DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
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August 30, 2004

Jon M. Capacasa, PE
Director, Water Protection Division
Region III
US Environmental Protection Agency
3WP00
1650 Arch Street
Philadelphia, PA 19103-2029

Dear Mr. Capacasa:

As a follow up to Mr. Johnson's letter of August 20th and our subsequent meeting with Mr. Rogers and Ms. Benetti on August 24th, attached is WASA's revised OCCT sampling plan. WASA feels that the plan, as outlined, represents the best approach to our mutual interest in documenting any system changes that may result due to the addition of Orthophosphate system wide. WASA plans on using this data for the longer-term evaluation of the OCCT and also use it to act in a timely manner to any indicated system changes in order to preclude any complaints from our customers.

Your letter of August 3rd contained provisions that 25 TCR sites and 25 Supplemental sites be monitored on a monthly basis for an extensive list of parameters. It is WASA's opinion that by bifurcating the sampling plan into a Regulatory component that is sampled monthly and a Supplemental component that will be sampled twice per month will serve both parties more effectively and will meet the provisions of 40 CFR §141.87. In addition, it is proposed to sample the Supplemental sites at fire hydrants rather than at the tap. At your staff's suggestion, additional indicator parameters originally proposed for the Supplemental sites were increased. The following items indicate WASA's reasoning for any modifications to your proposed OCCT sampling plan:

1. The frequency of the Regulatory sites exceeds the minimum number required of samples required under 40CFR §141.87(a)(2) by a factor of three.

2. Our experience in responding to normal customer complaints indicates that a twice per month frequency is effective in monitoring system changes in that a shorter duration between samples is non-productive and that a greater duration will not provide adequate information to preclude customer complaints. The proposed twice per month sampling frequency at the supplemental sites is twice the rate outlined in your August 3rd letter.

3. The accelerated sampling at the supplemental sites will provide a greater number of samples during the six-month sampling period that can be used to develop a statistically valid regression analysis in a shorter period of time.

4. The Supplemental sites are those recommended in the *Supplemental Monitoring Program*, a study completed in 2001 by Camp Dresser and McKee in association with McKissack & McKissack and was recently revalidated by WASA's improved hydraulic model. The stated proposes of the study were; et al, to provide sample locations in worse case areas of the distribution system and the use of indicator parameters to provide base line information for corrosion-related studies.

5. When responding to customer complaints it is WASA's practice to sample both at the tap and simultaneously at a nearby hydrant. Information has been developed that indicates that the samples taken at the hydrant normally show equal or higher levels of indicator parameters than those taken at the tap. Preliminary data indicating this fact is included in the attached plan and additional data will be forwarded to your staff in the near future. Hydrant monitoring is expected to give WASA information on system changes sooner than tap monitoring and, as such, should minimize customer complaints.

6. Testing for the supplemental parameters at the TCR sites was not proposed as it would most likely provide data that would conflict with the hydrant data and affect any statistical analysis.

7. Coliform sampling at the supplemental sites was not included in the proposed plan because it would be of no useful value and, as a regulated parameter under the TCR, the test results could be misconstrued.

8. As noted, one of the objectives in developing this plan was to use it to be pro-active in addressing any customer service issues that might arise during this period. To this end WASA intends to provide any additional sampling during this period as indicated by the results of the outlined parameters. However, it would be impossible to predefine any additional sampling needed, as good forensic testing cannot be identified until an issue arises. Given the high visibility of this issue it is WASA's intention to be in close contact with the Agency during the testing period.

It appeared that the two major objections of your staff to WASA's proposed plan during the meeting were as follows:

- The fact that WASA does not propose to sample for non-regulated parameters at the TCR sites.

- The fact that WASA does not propose to test for Total coliform or ecoli at the supplemental sites.

Item six above goes directly to the issue of why WASA eliminated the testing of non-regulated parameters at the Regulated sites. No value is seen in conducting analyses for these parameters when it is known in advance, by actual experience, that the results probably will be lower than those obtained from hydrants. Inclusion of this data would preclude a valid regression analysis.

WASA's position on not including the testing of the hydrant samples for coliforms is that it will provide no useful additional information with respect to the prime reason for the OCCT testing; ie, measuring parameters that may indicate system changes. The inclusion of HPC at the Supplemental sites is an accepted indicator of bacteriological activity in the system and does not have the disadvantages of giving a false positive on a regulated parameter. It would be impossible to sterilize a hydrant to the level that is done at the tap and it is known that a significant number of positive samples, even taken at a tap, are due incomplete sterilization. It is also felt that a greater number of coliform samples (260 vs 210), even if there were not a testing issue, will not result in a statistically valid higher level of protection to the residents of the District. Clearly the USEPA would not have designed and promulgated a TCR that would not accommodate a special circumstance in a distribution system.

It is WASA's intention to implement the attached program next week as it is felt that the protection offered is important to our customers. It is hoped that you can at least give tentative approval to this plan and, if as the results come in and are forwarded to USEPA in an expeditious manner, your staff becomes concerned over any of the results, we can sit down together and address the issue further.

Sincerely,

John T. Dunn, PE

cc: Jerry N. Johnson
Thomas P. Jacobus

Attached:
OCCT Supplemental Sampling Plan
Revised August 27, 2004