

Georgia Department of Natural Resources

Environmental Protection Division • Watershed Protection Branch
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(404) 463-1511; Fax (404) 656-2453
Judson H. Turner, Director

November 16, 2015

Mr. Lester Hendrix, Wastewater Administrator
City of Savannah
1400 East President Street
Savannah, GA 31404

RE: City of Savannah - Georgetown
Water Pollution Control Plant (WPCP)
NPDES Permit No. GA0046418
Chatham County
Ogeechee River Basin

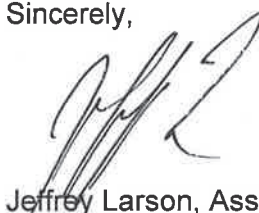
Dear Mr. Hendrix:

Thank you for your email regarding the permit for the City of Savannah - Georgetown Water Pollution Control Plant. After consideration of your comments received on September 10, 2015, EPD has determined that the permit as drafted is protective of water quality standards and we have issued the permit.

We have included an attachment, which addresses your concerns submitted during the public comment period. We appreciate your interest in this matter.

If you have any questions, please contact Jennifer Goodman of my staff at 404-463-4936 or Jennifer.Goodman@dnr.ga.gov.

Sincerely,



Jeffrey Larson, Assistant Branch Chief
Watershed Protection Branch

JL\jmg
Attachment: Response to comments

ATTACHMENT – Response to Comments

City of Savannah - Georgetown
Water Pollution Control Plant (WPCP)
NPDES Permit No. GA0046418
Chatham County

Comment # 1: Fact Sheet Section 3.4 subsection b) Whole Effluent Toxicity Testing

We would prefer to use Inhibition Concentration in lieu of No Observable Effect Concentration. Please see the following excerpt from Risk Sciences, for your review, “REGULATING WHOLE EFFLUENT TOXICITY USING “PERCENT EFFECT” AS THE TEST ENDPOINT”, 2001: “In 1995, U.S. EPA promulgated standard methods for whole effluent toxicity testing. At that time, the agency recommended replacing the NOEC endpoint with the “inhibition concentration (IC).” The most common version of the new endpoint is the IC-25 or the effluent concentration likely to cause a 25% reduction in the rate of survival, growth or reproduction among test organisms. EPA guidance states that the IC-25 is functionally-equivalent to the NOEC.” Please let us know if this will be acceptable.

EPD Response:

In NPDES permits, EPD uses the “No-Observed-Effect-Concentration (NOEC)” for reporting Whole Effluent Toxicity (WET), where the NOEC must be greater than or equal to the maximum permitted Instream Waste Concentration (IWC). The NOEC is the threshold at which the effluent no longer exhibits a statistically-significant negative effect. The method for reporting NOEC includes a formal test for statistical significance whereas the IC-25 procedure does not.

Part I.C.10. of the permit states that the testing for Chronic Whole Effluent Toxicity must include the most current U.S. Environmental Protection Agency (EPA) chronic aquatic toxicity testing manuals. The referenced document is entitled Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, 4th Edition, U.S. EPA, 821-R-02-013, October 2002. Definitive tests must be run on the same samples concurrently using both an invertebrate species (i.e., *Ceriodaphnia dubia*) and a vertebrate species (i.e., Fathead Minnow, *Pimephales promelas*).

As the permit requires the above as the prescribed method for reporting WET and EPD further requires that the NOEC be reported using this method, it will not be acceptable to replace the NOEC endpoint with IC-25.