

N42237.AR.000030
NSB KINGS BAY
5090.3a

HAZARDOUS WASTE PERMIT APPLICATION FOR NSB KINGS BAY GA
3/26/1991
NSB KINGS BAY



U.S. ENVIRONMENTAL PROTECTION AGENCY
HAZARDOUS WASTE PERMIT APPLICATION
 Consolidated Permits Program
 (This information is required under Section 3003 of RCRA.)

1. EPA I.D. NUMBER
 FGA 4 1 7 0 0 9 0 0 0 1

OFFICIAL USE ONLY

DATE RECEIVED (YR. MO. & DAY)	COMMENTS

31547.000
 19.02.00.0010

FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below (mark one box only) to indicate whether this is the first or revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if you already know your facility's EPA I.D. Number in Item 1 above.

FIRST APPLICATION (place an "X" below and provide the appropriate date)

1. EXISTING FACILITY (See instructions for definition of "existing" facility. Complete item below.)

2. NEW FACILITY (Complete item below.)

FOR EXISTING FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED (use the boxes to the left)

YR.	MO.	DAY
77	10	17

FOR NEW FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR IS EXPECTED TO BEGIN

YR.	MO.	DAY
77	10	17

REVISED APPLICATION (place an "X" below and complete Item 1 above)

1. FACILITY HAS INTERIM STATUS

2. FACILITY HAS A RCRA PERMIT

PROCESSES - CODES AND DESIGN CAPACITIES

PROCESS CODE - Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process (including its design capacity) in the space provided on the form (Item III-C).

PROCESS DESIGN CAPACITY - For each code entered in column A enter the capacity of the process.

- AMOUNT** - Enter the amount.
- UNIT OF MEASURE** - For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
CONTAINER (barrel, drum, etc.)	S01	GALLONS OR LITERS
TANK	S02	GALLONS OR LITERS
ASTE PILE	S03	CUBIC YARDS OR CUBIC METERS
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS
WELL	D79	GALLONS OR LITERS
LAND APPLICATION	D80	ACRE-FEET (the volume that would cover one acre to a depth of one foot) OR HECTARE-METER
CLEAN DISPOSAL	D81	ACRES OR HECTARES
SURFACE IMPOUNDMENT	D82	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	D83	GALLONS OR LITERS

Treatment:

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
TANK	T01	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR
OTHER (Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)	T04	GALLONS PER DAY OR LITERS PER DAY

UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G	LITERS PER DAY	Y	ACRE-FEET	A
LITERS	L	TONS PER HOUR	D	HECTARE-METER	F
CUBIC YARDS	Y	METRIC TONS PER HOUR	W	ACRES	B
CUBIC METERS	C	GALLONS PER HOUR	E	HECTARES	Q
GALLONS PER DAY	U	LITERS PER HOUR	N		

EXAMPLE FOR COMPLETING ITEM III (shown in line numbers X-1 and X-2 below): A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

A. PROCESS CODE (from list above)		B. PROCESS DESIGN CAPACITY		FOR OFFICIAL USE ONLY	LINE NUMBER	B. PROCESS DESIGN CAPACITY		FOR OFFICIAL USE ONLY
1. AMOUNT (specify)	2. UNIT OF MEASURE (enter code)	1. AMOUNT	2. UNIT OF MEASURE (enter code)					
S 0 2	600	G			5			
T 0 3	20	E			6			
S 0 1	68,200	G			7			
	4 See III c.				8			
					9			
					10			

FINAL (2)

T04 Code applies to an open burning/open detonation area at SUBASE Kings Bay used to dispose a waste munitions and pyrotechnics. Design capacity exceeds 1,000 pounds per detonation.

DESCRIPTION OF HAZARDOUS WASTES

HAZARDOUS WASTE NUMBER - Enter the four-digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four-digit number(s) from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

ESTIMATED ANNUAL QUANTITY - For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.

UNIT OF MEASURE - For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

<u>ENGLISH UNIT OF MEASURE</u>	<u>CODE</u>	<u>METRIC UNIT OF MEASURE</u>	<u>CODE</u>
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If any records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

PROCESSES

PROCESS CODES:
 For listed hazardous waste: For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.
 For non-listed hazardous waste: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in Item III to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.
 Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code(s).

PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER - Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

- Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B, C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
- In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
- Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING ITEM IV (shown in line numbers X-1, X-2, X-3, and X-4 below) - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

LINE NO.	A. EPA HAZARDOUS WASTE NO. (enter code)				B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES							
	1	2	3	4			1. PROCESS CODES (enter)			2. PROCESS DESCRIPTION (if a code is not entered in D(1))				
1	K	0	5	4	900	P	T	0	3	D	8	0		
		0	2		400	P	T	0	3	D	8	0		
3	U	0	0	1	100	P	T	0	3	D	8	0		
4	D	0	0	2										included with above

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DUP

DESCRIPTION OF HAZARDOUS WASTES (continued)

WASTE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES																		
				1. PROCESS CODES (enter)						2. PROCESS DESCRIPTION (if a code is not entered in D(1))												
1	D001	5000	P	S	0	1																
2	D002	2000	P	S	0	1																
3	D003	500	P	S	0	1																
4	D004	1000	P	S	0	1																
5	D005	1000	P	S	0	1																
6	D006	1000	P	S	0	1																
7	D008	1000	P	S	0	1																
8	D009	1000	P	S	0	1																
9	D011	1000	P	S	0	1																
10	D013	1000	P	S	0	1																
11	D018	5000	P	S	0	1																
12	D019	500	P	S	0	1																
13	D020	500	P	S	0	1																
14	D021	500	P	S	0	1																
15	D022	500	P	S	0	1																
16	D023	500	P	S	0	1																
17	D024	500	P	S	0	1																
18	D025	500	P	S	0	1																
19	D026	500	P	S	0	1																
20	D027	500	P	S	0	1																
21	D028	3000	P	S	0	1																
22	D029	500	P	S	0	1																
23	D030	500	P	S	0	1																
24	D031	500	P	S	0	1																
25	D032	500	P	S	0	1																
26	D033	500	P	S	0	1																

DESCRIPTION OF HAZARDOUS WASTES (continued)

M NO LN	A. EPA HAZARD. WASTE NO. (enter code)				B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES																
	M	M	M	M			1. PROCESS CODES (enter)						2. PROCESS DESCRIPTION (if a code is not entered in D(1))										
1	D	0	3	4	500	P	S	0	1														
2	D	0	3	5	5000	P	S	0	1														
3	D	0	3	6	500	P	S	0	1														
4	D	0	3	7	500	P	S	0	1														
5	D	0	3	8	500	P	S	0	1														
6	D	0	3	9	1000	P	S	0	1														
7	D	0	4	0	1000	P	S	0	1														
8	D	0	4	1	500	P	S	0	1														
9	D	0	4	2	500	P	S	0	1														
10	D	0	4	3	500	P	S	0	1														
11	F	0	0	1	1000	P	S	0	1														
12	F	0	0	2	1000	P	S	0	1														
13	F	0	0	3	1000	P	S	0	1														
14	F	0	0	4	1000	P	S	0	1														
15	F	0	0	5	1000	P	S	0	1														
16	F	0	0	6	1000	P	S	0	1														
17	F	0	0	7	1000	P	S	0	1														
18	F	0	0	8	1000	P	S	0	1														
19	F	0	0	9	1000	P	S	0	1														
20	F	0	1	9	1000	P	S	0	1														
21	P	0	1	5	500	P	S	0	1														
22	P	0	3	0	500	P	S	0	1														
23	P	0	7	4	500	P	S	0	1														
24	U	0	0	2	500	P	S	0	1														
25	U	0	7	5	500	P	S	0	1														
26	U	1	2	1	500	P	S	0	1														

W G A 4 1 7 0 0 9 0 0 0 1

W DUP DUP

DESCRIPTION OF HAZARDOUS WASTES (continued)

W Z I Z	A. EPA HAZARD. WASTENO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEA- SURE (enter code)	D. PROCESSES	
				1. PROCESS CODES (enter)	2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	U 1 5 1	500	P	S 0 1	
2	U 1 5 4	500	P	S 0 1	
3	U 1 5 9	500	P	S 0 1	
4	U 1 6 1	500	P	S 0 1	
5	U 2 1 0	500	P	S 0 1	
6	U 2 2 0	500	P	S 0 1	
7	U 2 2 6	500	P	S 0 1	
8	U 2 2 8	500	P	S 0 1	
9	U 2 3 9	500	P	S 0 1	
10	D 0 0 3	10000	P	T 0 4	Open burning/open detonation
11	D 0 0 5				Included in above
12	D 0 0 6				Included in above
13	D 0 0 9				Included in above
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					

IV. DESCRIPTION OF HAZARDOUS WASTE (continued)

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 1.

EPA I.D. NO. (enter from page 1)													
F	G	A	4	1	7	0	0	9	0	0	0	1	6

V. FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility (see instructions for more detail).

VI. PHOTOGRAPHS

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail).

VII. FACILITY GEOGRAPHIC LOCATION

LATITUDE (degrees, minutes, & seconds)						LONGITUDE (degrees, minutes, & seconds)							
N	3	0	4	6	2	5	W	8	1	3	2	5	8

VIII. FACILITY OWNER

- A. If the facility owner is also the facility operator as listed in Section VIII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.
- B. If the facility owner is not the facility operator as listed in Section VIII on Form 1, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER										2. PHONE NO. (area code & no.)			
E													
3. STREET OR P.O. BOX						4. CITY OR TOWN			5. ST.		6. ZIP CODE		
F						G							

IX. OWNER CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)	B. SIGNATURE	C. DATE SIGNED
C. Johannesmeyer, Captain, USN Commanding Officer		

X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)	B. SIGNATURE	C. DATE SIGNED
C. Johannesmeyer, Captain, USN Commanding Officer		1991

Table C-1
HAZARDOUS WASTE
SUBASE KINGS BAY

<u>WASTE</u>	<u>EPA WASTE NUMBER</u>	<u>EPA WASTE CODE</u>
Acetic Acid	D002	C
Acetone	F003, U002	I
Adhesives & adhesive primer	D001, D018, D035	I,TC
Alkaline sludge	D002	C
Alodine	D002, D007	C,TC
Alodine dried debris	D001, D007	I,TC
Aluminum Conversion coating sludge	F019	T
Ammonium Hydroxide	D002	C
Anti-seize compound	D008	TC
Barium containing debris	D005	TC
Battery acid (Sulfuric acid)	D002, D008	C,TC
Benzene (solvent)	F005	I,T
Benzene contaminated waste	D018	TC
Beryllium	P015	T
Bromine water	D002	C
Cadmium batteries	D006	TC
Calcium hypochlorite	D001	I

I = Ignitable R = Reactive
C = Corrosive T = Toxic
TC = Toxicity Characteristics

Table C-1
HAZARDOUS WASTE
SUBBASE KINGS BAY

<u>WASTE</u>	<u>EPA WASTE NUMBER</u>	<u>EPA WASTE CODE</u>
Carbon Tetrachloride Contaminated Waste	D019	TC
Chlordane Contaminated Waste	D020	TC
Chlorobenzene Contaminated Waste	D021	TC
Chloroform Contaminated Waste	D022	TC
Chromic Acid	D002, D007	C, TC
Chromium plating solution	D002, D007	C, TC
Copper acetoarsenite (Paris Green)	D004	TC
Corrosion preventive	D001	I
Cresols (solvent)	F004	T
Cresol Contaminated Waste	D023, D024, D025, D026	TC
Cyanide plating bath solutions (spent)	F007	R, T
Cyanide plating bath residues	F008	R, T
Cyanide salts n.o.s.	P030	T
Descaling compound	D002	C
1,4-Dichlorobenzene Contaminated Waste	D027	TC
1,2-Dichloroethane Contaminated Waste	D028	TC

I = Ignitable R = Reactive
C = Corrosive T = Toxic
TC = Toxicity Characteristics

Table C-1
HAZARDOUS WASTE
SUBASE KINGS BAY

<u>WASTE</u>	<u>EPA WASTE NUMBER</u>	<u>EPA WASTE CODE</u>
1,1-Dichloroethylene Contaminated Waste	D029	TC
Dichlorodifluoromethane	U075	T
2,4-Dinitrotoluene Contaminated Waste	D030	TC
Epoxy paint remover (undiluted)	D002, D007, F002	C,TC,T
Formic acid	D002	C
Gasoline	D001	I
Heptachlor Contaminated Waste	D031	TC
Hexachlorobenzene Contaminated Waste	D032	TC
Hexachlorobutadiene Contaminated Waste	D033	TC
Hexachloroethane Contaminated Waste	D034	TC
Hydrochloric acid	D002	C
Hydrofluoric acid	D002	C
Hydrogen peroxide	D001	I
Insulating varnish	D001, D018, D035	I,TC
Isobutanol	F005	I,T
Isopropyl alcohol	D001	I
Kerosene	D001	I

I = Ignitable R = Reactive
C = Corrosive T = Toxic
TC = Toxicity Characteristic

Table C-1
HAZARDOUS WASTE
SUBASE KINGS BAY

<u>WASTE</u>	<u>EPA WASTE NUMBER</u>	<u>EPA WASTE CODE</u>
Lead residue	D008	TC
Lindane	D013	TC
Lithium hydroxide	D002	C
Mercuric Nitrate solution	D009	TC
Mercury	D009, U151	TC, T
Methanol	F003, U154	I
Methylene chloride	F001, F002	T
Methyl ethyl ketone (Solvent)	F005, U159	I, T
Methyl ethyl ketone Contaminated Waste	D035	TC
Methyl isobutyl ketone	F003, U161	I
Monoethanolamine	D002	C
Naphtha	D001	I
Nickel Cyanide	P074	T
Nickel solution, electrode-less	D006	TC
Nitric acid solution	D002	C
Nitrobenzene Contaminated Waste	D036	TC
n-butyl alcohol	F003	I

I = Ignitable R = Reactive
C = Corrosive T = Toxic
TC = Toxicity Characteristic

Table C-1
HAZARDOUS WASTE
SUBASE KINGS BAY

<u>WASTE</u>	<u>EPA WASTE NUMBER</u>	<u>EPA WASTE CODE</u>
Otto fuel waste	D003	R
Oxygen breathing apparatus canister	D001, D009	I,TC
Paints	D001, D000	I,TC
Paint stripper	D002/F002	C,T
Paint thinner	D001, F003, F005	I,T
Penetrating Fluid	D001	I
Pentachlorophenol Contaminated Waste	D037	TC
Phosphoric acid	D002	C
Plastisol	D001, D018, D035	I,TC
Potassium hydroxide	D002	C
Pyridine Contaminated Waste	D038	TC
Scale Removing Compound	D002	C
Silver Solutions	D011	TC
Sludges from IWTP	F006,D000	T,TC
Sodium Chromate	D007	TC
Sodium hydroxide	D002	C

I = Ignitable R = Reactive
C = Corrosive T = Toxic
TC = Toxicity Characteristic

Table C-1
HAZARDOUS WASTE
SUBBASE KINGS BAY

<u>WASTE</u>	<u>EPA WASTE NUMBER</u>	<u>EPA WASTE CODE</u>
Stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process	F009	R, T
Sulfamic acid	D002	C
Sulfuric acid	D002	C
Tetrachloroethylene	F001, F002, U210	T
Tetrachloroethylene Contaminated Waste	D039	TC
Toluene	F005, U220	I
1,1,1-Trichloroethane	F001, F002, U226	T
Trichloroethylene	F001, U228	T
Trichloroethylene Contaminated Waste	D040	TC
Trichlorofluoromethane	F001, F002, U121	T
1,1,2-Trichloro-1,2,2-trifluoroethane	F001, F002	T
Trichlorophenol Contaminated Waste	D041, D042	TC
Vinyl Chloride Contaminated Waste	D043	TC
Waste acids, mixed	D002	C
Waste caustics, mixed	D002	C
Xylene	F003, U239	I

I = Ignitable R = Reactive
C = Corrosive T = Toxic
TC = Toxicity Characteristics

Publications 6050.5-L, 1987. The HMIS is a microfiche database containing physical and chemical characteristics of the product purchased by the DOD. The database is updated frequently. This data is supplemented with laboratory analyses when the waste is a "process waste" or when the HMIS is inadequate. Table C-2 is a summary of the data available in the HMIS.

C-2 WASTE ANALYSIS PLAN [40 CFR 270.14(b)(3)]

The following plan provides guidance for determining the physical and chemical characteristics of hazardous wastes and industrial wastes. The characteristics of each waste must be determined prior to initiating storage, treatment, or disposal procedures. While the plan requires that these characteristics be determined, it will not often be necessary to conduct actual laboratory analyses if maximum use is made of existing data for materials used at SUBASE. Implementation of the plan is the responsibility of the Public Works Department and the "originator" of the waste. (The work originator is used to refer to the individual commands and/or departments within SUBASE who generate industrial or hazardous wastes.) The Plan details the steps to be taken to characterize wastes in order to provide labeling/handling information to originators and to determine the most appropriate handling/disposal method for the waste.

SUBASE Kings Bay has determined that sampling waste explosives is not warranted. The justification for this is: (1) all chemical compositions can be determined from feedstock chemical information provided by the U. S. Navy and (2) sampling waste explosives poses a significant health risk due to premature detonation of the ordnance as a result of sampling attempts. However, residual ash resulting from open burning in secondary containment shall be sampled and analyzed for reactivity and TCLP heavy metals such as barium, cadmium, mercury and lead. In addition, upon closure, soil samples shall be taken at the open detonation area and analyzed for reactivity and heavy metals as specified in Section C-1. The sampling and analysis of these wastes will be discussed in the following sections.

It is vitally important that wastes be properly characterized. Inaccurate information concerning the chemistry of the waste could lead to violations of state/federal rules, safety problems for workers handling the wastes and/or improper treatment at the base treatment plants.

- d. Is the material an oxidizer:
 - e. Does the material react violently with water?
 - f. Does the material contain Toxicity Characteristic heavy Metals or organic compounds (laboratory test may be needed for TCLP to determine whether the waste is hazardous)?
 - g. Does the material contain any chemical listed in 40 CFR 261.31?
 - h. Is the material a pure form of any chemical listed in 40 CFR 261.33(e) or 40 CFR 261.33(f)?
4. If the material does not match the container markings, it is necessary to test it to determine if the waste is a hazardous waste. First the waste will be analyzed for "Characteristics of Hazardous Waste," to determine proper storage. Second the wastes will be analyzed to identify the material by either GC/MS or HPLC, to determine proper disposal.

It is possible that additional tests may be required on some drums. For instance, a check for PCBs may be necessary on oily wastes prior to disposal.

All laboratory tests will be conducted using regulatory approved/required analytical protocols and certified by the analyst. Procedures to be followed include those in EPA Publication SW-846, Test Methods for Evaluating Solid Waste, and DOT methods referenced in 49 CFR 171.8.

Upon receipt of test results, the WID can be completed and the waste information transferred to the originator.

Table C-3
WASTE ANALYSIS PROTOCOL
SUBBASE KINGS BAY

<u>WASTE</u>	<u>PARAMETER(S)</u>	<u>RATIONALE</u>
Beryllium	none	Listed waste
Bromine water	pH	Check pH <2.0
Cadmium batteries	TCLP	To determine cadmium content
Calcium hypochlorite	none	DOT Oxidizer
Carbon Tetrachloride Contaminated Waste	TCLP	To determine organics content
Chlordane Contaminated Waste	TCLP	To determine organics content
Chlorobenzene Contaminated Waste	TCLP	To determine organics content
Chloroform Contaminated Waste	TCLP	To determine organics content
Chromic Acid	pH, TCLP	check pH <2.0, To determine chromium content
Chromium plating solution	pH, TCLP	check pH <2.0, To determine chromium content
Copper acetoarsenite (Paris Green)	TCLP	To determine arsenic content
Corrosion preventive	Flashpoint	Check Flashpoint
Cresols (solvent)	none	Listed solvent
Cresol Contaminated Waste	TCLP	To determine organics content

Table C-3
WASTE ANALYSIS PROTOCOL
SUBBASE KINGS BAY

<u>WASTE</u>	<u>PARAMETER(S)</u>	<u>RATIONALE</u>
Cyanide plating bath solutions	none	Listed waste
Cyanide plating bath residues	none	Listed waste
Cyanide salts n.o.s.	none	Listed waste
Descaling compound	pH	Check pH <2.0
1,4-Dichlorobenzene Contaminated Waste	TCLP	To determine organics content
1,2-Dichloroethane Contaminated Waste	TCLP	To determine organics content
1,1-Dichloroethylene Contaminated Waste	TCLP	To determine organics content
Dichlorodifluoromethane	none	listed waste
2,4-Dinitrotoluene Contaminated Waste	TCLP	To determine organics content
Epoxy paint remover	TCLP	To determine metals content
Formic acid	pH	Check pH <2.0
Gasoline	Flashpoint	Check Flashpoint
Heptachlor Contaminated Waste	TCLP	To determine organics content
Hexachlorobenzene Contaminated Waste	TCLP	To determine organics content

Date: 03/26/91
Revision No: 2
Section C

Table C-3
WASTE ANALYSIS PROTOCOL
SUBASE KINGS BAY

<u>WASTE</u>	<u>PARAMETER(S)</u>	<u>RATIONALE</u>
Hexachlorobutadiene Contaminated Waste	TCLP	To determine organics content
Hexachloroethane Contaminated Waste	TCLP	To determine organics content
Hydrochloric acid	pH	Check pH <2.0
Hydrofluoric acid	pH	Check pH <2.0
Hydrogen peroxide	none	DOT oxidizer
Insulating varnish	Flashpoint TCLP	Check Flashpoint To determine organics content
Isobutanol	none	Listed solvent
Isopropyl alcohol	Flashpoint	Check Flashpoint
Kerosene	Flashpoint	Check Flashpoint
Lead residue	TCLP	To determine metals content
Lindane	TCLP	To determine organics content
Lithium hydroxide	pH	Check pH >12.5
Mercuric Nitrate solution	TCLP	To determine metals content
Mercury	TCLP	To Determine metals content

Date: 03/26/91
Revision No: 2
Section C

Table C-3
WASTE ANALYSIS PROTOCOL
SUBASE KINGS BAY

<u>WASTE</u>	<u>PARAMETER(S)</u>	<u>RATIONALE</u>
Methanol	none	Listed solvent
Methylene chloride	none	Listed solvent
Methyl ethyl ketone (Solvent)	none	listed solvent
Methyl ethyl ketone Contaminated Waste	TCLP	To determine organics content
Methyl isobutyl ketone	none	Listed waste
Monoethanolamine	pH	Check pH <2.0
Naphtha	Flashpoint	Check Flashpoint
Nickel Cyanide	none	Listed waste
Nickel solution, electrode-less	TCLP	To determine metals content
Nitric acid solution	pH	Check pH <2.0
Nitrobenzene Contaminated Waste	TCLP	To determine organics content
n-butyl alcohol	none	Listed solvent
Otto fuel waste	none	Reactive
Oxygen breathing apparatus canister	TCLP	To determine metals content
Paints	TCLP	To Determine metals and organics content

Table C-3
WASTE ANALYSIS PROTOCOL
SUBASE KINGS BAY

<u>WASTE</u>	<u>PARAMETER(S)</u>	<u>RATIONALE</u>
Paint stripper	pH	Check pH <2.0 or pH >12.5
Paint thinner	TCLP	To determine trace organics content
Penetrating Fluid	Flashpoint TCLP	Check Flashpoint To determine organics content
Pentachlorophenol Contaminated Waste	TCLP	To determine organics content
Phosphoric acid	pH	Check pH < 2.0
Plastisol	Flashpoint TCLP	Check Flashpoint To determine organics content
Potassium hydroxide	pH	Check pH > 12.5
Pyridine Contaminated Waste	TCLP	To determine organics content
Scale Removing Compound	pH	Check pH <2.0
Silver Solutions	TCLP	To determine metals content
Sludges from IWTP	TCLP	TCLP to determine metals and organics content

Date: 03/26/91
Revision No: 2
Section C

Table C-3
WASTE ANALYSIS PROTOCOL
SUBASE KINGS BAY

<u>WASTE</u>	<u>PARAMETER(S)</u>	<u>RATIONALE</u>
Sodium Chromate	TCLP	To Determine metals content
Sodium hydroxide	pH	Check pH >12.5
Stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process	none	Listed waste
Sulfamic acid	pH	Check pH <2.0
Sulfuric acid	pH	Check pH <2.0
Tetrachloroethylene	none	Listed waste
Tetrachloroethylene Contaminated Waste	TCLP	To determine organics content
Toluene	none	Listed solvent
1,1,1-Trichloroethane	none	Listed solvent
Trichloroethylene	none	Listed solvent
Trichloroethylene Contaminated Waste	TCLP	To determine organics content
Trichlorofluoromethane	none	Listed solvent
1,1,2-Trichloro-1,2,2-trifluoroethane	none	Listed solvent
Trichlorophenol Contaminated Waste	TCLP	To determine Organics content

Table C-3
WASTE ANALYSIS PROTOCOL
SUBASE KINGS BAY

<u>WASTE</u>	<u>PARAMETER(S)</u>	<u>RATIONALE</u>
Vinyl Chloride Contaminated Waste	TCLP	To determine organics content
Waste acids, mixed	pH	Check pH <2.0
Waste caustics, mixed	pH	Check pH >12.5
Xylene	none	Listed Solvent
Waste Explosives	none	These items are known to be reactive (D003) and contain known metals
Residual ash generated from open burning	Reactivity TCLP	Reactive residues To determine metals content

TABLE C-4

TEST METHODS

<u>PARAMETER</u>	<u>PROCEDURE</u>	<u>REFERENCE</u>
pH	Electrometric	*Method 9040
Flash Point	Pensky-Martens closed cup test	*Method 1010
TCLP	Toxicity Characteristic Leaching Procedure	*Method 1311
Arsenic	Atomic absorption	*Method 7060/7061
Barium	Atomic absorption	*Method 7080/7081
Cadmium	Atomic absorption	*Method 7090/7091
Chromium	Atomic absorption	*Method 7190/7191
Lead	Atomic absorption	*Method 7420/7421
Mercury	Atomic absorption	*Method 7470
Silver	Atomic absorption	*Method 7760/7761
Lindane	GC/EC	*Method 8080
Cyanide, Total	Colorimetric	*Method 9010
Reactivity	US Gap Test and/or Detonation, Deflagration, Transition Test	U.S. Bureau of Mines
Benzene	GC/MS or GC	*Method 8240/8020
Carbon Tetrachloride	GC/MS or GC	*Method 8240/8010
Chlordane	GC/MS or GC	*Method 8080/8250
Chlorobenzene	GC/MS or GC	*Method 8240/8020
Chloroform	GC/MS or GC	*Method 8240/8010
Cresols	GC/MS or GC	*Method 8250/8040

*From EPA Publication SW-846

TABLE C-4
TEST METHODS

<u>PARAMETER</u>	<u>PROCEDURE</u>	<u>REFERENCE</u>
1,4-Dichlorobenzene	GC/MS or GC	*Method 8250/8010
1,2-Dichloroethane	GC/MS or GC	*Method 8240/8010
1,1-Dichloroethylene	GC/MS or GC	*Method 8240/8010
2,4-Dinitrotoluene	GC/MS or GC	*Method 8250/8090
Heptachlor	GC/MS or GC	*Method 8250/8080
Hexachlorobenzene	GC/MS or GC	*Method 8250/8120
Hexachlorobutadiene	GC/MS or GC	*Method 8250/8120
Hexachloroethane	GC/MS or GC	*Method 8240/8010
Methyl ethyl ketone	GC/MS or GC	*Method 8240/8015
Nitrobenzene	GC/MS or GC	*Method 8250/8090
Pentachlorophenol	GC/MS or GC	*Method 8250/8040
Pyridine	GC/MS or GC	*Method 8250/8090
Tetrachloroethylene	GC/MS or GC	*Method 8240/8010
Toxaphene	GC/MS or GC	*Method 8250/8080
Trichloroethylene	GC/MS or GC	*Method 8240/8010
Trichlorophenols	GC/MS or GC	*Method 8250/8040
Vinyl chloride	GC/MS or GC	*Method 8240/8020

*From EPA Publication SW-846

The HW facility is not surrounded by a chain link fence. However, the facility does meet the security requirements of 40 CFR 264.14 by being part of SUBASE Kings Bay Naval Base which has a complete security system, as described in the previous paragraphs. Besides the base security system the building is kept locked except when the HW Facility Operator is there. All hazardous wastes are kept within the locked facility.

The OB/OD facility is not surrounded by a chain link fence. However, the facility does meet the security requirements of 40 CFR 264.14 by being part of SUBASE Kings Bay Naval Base which has a complete security system, as described in the previous paragraphs.

F-1(a)(1) Warning Signs

Signs reading "DANGER - UNAUTHORIZED PERSONNEL KEEP OUT" and "NO SMOKING" will be posted on the HW facility in sufficient numbers to be seen from any approach. All signs will be legible from a distance of 25 feet and are written in English.

The OB/OD facility has danger signs posted which read "DANGER - UNAUTHORIZED PERSONNEL KEEP OUT". These signs are posed at the entrance to the facility on John C. Calhoun road and on each side of the facility. In addition, "NO SMOKING" signs are posted at the facility. These signs have been produced so that they are legible from at least 25 feet and are written in English.

F-1(b) Waiver

SUBASE Kings Bay does not request a waiver of the security requirements stated in 40 CFR 264.14(a)(1) and (2) regarding injury to intruder and violation by intruder.

F-2 INSPECTION SCHEDULE [40 CFR 270.14 (B)(5)]

F-2(a) General Inspection Requirements

SUBASE conducts general inspections of the HW management area for structural deterioration, unauthorized discharges, equipment malfunctions, and security problems. These general inspections are performed by the Fire Department Inspector (quarterly), Public Works (quarterly), and the Safety Officer (at least quarterly). These inspections as described in Table F-1 are in addition to the requirements for a HW storage facility.

Primary EC

Michael Anderson
Environmental Engineer
(912) 673-4620 (office)
(912) 638-4981 (home)
524 Wesley Circle
St. Simons Island, GA 31522

Alternate EC

James E. More
Environmental Engineer
(912) 673-4759 (office)
(912) 882-2466 (home)
102 Partridge Ln.
St. Marys, GA 31558

Other emergency organizations and telephone numbers are listed in Table 1. The person who will call these numbers during normal working hours is the Hazardous Waste Coordinator, Michael Anderson, at (912) 673-4620 and during off duty hours it will be the Command Duty Watch Station Officer at (912) 673-4703 or 2020.

3.0 Implementation Criteria

The Contingency Plan must be implemented under the following circumstances:

1. Fire/Explosion:
 - a. Fire causes release of toxic fumes;
 - b. Fire spreads beyond area of ignition;
 - c. Fire threatens off-site areas;
 - d. Fire fighting agents result in contamination runoff; or
 - e. Imminent threat of explosion.

2. Spills/leaks:
 - a. Fire hazard exists due to spilled material;
 - b. Toxic fume hazard exists;
 - c. Groundwater may be threatened;
 - d. Spill threatens off-site property; or
 - e. Spill threatens navigable water.

Finals closure will be supervised and certified by an independent registered professional engineer, in addition to the owner or operator. SUBASE does not anticipate a need for an extension of closure time; therefore, no extension is requested.

I-1(d) Inventory Removal, Disposal, or Decontamination of Equipment

The final inventory of wastes will be removed from the HW facility and transported to a permitted hazardous waste treatment, storage, or disposal facilities. All drums will be sealed and labeled prior to shipment.

After the final inventory of waste has been removed, the HW facility will be inspected and all loose items, i.e., papers, pallets or empty containers will be removed and packaged for disposal as hazardous wastes. A registered professional engineer will certify that the HW facility is ready for decontamination. Trained personnel wearing rubber gloves, rubber boots, and protective coveralls will wash each bay of the HW facility with water containing an ionic surfactant. All washings will be drummed for disposal as hazardous waste. In order to determine if the bays have been adequately decontaminated, each bay will be rinsed twice with clean fresh water. The water from the first rinse will be drummed and disposed as hazardous waste. A sample of the second rinsewater from each bay will be collected and analyzed for Toxicity Characteristics, total organic carbon (TOC), and total organic halogens (TOX). A bay will not be considered decontaminated if the corresponding rinsewater sample meets any of the following criteria:

- * the concentration of any Toxicity Characteristic exceeds one tenth of the Characteristic maximum values for hazardous waste,
- * the TOC concentration exceeds 25 mg/l,
- * the TOX concentration exceeds 25 mg/l.

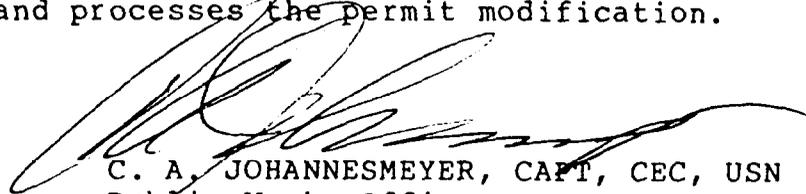
The rinsewater from any bay found to be contaminated will be disposed of as hazardous waste. Each bay will be rinsed until a sample of the rinsewater fails to meet all of the criteria set forth above. Rinsewater not found to be contaminated will be discharged to the sanitary sewer system.

Once the decontamination process for the storage facility is completed, the Environmental Engineer will certify the results of all tests and an independent registered professional engineer will visually inspect the storage building, review the test results of each bay, and if all criteria described above are met, certify the facility decontamination.

Three background samples will be collected from areas known not to be impacted by hazardous wastes. Two samples of the top six inches of soil will be collected along each edge of the drive at the loading/unloading area. In addition, one composite sample of the top six inches of soil will be collected along each of the drainage ditches located on the north and south facility boundaries. Each of the samples will be analyzed for hazardous constituents applicable to hazardous waste routinely stored in the building. For each waste identified in Table C-2 of the Waste Analysis Plan as a waste to be stored in the HW facility, the hazardous constituents shall consist of: (1) the appropriate characteristic test for waste hazardous due to the characteristic of ignitability, corrosivity, and reactivity; (2) total metal (SW-846 acid digestion methods) for wastes hazardous due to Toxicity Characteristics; (3) the constituents shown in Appendix VII, 40 CFR 261, for "F" and "K" listed wastes; and (4) the waste itself for "U" and "P" listed hazardous wastes. Any sample which exhibits concentrations greater than twice background will be assumed to be representative of contaminated soils. Appropriate statistical methods will be used to calculate background concentrations. Analytical methods for these analyses shall be as specified in

REQUEST FOR DEFERMENT

Effective this 28th day of June 1991, Kings Bay Naval Submarine Base, EPA I.D. No. 270-50-8998, does hereby consent to allow the United States Environmental Protection Agency to defer to review and action on the Class 2 permit modification request submitted by this facility on 29 March 1991, until such time as the State Of Georgia adopts the Toxicity Characteristics rule, promulgated 29 March 1990, (FR 117998) and processes the permit modification.



C. A. JOHANNESMEYER, CAPT, CEC, USN
Public Works Officer
By Direction of the
Commanding Officer