

HWMA/RCRA STORAGE and TREATMENT PERMIT

for the

MATERIALS AND FUELS COMPLEX (MFC)

ATTACHMENT 1 – FACILITY DESCRIPTION

EPA Part A Permit Application

EFFECTIVE DATE: OCTOBER 1, 2015

REVISED DATE: JULY 1, 2016

INL HWMA/RCRA MFC Permit
Attachment 1—Part A Permit Application

Revision Date: July 1, 2016

OMB#: 2050-0024 Expires 01/31/2017

<p>SEND COMPLETED FORM TO: The appropriate State or Regional Office.</p>	<p>United States Environmental Protection Agency RCRA SUBTITLE C SITE IDENTIFICATION FORM</p>		
<p>1. Reason for Submittal MARK ALL BOX(ES) THAT APPLY</p>	<p>Reason for Submittal:</p> <p><input type="checkbox"/> To provide an Initial Notification (first time submitting site identification information / to obtain an EPA ID number for this location).</p> <p><input type="checkbox"/> To provide Subsequent Notification (to update site identification information for this location).</p> <p><input type="checkbox"/> As a component of a First RCRA Hazardous Waste Part A Permit Application.</p> <p><input checked="" type="checkbox"/> As a component of a Revised RCRA Hazardous Waste Part A Permit Application (Amendment #/Revision Date: Class 1* PMR-July 2016)</p> <p><input type="checkbox"/> As a component of the Hazardous Waste Report (If marked, see sub-bullet below)</p> <p><input type="checkbox"/> Site was a TSD facility and/or generator of >1,000 kg of hazardous waste, >1 kg of acute hazardous waste, or >100 kg of acute hazardous waste spill cleanup in one or more months of the report year (or State equivalent LQG regulations)</p>		
<p>2. Site EPA ID Number</p>	<p>EPA ID Number: ID4890008952</p>		
<p>3. Site Name</p>	<p>Name: Idaho National Laboratory — Materials and Fuels Complex Permit</p>		
<p>4. Site Location Information</p>	<p>Street Address:</p> <p>City, Town, or Village: Scoville County: Bingham</p> <p>State: Idaho Country: USA Zip Code: 83415</p>		
<p>5. Site Land Type</p>	<p><input type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other</p>		
<p>6. NAICS Code(s) for the Site (at least 5-digit codes)</p>	<p>A. 924110</p>		<p>B. 541712</p>
	<p>C. 336992</p>		<p>D. Not Applicable</p>
<p>7. Site Mailing Address</p>	<p>Street or P. O. Box: 1955 Fremont Avenue</p> <p>City, Town, or Village: Idaho Falls</p> <p>State: Idaho Country: USA Zip Code: 83415</p>		
<p>8. Site Contact Person</p>	<p>First Name: Teresa MI: L Last Name: Perkins</p> <p>Title: Director, Environment & Sustainability Division</p> <p>Street or P. O. Box: 1955 Fremont Avenue</p> <p>City, Town, or Village: Idaho Falls</p> <p>State: Idaho Country: USA Zip Code: 83415</p> <p>Email: perkintl@id.doe.gov</p> <p>Phone: (208) 526-1483 Ext.: N/A Fax: 208-526-1926</p>		
<p>9. Legal Owner and Operator of the Site</p>	<p>A. Name of Site's Legal Owner: Department of Energy — Idaho</p>		<p>Date Became Owner: 02/01/2005</p>
	<p>Owner Type: <input type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other</p>		
	<p>Street or P. O. Box: 1955 Fremont Avenue</p> <p>City, Town, or Village: Idaho Falls Phone: (208) 526-1483</p> <p>State: Idaho Country: USA Zip Code: 83415</p>		
	<p>B. Name of Sites Operator: Battelle Energy Alliance, LLC</p>		<p>Date Became Operator: 02/01/2005</p>
	<p>Operator Type: <input type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other</p>		

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10. Type of Regulated Waste Activity (at your site)

Mark "Yes" or "No" for all current activities (as of the date submitting the form); complete any additional boxes as instructed.

A. Hazardous Waste Activities; Complete all parts 1-10.

Y N 1. Generator of Hazardous Waste

If "Yes" mark only one of the following - a, b, or c

- a. LQG: Generates, in any calendar month, 1,000 kg/mo (2,200 lbs/mo) or more of hazardous waste; or Generates In any calendar month, or accumulates at any time, more than 1 kg/mo (2.2 lbs/mo) of acute hazardous waste or Generates, in any calendar month or accumulates at any time, more than 100 kg/mo (220 lbs/mo) of acute hazardous spill cleanup material.
- b. SQG: 100 to 1,000 kg/mo (220 - 2,200 lbs/mo) of non-acute hazardous waste.
- c. CESQG: Less than 100 kg/mo (220 lbs/mo) of non-acute hazardous waste

If "Yes" above, indicate other generator activities in 2-10.

- Y N 2. Short-Term Generator** (generate from a short term or one-time event and not from on-going processes). If "Yes," provide an explanation in the Comments section

- Y N 3. United States Importer of Hazardous Waste**

- Y N 4. Mixed Waste (hazardous and radioactive) Generator**

- Y N 5. Transporter of Hazardous Waste.** If "Yes," mark all that apply.

- a. Transporter
- b. Transfer Facility (at your site)

- Y N 6. Treater, Storer, or Disposer of Hazardous Waste** Note: A hazardous waste Part B permit is required for these activities.

- Y N 7. Recycler of Hazardous Waste**

- Y N 8. Exempt Boiler and/or Industrial Furnace.** If "Yes," mark all that apply.

- a. Small Quantity On-site Burner Exemption

- b. Smelting, Melting, and Refining Furnace Exemption

- Y N 9. Underground Injection Control**

- Y N 10. Receives Hazardous Waste from Off-site**

B. Universal Waste Activities; Complete all parts 1-2

Y N 1. Large Quantity Handler of Universal Waste (you accumulate 5,000kg or more)[refer to your State regulations to determine what is regulated]. Indicate types of universal waste managed at your site. If "Yes", mark all that apply.

- a. Batteries
- b. Pesticides
- c. Mercury containing equipment
- d. Lamps
- e. Other (specify) _____
- f. Other (specify) _____
- g. Other (specify) _____

- Y N 2. Destination Facility for Universal Waste**
Note: A hazardous waste permit may be required for this activity

C. Used Oil Activities; Complete all parts 1-4.

- Y N 1. Used Oil Transporter**
 If "Yes," mark all that apply.

- a. Transporter
- b. Transfer Facility (at your site)

- Y N 2. Used Oil Processor and/or Re-refiner**
 If "Yes," mark all that apply.

- a. Processor
- b. Re-refiner

- Y N 3. Off-Specification Used Oil Burner**

- Y N 4. Used Oil Fuel Marketer**

If "Yes," mark all that apply.

- a. Marketer Who Directs Shipment of Off-Specification Used Oil to Off-Specification Used Oil Burner
- b. Marketer Who First Claims the Used Oil Meets the Specifications

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D. Eligible Academic Entities with Laboratories - Notification for opting into or withdrawing from managing laboratory hazardous wastes pursuant to 40 CFR Part 262 Subpart K.

◆ You can **ONLY** Opt into Subpart K if:

- you are at least one of the following: a college or university; a teaching hospital that is owned by or has a formal affiliation agreement with a college or university; or a non-profit research institute that is owned by or has a formal affiliation agreement with a college or university; AND
- you have checked with your State to determine if 40 CFR Part 262 Subpart K is effective in your state

1. Opting into or currently operating under 40 CFR Part 262 Subpart K for the management of hazardous wastes in laboratories

See the item-by-item instructions for definitions of types of eligible academic entities. Mark all that apply:

- a. College or University
- b. Teaching Hospital that is owned by or has a formal written affiliation agreement with a college or university
- c. Non-profit Institute that is owned by or has a formal written affiliation agreement with a college or university

2. Withdrawing from 40 CFR Part 262 Subpart K for the management of hazardous wastes in laboratories

11. Description of Hazardous Wastes

A. Waste Codes for Federally Regulated Hazardous Wastes. Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g., D001, D003, F007, U112). Use an additional page if more spaces are needed.

See section #13						

B. Waste Codes for State-Regulated (i.e., non-Federal) Hazardous Wastes. Please List the waste codes of the State-Regulated hazardous wastes handled at your site. List them in the order they are presented in the regulations. Use an additional page if more spaces are needed.

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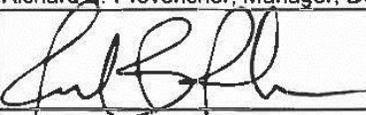
12. Notification of Hazardous Secondary Material (HSM) Activity

N Are you notifying under 40 CFR 260.42 that you will begin managing, are managing or will stop managing hazardous secondary material under 40 CFR 261.2(a)(2)(ii), 40 CFR 261.4(a)(23), (24), or (25)?
 If "Yes", you must fill out the Addendum to the Site Identification Form: Notification for Managing Hazardous Secondary Material.

13. Comments

For 11 (A), see attached Form OMB#: 2050-0024, Item 9 page(s) 5a of 6 thru 5o of 6

14. 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 fines and imprisonment for knowing violations. For the RCRA Hazardous Waste Part A Permit Application, all owner(s) and operator(s) must sign (see 40 CFR 270.10(b) and 270.11).

Signature of legal owner, operator, or an authorized representative	Name and Official Title (type or print)	Date Signed (mm/dd/yyyy)
Owner	Richard B. Provencher, Manager, DOE Idaho Operations Office	
		5/25/2016
Operator	Carolyn S. Mascareñas, Director ESH&Q, Battelle Energy Alliance, LLC	
		5/2/16

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United States Environmental Protection Agency													
HAZARDOUS WASTE PERMIT INFORMATION FORM													
1. Facility Permit Contact	First Name: Teresa								MI: L		Last Name: Perkins		
	Contact Title: Director, Environment & Sustainability Division												
	Phone: (208) 526-1483					Ext.: N/A			Email: perkintl@id.doe.gov				
2. Facility Permit Contact Mailing Address	Street or P.O. Box: 1955 Fremont Avenue												
	City, Town, or Village: Idaho Falls												
	State: Idaho												
	Country: USA						Zip Code: 83415						
3. Operator Mailing Address and Telephone Number	Street or P.O. Box: Battelle Energy Alliance, LLC, 2525 Fremont Avenue												
	City, Town, or Village: Idaho Falls												
	State: Idaho						Phone: (208) 526-9021						
	Country: USA						Zip Code: 83415						
4. Facility Existence Date	Facility Existence Date (mm/dd/yyyy): February 1965												
5. Other Environmental Permits													
A. Facility Type (Enter code)	B. Permit Number											C. Description	
R	I	D	4	8	9	0	0	0	8	9	5	2	Final HWMA Permit for the INL MFC Facilities
P	P	T	C	P	2	0	0	8	0	0	7	3	Building 765 Fuel Conditioning Facility (FCF)
P	P	T	C	-	0	1	1	0	0	0	2	2	Building 753 Plant Services Paint Spray Booth
P, E, U													See Item 5 Supplement, Page 1a for additional permits
6. Nature of Business													
<p>In operation since 1949, INL is a science-based, applied engineering national laboratory dedicated to supporting the United States Department of Energy's missions in nuclear and energy research, science, and national defense.</p> <p>The Materials and Fuels Complex performs a variety of research, development, demonstration, and deployment activities to expand the knowledge-base and capabilities of nuclear fuels, reactors, and associated components. In addition, research associated with energy, environment, and homeland security functions is also conducted. These activities require capabilities to store and treat both hazardous and mixed wastes.</p>													

INL HWMA/RCRA FINAL PERMIT, EPA NO. ID4890008952		
MFC Permit, Doc. No. PER-116		
Part A Form Supplement		
ITEM 5. OTHER ENVIRONMENTAL PERMITS		
AIR PERMITS		
Area	Type and Number	Description
Advanced Test Reactor Complex	P, PTC-023-00001	TRA-715 Evaporation pond
	P, PTC-000534	TRA-Diesel-powered generators
Idaho National Laboratory	P, TI-2009.0148	Title V Operating Permit
Materials and Fuels Complex	P, P-2011.0077	Fuel Manufacturing Facility
Materials and Fuels Complex	P, P-2011.0113	Irradiated Materials Characterization Laboratory
Test Area North Facility	P, P-2011.0092	Specific Manufacturing Capability
WATER PERMITS		
Area	Type and Number	Description
Idaho National Laboratory	U, CITRC Disposal Well #1 34W003001, CITRC Disposal Well #2 34W003002, CITRC Disposal Well #3 34W003003, CFA Disposal Well 34W003004, TAN Disposal Well #1 34W003005, TAN Disposal Well #2 34W003006, TAN Disposal Well # 3 34W003007	State of Idaho Underground Injection Well Permits [Idaho Department of Water Resources (IDWR)]
Idaho National Laboratory	U, State of Idaho Monitoring Well Permits	INL monitoring well permit applications are sent annually to the IDWR for wells (greater than 18 ft deep) to be constructed in the current calendar year. Permits are authorized by agreement between the DOE-ID and the IDWR
Central Facilities Area/Site Wide Complex	E, LA-000141-03	Municipal Wastewater Reuse Permit INL Central Facilities Area (CFA) Sewage Treatment Plant.
Materials and Fuels Complex	E, WRU-I-0160-01	Industrial Wastewater Reuse Permit INL Materials and Fuels Complex (MFC) Industrial Waste Ditch (IWD) and Industrial Waste Pond (IWP).
Advanced Test Reactor Complex	E, LA-000161-01	Industrial Wastewater Reuse Permit INL Minor Modification "B" Advanced Test Reactor Complex (ATR Complex)
Idaho National Laboratory	E	INL operates under a Federal Reserved Water Right for groundwater use

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7. Process Codes and Design Capacities - Enter information in the Sections on Form Page 3.

A. PROCESS CODE - Enter the code from the list of process codes below that best describes each process to be used at the facility. If more lines are needed, attach a separate sheet of paper with the additional information. For "other" processes (i.e., D99, S99, T04 and X99), describe the process (including its design capacity) in the space provided in Item 8.

B. PROCESS DESIGN CAPACITY - For each code entered in Item 7.A; enter the capacity of the process.

1. **AMOUNT** - Enter the amount. In a case where design capacity is not applicable (such as in a closure/post-closure or enforcement action) enter the total amount of waste for that process.

2. **UNIT OF MEASURE** - For each amount entered in Item 7.B(1), enter the code in Item 7.B(2) from the list of unit of measure codes below that describes the unit of measure used. Select only from the units of measure in this list.

C. PROCESS TOTAL NUMBER OF UNITS - Enter the total number of units for each corresponding process code.

Process Code	Process	Appropriate Unit of Measure for Process Design Capacity	Process Code	Process	Appropriate Unit of Measure for Process Design Capacity
Disposal			Treatment (continued) (for T81 - T94)		
D79	Underground Injection Well Disposal	Gallons; Liters; Gallons Per Day; or Liters Per Day	T81	Cement Kiln	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; BTU Per Hour; Liters Per Hour; Kilograms Per Hour; or Million BTU Per Hour
D80	Landfill	Acre-feet; Hectare-meter; Acres; Cubic Meters; Hectares; Cubic Yards	T82	Lime Kiln	
D81	Land Treatment	Acres or Hectares	T83	Aggregate Kiln	
D82	Ocean Disposal	Gallons Per Day or Liters Per Day	T84	Phosphate Kiln	
D83	Surface Impoundment Disposal	Gallons; Liters; Cubic Meters; or Cubic Yards	T85	Coke Oven	
D99	Other Disposal	Any Unit of Measure Listed Below	T86	Blast Furnace	
Storage			T87	Smelting, Melting, or Refining Furnace	
S01	Container	Gallons; Liters; Cubic Meters; or Cubic Yards	T88	Titanium Dioxide Chloride Oxidation Reactor	
S02	Tank Storage	Gallons; Liters; Cubic Meters; or Cubic Yards	T89	Methane Reforming Furnace	
S03	Waste Pile	Cubic Yards or Cubic Meters	T90	Pulping Liquor Recovery Furnace	
S04	Surface Impoundment	Gallons; Liters; Cubic Meters; or Cubic Yards	T91	Combustion Device Used In the Recovery Of Sulfur Values From Spent Sulfuric Acid	
S05	Drip Pad	Gallons; Liters; Cubic Meters; Hectares; or Cubic Yards	T92	Halogen Acid Furnaces	
S06	Containment Building Storage	Cubic Yards or Cubic Meters	T93	Other Industrial Furnaces Listed In 40 CFR §260.10	
S99	Other Storage	Any Unit of Measure Listed Below	T94	Containment Building Treatment	Cubic Yards; Cubic Meters; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour; BTU Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Metric Tons Per Day; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million BTU Per Hour
Treatment			Miscellaneous (Subpart X)		
T01	Tank Treatment	Gallons Per Day; Liters Per Day	X01	Open Burning/Open Detonation	Any Unit of Measure in Listed Below
T02	Surface Impoundment	Gallons Per Day; Liters Per Day	X02	Mechanical Processing	Short Tons Per Hour; Metric Tons Per Hour; Short Tons Per Day; Metric Tons Per Day; Pounds Per Hour; Kilograms Per Hour; Gallons Per Hour; Liters Per Hour; or Gallons Per Day
T03	Incinerator	Short Tons Per Hour; Metric Tons Per Hour; Gallons Per Hour; Liters Per Hour; BTUs Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Gallons Per Day; Metric Tons Per Hour; or Million BTU Per Hour	X03	Thermal Unit	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric tons Per Day; Metric Tons Per Hour; Short Tons Per Day; BTU Per Hour; or Million BTU Per Hour
T04	Other Treatment	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Short Tons Per Day; BTUs Per Hour; Gallons Per Day; Liters Per Hour; or Million BTU Per Hour	X04	Geologic Repository	Cubic Yards; Cubic Meters; Acre-feet; Hectare-meter; Gallons; or Liters
T80	Boiler	Gallons; Liters; Gallons Per Hour; Liters Per Hour; BTUs Per Hour; or Million BTU Per Hour	X99	Other Subpart X	Any Unit of Measure Listed Below

Unit of Measure	Unit of Measure Code	Unit of Measure	Unit of Measure Code	Unit of Measure	Unit of Measure Code
Gallons	G	Short Tons Per Hour	D	Cubic Yards	Y
Gallons Per Hour	E	Short Tons Per Day	N	Cubic Meters	C
Gallons Per Day	U	Metric Tons Per Hour	W	Acres	B
Liters	L	Metric Tons Per Day	S	Acre-feet	A
Liters Per Hour	H	Pounds Per Hour	J	Hectares	Q
Liters Per Day	V	Kilograms Per Hour	X	Hectare-meter	F
		Million BTU Per Hour	X	BTU Per Hour	I

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7. Process Codes and Design Capacities (Continued)

EXAMPLE FOR COMPLETING Item 7 (shown in line number X-1 below): A facility has a storage tank, which can hold 533.788 gallons.

Line Number	A. Process Code (From list above)			B. PROCESS DESIGN CAPACITY		C. Process Total Number of Units	For Official Use Only				
	(1) Amount (Specify)	(2) Unit of Measure									
X 1	S	0	2	533.788	G	001					
1	S	0	1	83365.000	G	005					
2	S	0	2	390.000	G	002					
3	T	0	1	1188.000	U	002					
4											
5											
6											
7											
8											
9											
1	0										
1	1										
1	2										
1	3										

NOTE: If you need to list more than 13 process codes, attach an additional sheet(s) with the information in the same format as above. Number the lines sequentially, taking into account any lines that will be used for "other" processes (i.e., D99, S99, T04 and X99) in Item 8.

8. Other Processes (Follow instructions from Item 7 for D99, S99, T04 and X99 process codes)

Line Number (Enter #s in sequence with item 7)	A. Process Code (From list above)			B. PROCESS DESIGN CAPACITY		C. Process Total Number of Units	For Official Use Only				
	(1) Amount (Specify)	(2) Unit of Measure									
X 2	T	0	4	100.00	U	001					
4	S	9	9	53000.000	G	001					
5	T	0	4	1320	U	003					

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ITEM-7-8A PROCESS CODES AND DESIGN CAPACITIES SUPPLEMENT				
Line Number	Process Code	Process Description	Process Design Capacity	Process Unit Capacity
Item # 7 Line # 1	S01	Container Storage	83365 gallons (total all units)	HFEF Container Storage Building 785 10,725 gallons ¹ SCMS Container Storage Building 793 7,040 gallons ¹ Building 793C 14,080 gallons ¹ Building 793G 3,520 gallons ¹ SSB Container Storage Building 703 48,000 gallons ¹
Item # 7 Line # 2	S02	Tank Storage	390 gallons (total all units)	SCMS Tank Storage Water Wash Vessel 90 gallons ² Scrubber Water Tank 300 gallons ²
Item # 7 Line # 3	T01	Tank Treatment	1188 gallons (total all units)	SCMS Tank Treatment Water Wash Vessel 156 gallons/day ³ Scrubber Water Tank 1,032 gallons/day ⁴
Item # 8 Line # 4	S99	Miscellaneous Unit Storage	53,000 gallons	RSWF Miscellaneous Unit Storage Building 771 53,000 gallons ¹
Item # 8 Line # 5	T04	Container Treatment	1320 gallons (total all units)	HFEF Container Treatment 440 gallons/day ⁵ SCMS Container Treatment Building 793 440 gallons/day ⁵ Building 793C 440 gallons/day ⁵

ITEM 7-8A PROCESS CODES AND DESIGN CAPACITIES SUPPLEMENT

- 1 Total volume in 55 gallon drums or process equipment.
- 2 Total volume in process tanks.
- 3 SCMS tank deactivation (water reaction) rate:

$$\left(\frac{50 \text{ lbs}}{\text{hour}}\right)\left(\frac{24 \text{ hours}}{\text{day}}\right)\left(\frac{\text{gallon}}{7.7 \text{ lbs}}\right) = \frac{156 \text{ gallons}}{\text{day}}$$

Note: calculation rate is rounded down

- 4 SCMS tank evaporation and deactivation (acid addition or carbonation) rate:

$$\left(\frac{43 \text{ gallons}}{\text{hour}}\right)\left(\frac{24 \text{ hours}}{\text{day}}\right) = \frac{1032 \text{ gallons}}{\text{day}}$$

- 5 HFEF, SCMS container treatment-melt and draining, absorption, deactivation, neutralization, solidification, stabilization, and repackaging rate:

$$\left(\frac{18.3 \text{ gallons}}{\text{hour}}\right)\left(\frac{24 \text{ hours}}{\text{day}}\right) = \frac{440 \text{ gallons}}{\text{day}}$$

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9. Description of Hazardous Wastes (Continued. Use the additional sheet(s) as necessary; number pages as 5a, etc.)																	
Line Number	A. EPA Hazardous Waste No. (Enter code)					B. Estimated Annual Qty of Waste	C. Unit of Measure (Enter code)	D. PROCESSES									
								(1) PROCESS CODES (Enter code)					(2) PROCESS DESCRIPTION (If a code is not entered in 9.D(1))				
1	D	0	0	1	1,430,000	P	S	0	1	T	0	4					HFEF Container Storage, Verification, Repackaging and/or Container Treatment
2	D	0	0	2													Included with the above
3	D	0	0	3													Included with the above
4	D	0	0	4													Included with the above
5	D	0	0	5													Included with the above
6	D	0	0	6													Included with the above
7	D	0	0	7													Included with the above
8	D	0	0	8													Included with the above
9	D	0	0	9													Included with the above
10	D	0	1	0													Included with the above
11	D	0	1	1													Included with the above
12	D	0	1	2													Included with the above
13	D	0	1	3													Included with the above
14	D	0	1	4													Included with the above
15	D	0	1	5													Included with the above
16	D	0	1	6													Included with the above
17	D	0	1	7													Included with the above
18	D	0	1	8													Included with the above
19	D	0	1	9													Included with the above
20	D	0	2	0													Included with the above
21	D	0	2	1													Included with the above
22	D	0	2	2													Included with the above
23	D	0	2	3													Included with the above
24	D	0	2	4													Included with the above
25	D	0	2	5													Included with the above
26	D	0	2	6													Included with the above
27	D	0	2	7													Included with the above
28	D	0	2	8													Included with the above
29	D	0	2	9													Included with the above
30	D	0	3	0													Included with the above
31	D	0	3	1													Included with the above
32	D	0	3	2													Included with the above
33	D	0	3	3													Included with the above
34	D	0	3	4													Included with the above
35	D	0	3	5													Included with the above
36	D	0	3	6													Included with the above

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9. Description of Hazardous Wastes (Continued. Use the additional sheet(s) as necessary; number pages as 5a, etc.)						
Line Number	A. EPA Hazardous Waste No. (Enter code)			B. Estimated Annual Qty of Waste	C. Unit of Measure (Enter code)	D. PROCESSES
						(1) PROCESS CODES (Enter code)
3	7	D	0	3	7	Included with the above
3	8	D	0	3	8	Included with the above
3	9	D	0	3	9	Included with the above
4	0	D	0	4	0	Included with the above
4	1	D	0	4	1	Included with the above
4	2	D	0	4	2	Included with the above
4	3	D	0	4	3	Included with the above
4	4	F	0	0	1	Included with the above
4	5	F	0	0	2	Included with the above
4	6	F	0	0	3	Included with the above
4	7	F	0	0	4	Included with the above
4	8	F	0	0	5	Included with the above
4	9	F	0	0	6	Included with the above
5	0	F	0	0	7	Included with the above
5	1	F	0	0	8	Included with the above
5	2	F	0	0	9	Included with the above
5	3	F	0	3	9	Included with the above
5	4	P	0	0	5	Included with the above
5	5	P	0	1	2	Included with the above
5	6	P	0	2	2	Included with the above
5	7	P	0	2	4	Included with the above
5	8	P	0	2	7	Included with the above
5	9	P	0	2	8	Included with the above
6	0	P	0	3	0	Included with the above
6	1	P	0	3	1	Included with the above
6	2	P	0	5	6	Included with the above
6	3	P	0	7	3	Included with the above
6	4	P	0	7	7	Included with the above
6	5	P	0	9	8	Included with the above
6	6	P	1	0	4	Included with the above
6	7	P	1	0	5	Included with the above
6	8	P	1	0	6	Included with the above
6	9	P	1	1	3	Included with the above
7	0	P	1	1	6	Included with the above
7	1	P	1	1	9	Included with the above
7	2	P	1	2	0	Included with the above

**INL HWMA/RCRA MFC Permit
Attachment 1—Part A Permit Application**

Revision Date: July 1, 2016

EPA ID NO: ID4890008952

OMB #: 2050-0024; Expires 01/31/2017

9. Description of Hazardous Wastes (Continued. Use the additional sheet(s) as necessary; number pages as 5a, etc.)													
Line Number	A. EPA Hazardous Waste No. (Enter code)					B. Estimated Annual Qty of Waste	C. Unit of Measure (Enter code)	D. PROCESSES					(2) PROCESS DESCRIPTION (If a code is not entered in 9.D(1))
								(1) PROCESS CODES (Enter code)					
7	3	U	0	0	3								Included with the above
7	4	U	0	0	4								Included with the above
7	5	U	0	0	7								Included with the above
7	6	U	0	0	9								Included with the above
7	7	U	0	1	2								Included with the above
7	8	U	0	1	4								Included with the above
7	9	U	0	1	9								Included with the above
8	0	U	0	2	0								Included with the above
8	1	U	0	3	2								Included with the above
8	2	U	0	3	7								Included with the above
8	3	U	0	4	4								Included with the above
8	4	U	0	4	8								Included with the above
8	5	U	0	5	2								Included with the above
8	6	U	0	6	9								Included with the above
8	7	U	0	7	9								Included with the above
8	8	U	0	8	0								Included with the above
8	9	U	0	8	1								Included with the above
9	0	U	0	8	3								Included with the above
9	1	U	0	8	4								Included with the above
9	2	U	1	0	2								Included with the above
9	3	U	1	0	3								Included with the above
9	4	U	1	0	8								Included with the above
9	5	U	1	1	6								Included with the above
9	6	U	1	1	8								Included with the above
9	7	U	1	2	0								Included with the above
9	8	U	1	2	2								Included with the above
9	9	U	1	2	3								Included with the above
10	0	U	1	2	7								Included with the above
10	1	U	1	2	8								Included with the above
10	2	U	1	3	1								Included with the above
10	3	U	1	3	3								Included with the above
10	4	U	1	3	4								Included with the above
10	5	U	1	3	5								Included with the above
10	6	U	1	3	8								Included with the above
10	7	U	1	4	0								Included with the above
10	8	U	1	4	4								Included with the above

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Revision Date: July 1, 2016

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9. Description of Hazardous Wastes (Continued. Use the additional sheet(s) as necessary; number pages as 5a, etc.)													
Line Number	A. EPA Hazardous Waste No. (Enter code)				B. Estimated Annual Qty of Waste	C. Unit of Measure (Enter code)	D. PROCESSES						(2) PROCESS DESCRIPTION (If a code is not entered in 9.D(1))
							(1) PROCESS CODES (Enter code)						
10	9	U	1	4	5								Included with the above
11	0	U	1	4	7								Included with the above
11	1	U	1	5	1								Included with the above
11	2	U	1	5	9								Included with the above
11	3	U	1	6	2								Included with the above
11	4	U	1	6	5								Included with the above
11	5	U	1	6	9								Included with the above
11	6	U	1	7	0								Included with the above
11	7	U	1	7	1								Included with the above
11	8	U	1	8	2								Included with the above
11	9	U	1	8	8								Included with the above
12	0	U	1	9	0								Included with the above
12	1	U	1	9	1								Included with the above
12	2	U	1	9	6								Included with the above
12	3	U	2	0	1								Included with the above
12	4	U	2	0	4								Included with the above
12	5	U	2	0	7								Included with the above
12	6	U	2	0	8								Included with the above
12	7	U	2	1	0								Included with the above
12	8	U	2	1	1								Included with the above
12	9	U	2	1	5								Included with the above
13	0	U	2	1	7								Included with the above
13	1	U	2	1	8								Included with the above
13	2	U	2	1	9								Included with the above
13	3	U	2	2	0								Included with the above
13	4	U	2	2	5								Included with the above
13	5	U	2	2	6								Included with the above
13	6	U	2	2	7								Included with the above
13	7	U	2	2	8								Included with the above
13	8	U	2	3	9								Included with the above
13	9	U	3	2	8								Included with the above

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9. Description of Hazardous Wastes (Continued. Use the additional sheet(s) as necessary; number pages as 5a, etc.)																				
Line Number	A. EPA Hazardous Waste No. (Enter code)					B. Estimated Annual Qty of Waste	C. Unit of Measure (Enter code)	D. PROCESSES												
								(1) PROCESS CODES (Enter code)					(2) PROCESS DESCRIPTION (If a code is not entered in 9.D(1))							
1	D	0	0	1	990,000	P	S	0	2	T	0	1								SCMS Tank Storage and Tank Treatment
2	D	0	0	2																Included with the above
3	D	0	0	3																Included with the above
4	D	0	0	4																Included with the above
5	D	0	0	5																Included with the above
6	D	0	0	6																Included with the above
7	D	0	0	7																Included with the above
8	D	0	0	8																Included with the above
9	D	0	0	9																Included with the above
10	D	0	1	0																Included with the above
11	D	0	1	1																Included with the above
12																				
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9. Description of Hazardous Wastes (Continued. Use the additional sheet(s) as necessary; number pages as 5a, etc.)																	
Line Number	A. EPA Hazardous Waste No. (Enter code)					B. Estimated Annual Qty of Waste	C. Unit of Measure (Enter code)	D. PROCESSES									
								(1) PROCESS CODES (Enter code)					(2) PROCESS DESCRIPTION (If a code is not entered in 9.D(1))				
1	D	0	0	1	990,000	P	S	0	1	T	0	4	SCMS Container Storage, Verification, Repackaging, and/or Container Treatment				
2	D	0	0	2									Included with the above				
3	D	0	0	3									Included with the above				
4	D	0	0	4									Included with the above				
5	D	0	0	5									Included with the above				
6	D	0	0	6									Included with the above				
7	D	0	0	7									Included with the above				
8	D	0	0	8									Included with the above				
9	D	0	0	9									Included with the above				
10	D	0	1	0									Included with the above				
11	D	0	1	1									Included with the above				
12	D	0	1	8									Included with the above				
13	D	0	1	9									Included with the above				
14	D	0	2	1									Included with the above				
15	D	0	2	2									Included with the above				
16	D	0	2	6									Included with the above				
17	D	0	2	7									Included with the above				
18	D	0	2	8									Included with the above				
19	D	0	2	9									Included with the above				
20	D	0	3	0									Included with the above				
21	D	0	3	2									Included with the above				
22	D	0	3	3									Included with the above				
23	D	0	3	4									Included with the above				
24	D	0	3	5									Included with the above				
25	D	0	3	6									Included with the above				
26	D	0	3	7									Included with the above				
27	D	0	3	8									Included with the above				
28	D	0	3	9									Included with the above				
29	D	0	4	0									Included with the above				
30	D	0	4	2									Included with the above				
31	D	0	4	3									Included with the above				
32	F	0	0	1									Included with the above				
33	F	0	0	2									Included with the above				
34	F	0	0	3									Included with the above				
35	F	0	0	4									Included with the above				
36	F	0	0	5									Included with the above				

**INL HWMA/RCRA MFC Permit
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9. Description of Hazardous Wastes (Continued. Use the additional sheet(s) as necessary; number pages as 5a, etc.)													
Line Number	A. EPA Hazardous Waste No. (Enter code)					B. Estimated Annual Qty of Waste	C. Unit of Measure (Enter code)	D. PROCESSES					(2) PROCESS DESCRIPTION (If a code is not entered in 9.D(1))
								(1) PROCESS CODES (Enter code)					
1	D	0	0	1		432,000	P	S	0	1			SSB Container Storage
2	D	0	0	3									Included with the above
3	D	0	0	4									Included with the above
4	D	0	0	5									Included with the above
5	D	0	0	6									Included with the above
6	D	0	0	7									Included with the above
7	D	0	0	8									Included with the above
8	D	0	0	9									Included with the above
9	D	0	1	0									Included with the above
10	D	0	1	1									Included with the above
11	D	0	1	8									Included with the above
12	D	0	1	9									Included with the above
13	D	0	2	1									Included with the above
14	D	0	2	2									Included with the above
15	D	0	2	6									Included with the above
16	D	0	2	7									Included with the above
17	D	0	2	8									Included with the above
18	D	0	2	9									Included with the above
19	D	0	3	0									Included with the above
20	D	0	3	2									Included with the above
21	D	0	3	3									Included with the above
22	D	0	3	4									Included with the above
23	D	0	3	5									Included with the above
24	D	0	3	6									Included with the above
25	D	0	3	7									Included with the above
26	D	0	3	8									Included with the above
27	D	0	3	9									Included with the above
28	D	0	4	0									Included with the above
29	D	0	4	2									Included with the above
30	D	0	4	3									Included with the above
31	F	0	0	1									Included with the above
32	F	0	0	2									Included with the above
33	F	0	0	3									Included with the above
34	F	0	0	4									Included with the above
35	F	0	0	5									Included with the above
36	F	0	0	6									Included with the above

INL HWMA/RCRA FINAL PERMIT, EPA NO. ID4890008952		
MFC Permit, Doc. No. PER-116		
Part A Form Supplement		
ITEM – 9A DESCRIPTION OF HAZARDOUS WASTE SUPPLEMENT		
PAGE/LINE NUMBERS	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE
Page 5a of 6 thru 5d of 6 (Highest estimated annual qty shown on Line 1)	<p>This annual estimate is based on HFEF container treatment processing rates for characteristic waste.</p> <p>This estimated annual quantity of characteristic waste (throughput) is the product of a 440 gallons/day container treatment rate, a production rate of 250 days/year of operation, and the density of characteristic waste streams of 13 lbs per gallon</p> $\left(\frac{440 \text{ gallons}}{\text{day}}\right)\left(\frac{13 \text{ lbs}}{\text{gallon}}\right)\left(\frac{250 \text{ days}}{\text{year}}\right) = \frac{1,430,000 \text{ lbs}}{\text{year}}$	The density used for of the waste is estimated at 13.0 lbs/gal.
	<p>This annual estimate is based on HFEF container storage rates.</p> <p>This estimated annual quantity of waste stored per year is the product of the maximum allowable quantity of waste and the density of the waste streams of 13.0 lbs per gallon</p> $\left(\frac{10725 \text{ gallons}}{\text{year}}\right)\left(\frac{13 \text{ lbs}}{\text{gallon}}\right) = \frac{139,425 \text{ lbs}}{\text{year}}$	The density used for of the waste is estimated at 13.0 lbs/gal.
	<p>This annual estimate is based on HFEF container treatment processing rates for listed waste.</p> <p>This estimated annual quantity of listed waste (throughput) is the product of a 440 gallons/day container treatment rate, a production rate of 250 days/year of operation, and the density of listed waste streams of 13 lbs per gallon</p> $\left(\frac{440 \text{ gallons}}{\text{day}}\right)\left(\frac{13 \text{ lbs}}{\text{gallon}}\right)\left(\frac{250 \text{ days}}{\text{year}}\right) = \frac{1,430,000 \text{ lbs}}{\text{year}}$	The density used for of the waste is estimated at 13.0 lbs/gal.
	<p>This annual estimate is based on HFEF container storage rates.</p> <p>This estimated annual quantity of waste stored per year is the product of the maximum allowable quantity of waste and the density of the waste streams of 13.0 lbs per gallon</p> $\left(\frac{10725 \text{ gallons}}{\text{year}}\right)\left(\frac{13 \text{ lbs}}{\text{gallon}}\right) = \frac{139,425 \text{ lbs}}{\text{year}}$	The density used for of the waste is estimated at 13.0 lbs/gal.

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MFC Permit, Doc. No. PER-116		
Part A Form Supplement		
ITEM - 9A DESCRIPTION OF HAZARDOUS WASTE SUPPLEMENT		
PAGE/LINE NUMBERS	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE
Page 5e of 6 Line 1	<p>This annual estimate is based on RSWF container storage rates.</p> <p>This estimated annual quantity of waste stored per year is the product of the maximum allowable quantity of waste and the density of the waste streams of 9 lbs per gallon.</p> $\left(\frac{53000 \text{ gallons}}{\text{year}} \right) \left(\frac{9 \text{ lbs}}{\text{gallon}} \right) = \frac{477,000 \text{ lbs}}{\text{year}}$	The density used for the waste is 9.0 lb/gal.

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MFC Permit, Doc. No. PER-116		
Part A Form Supplement		
ITEM – 9A DESCRIPTION OF HAZARDOUS WASTE SUPPLEMENT		
PAGE/LINE NUMBERS	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE
Page 5f of 6 thru 5h of 6 (Highest estimated annual qty shown on Line 1)	This annual estimate is based on SCMS tank treatment processing rates for ignitable and reactive waste. This estimated annual quantity of ignitable and reactive waste (throughput) is the product of a 156 gallons/day burn rate, a production rate of 250 days/year of operation, and the density of Na waste streams of 7.7 lbs per gallon. $\left(\frac{156 \text{ gal}}{\text{day}}\right)\left(\frac{250 \text{ days}}{\text{year}}\right)\left(\frac{7.7 \text{ lbs}}{\text{gal}}\right) = \frac{298,375 \text{ lbs}}{\text{year}}$	The density used for the waste is 7.7 lb/gal.
	This annual estimate is based on SCMS container storage rates. This estimated annual quantity of waste stored per year is the product of the maximum allowable quantity of waste and the density of the waste streams of 7.7 lbs per gallon. $\left(\frac{24640 \text{ gal}}{\text{year}}\right)\left(\frac{7.7 \text{ lbs}}{\text{gal}}\right) = \frac{189,728 \text{ lbs}}{\text{year}}$	The density used for the waste is 7.7 lb/gal.
	This annual estimate is based on SCMS container treatment processing rates. This estimated annual quantity of waste (throughput) is the product of a 440 gallons/day container treatment rate, a production rate of 250 days/year of operation, and the density of waste streams of 9 lbs per gallon. $\left(\frac{440 \text{ gallons}}{\text{day}}\right)\left(\frac{9 \text{ lbs}}{\text{gallon}}\right)\left(\frac{250 \text{ days}}{\text{year}}\right) = \frac{990,000 \text{ lbs}}{\text{year}}$	The density used for the waste is estimated at 9.0 lbs/gal.
	This annual estimate is based on SCMS container storage rates. This estimated annual quantity of waste stored per year is the product of the maximum allowable quantity of waste and the density of the waste streams of 9 lbs per gallon. $\left(\frac{24640 \text{ gal}}{\text{year}}\right)\left(\frac{9.0 \text{ lbs}}{\text{gal}}\right) = \frac{221,760 \text{ lbs}}{\text{year}}$	The density used for the waste is estimated at 9.0 lbs/gal.

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MFC Permit, Doc. No. PER-116		
Part A Form Supplement		
ITEM – 9A DESCRIPTION OF HAZARDOUS WASTE SUPPLEMENT		
PAGE/LINE NUMBERS	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE
Page 5i of 6 thru 5j of 6 Lines 1-10	<p>This annual estimate is based on SSB container storage rates.</p> <p>This estimated annual quantity of waste stored per year is the product of the maximum allowable quantity of waste and the density of the waste streams of 9 lbs per gallon.</p> $\left(\frac{48000 \text{ gal}}{\text{year}} \right) \left(\frac{9\text{lbs}}{\text{gallon}} \right) = \frac{432,000\text{lbs}}{\text{year}}$	The density used for of the waste is estimated at 9.0 lbs/gal.

INL HWMA/RCRA FINAL PERMIT, EPA NO. ID4890008952				
MFC Permit, Doc. No. PER-116				
Part A Form Supplement				
ITEM – 9A DESCRIPTION OF HAZARDOUS WASTE SUPPLEMENT				
Debris Waste Categories¹	HFEF	RSWF	SCMS	SSB
Metal Debris ²	x	x	x	x
Inorganic Debris ³	x	x	x	x
Organic Debris ⁴	x	x	x	x
Paper/plastic/rubber/rags ⁵	x	x	x	x
Ceramic/Brick Debris ⁶	x	x	x	x
Heterogenous Debris ⁷	x	x	x	x
Debris Contaminant Categories	HFEF	RSWF	SCMS	SSB
Characteristic contaminants	Ref. Part A	Ref. Part A	Ref. Part A	Ref. Part A
Listed contaminants	Ref. Part A	NA	Ref. Part A	Ref. Part A
Notes:				
1 Debris Waste Categories—debris waste streams have been grouped into six debris waste categories consistent with packaging and storage configurations and/or treatment plans.				
2 Metal Debris Waste—process and ancillary equipment and operations components including pipes, pumps, valves, fitting, flanges, metal scrap, shipping and process vessels, cold traps, vapor traps, nonintact containers and tanks, cut-up equipment.				
3 Inorganic Debris Waste—operational, decontamination, and closure-related wastes including filters, prefilters and filter media, glass, insulation, concrete, asbestos and noncombustible solids.				
4 Organic Debris Waste—operational, decontamination, and closure-related wastes including combustible solids, paper, cloth, wood, plastic, industrial equipment, and natural geologic material.				
5 Paper/Plastic/Rubber/Rags—operational, decontamination, and closure-related wastes including paper and rags, washables, rubber, plastic, gloves, aprons, PVC, nonintact containers.				
6 Ceramic/Brick Debris—ceramic or brick from operational, decontamination, and closure-related activities.				
7 Heterogenous Debris—operational, decontamination, and closure-related waste consisting of mixtures of debris categories.				

EPA ID NO: ID4890008952

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10. Map

Topographical maps of the MFC site extending to at least one mile beyond property boundaries are provided in this Permit Application, Section B, Facility Description.

11. Facility Drawing

Drawings of the facility listed in the Part A Application are provided in this Permit Application, Section B, Facility Description.

12. Photographs

Photographs showing the facilities, storage, and treatment areas is provided in this Permit Application, Section B, Facility Description.

13. Comments

No comments

