH also created a separate SOP for closing and opening system valves and referenced them in the Flushing SOP. See section 3.5 and section 3.6

5. ***The inclusion of the dechlorination section (Section 4) is confusing. Why is it in the report? It doesn't provide a recommended approach, but the SOP above says tablets. Is it being left to the operator to make a selection or has one been selected? Should there be steps in the SOP for the application?***

   Navy Response - AH provided a general section containing information on dechlorination and gave recommendations for its use during UDF plan operations. AH recommended using Pollard hydrant mounted diffusers which contain integral tablet feeders capable of introducing a dechlorinating agent. AH recommended using ascorbic acid as the dechlorinating agent. JBPHH is currently in the process of procuring flushing diffusers and ascorbic acid for this effort. AH developed an SOP for dechlorination during flushing operations. The SOP follows Pollard manufacturer's instructions for this equipment and chemical. See section 4.4.

6. ***Include Hydraulic Model models.***

   Navy Response - During the initial EPA meeting on April 16, 2024, all parties agreed that hydraulic model runs will not be needed to generate the flushing loops and develop the UDF plan.