

# Protecting Our Waterways - Verifying Industry Self-Monitoring

All industrial and municipal wastewater treatment facilities which discharge effluents into Maryland's waters must have a National Pollutant Discharge Elimination System (NPDES) permit. This permit is issued by the Maryland Department of the Environment (MDE) and sets discharge limitations and contains various restrictions and monitoring requirements to insure that the discharge will not degrade water quality or harm aquatic life. The permits require the dischargers to monitor their effluents and submit their own data to show that they are complying with these restrictions.

To insure that the data submitted by the dischargers are representative and accurate, MDE's Environmental Risk Assessment Program conducts compliance sampling inspections on an annual basis at each major industrial wastewater discharger in the state and at significant non-major dischargers. Major industrial wastewater dischargers are those industries that discharge large volumes of wastewater directly to Maryland waters or industries that treat and discharge wastewater that is potentially toxic to aquatic life. Major dischargers have also scored enough points in EPA's ranking system to be classified as major dischargers. Significant non-major dischargers do not score high enough to be ranked as a Major using EPA's ranking system, but still need to be carefully evaluated by MDE on a recurring basis. These detailed inspections consists of the following:

- Inspection of the industry's sampling, analysis and reporting records to insure that the company is in compliance with record keeping requirements of the permits. These record keeping requirements verify that representative effluent samples are properly collected, analyzed and reported. The records provide legal documentation of the persons responsible for sampling, analysis and report preparation.
- Inspection of the industry's laboratory to insure that samples are analyzed in conformance with USEPA approved procedures and with adequate quality control. This inspection also insures that the analyses are properly documented so that the analyses can be reconstructed and verified at any time.
- Inspection and evaluation of the industry's wastewater monitoring equipment and a general evaluation of the industry's self-monitoring program to insure that the company is obtaining and reporting accurate and precise effluent quality data.
- Inspection of wastewater treatment facilities to insure that the company is properly utilizing and maintaining their wastewater treatment equipment.
- Inspection of the plant grounds to identify storm water runoff problems, chemical storage problems, or other potential pollution problems.
- A review of past problems and the progress achieved in addressing these problems over the last year.
- The collection of wastewater samples from all active discharge points in accordance with the permits. Typically, an automatic wastewater sampler is set and left overnight to collect samples for a 24-hour period. The samples are analyzed on-site and by State laboratories for aquatic toxicity and chemical constituents.

As a result of these inspections, a detailed written report is sent to the company's representative. The report details the results of the inspection and lists the required corrective actions and recommendations. Copies of the report are sent also to the permitting and enforcement programs within MDE's Water Management Administration for appropriate follow up actions. A copy of the report is sent also to the USEPA.

For more information contact:  
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