

Appendix F

1/186 Infantry Organization Maintenance Shop

Baseline Inventory

A baseline inventory is necessary for two reasons. The quantities of waste generation or toxic material use are assessed to target specific waste streams, materials being used, or activities for pollution prevention. Annual reports on waste generation and toxic material use will be compared with the baseline inventories to evaluate the effectiveness of pollution prevention projects and to monitor progress in achieving the 1/186 Infantry Organizational Maintenance Shop's.

Some categories overlap (e.g., solvent wastes, waste acids and bases, and EPA Toxic 17 wastes also will appear as hazardous waste; some of the EPA Toxic 17 wastes can be solvents). The use of the baseline inventory will assist in developing projects for meeting the pollution prevention goals of the 1/186 Infantry Organizational Maintenance Shop's.

BASELINE INVENTORY FOR 1/186TH INF OMS 1994				
Waste Type	RCRA Waste Code(s)	Waste (lbs)	% of Total Waste	Process or Operation Generating Waste
Solvent	D001, D006	65	100	Parts cleaning

1/186th INF OMS POLLUTION PREVENTION GOALS				
Waste Type	Subtype	Reduction Goal (%)	Baseline Year	Target Year
Hazardous Waste	Cleaning solvents	50	1994	1999
Solid Waste Ozone Depleting Chemical Use	Class I ODS	100	1994	2003
TRI Reportable Releases		50%	1994	1999

Pollution Prevention Opportunity Assessment

The PPOA enables the 1/186 Infantry Organizational Maintenance Shop to examine the alternatives available for pollution prevention. The modules identify the waste stream and the operations from which the stream may be generated, describe the process, and present several pollution prevention alternatives. Each alternative is described along with its advantages and disadvantages.

Assessment modules that apply to 1/186 Infantry OMS are:

- Application of Sealant/Adhesives
- Battery Acids/Lead-Acid Batteries from Vehicle Maintenance
- Cleanup Solvents from Painting
- Electronic Equipment Battery Changeout
- Halon Use in Fire Extinguishers
- Manual Surface Preparation Using Rags
- Refrigerants (CFCs) from Refrigeration, Cooling-Equipment Maintenance
- Solid Waste
- Used Antifreeze from Vehicle Maintenance
- Used Oil Filters from Vehicle Maintenance
- Used Oil from Vehicle Maintenance
- Vehicle and Aircraft Washing
- VOC Emissions from Painting
- Waste Solvents from Parts Cleaning

➤ **Past Pollution Prevention Projects**

The status of past pollution prevention projects are discussed. Each project is described to include location implemented, implementation date, targeted waste type (e.g., hazardous waste, EPA Toxic 17 Wastes, ozone-depleting chemical), actual waste, actual implementation costs, actual savings, and funding sources.

Project Title: Parts Cleaning and Washing

Description: Installation of a ZEP parts cleaner has significantly reduced the generation because the solvent is never removed from the parts washer. Due to evaporation, small quantities of new solvent are added, as required.

Location: 1/186 IN OMS

Implementation Date: 1994

Targeted Waste Type(s): Hazardous Waste/EPA Toxic 17/Solvent Wastes

Waste Reduction: 100%

Implementation Costs: \$5,000.00

Savings: Elimination of the waste stream has saved the installation \$2,400.00 per year in reduced waste disposal cost.

Funding Source: NGB

Project Title: Battery Acid/Lead Acid Batteries from Vehicle Maintenance

Description: Lead Acid Batteries are being exchanged on a one-for-one basis with Sterling Battery Company.

Location: 1/186 IN OMS

Implementation Date: 1996

Targeted Waste Type(s): Hazardous Wastes, EPA Toxic 17

Waste Reduction: 100%

Implementation Costs: N/A

Savings: Elimination of the waste stream has saved the installation \$2,870.00 per year in reduced waste disposal cost.

Funding Source: N/A

Project Title: Oil Filter Crusher

Description: The Oberg Model P-300 filter crusher is used to eliminate the amount of oil left in the filter after it is removed from service. The P-300 deposits the crushed filters directly into a transport drum for disposal. EPR number OR00099003.

Location: 1/186th OMS

Implementation Date: 1998

Targeted Waste Type(s): Hazardous Chemicals listed on EPA's 17 ind. Toxics List

Waste Reduction: Recovery of metal by eliminating the oil from the element allowing the metal to be recycled, and keeping the oil saturated filters out of the landfill.

Implementation Costs: 1 unit @ \$3,988.80

Savings: \$1,935.50 annually per unit.

Funding Source: 1998 Year-end funds

Project Title: ODS Elimination Water Coolers

Description: Eliminate all appliances and equipment that use ozone-depleting substances. These include fire extinguishers using Halon and refrigeration systems containing CFCS. EPR number OR00099006

Location: 1/186 IN OMS

Implementation Date: 2000

Targeted Waste Type(s): Refrigerants-*R11, R12, R22 etc.*

Waste Reduction: Ozone Depleting Substances

Implementation Costs: \$2,459.44

Savings:

Funding Source: 2000 year end funds

Project Title: Aerosol Can Depressurizer

Description: A Lab Safety Aerosol Can Depressurizer that relieves the pressure in aerosol cans and allows the residual contents to be collected for disposal. With the contents thoroughly depleted the can may be recycled as scrap metal. EPR number OR 00099004.

Location: 1/186 IN OMS

Implementation Date: 2000

Targeted Waste Type(s): Solid Waste (metal), Reactive Hazardous Waste generic.

Waste Reduction: Metal, Reactive HW

Implementation Costs: \$577.00 each

Savings: \$1,350.00 each

Funding Source: 2000 year end funds.

Project Title: Aerosol Can Depressurizer

Description: A Lab Safety Aerosol Can Depressurizer that relieves the pressure in aerosol cans and allows the residual contents to be collected for disposal. With the contents thoroughly depleted the can may be recycled as scrap metal. EPR number OR 00099004.

Location: 1/186 IN OMS

Implementation Date: 2001

Targeted Waste Type(s): Solid Waste (metal), Reactive Hazardous Waste generic.

Waste Reduction: Metal, Reactive HW

Implementation Costs: \$577.00 each

Savings: \$1,350.00 each

Funding Source: 2001 year end funds.

Project Title: Secondary Containment Structures

Description: As required by the SPCCP for this facility and 40 CFR 112.3 and OAR 340-047-0160. A secondary containment structure is needed to be built to house the fuel hauling vehicles that are located at this facility. EPR OR12000001.

Location: OMS

Implementation Date: 2002

Targeted Waste Type(s): Petroleum's, Oils and Lubricants

Waste Reduction: Soil contamination.

Implementation Costs: \$80,000

Savings:

Funding Source: NGB

➤ Current Pollution Prevention Projects

The status of currently funded pollution prevention projects are discussed next. Each project will be described to include location to be implemented, anticipated implementation date, targeted waste type (e.g., hazardous waste, EPA Toxic 17 Wastes, ozone-depleting chemicals), expected waste reduction, estimated implementation costs, estimated savings, and funding sources.

Project Title: Propane Cylinder Recycling System

Description: The New Pig ProSolve system safely removes the valve stem so canister can be recycled as scrap steel. Activated carbon filters help remove Volatile Organic Compounds from propellant. EPR number OR00000001.

Location:

Implementation Date:

Targeted Waste Type(s): Reactive hazardous waste - generic compressed gas, Volatile Organic compounds.

Waste Reduction: Metal, Reactive HW

1/186 th INF OMS POLLUTION PREVENTION ACHIEVEMENT REPORT FOR 1997					
Waste Type	Subtype	Reduction Goal (%)	Baseline 1994 (lbs./year)	Current (lbs./year)	Achieved to Date (%)
Solid Waste	Cardboard				
Hazardous Waste	Solvent	50	65	320	
Ozone Depleting Chemical Use	Class I ODS	100			

1/186 th INF OMS POLLUTION PREVENTION ACHIEVEMENT REPORT FOR 1998					
Waste Type	Subtype	Reduction Goal (%)	Baseline 1994 (lbs./year)	Current (lbs./year)	Achieved to Date (%)
Solid Waste	Cardboard				
Hazardous Waste	Solvent	50	65		
Ozone Depleting Chemical Use	Class I ODS	100		48	

1/186 th INF OMS POLLUTION PREVENTION ACHIEVEMENT REPORT FOR 1999					
Waste Type	Subtype	Reduction Goal (%)	Baseline 1994 (lbs./year)	Current (lbs./year)	Achieved to Date (%)
Solid Waste	Cardboard				
Hazardous Waste	Solvent	50	65		
Ozone					

Depleting Chemical Use	Class I ODS	100		48	
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1/186th INF OMS POLLUTION PREVENTION ACHIEVEMENT REPORT FOR 2000					
Waste Type	Subtype	Reduction Goal (%)	Baseline 1994 (lbs./year)	Current (lbs./year)	Achieved to Date (%)
Solid Waste	Cardboard				
Hazardous Waste	Solvent	50	65		
Ozone Depleting Chemical Use	Class I ODS	100			

1/186th INF OMS POLLUTION PREVENTION ACHIEVEMENT REPORT FOR 2001					
Waste Type	Subtype	Reduction Goal (%)	Baseline 1994 (lbs./year)	Current (lbs./year)	Achieved to Date (%)
Solid Waste	Cardboard				
Hazardous Waste	Solvent	50	65		
Ozone Depleting Chemical Use	Class I ODS	100			