

# 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.