

PRETREATMENT CORNER

Zero Discharge Management Plans

By Judy F. Musselman, QEP

In our ever-changing economy, industries are attempting to consolidate or relocate to more efficient facilities just to be competitive and to stay in business. What steps must a pretreatment coordinator take when an industry is downsizing or closing its doors?

I was involved in one such recent case in which an industry was relocating its categorical operation to another site but yet maintained a few dry operations and administrative staff at its present location. The industry did not wish to terminate its wastewater discharge permit with the local municipality; it wanted to keep its options open. Therefore, to appease both the municipality and industry, amendments to the industry's wastewater discharge permit were made. These amendments included 'Zero Discharge Requirements' and a 'Zero Discharge Management Plan'.

The Zero Discharge Management Plan conditions are contained in the Special Conditions section of the wastewater discharge permit, following the Compliance Schedule provisions. A Zero Discharge Management Plan is similar to a Toxic Organic Management Plan in that specific elements are required to be submitted to the municipality for acceptance within a stated time frame. In this particular case, the industry is required to submit the following information to the municipality:

1. Date of discontinuance of wastewater discharge to the municipal sewer system.
2. Methods of disposal of regulated process tanks, chemicals, sludges and cleaning wastes.
3. Methods of cleaning tanks or other vessels containing regulated pollutants.
4. Names of haulers and/or disposal firms and ultimate waste disposal sites for the regulated pollutants and wastes disposed offsite, including the hauler and disposal site EPA permit numbers.
5. Certification statement as follows:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

The Zero Discharge Requirements conditions are contained in the Monitoring and Reporting Requirements section of the wastewater discharge permit. Basically, the Zero Discharge Requirements state that when an acceptable Zero Discharge Management Plan has been submitted and found acceptable by the municipality, and the industrial process wastewater discharge has been discontinued, the industry is no longer subject to the monitoring requirements previously specified for its industrial process wastewater discharge. Instead, the industry is required to submit a Zero Discharge Certification on a semi-annual basis to the municipality, which states that the industry does not discharge to the municipal sewer system the following:

1. Any wastewater federally regulated under 40 CFR §§405 through 471.
2. Any hazardous waste, as defined under 40 CFR §261 and 25 PA Code §261a.
3. Any wastewater violating the Specific Prohibited Discharge Standards of the municipal Sewer Use Rules and Regulations.
4. Any wastewater exceeding waste strength concentrations shown in the Imposition of Strength of Waste Surcharge section of the municipal Sewer Use Rules and Regulations.

A certification statement, containing the same language as provided above, is also signed and dated.

During the entire relocation/closure process at the industrial site, the municipal pretreatment staff conducts walk-throughs to confirm that emptying and cleaning of tanks is proceeding in accordance with regulatory requirements; copies of all of the necessary paperwork for offsite disposal of wastewater and/or solid wastes are provided to the municipality; floor drains are covered or plugged; pretreatment facility piping is capped; and any other actions required to ensure that no wastewater, other than sanitary wastewater, has the potential to be discharged to the municipal sewer system.

The key to a successful transition to a zero wastewater discharge is to maintain open communications between the municipal and industry staff and to ensure that all actions are properly documented in written form.