



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 49TH FIGHTER WING (ACC)
HOLLOMAN AIR FORCE BASE, NEW MEXICO

ENTERED



A. David Budak
Deputy Base Civil Engineer
550 Tabosa Avenue
Holloman AFB NM 88330-8458

New Mexico Environment Department
Hazardous Waste Bureau
Attn: Mr. James Bearzi
2905 Rodeo Park Drive East, Bldg. 1
Santa Fe NM 87505

Dear Mr Bearzi

As facility owner of the permitted Treatment, Storage, and Disposal Facility, Holloman AFB certifies, as required in 40 CFR 264.73(b)(9), that a program to reduce the volume and toxicity of hazardous waste is in place. This letter and attachments serve to satisfy the year-end requirement according to Section II.D., Waste Minimization of the Resource Conservation and Recovery Act Hazardous Waste Facility Operating Permit, EPA ID No. NM6572124422.

Attached is the Fiscal Year 2009 Holloman AFB Waste Minimization Program for the period of 1 Oct 08 through 30 Sep 09. This waste minimization program includes the 49th Wing Environmental Guidance Memorandum and a matrix of waste streams produced by Holloman AFB operations.

If you have any questions, please contact Ms. Geraldine Arellano of our Asset Management Flight at (575) 572-3931.

Sincerely

A. DAVID BUDAK, YF-03, DAFC

Attachments:
Fiscal Year 2009 Holloman AFB Waste Minimization Program

Fiscal Year 2009 Holloman AFB Waste Minimization Program

Waste Minimization Plan Objective

Any written policy or statement that outlines the goals, objectives, and/or methods for source reduction and recycling of hazardous waste at the facility.

Any employee training or incentive program designed to identify and implement source reduction and recycling opportunities for all hazardous/mixed waste.

Any source reduction and/or recycling measures implemented in the last five years or planned for the near future.

Holloman AFB Fiscal Year 2009 Actions

A written Wing Environmental Guidance Memorandum that includes the entire base signed by the Holloman AFB 49th Fighter Wing Commander. Copy attached.

Employee training or incentive programs include participation in:

- Annual Air Force Environmental Training Symposium
- Quarterly Air Force Internal Environmental Compliance Assessment Management Program
- Ongoing Pollution Prevention Opportunity Assessments
- Monthly Hazardous Waste Management Training

Source reduction measures include:

- Aqueous parts washers
- Introduction of environmentally friendly cleaning compound (EP-921) to replace solvent used in paint gun cleaners
- Introduction of special paint spray guns that reduce the amount of paint and solvent use for small painting operations
- Procurement of additional drum compactors for solid waste compaction
- Recovery of silver from waste generated by maintenance operations on the new F-22 aircraft

Planned source reduction/recycling measures include:

- Use of premoistened solvent wipes to reduce solvent use for cleaning where solvent use is required to meet Technical Order requirements for aircraft maintenance

An itemized list of dollar amounts of capital expenditures (plant and equipment) and operating costs devoted to source reduction and recycling of hazardous waste.

- Through the end of FY2009, 12,951 pounds of hazardous waste were recycled through SafetyKleen at an operating cost of over \$48,000.
- In FY2009, 5 drum compactors were purchased at a cost of \$14,854.

Factors that have prevented implementation of source reduction and/or recycling.

Recycling markets for hazardous waste are dependent on types of waste, quantity and distance to nearest recycling facility.

Sources of information on source reduction and/or recycling received at the facility (e.g. local government, trade associations, suppliers, etc.)

Course attendance, online searches and networking with others at the Air Force Environmental Training Symposium, other Air Force Bases, commercial entities through association with the New Mexico Recycling Coalition and Environmental Protection Agency.

An investigation of additional waste minimization efforts that could be implemented at the facility. This investigation shall analyze the potential for reducing the quantity and toxicity of each waste stream through production process change, production reformulation, recycling, and all other appropriate means. The analysis shall include an assessment of the technical feasibility, cost, and potential waste reduction for each option.

Investigation of waste minimization:

- Opportunity Assessments are continued to evaluate waste minimization opportunities
- Review of X-ray operations to determine the feasibility of converting to digital imaging to eliminate use of photograph developer and fixer solution that produce a silver containing hazardous waste
- Coordination efforts are being conducted with other Air Force bases that have established a silver recovery program for the new F-22 aircraft

A flow chart or matrix detailing all hazardous wastes it produces, by quantity and type, including mixed waste, and by building/area and program if consistent with security considerations.

Demonstration of the need to use those processes which produce a particular hazardous waste due to a lack of alternative processes, available technology, or available alternative processes that would produce less volume of toxic waste.

Demonstration of the applicability or inapplicability of the following waste minimization techniques:

- A program that inventories the amount of contaminated lead that exists at the facility
- A program that substitutes steel for lead whenever possible
- A program for coating lead with a strippable coating to prevent its entire contamination, if it is impossible to substitute steel for lead
- A program or bench scale method to decontaminate the contaminated lead
- Use of non-hazardous liquid scintillation cocktail solution
- A program designed to prevent commingling of radioactive waste

Matrix attached. Routine operations at Holloman AFB do not produce mixed waste streams.

The requirements to use processes which produce a particular hazardous waste are driven by our mission (Air Defense of the USA) including operations and maintenance of complex aircraft.

Not Applicable – Operations at HAFB do not produce radioactive contaminated lead

Not Applicable – Routine operations at HAFB do not produce radioactive contaminated lead

Not Applicable – Operations at HAFB do not produce radioactive contaminated lead

Not Applicable – Operations at HAFB do not produce radioactive contaminated lead

Not Applicable – Scintillation cocktail solution is not used at HAFB.

Not Applicable – Routine operations at HAFB does not produce radioactive waste



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NOV 16 2009

HOLLOMANAFBGM90-801

MEMORANDUM FOR DISTRIBUTION A & B

FROM: 49 FW/CC

SUBJECT: Wing Environmental Guidance Memorandum

1. The 49th Fighter Wing is dedicated to protecting the environment through the conservation of our natural resources. This policy requires the support of all stake holders in order for its success. This statement establishes the direction of the 49th Fighter Wing in its efforts to accomplish the huge task of environmental protection.
2. In the process of accomplishing everyday duties, people perform tasks that could potentially affect the environment. Our duty is to provide guidance and leadership to make environmental protection attainable. We must spread the word on programs and policies, and make sure everyone in the organization knows how and why we put so much effort into this area.
3. Our goals are simple, direct and establish clear priorities. We will comply with all of the laws and regulations and clean up areas where our predecessors or we have failed to comply. Commanders must take responsibility for the areas under their supervision and understand the requirements and standards of compliance.
4. As an organization, we must also go several steps beyond compliance. Our Environmental Management System (EMS) is a framework to assess and control operational impact on the environment, continually improve operating procedures, incorporate pollution prevention principles and identify and address new environmental impact. EMS is a management tool for implementing continuous improvement to our operations and not just an environmental program. I challenge every unit in the wing to help reduce our environmental footprint while improving operations.
5. Holloman Air Force Base is a recognized leader in protecting the environment. We have accomplished a great deal in the past and now must look to the future. Preventing pollution from the beginning eliminates environmental non-compliance. Everyone must do his or her part to make this happen.
6. The directions of this memorandum become void after 180 days have elapsed from the date of this memorandum, or upon publication of an Interim Change or rewrite of the affected publication, whichever is earlier.


JEFFREY L. HARRIGAN
Colonel, USAF
Commander

Holloman Air Force Base Hazardous Waste Stream Inventory

Bldg	Shop/Organization	Waste Stream	State	EPA Waste Codes	Lbs Generated
20	Dental Clinic	Excess Amalgam	solid	D009, D011	0
54	Power Production	Used Blast Media	solid	D006	58
149	90-Day	Mercury Batteries	solid	D009	0
		Magnesium Batteries	solid	D005, D007	617
		Ni-Cad Batteries (wet filled)	solid	D002, D006	61
		Lithium Batteries	solid	D001, D003	193
		Spent High and Low Pressure Sodium Lamps	solid	D003, D008, D009	10
		Mercury thermometers, mercury bulbs, rags, absorbent, debris	solid	D009	0
195	Allied Trades	Paints and solvents	liquid	D001, D006, D035	0
		Rags & debris contaminated with paint, solvent	solid	F005	0
198	Vehicle Maintenance	Gasoline fuel filters and absorbents	solid	D018	0
280	ECS Shop	Rags, absorbent, debris	solid	D006	0
280	Machine Shop	Rags, absorbent and debris	solid	D006	0
281	Structural Repair/Sheet Metal	Rags, absorbent, debris, metal shavings	solid	D006	86
282	Corrosion Control	Rags and debris	solid	D006, F002, F005	731
		Paint Booth Filters	solid	D007	238
		Waste paint related material	liquid	D001, D006, D007, F003, F005	397
		Bead Blast Filters	solid	D006	0
		Used blasting media	solid	D006, D007	688
283	Aero Club	Rags, absorbent, debris	solid	D006, D008	0
286	Aircraft Repair	Parts Washer Fluid	liquid	D006	2830
		Waste paints, lubricants	liquid	D001, D007, D035, D039	0
		Rags, absorbent, paper, debris	solid	D006, D007, F003, F005	47
		Used Solvent Naphtha	liquid	D001, D006	3164
		Used SVB-175 Universal Cleaner	liquid	D006, D008	1723
294	Aircraft Maint/Paint Booth	Waste paint related materials	liquid	D001, D035	0
		Mixed used paint	liquid	D001, D007, D035, F002, F005	443
		Rags/Debris	solid	D007, F002, F005	91
300	Propulsion	Vapor blast media and debris	liquid	D007	725
		Fluid carbon remover	liquid	D006	0
		Used fingerprint remover	liquid	D001	0
		Rags and Debris with Acetone	solid	F003	0
		Ultrasonic water solution from parts washer	liquid	D006	402
		Water from Small Blue Parts Washer	liquid	D006, D007	0
309	AGE Support	Jet Wash Water	liquid	D006	2008
		JP-8 & Gasoline Filters	solid	D018	153
314	Ground Equipment Shop	Waste paints, lubricants	liquid	D001, D007, D035, D039	0
		Rags, absorbents and debris	solid	F005	345
315	Fuel Shop	Rags, absorbent, debris	solid	D006, F005	0
500	Hydraulics Shop	Rags, Absorbents, Debris	solid	D006	0
576	Survival	Rags, absorbent, coveralls, debris, PPE	solid	F003, F005	0

578	T-38 Support	Rags & Debris	solid	D006	1156
701	Fuels	Absorbent Pads with Unleaded Fuel	solid	D001, D018	4
806	HAZMART	Paints, solvents, silicones, adhesives, sealants	liquid	D001, D035, D039	856
		Part 1 of polyurethane coating kits (Part 1 of 2)	liquid	D001, D035	934
		Part 2 of polyurethane coating kits.	liquid	D001, D003, D010, D035	327
		Expired Shelf Life	liquid	D001, D002, D003, D005, D007, D035	1401
		Expired Shelf Life	solid	D035	11
		Expired Shelf Life	semi-solid	D002	8
		Material to Waste	liquid	D001	84
		Material to Waste	solid	D007	11
830	Paint Barn	Used plastic blast media and/or blaster filters	solid	D006, D007	3203
		Paint booth filters, rags, and painting debris	solid	D007, F003, F005	2501
		Paint Related Material	liquid	D001, D035, F003, F005	462
842	Optics	Rags with solvent and debris	solid	F001	130
844	Motor Pool	Rags, Fuel Filters, Debris	solid	F002, F003	303
		Waste Gasoline	liquid	D001, D018	39
855	EOD	Metal Fragments	solid	D006	3597
856	Paint Shop	Paints and solvents mixture	liquid	D001, D035, F003, F005	113
		Rags, debris with paint and solvent	solid	F003, F005	0
868	Fuel System Repair	Rags, absorbent, sealant, debris	solid	F003, F005	0
883	Armament	Rags, absorbent, debris, sanding disks, PPE, Cover	solid	D006	104
898	MARS	Rags and painting debris	solid	F003, F005	2932
901	Vehicle Maintenance	Gasoline fuel filters and absorbents	solid	D018	0
		Waste Gasoline (Unleaded) Fuel	liquid	D001, D018	417
903	Corrosion Control	Paint dust and blast media	solid	D006, D008	0
		Bead Blast Filters	solid	D006	0
		Waste paint related material	liquid	D001, F005	436
		Rags, paint booth filters & paper, debris	solid	D001, D004, D007, F005	372
1079	Aircraft Maintenance	Used Grease	solid	D006	0
1178	Paint Shop	Waste Paint & Solvents	liquid	D001, D006, D007, D008, F003, F005	456
		Rags	solid	F003, F005	168
1181	HS Test Track	Rags, debris with solvent	solid	F003	116
5005	RAMS	Waste Paint	liquid	D001, D035, F003, F005	0
		Rags, absorbent, debris	solid	F003, F005	0
5018	RAMS Maintenance	Drained unleaded fuel filters, absorbent	solid	D018	0
		Waste paint	liquid	D001, D008, D010, D018, F003, F005	0
		Rags, swabs, absorbent, debris	solid	D007, F001	0
7000	Vehicle Maintenance	Drained fuel filters, absorbent	solid	D018	0
		Waste paint	liquid	D001, D007, D008, D010, D035, F003, F005	0
		Rags, absorbent, debris	solid	D006, F001, F005	0
7000	Model Shop	Waste Paint and Solvent	liquid	D001, F003, F005	0
		Rags, absorbent, debris	solid	F003, F005	0

9999	Miscellaneous	Expired Shelf Life	solid	D001, D007	80
		Expired Shelf Life	liquid	D001, D002, D009	786
		Blast Media	solid	D006, D007, D008	273
		Spent developer and fixer solution	liquid	D011	105
		Thermal Battery Type AOC	solid	D003, D005, D007	251
Total for 1 October 2008 through 30 September 2009					36,646