POLLUTION PREVENTION
IN RHODE ISLAND

Case studies of the Rhode Island On-Site Technical Assistance Program

Metal Parts Manufacturing
Petroleum Naphtha

Metal parts manufacturer saves money by purchasing recycled petroleum naphtha

Industry \ Contact
SIC Codes: 3722, 3599 Metal Working, Rhode Island.
Contact: DED #2

Technology Description
The company is primarily engaged in the manufacture of machined metal parts. The company employs 50 people at this location.

In 1988, the company purchased approximately 3,600 gallons of virgin petroleum naphtha and manifested approximately 3,000 gallons of waste petroleum naphtha and waste oil for off-site disposal. Petroleum naphtha is used in metal parts machining and manufacturing processes to remove excess oils and metal chips which adhere to the surface of the metal as the result of certain metal working operations. The waste petroleum naphtha contained an undetermined amount of mixed waste oils. After receiving a voluntary pollution prevention assessment by the Rhode Island Department of Economic Development's Technical Assistance Program, management at the facility decided to ship their waste petroleum naphtha off-site for reclamation and purchase recycled petroleum naphtha instead of virgin petroleum naphtha for use in their metal working operations.

Feedstock Materials
Petroleum naphtha, mixed oils

Wastes
2,800 gallons of waste petroleum naphtha manifested for off-site treatment annually

Costs
None
Operation \ Maintenance
Substitution of recycled petroleum naphtha for virgin product.

Savings
Decreased purchase costs by $980
Disposal savings: $2,100

Payback Period
Immediate

Impact
The company saves money by shipping their waste petroleum naphtha off-site for reclamation and by purchasing recycled petroleum naphtha instead of virgin petroleum naphtha for use in their metal working operations. Not only does the company save money by implementing these changes, but they also conserve limited natural petroleum resources.

As of 1992, the staff at this facility have continued to test aqueous-based degreasers for operational feasibility within the company.