ŞEPA

Enforcement Requirements

Case Studies



PROGRAM DESCRIPTION

The pollution prevention (PP) program of the County Sanitation Districts of Orange County, which regulates over 1,000 facilities in its pretreatment program, emphasizes enforcement. PP requirements are incorporated into written enforcement orders that are issued to facilities not complying with indirect discharge permits. As part of these orders, companies must conduct PP assessments and submit PP assessment reports. Descriptions of proven PP techniques, their application and benefits, and a PP checklist are provided to facilities for their use. In addition to issuing enforcement orders, an Orange County engineer or inspector visits each facility to review its manufacturing processes, assess PP opportunities, and answer questions about Orange County's requirements. Facilities must implement those techniques identified by their PP assessments to be technically and economically feasible. Through this program, Orange County has reduced industrial wastewater flow volume and heavy metals loadings by 50 percent over five years.

PROGRAM OBJECTIVE

Orange County's objective is to implement a PP program to control and reduce the quantity of toxic materials discharged by industrial users to the County's sewage system. Orange County's toxic control activities include promotion of source reduction, safe materials substitution, and educational activities directed at industrial and household users.

PROGRAM ACCOMPLISHMENTS

In 1984, Orange County promulgated mass emission limits (setting limits of pounds of pollutants per day) for each permitted discharger. Mass emission limits promote water conservation by preventing facilities from using dilution to meet concentration-based limits; they limit the total quantity of pollutants released to the environment. Compliance is based on the results of samples collected at each discharger's facility and average water usage. As part of the initial effort to enforce mass emission limits, permittees were required to install flow restrictors or control valves to ensure wastewater reduction and

to prevent companies from achieving compliance by dilution. Permittees' facilities are inspected and checked for water conservation control equipment at least annually.

In 1989 Orange County revised its wastewater discharge regulations and established PP requirements. These regulations require all significant users of the sewage system (as defined by EPA effluent guidelines) to develop PP plans that address water conservation, investigate raw material substitution, establish inventory controls, implement educational activities, and take any other steps needed to prevent pollution. Orange County uses both Enforcement Compliance Schedule Agreements and Probation Orders to promote implementation of PP measures.

Orange County may require a company to complete the necessary improvements specified in the facility's proposed PP plan under the terms and conditions of an Enforcement Compliance Schedule Agreement. The agreement is a contract between Orange County and a company in non-compliance that temporarily amends the facility's industrial wastewater discharge permit and establishes a compliance schedule for the development and implementation of an effective PP program.

In addition to Enforcement Compliance Schedule Agreements, Orange County uses Probation Orders to reduce wastewater discharges. Probation Orders direct a facility to:

- 1. Immediately cease all non-compliant discharges by:
 - implementing a PP plan,
 - reducing the manufacturing production level, water usage, and discharge,
 - hauling waste off site, or
 - using any other effective method.

- 2. Conduct an industrial waste survey that identifies:
 - all pollution sources,
 - a characteristics of industrial wastewater,
 - wastewater flow rates,
 - alternatives for PP and recycle/reuse, and
 - necessary characteristics of a pretreatment system.
- 3. Develop an effective waste management program that includes:
 - actions to reduce the generation of wastes at their source.
 - recycling and reuse of wastes, and
 - treatment of discharged wastes.

Orange County has 20 inspectors who perform quarterly and annual inspections. Each inspector is responsible for approximately 40 facilities. Orange County's 400 Class I (i.e., federally regulated) facilities are inspected every three months and receive a detailed annual inspection. Twelve permit and enforcement engineers assist facilities with the development of their PP plans. The inspectors and engineers receive training in PP opportunities and Orange County's enforcement requirements.

Recently, Orange County declassified hospitals as significant users because, although high in volume, their wastes (e.g., silver) are not significant in toxicity, primarily due to improved x-ray technology. Orange County offered hospitals the incentive to be exempt from more stringent sampling and inspection regulations provided they submit a PP plan.

Over the past five years. Orange County's PP program has achieved significant environmental improvements. These improvements include a 50 percent reduction in the volume of industrial wastewater discharged to Orange County's sewage system and about a 50 percent reduction in heavy metals in the POTW influent. As a result of the PP program, over 95 percent of the 400 Class I facilities, including 149 metal finishers, have installed flow restrictors or control valves to reduce wastewater usage or have installed PP equipment to reduce waste and wastewater volume. Orange County is currently conducting an ongoing survey of facilities to determine their individual accomplishments.

FOR MORE INFORMATION

To obtain additional information on Orange County's PP program, contact Adriana Renescu at (714) 962-2411 extension 3828 or write to:

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