Appendix K
141st SPT BN OMSS

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 141st SPT BN Organizational Maintenance Sub-Shop pollution prevention goals.

BASELINE INVENTORY FOR 141st SPT BN Organizational Maintenance Sub-Shop 1994				
Waste Type	**RCRA Waste Code(s)**	**Waste (lbs)**	**% of Total Waste**	**Process or Operation Generating Waste**
Petroleum Naphtha	D001	207	6	Parts Cleaning
Waste Paint	D001, D008	433	14	Painting Operations
Potassium Hydroxide-Mercury	D009	114	3	Battery Changeout
Coating Solution	D001	19	.06	Vehicle Maintenance
Magnesium Salts Barium, Chromium	D005, D007	1240	40	Battery Changeout
Chromium Filters	D007	153	5	NBC Training
Lithium Batteries	D001, D003	882	28	Battery Changeout

POLLUTION PREVENTION GOALS				
Waste Type	**Subtype**	**Reduction Goal (%)**	**Baseline Year**	**Target Year**
Hazardous Waste	Petroleum Naphtha	100	1994	1995
Hazardous Waste	Waste Paint	100	1994	1995
Hazardous Waste	Potassium Hydroxide-Mercury	100	1994	1995
Hazardous Waste	Coating Solution	100	1994	1995
Hazardous Waste	Magnesium Salts Barium, Chromium		1994	
Hazardous Waste	Chromium Filters		1994	
Hazardous Waste	Lithium Batteries		1994	
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 141st SPT BN OMSS to examine the alternatives available for pollution prevention. The modules identify the waste stream and the operation 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 141st SPT BN OMSS are:

Battery Acids/Lead-Acid Batteries from Vehicle Maintenance
Electronic Equipment Battery Changeout
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

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: 141 SPT BN OMSS
Implementation Date: 1994
Targeted Waste Type(s): Hazardous Waste/EPA Toxic 17/Solvent Wastes
Waste Reduction: 100%
Implementation Costs: $5000.00
Savings: Elimination of the waste stream has saved the installation $2400.00 per year in reduced waste disposal cost.
Funding Source: AGI-EPR

Project Title: Battery Acid/Lead from vehicle maintenance
Description: Lead Acid batteries are being exchanged on a one-for-one basis with Sterling Battery Company
Location: 141st SPT BN OMSS
Implementation Date: 1996
Targeted Waste Type(s): Hazardous wastes EPA Toxic 17
Waste Reduction: 100%
Implementation Costs: N/A
Savings:
Funding Source:

Project Title: Cardboard Recycling
Description: Cardboard is collected in a bin provided by an off-site vendor for pickup and reclamation.
Location: 141st SPT BN OMSS
Implementation Date: 1996
Targeted Waste Type(s): Solid Waste
Waste Reduction: 80%
Implementation Costs: N/A
Savings:
Funding Source: N/A

Project Title: Antifreeze Reclamation

Description: Used antifreeze is collected and picked up at the activity location by an outside vendor.
Location: 141st SPT BN OMSS
Implementation Date: September 1997
Targeted Waste Type(s): Ethylene Glycol
Waste Reduction: Hazardous waste
Implementation Costs: None
Savings: $2,536.00.
Funding Source: N/A

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: 141 SPT BN OMSS
Implementation Date: 1999
Targeted Waste Type(s): Refrigerants-*R11*, *R12*, *R22 etc.*
Waste Reduction: Ozone Depleting Substances
Implementation Costs: $2,496.00
Savings:
Funding Source: 1999 year end funds.

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: 141 SPT BN OMSS
Implementation Date: 2000
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 units @ $3,988.80 ea. Total Investment $3,988.80
Savings: $1,935.50 annually per unit. Total expected annual savings $1,935.50.
Funding Source: 2000 Year end funds

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: 141st SPT BN OMSS
Implementation Date: 2001
Targeted Waste Type(s): Reactive hazardous waste - generic compressed gas, Volatile Organic Compounds.
Waste Reduction: Metal, Reactive HW

Implementation Costs: $697.03 ea
Savings: $5,112.00
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 OR16000001.
Location: OMS
Implementation Date: 2002
Targeted Waste Type(s): Petroleum's, Oils and Lubricants
Waste Reduction: Soil contamination.
Implementation Costs: $149,650
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.

➢ Future Pollution Prevention Projects

The status of proposed pollution prevention projects is 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 saving, and funding sources.

ECONOMIC ANALYSIS SUMMARY
FOR
FUTURE POLLUTION PREVENTION PROJECTS

Polluting Process	P2 Opportunity	Investment Cost ($)	Net Annual Savings ($)	Payback Period (Years)	Net Present Value of Operation ($)
Safety Kleen	Solvent Waste Station Purchase and Modification	198,500	(5,841)	No Payback	(243,603)
Safety Kleen	Aqueous Cleaner with Jetwasher	701,050	44,639	15.7	(356,345)
Vehicle Washing Washrack	Wash rack sludge Oil/Water Separator	45,000			

POLLUTION PREVENTION IMPLEMENTATION PLAN FOR FUTURE PROJECTS							
Project Title	**Location**	**Waste Type**	**Reduction Expected (lbs/year)**	**Estimated Cost($)**	**Estimated Savings ($/yr)**	**Expected Implement Date**	**EPR Status**
Cardboard Baler	Recycling Center	Solid Waste	400,000	99,000	30,000	CY95	Entered
Vehicle Washing Washrack	OMS	Hazardous					

141st SPT BN OMSS POLLUTION PREVENTION ACHIEVEMENT REPORT FOR 1997					
Waste Type	**Subtype**	**Reduction Goal (%)**	**Baseline 1994 (lbs./year)**	**Current (lbs./year)**	**Achieved to Date (%)**
Hazardous Waste	Petroleum Naphtha	100	207		
Hazardous Waste	Waste Paint	100	433		
Hazardous Waste	Potassium Hydroxide-Mercury	100	114		
Hazardous Waste	Coating Solution	100	19		
Hazardous Waste	Magnesium Salts Barium, Chromium		1240		
Hazardous Waste	Chromium Filters		153		
Hazardous Waste	Lithium Batteries		882		
Ozone Depleting Substances	CFCs *(refrigerants)* and Fire Suppressants *(Halons)*	100			
Solid Waste	Cardboard	85			

141st SPT BN OMSS
POLLUTION PREVENTION ACHIEVEMENT REPORT FOR 1998

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Hazardous Waste	Petroleum Naphtha	100	207		
Hazardous Waste	Waste Paint	100	433		
Hazardous Waste	Potassium Hydroxide-Mercury	100	114		
Hazardous Waste	Coating Solution	100	19		
Hazardous Waste	Magnesium Salts Barium, Chromium		1240		
Hazardous Waste	Chromium Filters		153		
Hazardous Waste	Lithium Batteries		882		
Ozone Depleting Substances	CFCs *(refrigerants)* and Fire Suppressants *(Halons)*	100		48	
Solid Waste	Cardboard	85			

141st SPT BN OMSS
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Hazardous Waste	Waste Paint	100	433		
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Solid Waste	Cardboard	85			

141st SPT BN OMSS
POLLUTION PREVENTION ACHIEVEMENT REPORT FOR 2000

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Hazardous Waste	Waste Paint	100	433		
Hazardous Waste	Potassium Hydroxide-Mercury	100	114		
Hazardous Waste	Coating Solution	100	19		
Hazardous Waste	Magnesium Salts Barium, Chromium		1240		
Hazardous Waste	Chromium Filters		153		
Hazardous Waste	Lithium Batteries		882		
Ozone Depleting Substances	CFCs *(refrigerants)* and Fire Suppressants *(Halons)*	100			
Solid Waste	Cardboard	85			

141st SPT BN OMSS POLLUTION PREVENTION ACHIEVEMENT REPORT FOR 2001					
Waste Type	**Subtype**	**Reduction Goal (%)**	**Baseline 1994**	**Current (lbs./year)**	**Achieved to Date (%)**

			(lbs./year)		
Hazardous Waste	Petroleum Naphtha	100	207		
Hazardous Waste	Waste Paint	100	433		
Hazardous Waste	Potassium Hydroxide-Mercury	100	114		
Hazardous Waste	Coating Solution	100	19		
Hazardous Waste	Magnesium Salts Barium, Chromium		1240		
Hazardous Waste	Chromium Filters		153		
Hazardous Waste	Lithium Batteries		882		
Ozone Depleting Substances	CFCs *(refrigerants)* and Fire Suppressants *(Halons)*	100			
Solid Waste	Cardboard	85			