

NPDES Permitting and Regulatory Assistance

The National Pollutant Discharge Elimination System (NPDES) program has significantly reduced pollutant loads to our nation's waterways. These reductions have substantially, and in some cases, dramatically, improved water quality in streams, rivers, and coastal waters.

The NPDES program has also changed significantly since it first started, as have the water quality assessment tools needed to derive appropriate NPDES controls. Municipal and industrial dischargers, and state regulatory agencies, may find that the NPDES program is a bureaucratic headache without meaningful environmental gains if the appropriate assessments are not performed. Requirements for discharge limits and monitoring and reporting are often based on limited data, outdated assumptions, and inflexible regulatory policy decisions. This results in overly stringent permit requirements, leading to a higher risk of noncompliance and costly treatment and monitoring requirements.



We help clients negotiate requirements that they can meet and that protect the environment.

Helping clients resolve National Pollutant Discharge Elimination System (NPDES) permit problems is a core area for LimnoTech. We help clients understand the assumptions and regulations behind proposed permit conditions. We also review permit and fact sheet language to ensure fairness and appropriateness, and to help clients negotiate requirements that they can meet and that protect the environment.

We have done this work throughout our firm's history in states in every EPA region. Because of this experience, we can establish a common ground between permit holders and EPA and state regulators. This common ground is based



on appropriate scientific, engineering, and regulatory information. Selected tasks that we have performed for a large, diverse group of clients include:

Support for Permittees

- NPDES permit applications
- Permit negotiations and litigation support
- Mixing zone allowances
- Water quality, hydraulic, and effluent monitoring
- Site-specific criteria and limits
- Effluent and receiving water data analysis and statistical evaluations
- Computer modeling
- Expert testimony in permit appeals and civil suits
- Compliance evaluations
- Toxicity reduction evaluations (TREs)
- Review of modeling and analyses performed by regulators

Support to Regulators

- Development of technical training documents and guidance
- Technical training workshops for Federal and State personnel
- Development of innovative permitting methods and tools
- Development and enhancement of computer models used for calculating permit limits



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The following project descriptions offer a brief sampling of LimnoTech's experience in helping our clients resolve the challenges of NPDES permitting and regulatory issues.

Assistance for Renewal of a Watershed Permit for Clean Water Services (CWS), OR. CWS has the country's first watershed-based NPDES permit. The overall health of the Tualatin River drives permit requirements, but CWS is given flexibility to integrate core objectives. For example, rather than constructing costly chillers for wastewater treatment plant effluents, CWS plants riparian buffers. CWS can trade, update Total Maximum Daily Loads (TMDLs), construct new discharges including wetlands treatment, address wet weather issues in innovative ways, and conduct integrated monitoring.

LimnoTech is providing expert consulting services for NPDES permit renewal. We define issues and identify studies to meet refined monitoring requirements. For example, we helped CWS develop and update a Watershed Monitoring Plan. We are currently supporting CWS and other Oregon agencies in developing permitting language for sanitary sewer overflows (SSOs). This information will be used by Oregon DEQ in its discussions with EPA Region 10.



We have introduced the adaptive watershed management concept to airports throughout the U.S. to help establish compliance programs to ensure that environmental issues are mitigated.

Stormwater Permit Development for the Gerald R. Ford International Airport in Grand Rapids, MI. The Gerald R. Ford International Airport provides passenger and air freight services to central-western Michigan. Localized stream impairments led the Michigan DEQ to issue an individual instead of a general NPDES permit for the airport.

LimnoTech has helped the airport develop its permit conditions since 2000. We introduced the concept of adaptive watershed management and helped establish compliance programs to ensure that environmental issues are mitigated. LimnoTech led the development, implementation, and refinement of a Stormwater Pollution

Prevention Program (SWPPP) to address ecological impairments. We are also directing the project team in assisting the airport in compliance with the permit.



We have helped clients renegotiate permits to avoid unnecessary and costly restrictions.

SPDES Permit Support and Negotiations for Niagara Falls, New York. The City of Niagara Falls Department of Wastewater Facilities was renewing its permit for its 48 mgd carbon treatment plant. At issue were a large number of effluent limits (because of the industries that the plant serves), requirements for control of wet weather discharges including sanitary and combined sewer overflows and bypasses, and bioaccumulative contaminants of concern (BCCs) including mercury and PCBs.

LimnoTech has assisted Niagara Falls with permit issues since 1990. We succeeded in removing a large number of limits from the permit, significantly reducing monitoring costs and risks of noncompliance. We also helped negotiate a practical framework to address sewer overflows and bypasses and Pollutant Minimization Plans (PMPs). The cost of an extensive mixing zone study was avoided by LimnoTech's use of existing data and knowledge of the discharge and river.

NPDES Training for Exelon Generation Company. Exelon operates the largest nuclear fleet in the nation, and each of its 10 station managers must ensure that they comply with Clean Water Act (CWA) regulations. Exelon requested that LimnoTech provide on-site training to increase understanding about the CWA and the NPDES program. Station managers learned to understand when to object to proposed permit conditions, how to resolve these issues, and how to comment on other CWA programs that influence permit conditions.