US ERA ARCHIVE DOCUMENT



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III

## 1650 Arch Street Philadelphia, Pennsylvania 19103-2029

Thomas P. Jacobus General Manager Washington Aqueduct 5900 MacArthur Blvd., NW Washington, DC 20016-2514

AUG 0 4 2005

Dear Mr. Jacobus:

In a letter dated August 3, 2004, the U.S. Environmental Protection Agency Region III (EPA) gave interim approval for the optimal corrosion control treatment (OCCT) proposed by the Washington Aqueduct (WA) and by the District of Columbia Water and Sewer Authority (DCWASA). As a condition of that interim approval, EPA required WA to conduct a study to determine the best feasible solution to providing a more constant finished water pH with a maximum variation of 0.1 units.

On November 30, 2004, WA submitted its study, along with a proposal to implement one of the options in that study. In short, that proposal included developing the capability to use caustic soda as a pH trimming chemical after lime addition. The proposal also included a commitment to making short-term and longer-term improvements to the lime addition process: adding additional mixing capability for the water entering the first clearwell at Dalecarlia and making minor adjustments to the existing lime slakers; and replacing lime slakers at both treatment plants, respectively.

As reported to my staff during a meeting on January 25, 2005, WA proposes to make all possible adjustments and short- and longer-term improvements to the lime addition process as quickly as possible at Dalecarlia and McMillan treatment plants. A 2006 implementation date is expected for caustic soda pH trimming at McMillan. At Dalecarlia, WA proposes to install the caustic soda equipment in the same building that will house the hypochlorite facilities, currently planned for operation in 2008. WA also committed to managing the Dalecarlia finished water pH as close as possible to the target water quality parameter of  $7.7 \pm 0.1$  units at all times using lime addition until the caustic soda feed is operational in 2008.

Since the pH of water leaving the Dalecarlia facility has consistently been within the interim water quality parameter range of  $7.7 \pm 0.3$ , and since WA plans to make further improvements to the lime slaking and delivery system at the facility, EPA agrees with the proposal to not install interim caustic soda facilities at Dalecarlia. The interim OCCT designation set forth in EPA's August 3, 2004 letter remains in effect, and EPA expects the Aqueduct to strictly adhere to managing pH in as tight a range as possible with existing and future lime feed equipment.

Please prepare and submit to EPA by October 1, 2005 a more detailed schedule of implementing the treatment changes at both plants.

If you have any questions, please contact me or call Rick Rogers, Drinking Water Branch Chief, at (215) 814-5711.

Sincerely,

Jon M. Capacasa, Director Water Protection Division

cc: Jerry Johnson, DCWASA Hugh Eggborn, VDH