

SOLID WASTE CONTROL **2006 SUMMARY**

The Monmouth County Health Department Solid Waste Enforcement Team (SWET) completed its nineteenth year of operation in 2006. Our staff consisted of a Section Supervisor for Environmental Compliance, a Program Coordinator – Solid Waste, two Senior Environmental Health Specialists, two Environmental Specialists and a Public Health Investigator. Key activities for the previous year included compliance monitoring at all Major Operating Sanitary Landfills and Transfer Stations, Closed Landfills, Class A Recycling Facilities, Class B Recycling Facilities – including General, Limited, and Exempt Activities, Compost Facilities, and Farmland Leaf Mulch Sites. SWET has an established program to monitor solid waste haulers for compliance with regulations governing registration and transporter requirements. We also conduct solid waste transporter interviews to determine their eligibility for exemption from the licensing process. Our field activities also include recycling compliance inspections at businesses and institutions throughout the County to ensure compliance with our Monmouth County Solid Waste Management Plan. SWET is responsible for responding to and resolving citizen complaints and complaints forwarded by the New Jersey Department of Environmental Protection (NJDEP) regarding solid waste activities throughout the county. SWET also oversees the Household Hazardous Waste Program. Additional programs in our scope of work included Domestic Preparedness for Bio-Terrorism, Compliance Assistance for School Laboratory Chemical Management, and NJDEP Recycling Questionnaire Surveys.

SOLID WASTE FACILITY INSPECTIONS

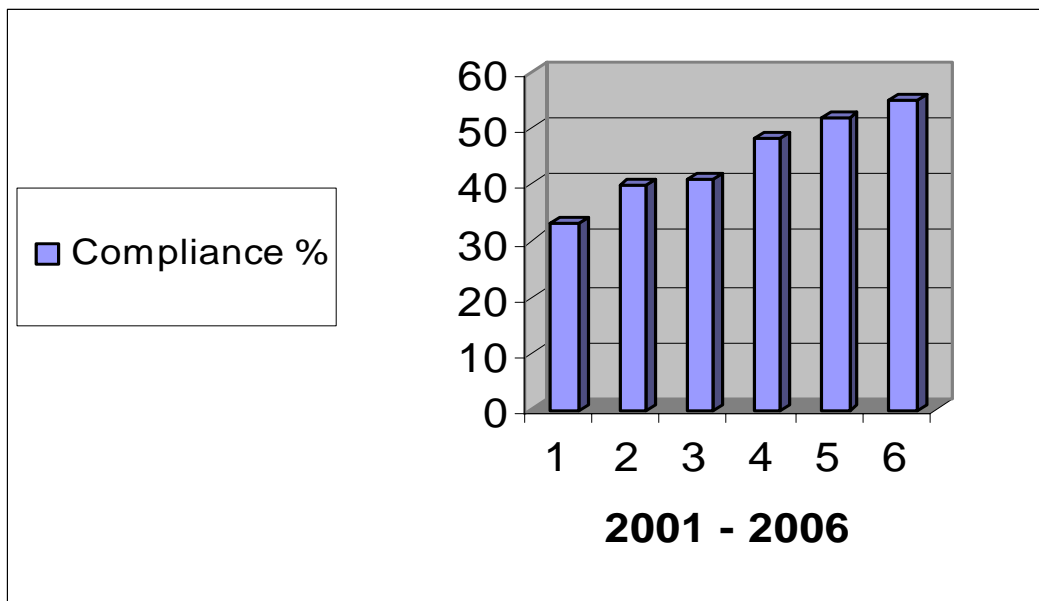
Monmouth County had 163 facilities which required at a minimum an annual inspection for each site. We conducted 495 inspections at these facilities during the past year. While seasonal facilities such as compost and leaf mulch sites only require two inspections per year, most other sites that are operating on a continuous basis require more frequent monitoring to ensure all operational standards are met. By doing so, we minimize problems by addressing non-compliance issues before they cause environmental concerns. All non-compliant facility inspection reports are forwarded to Michael Gage at the NJDEP Bureau of Solid Waste Compliance and Enforcement on a weekly basis. When possible, we conduct a follow-up joint inspection at non-compliant facilities with the NJDEP inspector assigned to the site. During the past year we conducted joint inspections with the State at the following sites; Becker's Tree Service in Tinton Falls, Benoit Class B Recycling in Tinton Falls, Goldstar Paving Class B Recycling and Lucas Brothers Class B Recycling in Marlboro, Mazza Transfer Station and RTC Inc Class B Recycling in Tinton Falls, and South Jersey Agricultural Products Class B Recycling in Wall.

RECYCLING ENFORCEMENT

SWET conducted 1,273 compliance inspections at businesses and institutions throughout the County. This resulted in 578 violations of recycling requirements for businesses as specified in the Monmouth County Solid Waste Management Plan. When a business is issued a recycling Notice of Violation we allow a grace period of thirty days during which we will assist them in

implementing measures to ensure a workable recycling program is in place. This is usually well received by the responsible parties but there are still occasions when our assistance is refused. Those businesses accumulating two violations within a twelve month period are issued penalties. In 2006 we had 46 businesses qualify as two time offenders and were issued penalties. Subsequent follow-up inspections showed that 45 of the 46 businesses were compliant on the third inspection.

Corporate offices and retail establishments are the largest generators of recyclables in our County thus they deservedly demand the majority of our field time. We have noticed a steady increase in the compliance rate in our inspections over the last six years.



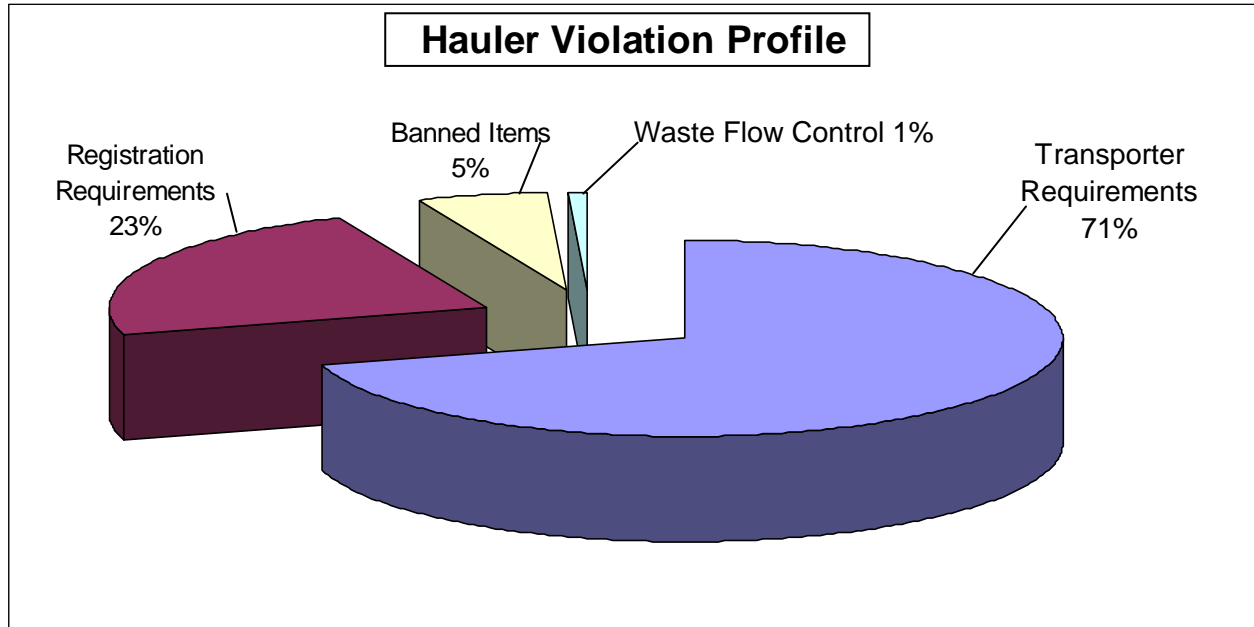
SWET staff also conducted an investigation into recycling tonnage reporting requirements for Intermediate Processing Facilities and out of State transporters. Interest in this was initiated by concerns over recent trends Statewide of declining recycling rates. Within two weeks we were able to identify over 16,000 tons of recyclables that went previously unreported by towns in Monmouth County. The information was referred to the District Recycling Coordinator to be distributed to local municipalities whose tonnage grants were affected.

We continued our participation in the NJDEP Recycling Questionnaire Program, where again the focus was on schools and multi-family dwellings. Schools in general were compliant, as they all had the necessary infrastructure in place to handle the vast amounts of recyclables they generate. We still recognize some areas of difficulty such as lunchrooms and study halls where compliance isn't quite up to the standard set in the classrooms. To improve recycling programs at these sites we have provided guidance and materials to enhance recycling opportunities. Examples of our efforts include providing and posting signage defining exactly what materials must be recycled, providing battery collection containers and disposal via the Monmouth County Household Battery Recycling Program, and working with support staff in establishing best management practices. Multi-family dwellings are another story. Here we have to work through layers of site management including but not limited to building superintendents, property management

companies, tenant associations and owners/landlords. It's a very time consuming task to get to the bottom of the problems here and identify the missing link that could close the loop on getting the job done. We still find some of these complexes with no recycling program in place for cans, bottles, and newspapers. In the coming year we hope to devote more time in this area. During 2006, inspections of schools and apartment complexes were done in the following communities; Aberdeen, Avon, Bradley Beach, Eatontown, Freehold Boro, Freehold Twp, Hazlet, Holmdel, Howell, Manalapan, Manasquan, Middletown, Neptune Twp, Ocean Twp, Red Bank, Spring Lake, Spring Lake Heights, Tinton Falls, and Wall Twp.

SOLID WASTE TRANSPORTER INSPECTIONS AND INVESTIGATIONS

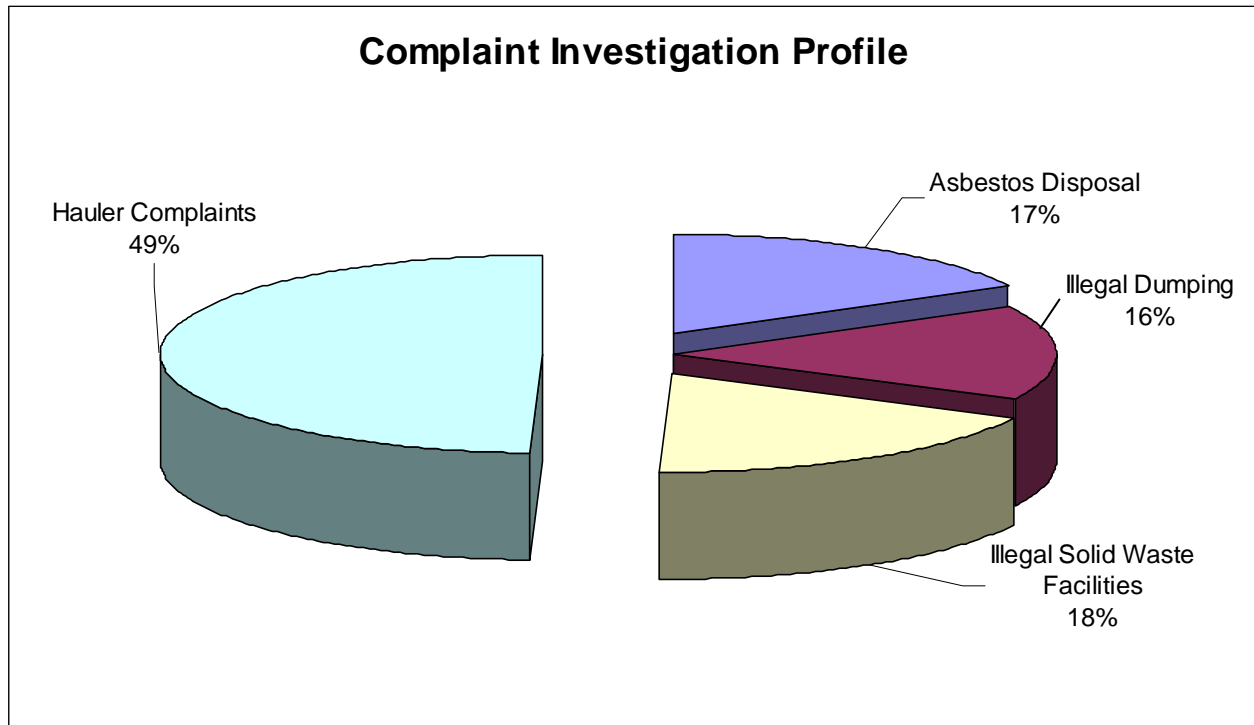
We conducted 726 solid waste transporter inspections during 2006. These inspections resulted in documentation of 291 violations. Inspectors typically focus on registration and transporter requirements as specified in the New Jersey Administrative Code 7:26 Regulations adopted pursuant to the New Jersey Solid Waste Management Act. During these inflow inspections we also monitor loads for banned or hazardous materials, regulated medical waste, and mandated recyclable materials as specified in our Monmouth County Solid Waste Management Plan are also typically part of our inspection regimen. The violation profile was as follows, Registration Requirements – 72, Transporter Requirements - 219, Banned Materials (may include hazardous materials, compressed gases, liquids, and refrigerants) – 17, Waste Flow Control - 3. While most violations written during these inspections fall under the grace period rules, all those that do not and which merit further investigation or require legal proceedings are copied to the NJDEP Bureau of Solid Waste Compliance and Enforcement prior to the issuance of a summons.



SOLID WASTE / ENVIRONMENTAL COMPLAINTS INVESTIGATIONS

We opened a total of 95 environmental complaints originating through sources ranging from local citizens to the NJDEP. Investigations of all NJDEP referrals (5 for 2006) were responded back within five days with updates on current status. Historically the majority of our complaints

center on solid waste transporter violations, illegal dumping, mishandling of asbestos containing waste, and illegal solid waste facilities. All minor violations are served Notices of Violation and reinvestigated for compliance after appropriate grace periods. A total of 28 cases involved violations of a non-minor nature which required further legal action in local municipal courts. In all of these cases, the responsible party pled guilty and was ordered by the court to correct/abate these violations. Due to the solid waste legal expertise of the SWET, we were able to represent the State in municipal court without attorney assistance, which saved the County at least \$28,000. SWET adheres strictly to all CEHA notification and reporting requirements regarding enforcement activities and this information is forwarded on a daily or weekly basis, whichever applies.



NJDEP A-901 EXEMPT HAULER REGISTRATION PROGRAM

The Solid Waste Enforcement Team conducted interviews with prospective registrants for the purpose of determining their eligibility and permitting them as A-901 Exempt Self Generator Solid Waste Transporters. Through this program we interviewed 78 haulers during 2006. While most registrants were from Monmouth County, we continued to see many applicants from Ocean, Middlesex, and Somerset Counties.

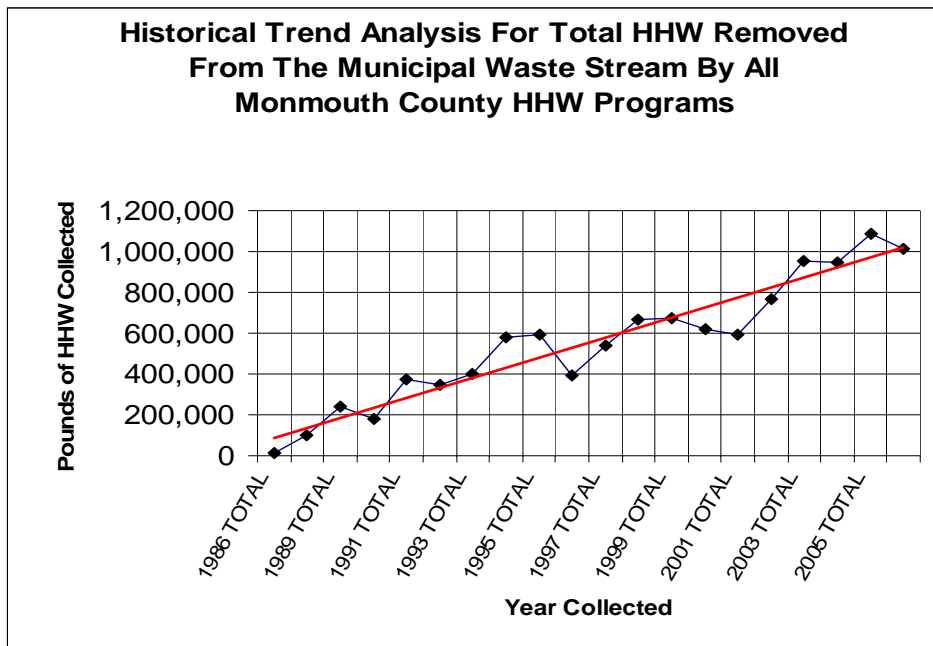
COMPLIANCE ASSISTANCE FOR SCHOOL CHEMICAL MANAGEMENT

This program provides schools in Monmouth County with guidance in complying with local, State, and Federal regulations as well as offering best management practices pertaining to laboratory chemical management and the New Jersey School Integrated Pest Management Act/Universal Waste Regulations. Our CEHA contract for 2006 called for inspections at 36

schools with the emphasis on higher education. We have learned that school district facilities manager's have been our most reliable and expedient partner in accessing schools and having necessary remediation completed promptly. In some schools we came across some hazardous items that required immediate attention and should be disposed as soon as possible. While some items are acceptable for disposal via the Household Hazardous Waste Program, others such as explosives and ethers must be handled by a private hazmat contractor. The most prevalent problems continue to be schools maintaining excess inventory and storing chemicals that are no longer part of the curriculum. Due to the popularity of the program, 9 schools and school systems used the disposal assistance portion of the program without being solicited or inspected. 15 schools used either the Household Hazardous Waste Facility or Single Day collections as a disposal option. 4 schools opted or were directed to use a private contractor for disposal. In total, 10,339 pounds of waste was properly disposed of. SWET has also been active in offering training for other agencies interested in participating in this worthwhile venture. We have given both oral presentations to interested groups and had various agency representatives accompany us on inspections for hands-on experience.

HOUSEHOLD HAZARDOUS WASTE COLLECTION PROGRAMS

SWET oversees the implementation of the County Household Hazardous Waste Program. This includes the Permanent Household Hazardous Waste Facility and Single Day Collections Events. In 2006 we held three satellite collections in Hazlet (spring and fall) and in Upper Freehold Twp (fall). Public participation was again outstanding as we had 1539 vehicles for the three events. We disposed of 124,175 lbs of hazardous materials via our contractor. The Health Dept additionally collected and recycled the following items; 1550 gallons of waste oil, 410 gallons of anti-freeze, 6,420 lbs of automotive batteries, 1104 lbs of dry batteries, 471 compressed gas cylinders, and 138 oil filters. Since 1986, the Solid Waste Enforcement Team has diverted over 11,000,000 pounds of hazardous materials from the municipal waste stream.

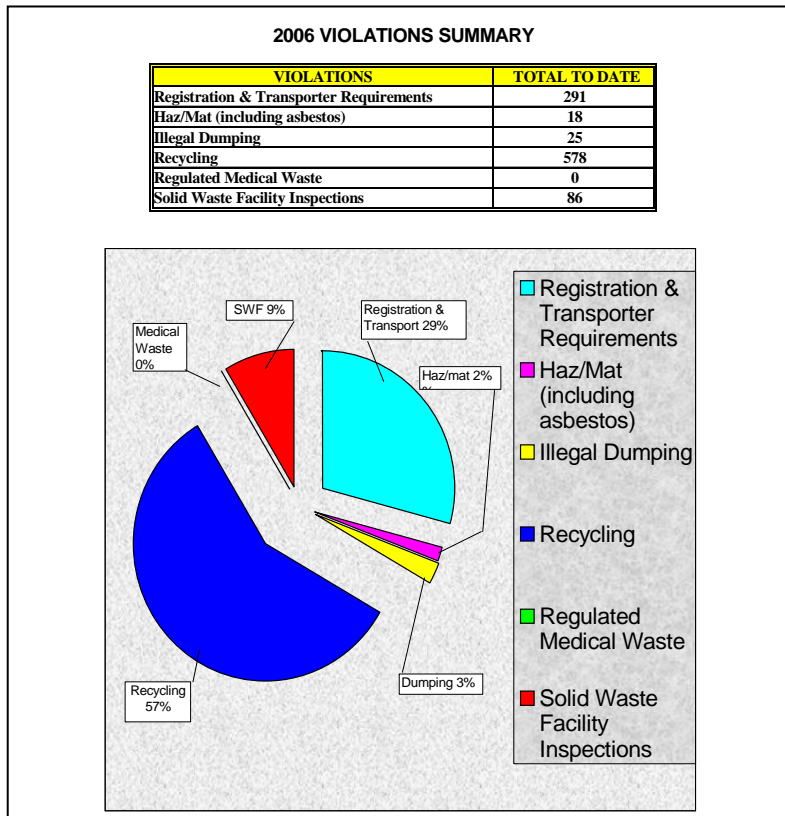


DOMESTIC PREPAREDNESS FOR BIOTERRORISM

SWET is involved in the planning, set-up, and operation of the RSS Warehousing operation for the receipt, storage, and shipment of medical supplies from the Strategic National Stockpile (SNS). As warehouse managers we are responsible for receiving, storing, order picking, shipping of supplies, maintaining chain of custody, warehouse safety and security, and warehouse personnel administration. We also are responsible to provide briefings to the public health coordinator or designee on status of prophylaxis/vaccine inventory, deliveries made, and potential additional prophylaxis/vaccines requested. This years training exercise, Operation Pathfinder, focused on using alternative sites and delivery mechanisms to provide supplies to first responders during times of emergency.

CONTINUING EDUCATION

SWET personnel were in attendance for the following educational and training courses; Blood Borne Pathogens, Cardio-Pulmonary Resuscitation, Communications Training, Environmental Awareness Presentation at St Rose High School on Earth Day, First Responder Drills Planning Meetings, First Responder Tabletop Drill, Fork Lift Training, Hazardous Materials Annual Health And Safety Refresher (8 hours), Incident Command System - 200, In House Haz Mat Training Drills, Municipal Recycling Coordinators Workshop, NJDEP/CEHA Solid Waste Workshop, National Incident Management System Awareness I-700, Operation Pathfinder Transportation Drill, Operation Pathfinder Wrap Up, PowerPoint Computer Class, Rail Car Haz Mat Response, Respirator Fit Testing, Right To Know, RSS Transportation Meeting, Sexual Harassment, Solid Waste Hauler and Municipal Officials Meeting to cover upcoming revisions to the Monmouth County Solid Waste Management Plan, and Workplace Discrimination.



HOUSEHOLD HAZARDOUS WASTE FACILITY **2006 STATUS REPORT**

During 2006, the Monmouth County Household Hazardous Waste collection facility provided service to residents, not for profit organizations, and other government agencies located within the County of Monmouth. As in previous years, this service is provided free of charge by the Monmouth County Board of Chosen Freeholders and is operated by Monmouth County Health Department employees.

Since 1997 the Permanent facility has collected, disposed and/or recycled more than 6.05 million pounds of material.

MANAGEMENT MEASURES TAKEN TO REDUCE COSTS

The facility continues to use innovative management techniques to reduce or avoid costs. We take great pride in knowing we manage materials at the lowest disposal cost of any program in the State, and the fact that we are making a difference in the environmental quality of Monmouth County. The examples given below are some of the quantifiable cost saving measures taken, there are many others.

Every year, collected propane cylinders are used to heat the office and warehouse during the heating season and power the back-up electric generator for the office building. Not only does this provide free fuel, but the cost of \$1.25 per pound (disposal contract) for cylinders is avoided. Based on the weight of empty and de-valved cylinders recycled as scrap metal (41,851 pounds), and the weight of propane in an average cylinder submitted to us (8.5 pounds), the disposal cost avoidance for the year was at least **\$72,820.00** dollars. Brass valves generated as a result of the above operation also produced **\$1,344.75** in revenue.

In order to divert paint from HHW collection days, the facility holds bi-monthly DPW/Non Profit/Governmental collection days. This has saved 43,350 pounds of paint from being disposed through the single day remote collections. The savings in paint disposal this year alone was more than **\$32,500.00**. Of course, other materials are collected and savings/revenues occur, but it is important to highlight the paint disposal savings because paint is 67% of the disposed materials submitted to all HHW programs.

The household battery recycling program continues to save at least **\$4,000.00** per year on the cost of disposal/recycling. Rechargeable batteries are sorted into 4 individual chemistries, packaged according to chemistry, and shipped free of recycling and transportation charges due to the Rechargeable Battery Recycling Corporation's (RBRC) willingness to fund this operation. A small amount of revenue was produced by the small lead acid batteries found during sorting. The county received **\$0.05/pound** for these batteries when they were packaged with lead acid car batteries.

On-site waste generation was significantly reduced by the agreement reached with Global Recycling Solutions to recycle suitable empty plastic, glass and metal containers generated at the facility. Homeowners use these containers to drop off their hazardous wastes and recyclable

liquids. 5577 pounds of recyclable containers were removed from the waste stream resulting in significant waste volume reduction which required only 8 – 20 yard container pick ups and dumps at the MCRC. In contrast, 18 pick ups and dumps were necessary in 2005. As a result of recycling efforts, savings were realized in landfill space, driver time, fuel consumption, and equipment maintenance.

Other Counties recognize the expertise, professionalism, and cost management efforts of our program. Throughout the year we assisted Atlantic County Utilities Authority's waste management personnel in helping them design and implement a more effective HHW collection and management program. They toured our site on multiple occasions and implemented some of our handling methods.

During 2006 the facility staff handled 801,507 pounds of waste.

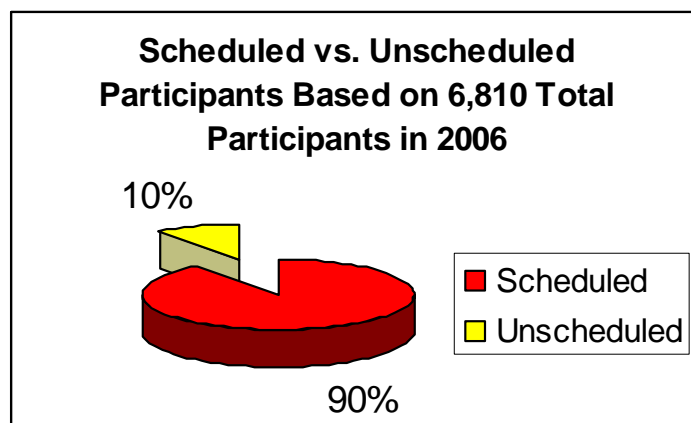
Staff

- (1) Section Supervisor Environmental Compliance
- (1) Hazardous Waste Operations Supervisor
- (1) Hazardous Materials Specialist
- (3) Hazardous Materials Responder, Operations
- (1) Clerk Typist

General Activity

- There were 6,125 (90%) scheduled appointments and 685 (10%) unscheduled participants for a total of 6,810 collections for the year. This year the Permanent Facility realized an increase in scheduled appointments vs. 2005. Our goal is to reduce the unscheduled appointments to a number that will not be disruptive when facility personnel are performing other tasks onsite throughout the collection days.

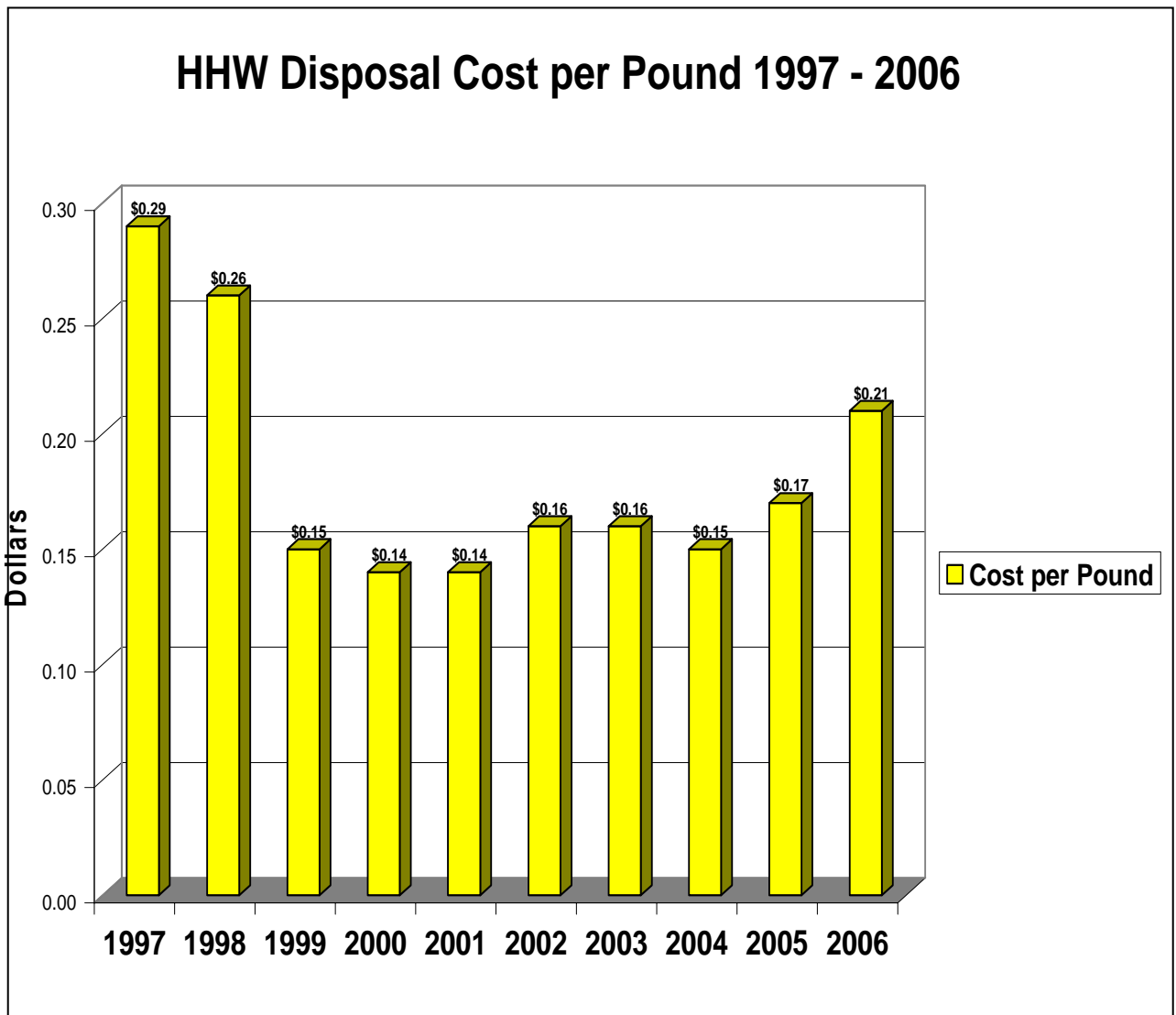
- 2006 = 6,810 Collections
- 2005 = 6,842 Collections
- 2004 = 6,639 Collections
- 2003 = 5,816 Collections
- 2002 = 3,629 Collections
- 2001 = 4,168 Collections
- 2000 = 4,020 Collections
- 1999 = 4,198 Collections
- 1998 = 4,688 Collections
- 1997 = 4,165 Collections



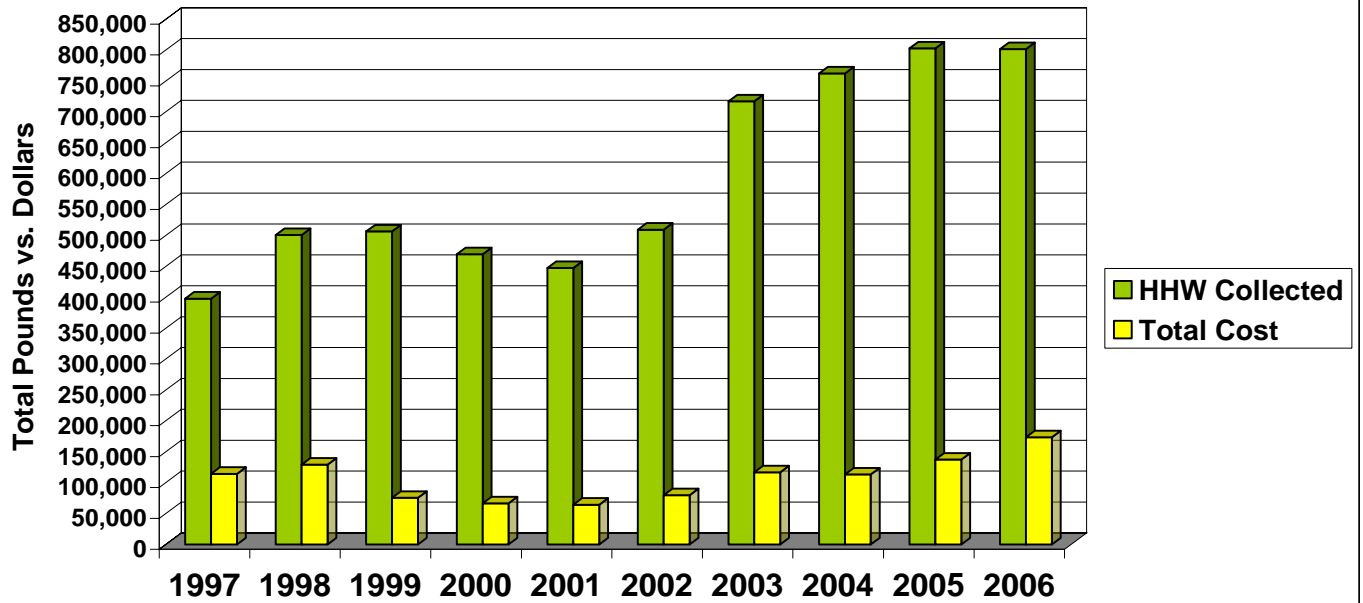
- Additionally there were a total of 514 “No Shows” (Individuals or Organizations with a scheduled and confirmed appointment that did not show up) for the year.

- The facility collected 801,507 Pounds of material (117.7 pounds average per participant) and paid \$173,480.34 (21 cents per pound average).

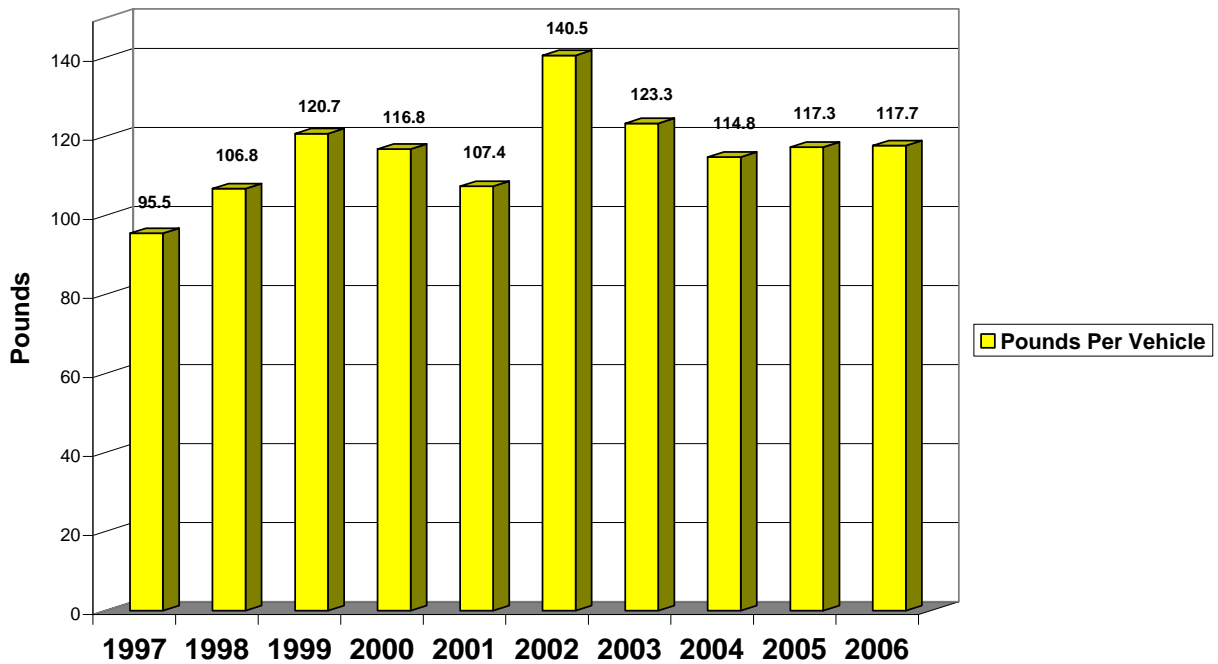
- 2006 = 801,507 Pounds @\$173,480.34 (21 cents per pound Average)
- 2005 = 802,638 Pounds @\$137,155.05 (17 cents per pound Average)
- 2004 = 762,218 Pounds @\$113,213.41 (15 cents per pound Average)
- 2003 = 717,078 Pounds @\$116,661.11 (16 cents per pound Average)
- 2002 = 509,382 Pounds @\$79,559.00 (16 cents per pound Average)
- 2001 = 447,448 Pounds @\$64,258.92 (14 cents per pound Average)
- 2000 = 469,559 Pounds @\$66,550.00 (14 cents per pound Average)
- 1999 = 506,624 Pounds @\$75,297.09 (15 cents per pound Average)
- 1998 = 500,684 Pounds @\$129,005.00 (26 cents per pound Average)
- 1997 = 397,794 Pounds @\$114,088.84 (29 cents per pound Average)



Materials Collected vs. Disposal/Recycling Costs 1997-2006



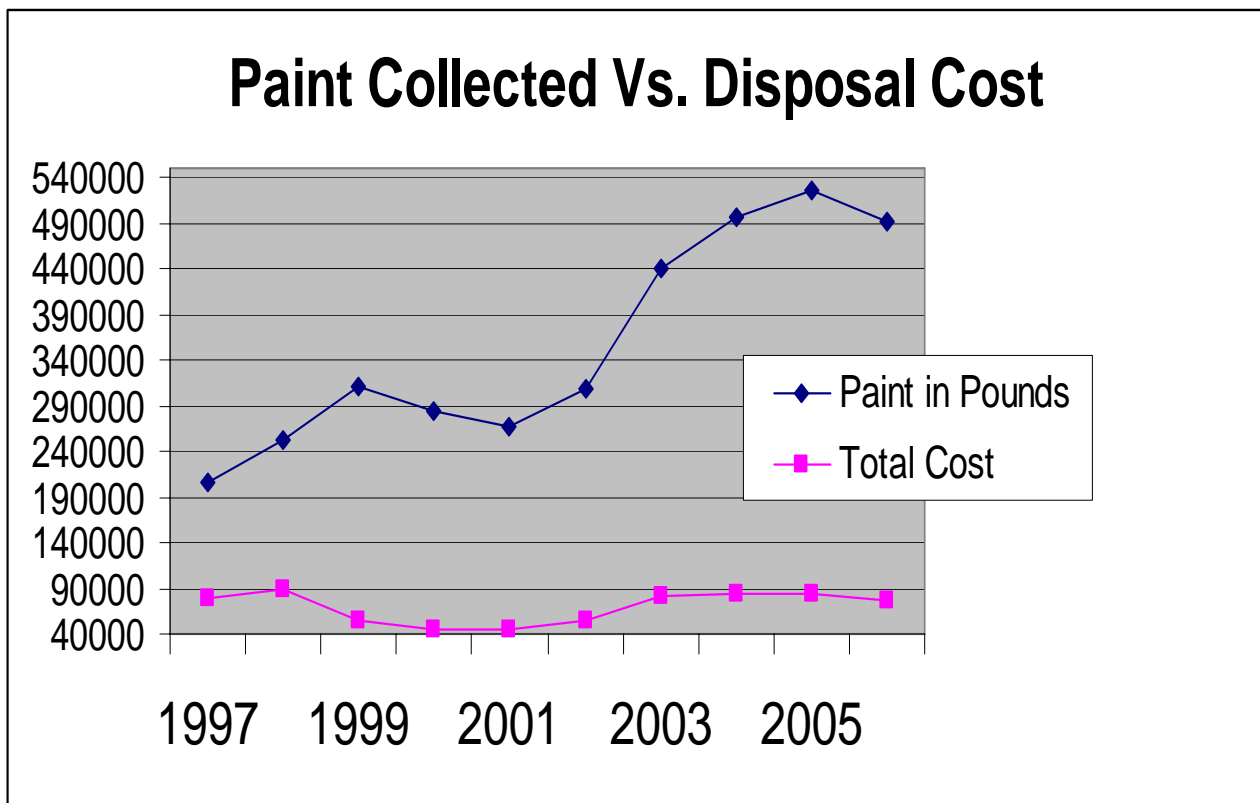
Total Pounds of HHW Collected per Vehicle 1997-2006



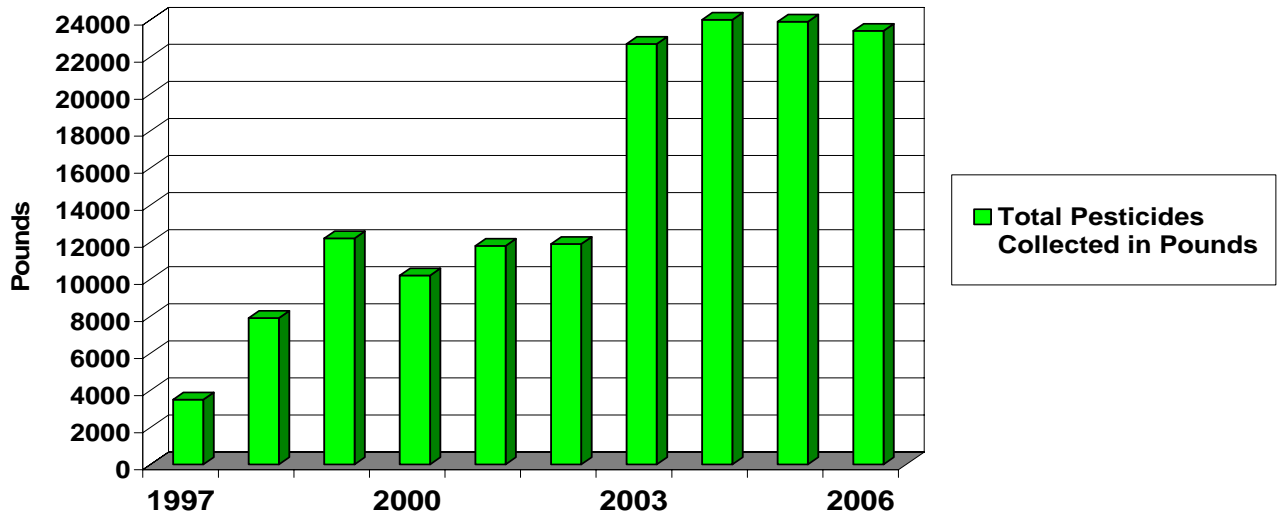
Specific Activity

The facility collected the following materials throughout 2006:

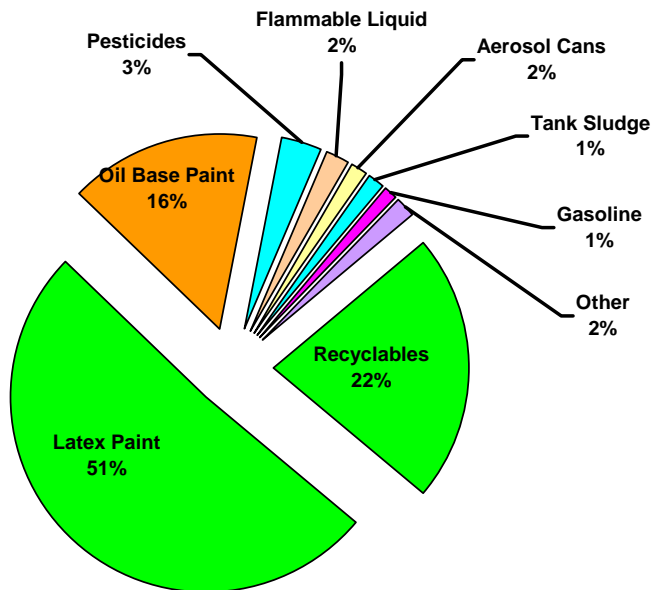
- 377,000 Pounds of Latex Paint (189 Tons)
- 114,000 Pounds of Oil Base Paints (57 Tons)
- 59,144 Pounds of Mixed Alkaline Batteries (30 Tons)
- 23,000 Pounds of Pesticides and Herbicides (12 Tons)
- 13,000 Pounds of Miscellaneous Flammable Liquid (1,650 Gals)
- 11,000 Pounds of Aerosol Spray Cans (6 Tons)
- 10,000 Pounds of Fuel Oil Tank Sludge (1,100 Gals)
- 9,000 Pounds of Corrosive Chemicals (5 Tons)
- 8,000 Pounds of Gasoline (1,100 Gals)
- 2,800 Pounds of Miscellaneous categories
 - Elemental Mercury
 - 1 Pound Propane Tanks
 - Non-Flammable Gas
 - Highway and Boat Flares
 - Fluorescent Tubes
 - PCB Ballasts
- 2,000 Pounds of Non Hazardous Liquids (240 Gals)
- 1,400 Pounds of Pool Chlorine and Miscellaneous Oxidizers (.70 Ton)
- 400 Pounds of Pentachlorophenols



Total Liquid and Solid Pesticides Collected 1997-2006



Breakdown of HHW Categories in 2006

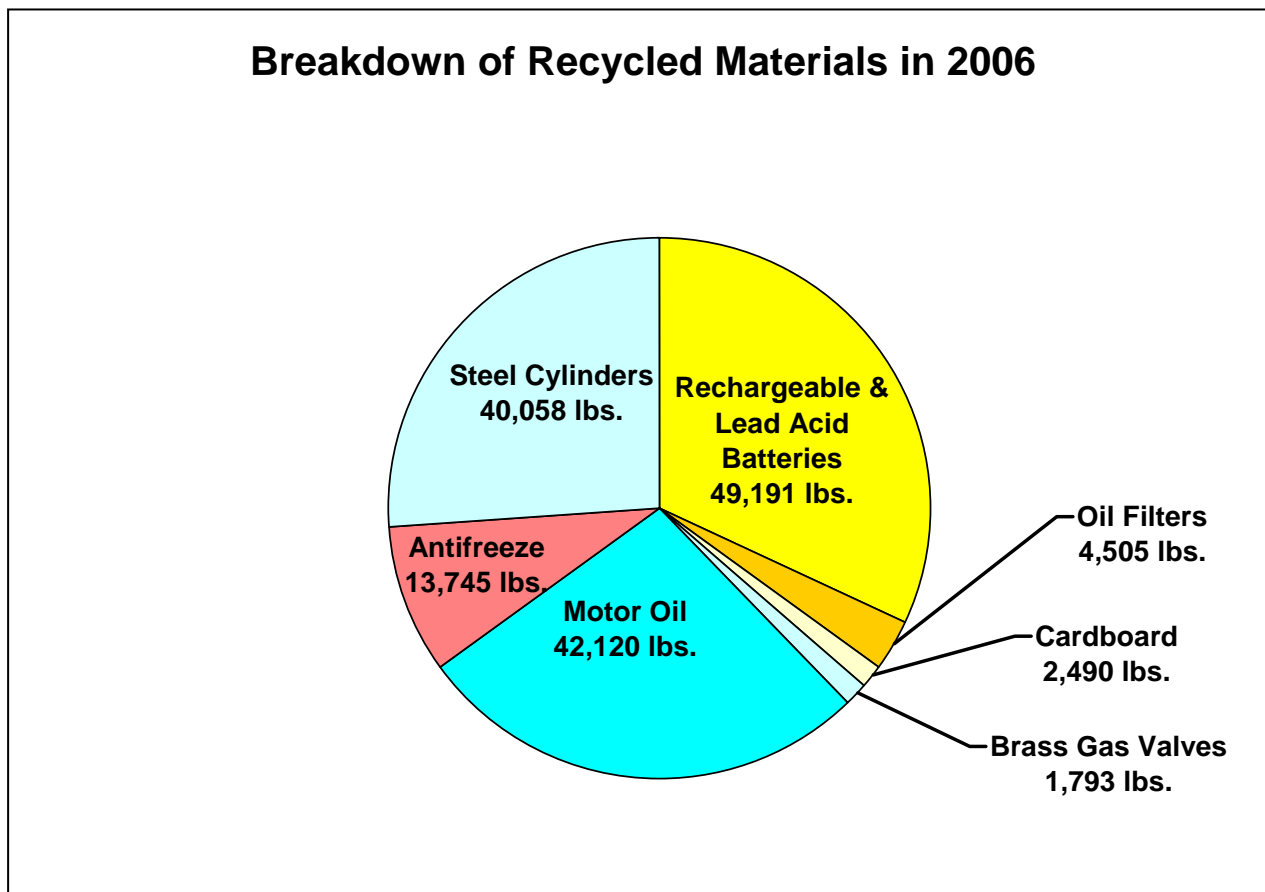


The facility also collected and recycled the following items throughout 2006:

- 44,442 Pounds = 1,400 Lead acid Boat and Auto batteries = \$2,222.10 Revenue
- 42,120 Pounds = 5,200 Gallons of Motor Oil = No Charge
- 40,058 Pounds = High Grade Steel Cylinders = No Charge
- 13,745 Pounds = 1,650 Gallons of Anti freeze = No Charge
- 4,505 Pounds = 2,700 pieces of Crushed steel motor oil filters = No Charge
- 1,793 Pounds = 1,653 pieces of Brass gas cylinder valves = \$1,344.75 Revenue

The facility redirected the following materials to the MCRC or Global for disposal or recycling:

- 11,000 Pounds of ID 10 Trash, = No Charge (MCRC)
- 5,577 #1 and #2 Plastic Containers to MCRC = No Charge (Global)
- 2,490 Pounds of Corrugated Cardboard, = Fluctuating Revenue to MCRC (Global)



Facility personnel attended the following training sessions in 2006 and covered absences for Department employees:

- ❖ Fit Testing
- ❖ DEP Hazardous Waste Handler Seminar
- ❖ Forklift Training
- ❖ Emergency Response to Chlorine Emergencies
- ❖ SCBA Update

- ❖ Right to Know-Initial, Right to Know-Refresher
- ❖ Blood Borne Pathogens
- ❖ Communications Training Skills
- ❖ CPR Refresher
- ❖ Defensive Driving Course
- ❖ First Responder EMT Refresher
- ❖ OSHA Hazmat Refresher
- ❖ Confined Space Training
- ❖ WMD Haz Mat Technician for Radiological Incidents
- ❖ Management Skills for Supervisors
- ❖ NIMS 700
- ❖ CAMEO Training
- ❖ Monmouth County Health Dept. Haz Mat Drills (8 x throughout the year)
- ❖ WMD Haz Mat Technician Certification
- ❖ NJSP Haz Mat Technician 80 Hr.
- ❖ OSHA Hazardous Waste Operations and Emergency Response 40 Hr.
- ❖ OSHA Hazardous Waste Operations and Emergency Response 8 Hr.