PUBLIC NOTICE

ENVIRONMENTAL PROTECTION WATER RESOURCE MANAGEMENT Notice of Action on Petition for Rulemaking Ground Water Quality Standards Practical Quantitation Limit and Ground Water Quality Standard for bis (2-cholorethyl) ether N.J.A.C. 7:9C Appendix, Table 1 Petitioner: Ernie Risha.

Take notice that the Department of Environmental Protection (Department) has denied the petition for rulemaking filed by Ernie Risha (petitioner). The petition was received by the Department on March 27, 2015. The petitioner submitted further materials in support of his petition dated June 29, 2015. Notice of receipt of the petition was published in the May 4, 2015, New Jersey Register (47 N.J.R. 913(c)). A subsequent Notice of Action referring the matter for further deliberation was published in the July 6, 2015, New Jersey Register, (47 N.J.R. 1673(a)).

The Petition

The petitioner requested that the Department amend the Ground Water Quality Standards (GWQS), N.J.A.C. 7:9C. Specifically, the petitioner requested that the Department amend Table 1 in the Appendix to the GWQS to reduce the practical quantitation limit (PQL) and ground water quality standard applicable to bis (2-chloroethyl) ether (BCEE). The petitioner asserts that BCEE is an extremely toxic and persistent contaminant as evidenced by a 2002 Federally recommended maximum contaminant level (MCL) of 0.03 parts per billion (ppb). Consistent with this toxicity, the petitioner points out that the Department has promulgated a health-based ground water quality criterion of 0.03 ppb in Table 1 of the Appendix to the GWQS rules. In addition, the GWQS set a practical quantitation level (PQL) for BCEE at seven ppb. As the higher of the PQL and the ground water quality criterion is the standard applied in the context of an applicable regulatory program to determine whether a contravention of a standard has

occurred (see N.J.A.C. 7:9C-1.9(c)), in the context of a clean-up of BCEE contamination, the applicable standard to be met is seven ppb, which petitioner asserts is inadequate.

Petitioner asserted that the seven ppb standard was based on technology that was available at the time these standards were set many years ago that could not identify BCEE below seven ppb. Petitioner asserted that advances in technology have resulted in a greatly improved ability to detect BCEE at significantly lower levels. Based upon these advances, petitioner requested that Table 1 in the Appendix to the GWQS be amended to include a PQL for BCEE based upon the most recent version of USEPA Method 8270 select ion monitoring (SIM) from USEPA's Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods, also known as SW-846. Petitioner expressed an opinion that the current minimum detection limit (MDL) that can be obtained is 0.02 ppb and, based upon this, suggested that a more representative PQL for BCEE of 0.1 ppb should be adopted. Petitioner further requested that the column in Table 1 for BCEE reflecting the higher of PQL and ground water quality criterion be amended to reflect the current laboratory detection limits with the current seven ppb changed to 0.1 ppb. Petitioner asserted that this new constituent standard corresponds with the requested, obtainable PQL of 0.1 ppb and would be more protective of human health and the environment.

Petitioner suggested that amending this standard is particularly important as application of what the petitioner asserted is an outdated standard to the clean-up of contaminated sites in the State can result in clean-up occurring to a level that is not protective of human health or the environment. Petitioner cited examples of clean-ups that he indicated have inappropriately utilized the current seven ppb ground water quality standard as the primary remediation goal for BCEE. Petitioner submitted a variety of attachments in support of his petition, including toxicity information on BCEE, the above-referenced USEPA National Recommended Water Quality Criteria from 2002, information on current (2014) BCEE detection limits, and documents related to several contaminated sites.

The Department's Response to the Petition

The GWQS are used in the implementation of various Department programs, including discharge to ground water permitting and for the clean-up of contaminated sites. The Department has analyzed the information submitted by the petitioner and other available data and has determined that the adjustment to the BCEE PQL requested by the petitioner is not warranted because it would not comply with the procedure for deriving a new or revised PQL for constituents listed in Appendix Table 1 set forth at N.J.A.C. 7:9C-1.9(c)3ii. This provision requires that PQLs shall be selected and derived using the most sensitive analytical method providing positive constituent identification utilizing Method Detection Limit (MDL) data from the New Jersey Department of Health and Senior Services Laboratory (DHSS) (if available) multiplied by 5, or from laboratory performance data that has been evaluated by the Department using the method of Sanders, Lippincott and Eaton (See Sanders, P. et al., "Determining Quantitation Levels for Regulatory Purposes." J. Amer. Water Works Assoc., 1996, March pp. 104-114).

There are no DHSS data for BCEE; therefore, pursuant to this provision of the GWQS rules, a PQL must be calculated using annual performance data that has been evaluated in accordance with the method described in Sanders, Lippincott and Eaton. Sanders, Lippincott and Eaton concluded that a single laboratory MDL is not representative of the capability for the certified laboratory community and that an inter-laboratory MDL using a nonparametric statistical approach must be implemented for the calculation of a PQL, and recommended a minimum of five laboratories that are certified by the NJDEP Office of Quality Assurance (OQA) be required. There are only four laboratories that are certified by OQA to perform this method. Additionally, there is no performance data from any of these laboratories from which to derive (or verify) a revised PQL using the SIM method to analyze BCEE. Without a new Method Detection Limit (MDL) provided by the New Jersey Department of Health, or sufficient performance data from certified laboratories, the Department cannot calculate a revised PQL pursuant to N.J.A.C. 7:9-1.9(c)3ii.

The Department acknowledges that new information has become available through the recent

publication of the U.S. Environmental Protection Agency's Final Updated Ambient Water Quality Criteria for the Protection of Human Health [EPA-HQ-OW-2014-0135; FRL-9929-85-OW] (see 80 FR 36986), and the stakeholder process recently conducted to inform development of proposed amendments to the New Jersey Remediation Standards at N.J.A.C. 7:26D (see http://www.nj.gov/dep/workgroups/srp.html). The Department will be reviewing this new information, and intends to initiate a stakeholder process in 2016 to gather additional information to determine if updates to any of the health-based criteria or PQLs are warranted based on current scientific information, which would subsequently be proposed as amendments to the GWQS rules.

This notice and the full text of the petition filed in this matter are available on the Department's website at <u>http://www.nj.gov/dep/rules/petition.html</u>. A copy of this notice has been mailed to the petitioner as required by N.J.A.C. 1:30-4.2 and 7:1D-1.1.