

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATERSHED MANAGEMENT

ADOPTION OF THE AMENDMENT TO THE TRI-COUNTY AND LOWER DELAWARE
WATER QUALITY MANAGEMENT PLANS TO ESTABLISH TOTAL MAXIMUM DAILY
LOADS FOR VOLATILE ORGANIC COMPOUNDS IN THE DELAWARE RIVER

Public Notice

Take notice that on **May 27, 2003**, pursuant to the provisions of the New Jersey Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., and the Statewide Water Quality Management Planning Rules (N.J.A.C. 7:15-3.4), an amendment to the Tri-County and Lower Delaware Water Quality Management Plans was adopted by the Department of Environmental Protection (Department). This amendment establishes Total Maximum Daily Loads (TMDLs) for two volatile organic compounds, 1,2-dichloroethane (DCE) and tetrachloroethene (PCE), in the Delaware River Zones 2 – 5 (from Trenton, New Jersey to the head of Delaware Bay). The TMDLs were developed through the Delaware River Basin commission (DRBC), with cooperation from the States of Delaware, New Jersey, Pennsylvania and New York and EPA Regions 2 and 3. This amendment implements the requirements of the United States Environmental Protection Agency's (USEPA) Water Quality Planning and Management Regulations (40 CFR 130) to establish TMDLs.

Total Maximum Daily Loads represent the assimilative or carrying capacity of the receiving water taking into consideration point and nonpoint sources of pollution, as well as surface water withdrawals. A TMDL is developed as a mechanism for identifying all the contributors to surface water quality impacts and setting goals for load reductions for specific pollutants as necessary to meet surface water quality standards. Under Section 303(d) of the Federal Clean Water Act (33 U.S.C.1251 et seq.), TMDLs are required to be developed for waterbodies that do not meet water quality standards after the implementation of technology-based effluent limitations. TMDLs may also be established to help maintain or improve water quality in waters that are not impaired.

A TMDL establishes wasteload allocations (WLAs) and load allocations (LAs) for point and nonpoint sources, respectively. Allocations are made to the sources of the parameter of concern in order to reduce the total pollutant load received by the waterbody. Load reduction goals established through TMDLs are achieved through the issuance of WLAs for point source discharges, LAs for nonpoint source discharges, a margin of safety and, as applicable, reserve capacity. Since nonpoint source pollution, by definition, does not come from discrete, identifiable sources, LA's consist of the identification of categories of nonpoint sources that contribute to the parameter of concern. Specific load reduction measures for those categories of sources are included in the analysis. These load reduction measures are implemented through best management practices (BMPs) including local ordinances for stormwater management and nonpoint source pollution control, headwaters protection practices, or other mechanisms for addressing the parameters of concern.

The Department and USEPA Region 2 entered into a Memorandum of Agreement (MOA) including an 8-year schedule to produce TMDLs for all water quality limited segments remaining on the 1998 Section 303(d) List of Water Quality Limited Waterbodies in New Jersey. According to the original May 12, 1999 MOA, TMDL development for the Delaware River Estuary for volatile organics (DCE and PCE) were scheduled to be submitted by the Department on September 30, 1999. This deadline was subsequently extended by agreement to February 15, 2000. The deadline was extended to allow the DRBC to respond to comments raised during public comment period.

Notice of the proposed TMDLs was published by the DRBC in the New Jersey Register on March 15, 1999 at 31 N.J.R. 804(a). Public hearings were held on May 3, May 5, and May 11, 1999. A public hearing response document entitled, "Determination regarding the assimilative capacity of the tidal Delaware River for volatile organics and toxicity" was published in December 1999, and a supplemental response document entitled, "Determination regarding the assimilative capacity for the tidal Delaware River for volatile organics and toxicity", was published in January 2000. These documents are accessible by contacting the DRBC as noted below. The TMDLs, including the plan for reduction of the volatile organic compounds, and the response to comments, all of which were reviewed and agreed to by the Department, were submitted to USEPA pursuant to N.J.A.C. 7:15-7.2(k), and the MOA on February 15, 2000 for formal review in accordance with 40 CFR 130.7. On May 22, 2000, USEPA approved the TMDLs for these two volatile organic compounds. USEPA's approval of these TMDLs applies to the New Jersey portion of the TMDL, which includes WLA's for DCE and PCE for point sources in New Jersey.

The Department is publishing this notice of adoption of an amendment to the Tri-County and Lower Delaware Water Quality Management Plans pursuant to N.J.A.C. 7:15-3.4. The TMDL report, entitled "Wasteload Allocations for Volatile Organics and Toxicity: Phase 1 TMDLs for Toxic Pollutants in the Delaware River Estuary," explains the development and substantive requirements of the volatile organic compound TMDL for the Delaware River and a volatile organic compounds reduction plan.

Under a resolution adopted by the DRBC on January 26, 2000, the Commission required dischargers of DCE and PCE to collect one year of effluent (discharge) data to measure the magnitude and variability of these pollutants. A letter dated October 13, 2000, was sent out to 44 NPDES permittees to monitor Volatile Organic Compounds (VOCs) on a monthly basis with a low detection limit (less than 1 ug/l). In addition, submissions of historical VOC and flow data from January 1997 to October 2000 were requested. A letter dated March 19, 2001 was sent out to 10 permittees who had not responded to the October 2000 letter. All data requested of dischargers of these compounds has now been received. Revised WLAs are planned for establishment in the final quarter of CY2003. These WLAs will be issued individually or as a group by the Commission's Executive Director and forwarded to the respective state NPDES Permitting agency for use as appropriate in developing effluent limitations, schedules of compliance and other requirements including monitoring in permits. The projected date for issuance of WLAs is the First Quarter CY2004.

Comments on this amendment received during the DRBC's public comment period, including the public hearing, were summarized with the DRBC's responses in two documents and are available by contacting Pamela Bush, Commission Secretary and Assistant General Council, Delaware River Basin Commission, P.O. Box 7360, 25 State Police Drive, West Trenton, NJ 08628-0360. Commenters raised issues on the TMDLs regarding the use of mathematical models to determine that the assimilative capacity of the Estuary has been exceeded for the two probable carcinogens. Commenters additionally questioned the tributary and discharge data used for model calibration and TMDL development. As indicated in the DRBC response to comment document, given the hydrodynamic complexity of the Estuary, the numerous point source discharges, and the various fate processes affecting toxic pollutants, mathematical models are needed to determine whether assimilative capacity is exceeded under design conditions that are protective of human health and aquatic life. The data used for the determination of the TMDLs included ambient monitoring data and data provided in Discharge Monitoring Reports (DMRs) submitted by National Pollutant Discharge Elimination System ("NPDES") permittees. Other comments supported the TMDLs and asked for clarification of the process by which the TMDLs were developed. This clarification was provided by DRBC in the response to comment documents. Further information is additionally available in the TMDL report referenced above.

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Department of Environmental
Protection

May 27, 2003

Date