

Ohio Turnpike Commission Storm Water Management **Discharging to the Turnpike**

Following the enactment of the Clean Water Act in 1972, it became more apparent to legislators that previous pollution management policies had to be refocused. The notions of “Water Conservation,” “Reduce, Reuse & Recycle,” “Pollution Prevention” and “Save the Environment” became more prominent following this act. By merging these new concepts with the traditional view “the solution to pollution is dilution,” a more proactive approach to solving water quality deficiencies evolved. This union refined the traditional view by incorporating a “laboratory” perspective of pollution control. This “laboratory” perspective introduces the fact that the concentration of a pollutant must become the critical variable in the pollutant-dilutant relationship. As many have discovered, the task of controlling the pollutant variable is difficult. This difficulty is partially due to the yearly increases in population and generated pollutants.

In 1948 the federal government began to take notice of the continued decline of water quality in the nation’s water bodies and began to implement legislation to develop water quality standards. However, according to the United States Environmental Protection Agency’s (US EPA’s) “Water Quality Standards History,” complexities in enforcement, among other problems, were reasons why these regulations did not achieve the desired results. This was evident in the fact that by the early 1970’s, forty percent (40%) of the nation’s water bodies were still impaired. Therefore, the federal government enacted the Clean Water Act of 1972. This act established the National Pollutant Discharge Elimination System (NPDES), which required that the states develop a means to monitor (discharge permitting and monthly operating reports) and enforce (i.e., fines) the water quality standards established in previous legislation.

In 1987 the Water Quality Act extended water quality standards to urban/suburban storm water run-off and construction site discharges. Regulations resulting from this act required that municipally separate storm sewer systems (MS4’s) create and manage a Storm Water Management Program. As part of the Ohio Turnpike Commission’s program, an “Outfall Permit Application” was developed for property owners that desire to discharge to the Commission right-of-way. This application process complements the NPDES program by requiring dischargers to obtain an outfall permit, which advises them that they will be subject to regular inspections and monitoring. Additionally, the permit holder must comply with Ohio EPA water quality standards and will be subject to elimination if the outfall is found to be non-compliant with these standards.

The outfall permit process involves the following steps to obtain a permit to discharge:

1. An applicant contacts the Ohio Turnpike Commission and requests to discharge to its right-of-way.
2. The applicant is forwarded to the Ohio Turnpike Commission’s permit webpage (http://www.ohioturnpike.org/media/pdf/outfall_permit.pdf) to download or print an application. (If internet is not available to the applicant, a mailed copy may be requested.)
3. After the applicant reviews the application, collects applicable information and provides a signature for the acknowledgement of the general conditions and the application page, the packet is submitted to the Ohio Turnpike Commission for review.
4. Based on the review of the application package, the Ohio Turnpike Commission will approve the application, request more information or reject the application.

5. For applications that are approved, the Ohio Turnpike Commission will forward a draft legal agreement between the applicant and the Commission to the applicant for review.
6. The Ohio Turnpike Commission and the applicant sign the agreement and the document serves as the applicant's permit to discharge, which will be subject to all Ohio EPA regulation modifications.

A similar type of program was initiated by the Wayne County Department of Environment. (Wayne County is located in Southeast Michigan and encompasses the city of Detroit.) It was stated that between the inception of the program (1987) and 2002, Wayne County inspected 5,420 commercial, retail, and industrial facilities for illicit connections. As a result of these inspections, field staff discovered 1,433 illicit connections at 370 facilities. It was estimated that the discovery and elimination of these connections prevented Wayne County's surface waters from hosting an estimate of 200 million gallons of polluted water, 76,000 pounds of biological oxygen demand (a measure of waste concentration), 287,000 pounds of total suspended solids and 5,000 pounds of total phosphorous per year.

Within the state of Ohio, state water body assessment data for 2004 was posted by the EPA. This data identified that approximately fifty percent (50%) of the state's streams, rivers, creeks, etc. have been assessed for water quality. Of this fifty percent (50%), over 10,000 miles of streams, rivers, creeks, etc. were impaired. Included in the top 10 causes of impairments were pollutants consistent with discharges from improperly operating waste water treatment systems and sedimentation/siltation. Both of these impairments can be further propagated by discharges from an outfall to a storm sewer system.

In the coming years of the storm water management program, the Commission plans to utilize the outfall information collected in the permitting program and regular monitoring to reduce pollutants in discharges from its storm sewer system. This can be accomplished by tracking what, where and to what extent discharges are being released into the system. In completing these tasks the Commission can identify and track pollutant sources to eliminate or require remediation as they are discovered.

Sources:

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