

N42237.AR.000383  
NSB KINGS BAY  
5090.3a

LETTER REGARDING HAZARDOUS WASTE FACILITY PERMIT MODIFICATION NSB KINGS  
BAY GA  
9/11/1995  
GEORGIA DEPARTMENT OF NATURAL RESOURCES

Georgia Department

205 Butler Street, S. E.,

31547.000

19.02.00.0013

ENVIRONMENTAL PROTECTION DIVISION

Harold F. Reheis, Director

404-656-2833

September 11, 1995

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

Z 369 540 027

Commanding Officer  
Naval Submarine Base  
1063 USS Tennessee Avenue  
Kings Bay, Georgia 31547

Re: Hazardous Waste Facility Permit Modification

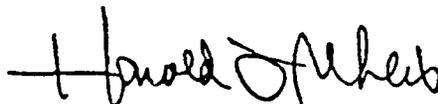
Dear Sir:

Your application for modification to the Hazardous Waste Facility Permit for the Naval Submarine Base Kings Bay has been reviewed and approved in accordance with the provisions of Section 391-3-11-.11(7)(d) of the Georgia Rules for Hazardous Waste Management. Enclosed is your copy of the cover page and the one changed page of the Permit, Number HW-014(S)(2), amended as requested. The expiration date of the permit remains as originally issued, September 29, 1999.

The public notice period expired without comment from the public, so no changes have been made to the permit beyond your request.

If you have questions or need further information, please contact Billy Hendricks at (404)656-2833.

Sincerely,



Harold F. Reheis, Director  
Environmental Protection Division

cc: Capt. J.R. Allen, P.E., DPW, Subbase  
File: Subbase (R)  
R:\BILLY\FACILITY\SUBBASE\NSB911.PMT





State of Georgia  
 Department of Natural Resources  
 ENVIRONMENTAL PROTECTION DIVISION



**AMENDMENT TO  
 HAZARDOUS WASTE FACILITY PERMIT**

Amendment To  
 Permit No. HW-014(S)(2)

Effective Date  
 Of Amendment 9/18/95

In accordance with the provisions of the Georgia Hazardous Waste Management Act and the Rules, Chapter 391-3-11, (as amended through December 26, 1994 ), adopted pursuant to that Act, Permit No. HW-014(S)(2) issued on 9/29/89 to: Naval Submarine Base, Kings Bay, Camden County, Georgia GA4170090001

for the following:  
 Storage of 68,200 gallons of hazardous waste in containers.

Is hereby amended as follows:  
 Redesign hazardous waste storage building and reduce permitted capacity for storage to 59,840 gallons hazardous waste in containers.  
 Amend Corrective Action Section III.A.2. to delete Site 12, the Army Reserve Disposal Area, Future Dry Dock, and add Site 2, Fire Fighting Pit.

Reason for Amendment:  
 Request of Permittee

This Permit Amendment is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached 1 page(s), which page(s) are a part of this Amendment. This Amendment is hereby made a part of Permit No. HW-014(S)(2) and compliance with this Amendment is hereby ordered.

  
 \_\_\_\_\_  
 Director  
 Environmental Protection Division



Permit Number: HW-014(S)(2)  
Naval Submarine Base

2. The Permittee is authorized to store a maximum of 59,840 gallons of hazardous waste in containers.
3. If a container holding hazardous waste is not in good condition, or if it begins to leak, the Permittee shall transfer the hazardous waste from such container to a container which is in good condition.
4. Containers must be managed according to §264.173.
5. Spilled or leaked waste and accumulated precipitation must be managed in accordance with §264.175(b)(5).
6. Incompatible wastes and materials must be managed according to §264.177.
7. No lab-packed waste as defined in 264.316(a) through (d) shall be opened, decanted and combined with other wastes or repackaged into larger containers.

**SECTION III. CORRECTIVE ACTION FOR RELEASES FROM SOLID WASTE MANAGEMENT UNITS (SWMUs) AND OTHER RELEASES**

**A. Applicability and Certification**

1. The conditions of this Section apply to the determination of need for, and subsequent implementation of, corrective action for releases from all SWMUs and other releases, both those contained within the facility property boundary and, as required by §12-8-66 of the Georgia Hazardous Waste Management Act, those extending beyond the facility property boundary. All submittals made under this Section shall be certified in accordance with 40 CFR 270.11.
2. The conditions of this Section specifically apply to the following SWMUs or other releases identified by the RCRA Facility Assessment (RFA) report which was completed by the Director as of the effective date of this permit as those for which an RFI plan will be required under Condition III.C.1.:

The following SWMU's as identified in NEESA report 13-086, Initial Assessment Study of Naval Submarine Base Kings Bay, Georgia:

- Site 2, Fire Fighting Pit
  - Site 5, Army Reserve Disposal Area, Towhee Trail
  - Site 11, Old Camden County Landfill
  - Site 16, Army Reserve Disposal Area near Old Sewage Lagoon 3990
3. The conditions of this Section also apply to any other SWMUs or releases discovered subsequent to the completion of the RFA report referenced in Condition III.A.2. or not otherwise identified in the RFA report.



SECTION A  
PART A APPLICATION

A.1 RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) PART A APPLICATION [40 CODE OF FEDERAL REGULATIONS (CFR) 270.13]. Naval Submarine Base (SUBASE) Kings Bay (GA4170090001), Kings Bay, Georgia, is seeking amendment of the Hazardous and Solid Waste Amendments permit number HW-014(S) issued September 29, 1989. The Part A application is included in this section.

A.2 PART A APPLICATION CHANGES. This subsection describes changes that have been made to the Part A application.

- The Georgia Department of Natural Resources' Part A application forms were used.
- The information in the Waste Information section was revised to be consistent with the list of hazardous wastes in Table C-1 of Section C of the Part B permit application.
- The process design capacity for the Hazardous Waste Container Storage and Transfer Facility was revised to 59,840 gallons.



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# PART A APPLICATION

Georgia Department of Natural Resources  
Environmental Protection Division  
Hazardous Waste Management Program

EPD USE ONLY  
RECEIPT DATE: \_\_\_\_\_

## HANDLER INFORMATION

EPA ID NUMBER: GA4170090001

FACILITY NAME: Naval Submarine Base

Facility Mailing Address: Commanding Officer, 1063 USS Tennessee Avenue  
City: Kings Bay State: GA ZIP: 31547-2606

Facility Location Address: 1063 USS Tennessee Avenue County: Camden  
City: Kings Bay State: GA ZIP: 31547-2606

Contact: Last Name: Anderson First Name: Michael  
Title: Environmental Engineer

Contact Telephone: (912) 673-2001/4620 At mailing or location address? (underline one)

Land Type: F Facility Existence Date (mmddyyyy): 07-01-1978

SIC Codes: Primary: 9711 SIC Code Description: National Security

Secondary: \_\_\_\_\_

Facility Latitude (ddmmss): 30 46 025 Facility Longitude (dddmmss): 081 32 058

## OPERATOR INFORMATION

Name of Operator: Commanding Officer

Status: F Telephone: (912) 673-2001, ext. 4700

Street Address: 1063 USS Tennessee Avenue

City: Kings Bay State: GA ZIP: 31547-2606

Current/Previous: CP Change Date (mmddyy): \_\_\_\_\_

## OWNER INFORMATION

Name of Owner: Commanding Officer

Status: F Telephone: (912) 673-2001, ext. 4700

Street Address: 1063 USS Tennessee Avenue

City: Kings Bay State: GA ZIP: 31547-5000

Current/Previous: CO Change Date (mmddyy): \_\_\_\_\_

## REGULATORY INFORMATION

Permit Type: S Permit Number: HW- 014(S)2 Description: Storage

Facility Indicator: X Regulatory Status: R

Regulatory Status Description: Cross-Reference ID: \_\_\_\_\_

See page A-5 for additional permits.

## BUSINESS INFORMATION

Brief Description of Business at Facility Site: Maintain and operate facilities for support of Fleet Ballistic Missile Submarines.

Closed Hazardous Waste Management Units: \_\_\_\_\_

Topographic Map, Scale Drawing, Photograph, and List of Affected Governments attached? Yes



PROCESS INFORMATION:

<u>Process Code:</u>	<u>Process Total Amount:</u>	<u>UOM:</u>	<u>Process Units:</u>	<u>Description:</u>
S01	59,840	G	01	Storage and transfer facility (1989)
T04	0.721	J	01	Open burning/open detonation facility (1979)

WASTE INFORMATION:

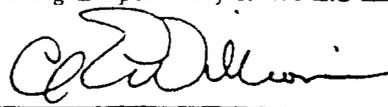
<u>Waste Stream #:</u>	<u>Amount:</u>	<u>UOM:</u>	<u>Waste Amt. In TONS:</u>	<u>Handling Description/ Process Codes:</u>	<u>Waste Codes:</u>
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See Appendix A-1.

CERTIFICATION:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

G. E. WILLIAMS, CAPT, USN  
COMMANDING OFFICER



8-16-95

Typed name and title

Signature

Date



Regulatory Information (continued)

Permit Type: N  
Number: GA0027707  
Description: NPDES, discharge to surface water

Permit Type: P  
Number: 97110209557  
Description: air quality permit

Permit Type: P  
Number: 97110209263  
Description: air quality permit

Permit Type: S  
Number: 2020J1253  
Description: operate public water system

Permit Type: S  
Number: 020-0008  
Description: permit to use groundwater

List of Affected Governments

County Commission:

Artie Jones, Jr.  
Chairman  
Camden County Commission  
P.O. Box 99  
Woodbine, GA 31569

City of St. Marys:

Mike Mahaney  
City Manager  
City of St. Marys  
418 Osborne Street  
St. Marys, GA 31558

Fire District:

Naval Submarine Base



Waste Stream #	Waste Description	Amount: <sup>1</sup>	UOM:	Waste Amount in Tons:	Handling Description /Process Codes:	Waste Codes
1	ACETYLENE GAS CYLINDERS	24	G	0.100	S01	D001
2	ADHESIVE	239	G	0.998	S01	D001
3	ADHESIVE PRIMER	1	G	0.004	S01	D001
4	AEROSOL CONTAINERS	717	G	2.989	S01	D001
5	BENZOINE TINCTURE	1	G	0.004	S01	D001
6	CALCIUM HYPOCHLORITE	41	G	0.172	S01	D001
7	CLEANING COMPOUND	15	G	0.064	S01	D001
8	CONATHANE	4	G	0.015	S01	D001
9	COPIER FLUID	115	G	0.481	S01	D001
10	CORROSION PREVENTATIVE	4	G	0.016	S01	D001
11	CORROSION PREVENTATIVE LIQUID	82	G	0.341	S01	D001
12	DECONTAMINATION KITS	1	G	0.004	S01	D001
13	DISPERSANT	19	G	0.080	S01	D001
14	DRY CLEANING SOLVENT	3	G	0.012	S01	D001
15	ETHYL ACETATE	1	G	0.005	S01	D001
16	ETHYL ALCOHOL	10	G	0.040	S01	D001
17	ETHYLENE GLYCOL MONOETHYL ETHER	15	G	0.061	S01	D001
18	ETHYLENE GLYCOL MONOETHYL ETHER ACETATE	11	G	0.047	S01	D001
19	GASOLINE	94	G	0.393	S01	D001
20	GASOLINE FILTERS	71	G	0.294	S01	D001
21	GRAM DECOLORIZER	1	G	0.005	S01	D001
22	HYDROGEN PEROXIDE	9	G	0.039	S01	D001
23	HYDROGEN PEROXIDE SOLUTION	105	G	0.439	S01	D001
24	ISOPROPANOL	3	G	0.015	S01	D001
25	ISOPROPANOL/GRAPHITE	7	G	0.029	S01	D001
26	ISOPROPANOL/WATER	2	G	0.008	S01	D001
27	LITHIUM NITRATE	1	G	0.005	S01	D001



Waste Stream #	Waste Description	Amount: <sup>1</sup>	UOM:	Waste Amount in Tons:	Handling Description /Process Codes:	Waste Codes
28	METAL POLISH	2	G	0.007	S01	D001
29	MORPHOLINE	70	G	0.290	S01	D001
30	N-BUTYL ALCOHOL	2	G	0.007	S01	D001
31	NAIL POLISH REMOVER	2	G	0.010	S01	D001
32	PAINT	5657	G	23.589	S01	D001
33	PAINT LIQUID	479	G	1.998	S01	D001
34	PENTANE	2	G	0.009	S01	D001
35	PETROLEUM DISTILLATE	53	G	0.222	S01	D001
36	POLISH (PLASTIC)	6	G	0.026	S01	D001
37	POLYESTER RESIN	50	G	0.210	S01	D001
38	POLYURETHANE	1	G	0.006	S01	D001
39	POTASSIUM NITRATE	2	G	0.007	S01	D001
40	RUBBER PRIMER	3	G	0.015	S01	D001
41	SCINTIVERSE	1	G	0.005	S01	D001
42	SILVER NITRATE SOLUTION	9	G	0.040	S01	D001
43	SODIUM CHLORATE	2	G	0.010	S01	D001
44	SODIUM NITRATE	15	G	0.063	S01	D001
43	SODIUM NITRITE	29	G	0.123	S01	D001
44	SOLDER FLUX	8	G	0.034	S01	D001
45	TEFLON PAINT/WATER	47	G	0.197	S01	D001
46	TETRAHYDROFURAN	4	G	0.018	S01	D001
47	TONER	39	G	0.161	S01	D001
48	VARNISH	419	G	1.747	S01	D001
49	WATCH CLEANING SOLUTION	2	G	0.010	S01	D001
50	ACETIC ACID	2	G	0.010	S01	D001 D002
51	AMMONIUM PERSULFATE -	0	G	0.001	S01	D001 D002
52	NITRIC ACID	36	G	0.149	S01	D001 D002
53	TURCOAT ACCELAGOLD	1	G	0.005	S01	D001 D002 D007

Waste Stream #	Waste Description	Amount: <sup>1</sup>	UOM:	Waste Amount in Tons:	Handling Description /Process Codes:	Waste Codes
54	CALCIUM HYPOCHLORITE	10	G	0.040	S01	D001 D003
55	CALCIUM, METALLIC	1	G	0.006	S01	D001 D003
56	OBA CANISTERS	443	G	1.848	S01	D001 D005
57	OXYGEN CANDLES	9	G	0.038	S01	D001 D005
58	PAINT/BARIUM	8	G	0.033	S01	D001 D005
59	ALUMIBOND	4	G	0.019	S01	D001 D007
60	EPOXY PRIMER	2	G	0.008	S01	D001 D007
61	PAINT	513	G	2.141	S01	D001 D007
62	PAINT WASTE (LIQUID)	13	G	0.056	S01	D001 D007
63	TEFLON PAINT/WATER	116	G	0.484	S01	D001 D007
64	AEROSOL CONTAINERS	13	G	0.056	S01	D001 D007 D008
65	PAINT	69	G	0.290	S01	D001 D007 D008
66	PAINT WASTE (LIQUID)	275	G	1.149	S01	D001 D007 D008
67	GUN WASH SLOP	4	G	0.016	S01	D001 D007 D008 D035 F003 F005
68	PAINT	794	G	3.309	S01	D001 D007 D008 F003 F005
69	PAINT WASTE (LIQUID)	140	G	0.584	S01	D001 D007 D008 F003 F005
70	PAINT/LISTED SOLVENTS	149	G	0.622	S01	D001 D007 D008 F003 F005
71	ADHESIVE	3	G	0.012	S01	D001 D008
72	DRY/SOLID FILM LUBRICANT	3	G	0.013	S01	D001 D008
73	PAINT	171	G	0.715	S01	D001 D008
74	PAINT WASTE (LIQUID)	7	G	0.031	S01	D001 D008
75	RED LEAD OXIDE POWDER	6	G	0.025	S01	D001 D008
76	SOLID FILM LUBRICANT	4	G	0.017	S01	D001 D008
77	FILM LUBRICANT (DRY/SOLID)	14	G	0.057	S01	D001 D008 D035
78	SOLID FILM LUBRICANT	2	G	0.007	S01	D001 D008 D035
79	SILVER NITRATE	15	G	0.061	S01	D001 D011
80	SILVER NITRATE SOLUTION	12	G	0.048	S01	D001 D011



Waste Stream #	Waste Description	Amount: <sup>1</sup>	UOM:	Waste Amount in Tons:	Handling Description /Process Codes:	Waste Codes
81	LAB PACK "A"	0	G	0.002	S01	D001 D013 D014 D015 D016 D018 D019 D021 D027 D038 D043
82	SILVEX/METHANOL	1	G	0.005	S01	D001 D017 F027
83	BENZENE	1	G	0.005	S01	D001 D018
84	URETHANE ACCELERATOR	48	G	0.202	S01	D001 D021
85	ADHESIVE	2	G	0.010	S01	D001 D035
86	FIRE BARRIER CAULK	6	G	0.024	S01	D001 D035
87	MEK	13	G	0.056	S01	D001 D035
88	PAINT	18	G	0.074	S01	D001 D035
89	PAINT/MEK	163	G	0.679	S01	D001 D035
90	WOOD FILLER	5	G	0.019	S01	D001 D035
91	PAINT/LISTED SOLVENTS/ MEK	161	G	0.673	S01	D001 D035 F003 F005
92	PAINT/SOLVENTS	105	G	0.438	S01	D001 D035 F003 F005
93	FREON, OIL, AND SOLVENTS	3	G	0.011	S01	D001 F002
94	PAINT REMOVER	6	G	0.024	S01	D001 F002
95	FLUOROETHANE/OIL AND SOLVENTS	4	G	0.018	S01	D001 F002
96	LAYOUT DYE	4	G	0.015	S01	D001 F002 F003
97	COATING REPAIR (XYLAN)	3	G	0.011	S01	D001 F003
98	PAINT/LISTED SOLVENTS	94	G	0.392	S01	D001 F003
99	XYLENE (SPENT)	4	G	0.017	S01	D001 F003
100	TITRATION FLUID	26	G	0.110	S01	D001 F003 D019 D035
101	PAINT WASTE (LIQUID)	2859	G	11.924	S01	D001 F003 F005
102	PAINT/LISTED SOLVENTS	2498	G	10.417	S01	D001 F003 F005
103	PLASTISOL PRIMER	10	G	0.043	S01	D001 F003 F005
104	TOLUENE	1	G	0.005	S01	D001 F005
105	ACETIC ACID	37	G	0.155	S01	D002

Waste Stream #	Waste Description	Amount: <sup>1</sup>	UOM:	Waste Amount in Tons:	Handling Description /Process Codes:	Waste Codes
106	ACIDIC MIXTURE	2	G	0.007	S01	D002
107	AMMONIUM HYDROXIDE	200	G	0.833	S01	D002
108	AROMATIC AMINE	1	G	0.004	S01	D002
109	CITRIC ACID SOLUTION	2	G	0.008	S01	D002
110	CLEANING COMPOUND	7	G	0.031	S01	D002
111	COPPER SOLUTION	2	G	0.007	S01	D002
112	CORROSION INHIBITOR	122	G	0.507	S01	D002
113	CORROSION REMOVER	2	G	0.007	S01	D002
114	DIGESTION SOLUTION	2	G	0.009	S01	D002
115	DIMETHYL GLOXIME	0	G	0.001	S01	D002
116	ETHANOLAMINE	1429	G	5.960	S01	D002
117	FERRIC CHLORIDE/HCl	0	G	0.001	S01	D002
118	FERROUS STAIN REMOVER	12	G	0.051	S01	D002
119	FLASH ARRESTOR WASH WATER	185	G	0.770	S01	D002
120	FLOOR POLISH REMOVER	91	G	0.379	S01	D002
121	HYDROCHLORIC ACID	264	G	1.100	S01	D002
122	HYDROCHLORIC ACID 2,4 DINITROPHENYL- HYDRAZINE	2	G	0.008	S01	D002
123	KODAK ACTIVATOR	6	G	0.025	S01	D002
124	MONOETHANOLAMINE	70	G	0.292	S01	D002
125	NEUTRA RUST	17	G	0.073	S01	D002
126	NICKEL SOLUTION	1	G	0.005	S01	D002
127	PHOSPHORIC ACID	46	G	0.194	S01	D002
128	PORCELAIN CLEANING COMPOUND	61	G	0.253	S01	D002
129	POTASSIUM HYDROXIDE	2284	G	9.526	S01	D002
130	SCALE REMOVER	11	G	0.047	S01	D002
131	SODIUM HYDROXIDE	28	G	0.118	S01	D002
132	SODIUM HYDROXIDE SOLUTION	93	G	0.387	S01	D002



Waste Stream #	Waste Description	Amount:	UOM:	Waste Amount in Tons:	Handling Description /Process Codes:	Waste Codes
133	SODIUM HYPOCHLORITE SOLUTION	38	G	0.157	S01	D002
134	SODIUM METASILICATE SOLUTION	41	G	0.172	S01	D002
135	SODIUM PHOSPHATE SOLUTION	522	G	2.178	S01	D002
136	SODIUM SILICATE SOLUTION	34	G	0.143	S01	D002
137	SULFURIC ACID	71	G	0.296	S01	D002
138	BATTERIES (NI-CAD) WET	290	G	1.208	S01	D002 D006
139	COPPER PLATING SOLUTION	169	G	0.704	S01	D002 D006 D007
140	I.C.P. WASTE (B)	6	G	0.027	S01	D002 D006 D007 D008 D009
141	I.C.P. AQUEOUS WASTE	7	G	0.030	S01	D002 D006 D007 D009
142	ALODINE WASTE	2	G	0.007	S01	D002 D007
143	CHROMIC ACID SOLUTION	4	G	0.017	S01	D002 D007
144	PASA JELL #102	1	G	0.004	S01	D002 D007
145	TURCOAT ACCELAGOLD	3	G	0.013	S01	D002 D007
146	NICKEL PLATING SOLUTION	2	G	0.010	S01	D002 D007 D008
147	BATTERIES	111	G	0.463	S01	D002 D008
148	BATTERIES (LEAD ACID)	4305	G	17.950	S01	D002 D008
149	BATTERIES	281	G	1.171	S01	D002 D009
150	BATTERIES/MERCURY	1	G	0.004	S01	D002 D009
151	MERCURIC NITRATE	70	G	0.293	S01	D002 D009
152	SILVER CELL BATTERIES	8	G	0.033	S01	D002 D011
153	LITHIUM OXYHOLIDE BATTERIES	23	G	0.096	S01	D003
154	PROPELLANTS, ENERGETICS, AND PYROTECHNICS	0.72	J	0.750	X01	D003
155	SOLDER DEBRIS	3	G	0.013	S01	D004 D008 D011
156	PHOTO RECEPTOR DRUM	8	G	0.035	S01	D004 D010
157	BARIUM CHLORIDE	1	G	0.004	S01	D005
158	BARIUM HYDROXIDE	1	G	0.005	S01	D005

Waste Stream #	Waste Description	Amount: <sup>1</sup>	UOM:	Waste Amount in Tons:	Handling Description /Process Codes:	Waste Codes
159	GUN WASH SLOP	14	G	0.059	S01	D005 D007 D008
160	SOLID PAINT	3	G	0.011	S01	D005 D007 D008 D035
161	SOLID PAINT AND CONTAINERS	147	G	0.613	S01	D005 D007 D008 D035
162	PAINT DEBRIS	11415	G	47.599	S01	D005 D007 D008 D035 F002 F003 F005
163	PAINT DEBRIS/SOLVENTS	299	G	1.246	S01	D005 D007 D008 D035 F002 F003 F005
164	BATTERIES (NI-CAD) DRY	80	G	0.334	S01	D006
165	BLAST MEDIA	151	G	0.630	S01	D006
166	GLASS BEADS BLAST MEDIA	118	G	0.490	S01	D006
167	ORDNANCE DEBRIS	6	G	0.024	S01	D006
168	X-RAY RINSE WATER	328	G	1.367	S01	D006
169	CHROMIC ACID DEBRIS	4	G	0.018	S01	D007
170	EPOXY POWDER COATING DEBRIS	32	G	0.134	S01	D007
171	GREASE/CHROMATES	6	G	0.027	S01	D007
172	MAGNESIUM BATTERIES	6	G	0.026	S01	D007
173	PLATING WASTE AND RAGS (ALODINE)	131	G	0.548	S01	D007
174	POTASSIUM CHROMATE	1	G	0.006	S01	D007
175	SAND BLAST MEDIA	126	G	0.528	S01	D007
176	SEALING COMPOUND	3	G	0.012	S01	D007
177	SODIUM HYDROXIDE POWDER	1	G	0.005	S01	D007
178	TEFLON PAINT DEBRIS	6	G	0.023	S01	D007
179	TONER	3	G	0.014	S01	D007
180	ZINC CHROMATE PUTTY	7	G	0.030	S01	D007
181	BLAST MEDIA	35	G	0.146	S01	D007 D008
182	NICKEL PLATING SOLUTION	97	G	0.405	S01	D007 D008
183	OIL FILTERS	1442	G	6.015	S01	D007 D008

Waste Stream #	Waste Description	Amount: <sup>1</sup>	UOM:	Waste Amount in Tons:	Handling Description /Process Codes:	Waste Codes
184	PAINT (SOLID)	5	G	0.022	S01	D007 D008
185	POLYSULFIDE RUBBER COMPOUND DEBRIS	37	G	0.155	S01	D007 D008
186	FIXER WASH WATER	47	G	0.197	S01	D007 D011
187	FIXER/METAL PHOTO	23	G	0.096	S01	D007 D011
188	RESPIRATOR FILTERS	3	G	0.013	S01	D007 D011
189	X-OMAT FIXER	65	G	0.270	S01	D007 D011
190	PAINT REMOVER	24	G	0.101	S01	D007 F002
191	TURCO SUPER CARB	6	G	0.027	S01	D007 F002
192	ANTI-SIEZE COMPOUND	2	G	0.008	S01	D008
193	ANTI-SIEZE/LEAD	2	G	0.009	S01	D008
194	DELCEM (PART B)	4	G	0.019	S01	D008
195	DRY CLEANING SOLVENT/ WIRE ROPE GREASE DEBRIS	27	G	0.112	S01	D008
196	EPOXY POWDER COATING DEBRIS	14	G	0.057	S01	D008
197	GREASE/LEAD	5	G	0.020	S01	D008
198	LEAD BLANKETS	45	G	0.187	S01	D008
199	LEAD DEBRIS	4	G	0.019	S01	D008
200	LEAD FOIL	4	G	0.019	S01	D008
201	N.O.C. LIQUID	19	G	0.081	S01	D008
202	POLYSULFIDE RUBBER COMPOUND	6	G	0.023	S01	D008
203	RED LEAD OXIDE POWDER/MINERAL OIL	15	G	0.064	S01	D008
204	SOLDER DEBRIS	3	G	0.013	S01	D008
205	WIRE ROPE GREASE	102	G	0.427	S01	D008
206	WIRE ROPE GREASE DEBRIS	3986	G	16.620	S01	D008
207	MERCURIC NITRATE	115	G	0.481	S01	D009
208	MERCURIC OXIDE	1	G	0.004	S01	D009
209	MERCURY AMALGAM	5	G	0.022	S01	D009

Waste Stream #	Waste Description	Amount: <sup>1</sup>	UOM:	Waste Amount in Tons:	Handling Description /Process Codes:	Waste Codes
210	MERCURY SWITCHES	2	G	0.007	S01	D009
211	MERCURY THERMOMETERS	2	G	0.008	S01	D009
212	SPILL RESIDUE/ MERCURY CONTAMINATED SOIL	90	G	0.375	S01	D009
213	MERCURY/SILVER PAPER	27	G	0.114	S01	D009 D011
214	SILVER PAPER	12	G	0.049	S01	D009 D011
215	PHOTO RECEPTOR DRUM	2	G	0.009	S01	D010
216	COLOR FIXER	150	G	0.624	S01	D011
217	PHENOLIC RESIN/ SILVER COMPOUND	1	G	0.004	S01	D011
218	SILVER CELL BATTERIES	4	G	0.015	S01	D011
219	SILVER CELL BATTERIES (DRY)	44	G	0.184	S01	D011
220	SILVER CELL WASH	9	G	0.039	S01	D011
221	SILVEX	1	G	0.003	S01	D017 F027
222	ETHYLENE GLYCOL, WATER PAINT THINNER	181	G	0.754	S01	D018 D022 F003 F005
223	MOISTURE TITRATION FLUID	2	G	0.007	S01	D019 D022 F003
224	GENERATOR SOLUTION	1	G	0.004	S01	D019 D035 F003
225	EPOXY CATALYST	73	G	0.305	S01	D021 D035
226	MEK DEBRIS	13	G	0.056	S01	D035
227	MEK/OIL	4	G	0.015	S01	D035
228	FREON AND OIL	25	G	0.103	S01	F001
229	FREON,FLUORINATED AND MOLYKOTE GREASE DEBRIS	13	G	0.053	S01	F001
230	METHYLENE CHLORIDE DEBRIS	23	G	0.097	S01	F001
231	PAINT REMOVER DEBRIS	11	G	0.048	S01	F001
232	TRICH, FREON 113, HYDRAULIC FLUID, & DEBRIS	8	G	0.035	S01	F001
233	TRICHLOROETHANE (SPENT)	208	G	0.868	S01	F001
234	TRICHLOROETHANE DEBRIS	4	G	0.016	S01	F001
235	TRICHLOROETHANE, FREON AND OIL DEBRIS	8	G	0.032	S01	F001

Waste Stream #	Waste Description	Amount: <sup>1</sup>	UOM:	Waste Amount in Tons:	Handling Description /Process Codes:	Waste Codes
236	TRICHLOROETHANE/RAGS	127	G	0.530	S01	F001
237	TRICHLOROETHANE/WATER	11	G	0.047	S01	F001
238	TRICHLOROETHYLENE	2	G	0.008	S01	F001
239	TRICHLOROTRI-FLUOROETHANE/OIL	80	G	0.333	S01	F001
240	TRICHLOROETHANE/MEK DEBRIS	23	G	0.098	S01	F001 D035
241	ADHESIVE	1	G	0.005	S01	F002
242	CLEANER, LUBRICANT AND PRESERVATIVE	1	G	0.006	S01	F002
243	FREON 113 (SPENT)	1	G	0.004	S01	F002
244	METHYLENE CHLORIDE DEBRIS	101	G	0.423	S01	F002
245	METHYLENE CHLORIDE STRIPPER	616	G	2.570	S01	F002
246	METHYLENE CHLORIDE/ WATER	1941	G	8.093	S01	F002
247	POLYURETHANE	6	G	0.027	S01	F002
248	PRIMER (SEALING COMPOUND)	45	G	0.186	S01	F002
249	STRIPPING SOLUTION	3	G	0.012	S01	F002
250	TETRACHLOROETHYLENE	178	G	0.743	S01	F002
251	TETRACHLOROETHYLENE/ DEBRIS	6	G	0.025	S01	F002
252	TRICHLOROETHANE	5	G	0.020	S01	F002
253	TRICHLOROTRI- FLUOROETHANE	580	G	2.418	S01	F002
254	TRICHLOROTRI- FLUOROETHANE DEBRIS	4	G	0.017	S01	F002
255	TRICHLOROTRI- FLUOROETHANE/ OIL	8	G	0.034	S01	F002
256	SEALING COMPOUND, TCE, FREON AND DEBRIS	117	G	0.488	S01	F002 D007
257	ACETONE	13	G	0.053	S01	F003
258	ACETONE AND SPOTCHECK PENETRANT DEBRIS	135	G	0.563	S01	F003
259	ACETONE RAGS	6	G	0.023	S01	F003
260	PENTACHLOROPHENOL	5	G	0.023	S01	F027 D037

Waste Stream #	Waste Description	Amount: <sup>1</sup>	UOM:	Waste Amount in Tons:	Handling Description /Process Codes:	Waste Codes
261	ARSENIC TRIOXIDE	0.5	G	0.002	S01	P012
262	DIMETHOATE SPILL DEBRIS	17	G	0.070	S01	P044
263	ACETONE	6	G	0.026	S01	U002
264	BENZENE	3	G	0.013	S01	U019
265	DI(2-ETHYLHEXYL) PHTHALATE	17	G	0.072	S01	U028
266	MEK/PEROXIDE	1	G	0.005	S01	U029
267	TRICHLORO- FLUOROMETHANE	14	G	0.057	S01	U121
268	R-11	153	G	0.636	S01	U121 U075
269	FORMALDEHYDE	2	G	0.010	S01	U122
270	METHANOL	14	G	0.057	S01	U154
271	TOLUENE	15	G	0.063	S01	U220
272	XYLENE (UNUSED)	11	G	0.046	S01	U239

es:

<sup>1</sup> Amount measured in pounds and then converted to gallons by assuming all compounds have the specific weight of water.



• Maximum treatment rate for Open Burning/Open Detonation (OB/OD) Area  
Using units of pounds (lb) per hour (hr), the process design capacity was derived from 1994 operations data, when approximately 1,500 pounds of explosives were treated, and an assumed annual operational time of 2080 hours per year. Based on the above assumptions the annual average process design capacity is:

$$\frac{1,500 \text{ pounds explosives}}{\text{Year}} \div \frac{2080 \text{ hours}}{\text{Year}} = 0.721 \text{ pounds per hour}$$

This is not a maximum (not to be exceeded) process design rate. Actual maximum process design capacity for the OB/OD area is 150 pounds of explosive per detonation and 4,000 pounds of explosives per burn, with no limit on the number of detonations or burns performed in a year.

• Topographic Map, Scale Drawings, and Photographs

Figure A-1, Harriett's Bluff Quadrangle Topographic Map is located in a map pocket at the back of this document.

Hazardous Waste Container Storage and Transfer Facility Drawings:

Figure D-1, Site Plan of Hazardous Waste Container Storage and Transfer Facility is located on page D-2 of section D of this document.

Figure D-2, Floor Plan, Hazardous Waste Container Storage and Transfer Facility is located on page D-3 of section D of this document.

OB/OD Facility Drawings:

Figure D-8, Construction Plan for the OB/OD Crew Shelter is located at the back of this document.

Figure D-9, Engineering Drawing for the OB/OD Facility is located at the back of this document.

Hazardous Waste Container Storage and Transfer Facility photographs are located in Appendix A-3.

OB/OD Facility aerial photograph is located in Appendix A-3.

