
CASE STUDY: Mid-East Tractor Parts

Location:	Goldboro, NC (Wayne County)
Industry:	Farm Equipment Salvage and Remanufacture (SIC: 3523)
Pollution Prevention Application:	Wastewater Collection and Reuse
Annual Savings:	Not applicable
Payback Period:	Not applicable
Contact:	Bill Creech, Manager (in 1995: John Forbey) (919) 735-0987

Background

Mid-East Tractor Parts is a small company that sells rebuilt, used, and new parts for farm tractors, combines and cotton pickers. As part of the salvage process the machinery is broken down into parts, which are then pressure washed to remove the grease, lubricants, and dirt. Previously, this water was discharged on site through a series of grease traps, holding tanks, and a leach field. Although not obligated by regulation, the company was concerned about the impacts of releasing this washwater to the environment and took steps to prevent its release.

Waste Reduction Activities

In 1993, the company decided to eliminate the release of all washwater. A 60- by 30-foot concrete pad with a 6-inch curbing was laid to contain water. This pad enables the machinery to be cleaned and washwater to be collected. A roof was then installed over the pad to prevent rainwater accumulation. The company purchased a \$60,000 self-contained water treatment unit, which is housed in a used shipping container on the pad. This unit is a hydrogen peroxide treatment system, which removes the VOCs (Volatile Organic Carbons) and hydrocarbons from the grease- and oil-contaminated washwater. A filter in the unit removes particles down to 5 microns in size. The system is completely closed looped and does not discharge any water. The company is able to reuse 100 percent of the treated water. Mid-East Tractor Parts has been pleased with the system's low cost of operation since its installation in October 1993.

Waste Reduced and Annual Savings

The major payback features of the water collection, treatment, and reuse system are reduced water consumption and elimination of the risk of groundwater contamination. Previously, the company used approximately 3,000 gallons of well water per month for parts washing. Mid-East now consumes groundwater only to replace evaporative losses.

Other Activities

Mid-East Tractor Parts is now evaluating various parts washing systems that use hot water and biodegradable detergents to replace a solvent parts washer on site. Also a closed looped system, this parts washer will markedly reduce the quantity of hazardous waste generated by the company.

In the 1994 Governor's Awards for Excellence in Waste Reduction, Mid-East Tractor Parts received a Significant Achievement Award in the Small Business Category.