New Jersey Department of Environmental Protection
Water Resource Management
Water Monitoring and Standards

Summary of Stakeholder Meeting: Surface Water Quality Standards
April 15, 2015 (9:30 AM – 11:30 AM)

Facilitator Kerry Pflugh
Presenter Biswarup Guha (Roop) (Biswarup.Guha@dep.nj.gov)
Presenter Susan Rosenwinkel

New Jersey Department of Environmental Protection (NJDEP) is considering making revisions to New Jersey's surface water quality standards (SWQS) in three areas: (1) Recreational criteria in all waters based on EPA's 2012 revisions; (2) Nutrient/TP standards; and (3) Ammonia criteria in freshwaters based on EPA's 2013 revisions. The revisions are required per the Clean Water Act's provision of Triennial review and also because EPA in the recent years have revised recreational and ammonia criteria and states have three years to adopt the same. The purpose of this meeting, arranged on April 15th 2015 from 9:30 to 11:30 AM at NJDEP, was to present these revisions and solicit feedback. Stakeholders were carefully chosen and invited so that the attendees could represent all sectors such as environmental, professional and trade groups, industry, dischargers, local, regional, state and federal government organizations and consulting groups etc. An effort was made to limit the number of attendees to less than 30 in order to promote communication. Representatives from NJDEP's permitting program also attended the meeting in order to respond to implementation related questions.

The agenda and fact sheets which were e-mailed prior to the meeting and a copy of the presentation from the meeting are posted at http://www.nj.gov/dep/workgroups/). Below is a summary of the issues discussed at the meeting.

The presentation was broken down into three sessions, each discussing areas of contemplated revisions. Each session ensued discussion/questions. First, contemplated revisions to the recreational standards and options that NJDEP has for choosing were presented. In 2012, EPA revised the recreational criteria and offered two options (presented in the fact sheets and the presentation) with two illness levels, option of choosing pathogenic indicator, applicability of the criteria either seasonally or year-round and method of applying the 30-day duration component of the criteria statically or as moving 30-day duration. New York State has expressed intention of adopting the option with more stringent enterococci thresholds in fresh and marine waters of the state while Pennsylvania's preliminary plan is to propose the less stringent *E. coli* thresholds in all fresh waters while deferring Delaware main-stem to DRBC. The geometric mean threshold for both pathogenic indicators for option 1, which is the less stringent option, equals NJ's existing geometric mean threshold.

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It was a general concern that EPA had two illness rates to choose from, that new threshold entities such as "Statistical Threshold Value" were introduced without any guidance provided on how to translate the thresholds in the discharge permits. There seemed to be a consensus that the indicator organisms for fresh waters should be *E. coli* and enterococci in marine waters; however further evaluation to determine the representativeness of *E. coli* versus enterococci in freshwaters was advised. Impact of the new criteria on frequency of monitoring for assessment and permitting was discussed. Impact of the criteria on the downgraded waters and feasibility of Use Attainability Analysis in those waters were discussed as well. Regarding the question of seasonal versus year-round applicability of the recreational waters, audience was neutral although concern was raised that in the shared waters, especially in the NY/NJ harbor, the applicability period would be different in NY and NJ shores, if NJ chooses year-round applicability. Relevant information regarding EPA recommended recreational criteria can be found at *http://water.epa.gov/scitech/swguidance/standards/criteria/health/recreation/index.cfm*

The second session of the presentation included the contemplated revisions for the nutrient or phosphorus criteria. This revision was two-fold: (1) apply numeric total phosphorus criteria in tidal freshwaters and (2) ensure continued protection of designated uses both in receiving and downstream waters when dischargers demonstrate that waters are not rendered unsuitable as per the "Technical Manual for Phosphorus Evaluations for NJPDES Discharge to Surface Water Permits". In general, NJDEP was advised to focus resources on waterbodies where phosphorus was identified as a problem already and on implementation of the Passaic and Raritan TMDLs.

For the first contemplated revision related to tidal freshwaters, the audience discussed the current practice for tidal freshwater permit holders and encouraged the department to wait for DRBC's nutrient criteria development to complete before attempting to implement the numeric criteria in the tidal freshwaters.

For the second contemplated revision presented in the session, NJDEP solicited opinion on options of effectuating continued protection of receiving waters as well as downstream waters through permit limits pending site specific criteria or TMDLs. One example provided was to have dischargers who have already demonstrated that they are not rendering the waters unsuitable, maintain their existing effluent quality there by ensuring no degradation of the waters. While the audience agreed that it could be an option, they cautioned that rule language should be carefully crafted and not generalized for the entire state because there could be waters where phosphorus was not the limiting nutrient or small changes in the discharge conditions could be de minimus relative to the ambient conditions. An option was floated from the audience that NJDEP could wait until the permit renewal to evaluate if there are substantial changes in the discharge conditions and the status of the receiving stream before taking further permitting actions on the discharger. And if the receiving water becomes impaired during the interim time, then a TMDL should be used to address the impairment. It was also mentioned that phosphorus evaluation studies are expensive and small facilities should have an option of performing stream visual assessment protocol (SVAP) per the technical manual, may be on a more frequent basis. All stakeholders were encouraged to think of ways to address this issue and provide written comments. The technical manual for phosphorus evaluations can be found here: *http://www.nj.gov/dep/dwq/pdf/p-manual-07-30-08.pdf*.

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The third and final contemplated revision was related to ammonia criteria and its implementation options. EPA's formula based ammonia criteria for freshwaters is pH (applicable only when greater than 6.5) and temperature dependent and is based on mussels, unionids and gill breathing snails in addition to some of the species which New Jersey used to develop its existing ammonia criteria. The new species are more sensitive and DRBC confirmed that their mussel survey indicates that many of the species are present in New Jersey. As per feedback from NJDEP's permitting program, permit limits for most dischargers may be required to be revised as EPA's criteria is more stringent than New Jersey's existing criteria. As requested by the audience, links to NJ and EPA's ammonia criteria are provided below. There was a consensus that treating ammonia would increase nitrate and could pose a problem in streams such as Passaic River whose water is used for drinking water supply. Audience also advised factoring in flow limitations and seasonality during implementation.

Stakeholders were encouraged to contact Barbara Hirst at Barbara.hirst@dep.nj.gov with written comments and recommendations.

Relevant information regarding EPA ammonia criteria can be found at *http://water.epa.gov/scitech/swguidance/standards/criteria/aqlife/ammonia/*. Relevant information regarding NJ ammonia criteria can be found at *http://www.nj.gov/dep/rules/rules/njac7_9b.pdf* and *http://www.state.nj.us/dep/wms/bwqsa/support_docs.htm*.

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