

## Appendix J AASF #1

### 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 Army Aviation Support Facility's pollution prevention goals.

<b>BASELINE INVENTORY FOR AASF #1 1994</b>				
Waste Type	RCRA Waste Code(s)	Waste (lbs)	% of Total Waste	Process or Operation Generating Waste
Petroleum Naphtha	D001	1144	100	Parts Cleaning

<b>AASF #1 POLLUTION PREVENTION GOALS</b>				
Waste Type	Subtype	Reduction Goal (%)	Baseline Year	Target Year
Hazardous Waste	Petroleum Naphtha	80%	1994	1997
Solid Waste	Cardboard	80%	1994	1996
Ozone Depleting Chemical Use	Class I and Class II	40% 60%	1994	1997 2003
TRI Reportable Releases		50%	1994	1999

### Pollution Prevention Opportunity Assessment

The PPOA enables the Army Aviation Support Facility 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 the AASF are:

Electronic Equipment Battery Changeout  
 Halon Use in Fire Extinguishers  
 Manual Surface Preparation Using Rags  
 Refrigerants (CFCs) from Refrigeration, Cooling-Equipment Maintenance  
 Solid Waste  
 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 Washer

**Description:** Switched from Safety-Kleen washers to ZEP washers

**Location:** Hangar #1 and #2

**Implementation Date:** Spring 1995

**Targeted Waste Type(s):** Solvents

**Waste Reduction:** 80%

**Implementation Costs:** \$5,000

**Savings:** \$2,800

**Funding Source:** AGI-ENV

**Project Title:** Removal of old water cooler

**Description:** Replaced old water cooler with a non-ODS cooler.

**Location:** Hangar #1

**Implementation Date:** July 1996

**Targeted Waste Type(s):** ODS

**Waste Reduction:**

**Implementation Costs:**

**Savings:**

**Funding Source:**

**Project Title:** Cardboard Recycling

**Description:** Implemented a cardboard recycling center in Hangar #2

**Location:** Hangar #2

**Implementation Date:** 1995  
**Targeted Waste Type(s):** Cardboard  
**Waste Reduction:** Landfill Solid Waste  
**Implementation Costs:** None  
**Savings:**  
**Funding Source:**

**Project Title:** Replacement air conditioners  
**Description:** Replaced old air conditioners that used ODS with non-ODS conditioners  
**Location:** Hangar #2 Avionics  
**Implementation Date:** May 1997  
**Targeted Waste Type(s):** Ozone Depleting Substances  
**Waste Reduction:**  
**Implementation Costs:**  
**Savings:**  
**Funding Source:**

**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:** Hangar #2  
**Implementation Date:** 1998  
**Targeted Waste Type(s):** Solid Waste (metal), Reactive Hazardous Waste generic  
**Waste Reduction:** Metal, Reactive HW  
**Implementation Costs:** \$577.00  
**Savings:** \$1,350.00  
**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:** AASF#1  
**Implementation Date:** 1999  
**Targeted Waste Type(s):** Refrigerants-R11, R12, R22 etc.  
**Waste Reduction:** Ozone Depleting Substances  
**Implementation Costs:** \$5,224.08  
**Savings:**  
**Funding Source:** 1999 year end funds.

**Project Title:** Weapons Cleaning/Parts Washer System IT48WC

**Description:** The Inland Technology IT-48WC Weapons Cleaning System NSN 6850-01-397-2539 is a high volume usage system that recycles the Breakthrough solvent continuously through a high efficiency filtration system. EPR number OR00099002.

**Location:** AASF #1

**Implementation Date:** 2000

**Targeted Waste Type(s):** Other Hazardous Materials

**Waste Reduction:** 1,1,1-Trichloroethane

**Implementation Costs:** \$2,476.00

**Savings:** \$2,031.00

**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:** AASF #1

**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:** 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:** AASF#1

**Implementation Date:** 2001

**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 ea.

**Savings:** \$1,935.50 annually per unit.

**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 OR20500001.

**Location:** Airfield refueling and C-23 Hangar

**Implementation Date:** 2002

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

**Waste Reduction:** Soil contamination.

**Implementation Costs:** \$128,774

**Savings:**

**Funding Source:**

### ➤ **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.

**Project Title:** Replacement of NiCad Batteries

**Description:** Replace NiCad batteries with lead/acid gel batteries.

**Location:** AASF#1

**Implementation Date:** 2003

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

**Waste Reduction:** Ozone Depleting Substances

**Implementation Costs:** 75,600

**Savings:**

**Funding Source:** AGI-EPR

<p style="text-align: center;"><b>ECONOMIC ANALYSIS SUMMARY</b> <b>FOR</b></p>
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<b>FUTURE POLLUTION PREVENTION PROJECTS</b>					
<b>Polluting Process</b>	<b>P2 Opportunity</b>	<b>Investment Cost (\$)</b>	<b>Net Annual Savings (\$)</b>	<b>Payback Period (Years)</b>	<b>Net Present Value of Operation (\$)</b>
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)
A/C Washing	Closed loop System	>100,000			
Replacement of NiCad Batteries	Use Lead-Acid gel batteries				

<b>POLLUTION PREVENTION IMPLEMENTATION PLAN FOR FUTURE PROJECTS</b>							
<b>Project Title</b>	<b>Location</b>	<b>Waste Type</b>	<b>Reduction Expected (lbs/year)</b>	<b>Estimated Cost(\$)</b>	<b>Estimated Savings (\$/yr)</b>	<b>Expected Implement Date</b>	<b>EPR Status</b>
Cardboard Baler	Recycling Center	Solid Waste	400,000	99,000	30,000	CY95	Entered
Wash pad replacement	adjacent to Hangar #1	Petroleum products		>100,000		CY03	Entered
Use Lead-Acid gel batteries	AASF	Universal Waste					Pending

<b>ARMY AVIATION SUPPORT FACILITY'S POLLUTION PREVENTION ACHIEVEMENT REPORT FOR 1997</b>					
<b>Waste Type</b>	<b>Subtype</b>	<b>Reduction Goal (%)</b>	<b>Baseline 1994 (lbs./year)</b>	<b>Current (lbs./year)</b>	<b>Achieved to Date (%)</b>
Hazardous Waste	Petroleum Naphtha	80%	1144	30	
Solid Waste	Cardboard	80%			
Ozone Depleting Chemical Use	Class I ODS	100%			

<b>ARMY AVIATION SUPPORT FACILITY'S POLLUTION PREVENTION ACHIEVEMENT REPORT FOR 1998</b>					
<b>Waste Type</b>	<b>Subtype</b>	<b>Reduction Goal (%)</b>	<b>Baseline 1994 (lbs./year)</b>	<b>Current (lbs./year)</b>	<b>Achieved to Date (%)</b>
Hazardous Waste	Petroleum Naphtha	80%	1144	390	
Solid Waste	Cardboard	80%			
Ozone Depleting Chemical Use	Class I ODS	100%		112	

<b>ARMY AVIATION SUPPORT FACILITY'S POLLUTION PREVENTION ACHIEVEMENT REPORT FOR 1999</b>					
<b>Waste Type</b>	<b>Subtype</b>	<b>Reduction Goal (%)</b>	<b>Baseline 1994 (lbs./year)</b>	<b>Current (lbs./year)</b>	<b>Achieved to Date (%)</b>
Hazardous Waste	Petroleum Naphtha	80%	1144		
Solid Waste	Cardboard	80%			
Ozone Depleting Chemical Use	Class I ODS	100%			

<b>ARMY AVIATION SUPPORT FACILITY'S</b>
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<b>POLLUTION PREVENTION ACHIEVEMENT REPORT FOR 2000</b>					
<b>Waste Type</b>	<b>Subtype</b>	<b>Reduction Goal (%)</b>	<b>Baseline 1994 (lbs./year)</b>	<b>Current (lbs./year)</b>	<b>Achieved to Date (%)</b>
Hazardous Waste	Petroleum Naphtha	80%	1144		
Solid Waste	Cardboard	80%			
Ozone Depleting Chemical Use	Class I ODS	100%			

<b>ARMY AVIATION SUPPORT FACILITY'S POLLUTION PREVENTION ACHIEVEMENT REPORT FOR 2001</b>					
<b>Waste Type</b>	<b>Subtype</b>	<b>Reduction Goal (%)</b>	<b>Baseline 1994 (lbs./year)</b>	<b>Current (lbs./year)</b>	<b>Achieved to Date (%)</b>
Hazardous Waste	Petroleum Naphtha	80%	1144		
Solid Waste	Cardboard	80%			
Ozone Depleting Chemical Use	Class I ODS	100%			