



U.S. Department of Energy  
**Office of River Protection**

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Richland, Washington 99352

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DEPARTMENT OF ECOLOGY  
NWP - RICHLAND

12-ECD-0044

Ms. Jane A. Hedges, Program Manager  
Nuclear Waste Program  
Washington State  
Department of Ecology  
3100 Port of Benton Blvd.  
Richland, Washington 99354

Central Files Air/AOP  
File Name: \_\_\_\_\_  
Cross Reference: \_\_\_\_\_

Dear Ms. Hedges:

U.S. DEPARTMENT OF ENERGY (DOE), OFFICE OF RIVER PROTECTION (ORP)  
SUBMITS TO THE WASHINGTON STATE DEPARTMENT OF ECOLOGY (ECOLOGY)  
THE CRITERIA AND TOXICS AIR EMISSIONS NOTICE OF CONSTRUCTION (NOC)  
FOR THE RETRIEVAL DIRECT FIRED HOT WATER HEATERS, AND NOC  
APPLICATION: NEW PROJECT OR MODIFICATION OF EXISTING STATIONARY  
SOURCE

DOE ORP requests Ecology review the Criteria and Toxics Air Emissions NOC for the Retrieval Direct Fired Hot Water Heaters (Attachment 1) and Ecology's NOC Application: New Project or Modification of Existing Stationary Source (Attachment 2).

This NOC and application are being submitted in compliance with Washington Administrative Code (WAC) 173-400, General Regulations for Air Pollution Sources, as amended in WAC 173-460, Controls for New Sources of Toxic Air Pollutants.

The diesel fueled direct fired hot water heaters will be used to provide hot water to Single-Shell Tanks to help dissolve and break up solids in order to retrieve the waste to Double-Shell Tanks. Initially, two hot water heaters will be purchased; the permit allows up to 10 units to be purchased, if needed. The hours of use of all of the direct fired hot water heaters will be limited to 2,500 hours per year so that emissions are below the WAC 173-400-110 emission exemption levels. The total hours limit is well below anticipated use.

If you have any questions, please contact me, or your staff may contact Dennis W. Bowser, Environmental Compliance Division, (509) 373-2566.

Sincerely,

  
Scott L. Samuelson, Manager  
Office of River Protection

ECD:DWB

Attachments: (2)

cc: See page 2

Ms. Jane A. Hedges  
12-ECD-0044

-2-

SEP 14 2012

cc w/attachs:

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Attachment 1  
12-ECD-0044  
(22 Pages)

Criteria & Toxics Air Emissions Notice of Construction for the Retrieval  
Direct fired Hot Water Heaters

TOC-ENV-NOC-0002, Revision 0

# **Criteria & Toxics Air Emissions Notice of Construction for the Retrieval Direct Fired Hot Water Heaters**

Prepared by:  
Washington River Protection Solutions, LLC

Date Published  
August 2012

Prepared For:  
United States Department of Energy  
Office of River Protection  
P.O. Box 550  
Richland, Washington

## EXECUTIVE SUMMARY

This document serves as a notice of construction pursuant to the requirements of *Washington Administrative Code* (WAC) 173-400, "General Regulations for Air Pollution Sources," and WAC 173-460, "Controls for New Sources of Toxic Air Pollutants," for operation of direct fired hot water heaters.

Hanford's storage tanks contain waste from nearly 50 years of production of defense related nuclear material and are comprised of radioactive fission products and chemical wastes generated during processing. Originally 149 single-shelled tanks (SSTs) were built to store the waste from 1943 to 1964. The heat and the composition of the waste have been estimated to cause 67 of the SSTs to leak some of their contents into the ground. Twenty eight double-shelled tanks (DSTs) were built between 1968 and 1986. All of the pumpable liquid waste that could be safely be pumped from the SSTs has been transferred to the DSTs. Work is now focused on retrieving the solid and semi-solid wastes from the SSTs to the DSTs.

Waste retrieval operations involve several different methods to liquefying the waste so that it can be pumped into DSTs. The addition of raw hot water is one method used to speed up and enhance with the dissolution of solid and semi-solid waste. Faster and more effective methods of retrieving the waste from SSTs to the DSTs help meet legal and regulatory requirements for retrieval.

This NOC is being submitted to obtain Washington State Department of Ecology (Ecology) approval to use new direct fired hot water heaters to provide hot water to SSTs to aid in the retrieval of waste from the tanks. The units have high efficiency burners and will be fueled by ultra-low sulfur diesel. This project will initially involve purchasing two direct fired water heaters. More units may be purchased in the future to support future retrievals in multiple farms, up to ten units may be purchased.

The initial two units will have a heating capacity of 2.5 million Btu/hour each. Due to potentially different needs in future farms it is not known if future units will be of equivalent heating capacity. Emission for the direct fired hot water heaters are directly correlated to the number of million Btu/hour.

Potential emissions from the direct fired hot water heaters could exceed emission thresholds in WAC 173-400-110 if the units were run continuously, year round. Due to space constraints and compatibility issues in the DSTs hot water additions to the SSTs for waste retrieval are limited, therefore the actual emissions from the direct fired hot water heaters are expected to be well below the WAC 173-400-110 emission thresholds.

The total number of operating hours for the current and future equivalent units shall be below 2,500 hours for the entire year to ensure that emissions will be below the exemption criteria. If future units are purchased they will be reported as 2.5 million Btu/hour equivalent.

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**LIST OF TERMS**

BACT	Best Available Control Technology
CFR	Code of Federal Regulations
DOE	U.S. Department of Energy
DST	double-shell tank
Ecology	State of Washington, Department of Ecology
EIS	environmental impact statement
NEPA	National Environmental Policy Act of 1969
NOC	notice of construction
ORP	U.S. Department of Energy, Office of River Protection
RCW	Revised Code of Washington
SEPA	State Environmental Policy Act
TAP	toxic air pollutant
TWRS	Tank Waste Remediation System
VOC	volatile organic compounds
WAC	Washington Administrative Code

	<b>UNITS</b>
Btu/hr	British thermal units per hour
gal	gallons
lb/yr	pound(s) per year

### METRIC CONVERSION CHART

Into metric units			Out of metric units		
U.S. Customary Units	Multiply by	To get	U.S. Customary Units	Multiply by	To get
<b>Length</b>			<b>Length</b>		
Inches	25.40	Millimeters	millimeters	0.0393	inches
Inches	2.54	Centimeters	centimeters	0.393	inches
Feet	0.3048	Meters	meters	3.2808	feet
Yards	0.914	Meters	meters	1.09	yards
Miles	1.609	Kilometers	kilometers	0.62	miles
<b>Area</b>			<b>Area</b>		
square inches	6.4516	Square centimeters	square centimeters	0.155	square inches
square feet	0.092	square meters	square meters	10.7639	square feet
square yards	0.836	square meters	square meters	1.20	square yards
square miles	2.59	Square kilometers	square kilometers	0.39	square miles
Acres	0.404	Hectares	hectares	2.471	acres
<b>Mass (weight)</b>			<b>Mass (weight)</b>		
Ounces	28.35	Grams	grams	0.0352	ounces
Pounds	0.453	Kilograms	kilograms	2.2046	pounds
short ton	0.907	metric ton	metric ton	1.10	short ton
<b>Volume</b>			<b>Volume</b>		
fluid ounces	29.57	Milliliters	milliliters	0.03	fluid ounces
Quarts	0.95	Liters	liters	1.057	quarts
Gallons	3.79	Liters	liters	0.26	Gallons
cubic feet	0.03	cubic meters	cubic meters	35.3147	cubic feet
cubic yards	0.76456	cubic meters	cubic meters	1.308	cubic yards
<b>Temperature</b>			<b>Temperature</b>		
Fahrenheit	subtract 32 then multiply by 5/9ths	Celsius	Celsius	multiply by 9/5ths, then add 32	Fahrenheit
<b>Energy</b>			<b>Energy</b>		
kilowatt hour	3,412	British thermal unit	British thermal unit	0.000293	kilowatt hour
Kilowatt	0.948	British thermal unit per second	British thermal unit per second	1.055	kilowatt
<b>Force/Pressure</b>			<b>Force/Pressure</b>		
pounds per square inch	6.895	Kilopascals	kilopascals	0.14504	pounds per square inch

Source: *Engineering Unit Conversions*, M. R. Lindeburg, PE., Second Ed., 1990, Professional Publications, Inc., Belmont, California.

## 1.0 INTRODUCTION

This Notice of Construction (NOC) application is being submitted for approval in accordance with *Washington Administrative Code* (WAC) 173-400, "General Regulations for Air Pollution Sources," and WAC 173-460, "Controls for New Sources of Toxic Air Pollutants." This NOC application describes the operation of the direct fired hot water heaters located in the 200 West and 200 East Areas of the Hanford Site. Operation of the direct fired hot water heaters will aid in the faster and more effective retrieval of waste from the SSTs and help meet requirements for cleaning up the waste.

This project will involve initially purchasing two direct fired water heaters, the units have high efficiency burners which will use low sulfur diesel as a fuel. The units will have a heating capacity of 2.5 million Btu/hour each. More units may be purchased in the future to support future retrievals in multiple farms. Potential emissions from the direct fired hot water heaters could exceed emission threshold in WAC 173-400-110 if the units were run continuously, year round. Due to space constraints and waste compatibility issues in the DSTs hot water additions to the SSTs for waste retrieval are limited.

The direct fired hot water heaters use high efficiency burners. They are designed so that the exhaust from the burner directly contacts the water so there is no pressure vessel like a boiler. The exhaust from the burner flows up a stack where the water is sprayed onto stainless steel rings and the water is heated by contact with the rings. The water drops down to the bottom of the heater to a holding tank and is then transferred to the SSTs. The contact zone where the exhaust passes through the water sprays onto the rings acts as a scrubber to remove particulates and any water soluble gases.

Emissions from the direct fired hot water heater were estimated from testing data provided by the vendor. Criteria pollutants were identified in the vendor emissions testing data. No toxic air pollutants from WAC 173-460-150 were identified in the vendor's emissions testing data. The potential emissions from the direct fired hot water heaters ran continuously, year-round are above the emissions thresholds in WAC 173-400-110, but emissions based upon the hours of actual operation will be below the threshold values.

## **2.0 FACILITY IDENTIFICATION AND LOCATION**

The Tank Farms are located at:

U.S. Department of Energy, Office of River Protection  
Hanford Site  
200 East and West Area Tank Farms  
Richland, WA 99352

The SSTs are located in the 200 East and West Areas of the Hanford Site (See Figure 1). A brief description of each tank farm follows. Table 1 lists the locations of the tank farms. The direct fired hot water heaters will be placed near the farms.

The SSTs are located in the 200 East and West Areas of the Hanford Site (See Figure 1). The 200 East Area SST Tank Farms are 241-A, 241-AX, 241-B, 241-BX, 241-BY and 241-C. The 200 West Area SST Tank Farms are 241-S, 241-SX, 241-T, 241-TX, 241-TY, and 241-U.

**241-A Tank Farm:** The A tank farm consists of six buried SSTs. The tank farm is located approximately 400 meters (1,300 feet) northeast of the 202-A Building, which is directly south of the AX tank farm. The tanks were placed in service during the mid-1950s and were retired in the early 1970s and 1980s. They are numbered 241-A-101 through 241-A-106.

**241-AX Tank Farm:** The AX tank farm consists of four buried SSTs. The tank farm is located approximately 530 meters (1,750 feet) northeast of the 202-A Building, east of the AY tank farm, and between the A and AZ tank farms. The tanks were placed in service during the mid-1960s and retired in the early 1980s. They are numbered 241-AX-101 through 241-AX-104.

**241-B Tank Farm:** The B tank farm consists of 16 buried SSTs. The tank farm is located approximately 792 meters (2,600 feet) north by northeast of the 221-B Building. The tanks were placed in service between 1945 and 1952 and retired between 1975 and 1978. They are numbered 241-B-101 through 241-B-112 and 241-B-201 through 241-B-204.

**241-BX Tank Farm:** The BX tank farm consists of 12 buried SSTs. The tank farm is located approximately 792.5 meters (2,600 feet) north of the 221-B Building, adjacent to the southern boundary of the BY tank farm and immediately west of the BX tank farm. The tanks were placed in service from 1948 to 1950, and retired in the late 1970s. They are numbered 241-BX-101 through 241-BX-112.

**241-BY Tank Farm:** The BY tank farm consists of 12 buried SSTs. The tank farm is located approximately 915 meters (3,000 feet) north of the 221-B Building and is adjacent to the northern boundary of the BX tank farm. The tanks were placed in service between 1950 and 1953, and retired in the late 1970s. They are numbered BY-101 through BY-112.

**241-C Tank Farm:** The C tank farm consists of 16 buried SSTs. The tank farm is located approximately 915 meters (3,000 feet) north of the 202-A Building, and 152.5 meters (500 feet) northwest of the AN tank farm. The tanks were placed in service during the mid-1940s and were retired in the late 1970s to mid-1980s. They are numbered 241-C-101 through 241-C-112, and 241-C-201 through 241-C-204.

241-S Tank Farm: The S tank farm consists of 12 buried SSTs. The tank farm is located less than 1.6 kilometers (1 mile) northwest of the 202-S Building. The tanks were placed in service in 1950 and 1951 and retired in 1980. They are numbered 241-S-101 through 241-S-112.

241-SX Tank Farm: The SX tank farm consists of 15 buried SSTs. The tank farm is located directly south of the S tank farm. A site plan of the SX tank farm is provided as Figure 9. The tanks were placed in service during 1953 and 1954 and retired in 1980. They are numbered 241-SX-101 through 241-SX-115.

241-T Tank Farm: The T tank farm consists of 16 buried SSTs. The tank farm is located approximately 610 meters (2,000 feet) west of the 221-T Building and directly north of the TY tank farm and 23rd Street. The tanks were placed in service in 1945 and retired in the mid to late 1970s. They are numbered 241-T-101 through 241-T-112 and 241-T-201 through 241-T-204.

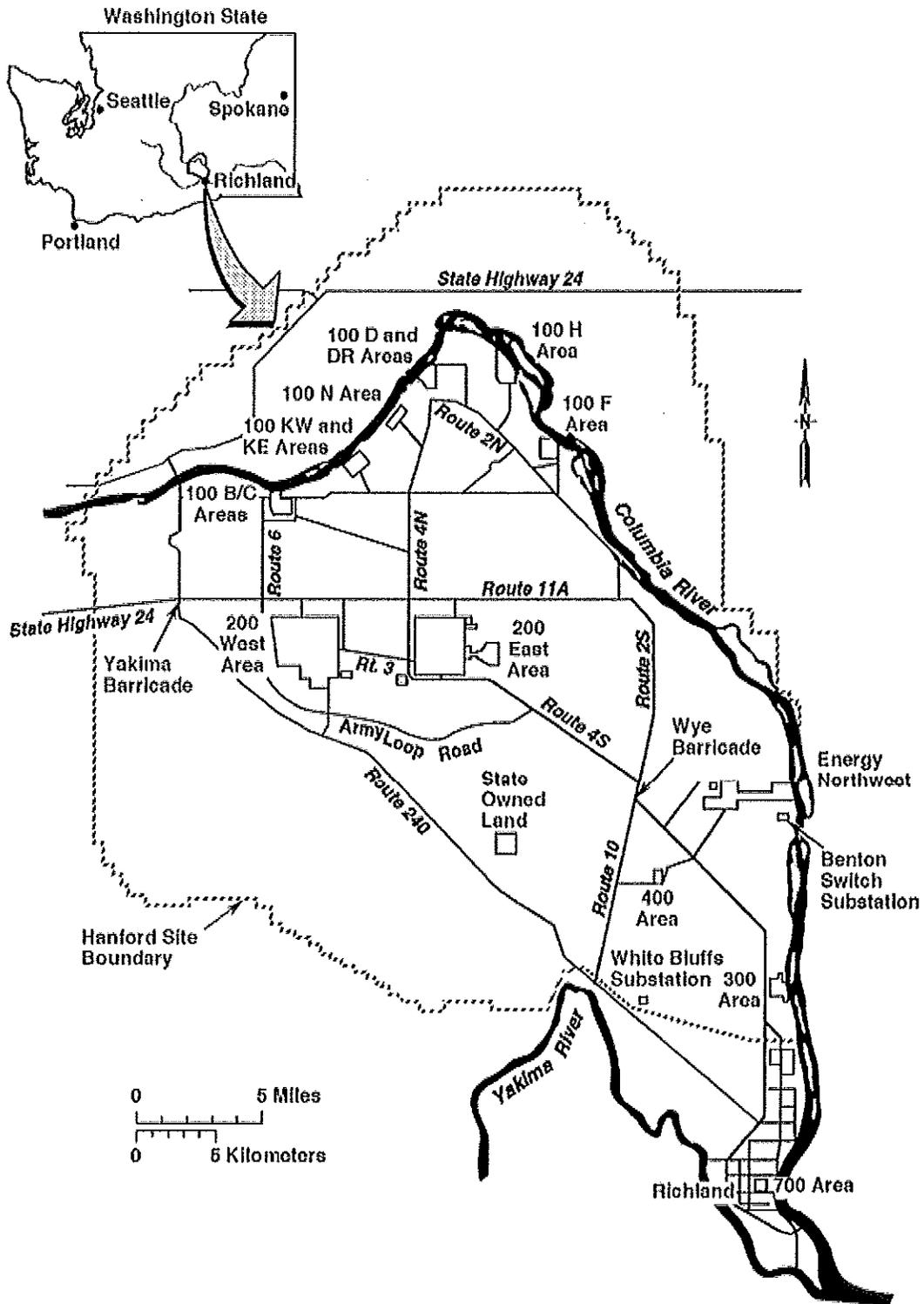
241-TX Tank Farm: The TX tank farm consists of 18 buried SSTs. The tank farm is located approximately 762 meters (2,500 feet) southwest of the 221-T Building and is directly south of the TY tank farm. The tanks were placed in service 1949 and retired in 1969 through 1980. They are numbered 241-TX-101 through 241-TX-118.

241-TY Tank Farm: The TY tank farm consists of six buried SSTs. The tank farm is located approximately 732 meters (2,400 feet) southwest of the 221-T Building and is directly north of the TX tank farm. The tanks were placed in service during 1953 and retired in 1959 through 1980. They are numbered 241-TY-101 through 241-TY-106.

241-U Tank Farm: The U tank farm consists of 16 buried SSTs. The tank farm is located immediately west of Camden Avenue and north of 16th Street in the 200 West Area. The tanks were placed in service during 1943 and 1944 and retired 1951 through 1980. They are numbered 241-U-101 through 241-U-112 and 241-U-201 through 241-U-204.

The SST Waste Retrieval Operations will be performed in the SST farms. Table 1 is a listing of coordinates for the individual SST farms.

Figure 1. The Hanford Site.



H97020271.4R1

**Table 1. SST Tank Farm locations.**

<b>Tank Farm</b>	<b>Latitude</b>	<b>Longitude</b>
241-A	46° 33' 11.6" N	119° 31' 2.3" W
241-AX	46° 33' 15.7" N	119° 31' 29.6" W
241-B	46° 33' 52.3" N	119° 32' 13.9" W
241-BX	46° 33' 54.0" N	119° 32' 23.2" W
241-BY	46° 33' 58.5" N	119° 32' 36.1" W
241-C	46° 33' 28.2" N	119° 31' 12.0" W
241-S	46° 33' 22.9" N	119° 37' 88.8" W
241-SX	46° 32' 13.7" N	119° 37' 43.0" W
241-T	46° 32' 35.7" N	119° 37' 43.1" W
241-TX	46° 33' 20.0" N	119° 37' 44.9" W
241-TY	46° 33' 26.4" N	119° 37' 45.6" W
241-U	46° 32' 41.9" N	119° 37' 43.7" W

### **3.0 RESPONSIBLE MANAGER**

The current responsible facility manager is:

Scott Samuelson, Manager  
U.S. Department of Energy, Office of River Protection (ORP)  
P.O. Box 550  
Richland, Washington 99352  
(509) 376-8830

#### **4.0 PROPOSED ACTION**

This NOC application is being submitted for approval to install and operate two new 2.5 million Btu/hr direct fired hot water heaters. Approval is requested in this application to operate these new direct fired hot water heaters for SST retrieval.

The direct fired hot water heaters will burn ultra-low sulfur diesel (less than 0.0015% or 15 ppm). Two units will be purchased and run in parallel; two units allow for redundancy and continued operations if one unit requires maintenance. Future retrievals could occur in multiple farms at once, therefore it is requested that we can operate up to 10 directed fired hot water heaters.

The addition of hot water to retrieval tanks is a part of the overall retrieval and waste transfer process. Before waste transfers can occur waste compatibility studies are conducted to ensure that the wastes are chemically and physically compatible, meet regulatory limits, and protect the tank integrity. Operational specifications such as tank space are also considered in determining the amount of water that can be added.

The amount of use each unit gets per year will depend upon the tanks being retrieved and if hot water is determined to be the best method of dissolution and how much water will be required. The units will have hour meters to track to the total number of hours used to ensure that emissions are below the emission limits.

The planned delivery of the first two direct fired hot water heater will be January 2013 with installation complete by February 2013.

The project could last until the completion of all the SST retrievals, which is current scheduled to occur in 2040 (DOE/RL-2009-10, Rev. 1).

## 5.0 STATE ENVIRONMENTAL POLICY ACT

In accordance with WAC 197-11, *State Environmental Policy Act of 1971* and the *Revised Code of Washington* (RCW) 43.21C Ecology requires all government agencies to consider the environmental impacts of a proposal before making decisions. An environmental review of the actions identified in this NOC application was conducted in the preparation of the National Environmental Policy Act (NEPA) of 1969 (title 10, *Code of Federal Regulations*, Part 1021, "National Environmental Policy Act" [10 CFR 1021]) documentation. Existing environmental documentation can be used to meet all or part of an agency's responsibilities under the State Environmental Policy Act (SEPA) as provided in WAC 197-11-600. These documents meet the agencies review needs for the current proposal:

- DOE/EIS-0189, "*Tank Waste Remediation System, Hanford Site, Richland, Washington, Final Environmental Impact Statement*"
- 62 FR 8693, "*Final Environmental Impact Statement: Disposal of Hanford Defense High-Level, Transuranic and Tank Wastes, Hanford Site, Richland WA*"

## **6.0 CHEMICAL AND PHYSICAL PROCESS**

The direct fired hot water heaters burn diesel fuel in a horizontal burn chamber and the exhaust exits the burn chamber and goes up a heating chamber. At the top of the heating chamber there are stainless steel rings which are heated by the exhaust. Water is sprayed onto the top and bottom of the steel rings and the water is heated by contact with the rings, the water then drips down to the bottom of the heating chamber where it is collected and then pumped to a water delivery skid for delivery into the farms. Figures 2 and 3 show the design and operation of the direct fired hot water heaters.

## 7.0 EMISSION ESTIMATES

Criteria and toxic air pollutants emissions were estimated based upon manufacturer's measured emission rates and the maximum anticipated use per year (Attachment 1).

### 7.1 ESTIMATED EMISSIONS OF CRITERIA POLLUTANTS

Based upon the vendors emissions data the anticipated maximum emissions are the shown in Table 2.

**Table 2. Actual emissions from the direct fired hot water heater.**

Pollutant	Emissions (lb/mmbtu)	Maximum Capacity of Water Heater (mmbtu)	Hours of Water Heater Operation per Year	Pollutant Emissions (tons/yr)	WAC 173-400-110(5) Exemption Levels (tons/yr)
NOx	0.25	2.5	2,500	0.78	2.0
CO	0.07	2.5	2,500	0.22	5.0
SOx	0.52	2.5	2,500	1.63	2.0
HC/VOC	0.025	2.5	2,500	0.08	2.0
PM	0.025	2.5	2,500	0.08	0.75 (PM <sub>10</sub> ) & 0.5 (PM <sub>2.5</sub> )

Based upon the emissions data the maximum hours of use for all units will be below 2,500 hours per year to keep emissions below the WAC 173-400-110(5) exemption levels.

### 7.2 ESTIMATED EMISSIONS OF TOXIC AIR POLLUTANTS

Based upon testing by the manufacturer there are no emissions of toxic air pollutants (TAPs) listed in WAC 173-460-150. Diesel engine exhaust, particulate is listed as a TAP, but the direct fired hot water heaters burn the diesel, the combustion does not occur in an engine.

## **8.0 PROCESS AND EMISSION CONTROL SYSTEMS**

The process system is designed to burn the diesel at 99% efficiency; the high efficiency design reduces emissions. The burner is in a horizontal position so that the water does not fall into the burn chamber reducing the combustion efficiency. The burner exhaust passes through a spray of water that acts like a scrubber to further remove any water soluble gases and particulates. The units will be maintained per the manufacturer's recommendations to limit emissions. The units will be operated only when needed and for scheduled maintenance. An hour meter will be installed to track the hours of use.

### **8.1 BEST AVAILABLE CONTROL TECHNOLOGY**

Pursuant to WAC 173-400-113(2), an analysis of Best Available Control Technology (BACT) for emissions of criteria pollutants was performed. The direct fired hot water heaters have high efficiency burners using ultra-low sulfur diesel and will only be operated for a limited number of hours per year. The direct fired hot water heaters will be maintained and operated to manufacturer's recommendations. The design of the hot water heaters limits particulate emissions because the exhaust passes through a spray of water that will scrub out some particulates.

The National Emission Standards for Hazardous Air Pollutants (40 CFR 63) NESHAPs maximum achievable control technology (MACT) standards for boilers do not apply to the direct fired water heaters because they do not meet the definition of a boiler in 40 CFR Part 63.7575 because the device is not enclosed. The direct fired heater also does not meet the definition of a process heater because combustion gases come into contact with the process material (40 CFR Part 63.7575).

9.0 APPLICABLE CONTROL TECHNOLOGY DRAWINGS

Figure 2. Conceptual model of a direct fired hot water heater.

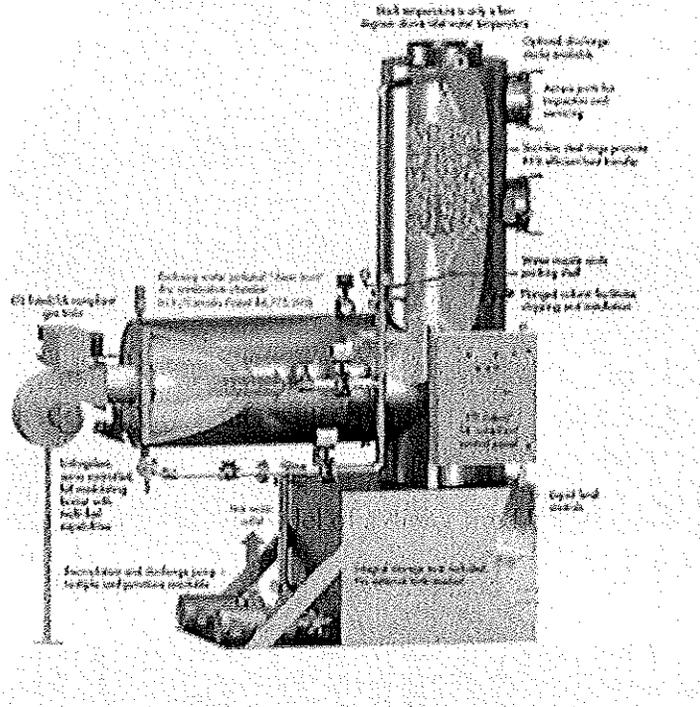
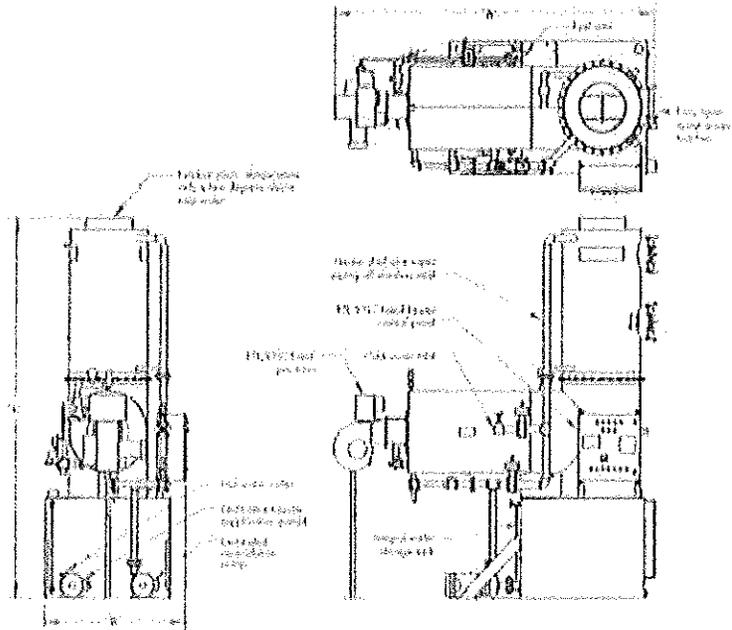


Figure 3. Direct fired hot water heater schematic.



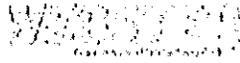
## **10.0 MONITORING DURING OPERATIONS**

Annual reporting of the number of heaters used and the hours of each heater will ensure that the emissions based upon use are below the threshold values in WAC 173-400-110.

## 11.0 REFERENCES

- 00-05-006, 2001, *Hanford Air Operating Permit*, Washington State Department of Ecology, Olympia, Washington.
- 10 CFR 1021, "Compliance with the National Environmental Policy Act," *Code of Federal Regulations*, as amended.
- 40 CFR 52, "Approval and Promulgation of Implementation Plans," *Code of Federal Regulations*, as amended.
- 40 CFR 60, "Standards for Performance of New Stationary Sources," *Code of Federal Regulations*, as amended.
- 40 CFR 63, "National Emission Standards for Hazardous Air Pollutants for Source Categories," *Code of Federal Regulations*, as amended.
- 62 FR 8693, 1997, "Record of Decision: Final Environmental Impact Statement: Disposal of Hanford Defense High-Level, Transuranic and Tank Wastes, Hanford Site, Richland, WA," *Federal Register*, Vol. 62, p. 8693 (February 26).
- DOE/EIS-0189, 1996, *Tank Waste Remediation System (TWRS), Hanford Site, Richland Washington, Final Environmental Impact Statement*, U.S. Department of Energy, Richland, WA.
- National Environmental Policy Act of 1969*, 42 USC 4321, et seq.
- ORP-11242, Rev. 5,
- RCW 43.21C, "State Environmental Policy Act of 1971," *Revised Code of Washington*, as amended.
- TFC-PLN-02, 2009, *Quality Assurance Program Description*, Rev. F-1, Washington River Protection Solutions, Inc., Richland, Washington.
- WAC 173-400, "General Regulations for Air Pollution Sources," *Washington Administrative Code*, as amended.
- WAC 173-460, "Controls for New Sources of Toxic Air Pollutants," *Washington Administrative Code*, as amended.
- WAC 197-11, "SEPA Rules," *Washington Administration Code*, as amended.

12.0 ATTACHMENT 1  
Manufacturers Emissions Measurements



619 INDUSTRIAL ROAD WINFIELD, KANSAS 67150 PH (620) 221-7464 FAX (620) 221-9447

Estimated Emission Levels Firing Natural Gas						
Pollutant		NO FGR				
		60 ppm	30 ppm	25 ppm	20 ppm	
NO <sub>x</sub> <sup>(B)</sup>	ppm	100	60	30	25	20
	lb/mmmbtu	0.12	0.07	0.035	0.03	0.024
CO <sup>(A)</sup>	ppm	200	200 <sup>(A)</sup>	200 <sup>(A)</sup>	200 <sup>(A)</sup>	200 <sup>(A)</sup>
	lb/mmmbtu	0.15	0.15 <sup>(A)</sup>	0.15 <sup>(A)</sup>	0.15 <sup>(A)</sup>	0.15 <sup>(A)</sup>
SO <sub>x</sub> <sup>(C)</sup>	ppm	1	1	1	1	1
	lb/mmmbtu	0.001	0.001	0.001	0.001	0.001
HC / VOC	ppm	40	40	40	40	40
	lb/mmmbtu	0.016	0.016	0.016	0.016	0.016
PM	ppm	na	na	na	na	na
	lb/mmmbtu	0.01	0.01	0.01	0.01	0.01

Estimated Emission Levels Firing #2 Oil <sup>(B)</sup>						
Pollutant		NO FGR				
		60 ppm	30 ppm	25 ppm	20 ppm	
NO <sub>x</sub> <sup>(B)</sup>	ppm	185	185	140	140	140
	lb/mmmbtu	0.25	0.25	0.176	0.176	0.176
CO <sup>(A)</sup>	ppm	90	90	90	90	90
	lb/mmmbtu	0.07	0.07	0.07	0.07	0.07
SO <sub>x</sub> <sup>(C)</sup>	ppm	278	278	278	278	278
	lb/mmmbtu	0.52	0.52	0.52	0.52	0.52
HC / VOC	ppm	50	60	60	60	60
	lb/mmmbtu	0.025	0.03	0.03	0.03	0.03
PM	ppm	na	na	na	na	na
	lb/mmmbtu	0.025	0.025	0.025	0.025	0.025

- A. CO varies with firing rate. Lower levels available, contact sales.
- B. The ppm levels are corrected to 3% Oxygen (15% excess air) and dry volume basis.
- C. Maximum sulfur in natural gas is 0.0006% wt.
- D. ASTM #2 fuel, 0.05% by weight Nitrogen, 0.5% by weight Sulfur and 0.01% by weight Ash.
- E. All levels are above background (ambient) conditions.
- F. Emission levels are based on a properly maintained and tuned burner.

WEBSTER ENGINEERING & MANUFACTURING CO., L.L.C.

Attachment 2  
12-ECD-0044  
(12 Pages)

Ecology's Notice of Construction Application: New Project or  
Modification of Existing Stationary Source



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000  
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

July 1, 2011

**NOTICE**

The Air Quality Program has revised our permit fees beginning July 1, 2011. Bear with us as we fine-tune this new system. We want to give you a heads up on one point. Ecology set the initial fee rate at an amount that would cover the simplest type of permit. The amount of time required to review a permit application and issue a permit varies based on the complexity of the project. Therefore, it is possible that your initial fee will not cover the cost of processing your request. If that happens, we will send you a bill to cover our expenses.

We encourage you to work closely with your permit writer so that the permitting process, timeline, and costs are clear. These changes are our first step toward meeting the legislative mandate of shifting the cost of permitting from the state General Fund to the recipients of the permits. If you have any questions, please call the contact listed below.

**Ecology Permitting Authority**

Ecology Central Regional Office – Air Quality Program  
Chelan, Douglas, Kittitas, Klickitat, or Okanogan County

Ecology Eastern Regional Office – Air Quality Program  
Adams, Asotin, Columbia, Ferry, Franklin,  
Garfield, Grant, Lincoln, Pend Oreille, Stevens,  
Walla Walla or Whitman County

Ecology Northwest Regional Office – Air Quality Program  
San Juan County

Ecology Industrial Section – W2Resources Program  
For actions taken at  
Kraft and Sulfite Paper Mills and Aluminum Smelters  
Ecology Nuclear Waste Program

US Department of Energy Hanford Reservation

**Contact**

Lynnette Haller  
(509) 457-7126

[lynnette.haller@ecy.wa.gov](mailto:lynnette.haller@ecy.wa.gov)

Greg Flibbert  
(509) 329-3400

[gregory.flibbert@ecy.wa.gov](mailto:gregory.flibbert@ecy.wa.gov)

David Adler  
(425) 649-7000

[david.adler@ecy.wa.gov](mailto:david.adler@ecy.wa.gov)

Garin Schrieve  
(360) 407-6900

[garin.schrieve@ecy.wa.gov](mailto:garin.schrieve@ecy.wa.gov)

Philip Gent  
(509) 372-7950

[philip.gent@ecy.wa.gov](mailto:philip.gent@ecy.wa.gov)



## Notice of Construction Application: New Project or Modification of Existing Stationary Source

### INSTRUCTIONS

This application applies statewide for facilities under the Department of Ecology's jurisdiction. Submit this form if you want approval to construct a new project or modify an existing permit. Submit the Application for a PSD Program Applicability Determination form (ECY 070-413) if you want Ecology to determine whether your project is subject to the PSD Program. The state rules exempt specific emission units, activities, and emission rates. Refer to WAC 173-400-110(4) and (5) for more information.

Fill out the front and back of this form. Attach a check for the initial fee to this form. Mail the form and your Notice of Construction application to: **Department of Ecology**

**Cashiering Unit  
P.O. Box 47611  
Olympia, WA 98504-7611**

*For Fiscal Office Use Only:*  
001-NSR-216-0299-000404

Check the box that applies to your application.

<input checked="" type="checkbox"/>	\$1,500: Basic project initial fee covers 16 hours of review. Ecology may determine your project is complex during completeness review of your application. If your project is complex, you must pay the additional \$8,500 before we will continue working on your application.
<input type="checkbox"/>	\$10,000: Complex project initial fee covers 106 hours of review. Submit this fee if you know your project is complex based on emissions.

Check the box for the location of your proposal. For assistance, call the contact listed below:		
	Ecology Permitting Authority	Contact
<input type="checkbox"/>	<b>Chelan, Douglas, Kittitas, Klickitat, or Okanogan County</b> Ecology Central Regional Office – Air Quality Program	Lynnette Haller (509) 457-7126 <a href="mailto:lynnette.haller@ecy.wa.gov">lynnette.haller@ecy.wa.gov</a>
<input type="checkbox"/>	<b>Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Stevens, Walla Walla or Whitman County</b> Ecology Eastern Regional Office – Air Quality Program	Greg Flibbert (509) 329-3452 <a href="mailto:gregory.flibbert@ecy.wa.gov">gregory.flibbert@ecy.wa.gov</a>
<input type="checkbox"/>	<b>San Juan County</b> Ecology Northwest Regional Office – Air Quality Program	David Adler (425) 649-7082 <a href="mailto:david.adler@ecy.wa.gov">david.adler@ecy.wa.gov</a>
<input type="checkbox"/>	<b>For actions taken at Kraft and Sulfite Paper Mills and Aluminum Smelters</b> Ecology Industrial Section – W2Resources Program Permit manager: _____	Garin Schrieve (360) 407-6916 <a href="mailto:garin.schrieve@ecy.wa.gov">garin.schrieve@ecy.wa.gov</a>
<input checked="" type="checkbox"/>	<b>For actions taken on the US Department of Energy Hanford Reservation</b> Ecology Nuclear Waste Program	Philip Gent (509) 372-7924 <a href="mailto:philip.gent@ecy.wa.gov">philip.gent@ecy.wa.gov</a>



## Notice of Construction Application: New Project or Modification of Existing Stationary Source

Read each statement, then check the box next to it to acknowledge what you have read.

- |                                     |   |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> | The initial fee you submitted may not cover the cost of processing your application. Ecology will track the number of hours spent on your project. If the number of hours exceeds the number of hours included in your initial fee, Ecology will send you a bill for that extra time. |
| <input checked="" type="checkbox"/> | Ecology will bill you \$95 per hour for each hour worked beyond the initial hours. You must pay the bill before we will issue your permit.  |
| <input checked="" type="checkbox"/> | When you get a permit, you give permission for Ecology staff to enter the premises for inspection.  |

### Applicant Information

The applicant is the business requesting services from Ecology and is responsible for paying the costs incurred by Ecology.

Name of business United States Department of Energy, Office of River Protection

Physical location of project (city) Hanford Site, 200 East and West Areas, Richland, Washington 99352

Name of project Retrieval Direct Fired Hot Water Heaters

### Responsible Official

The responsible official is the person responsible for overall operation of and ongoing compliance at the facility.

Name, Title Scott Samuelson, Manager

Mailing address P.O. Box 550, MSIN H6-60

City, State, Zip Richland, WA 99352

Phone, Fax, E-mail (509) 376-8830, Scott L. Samuelson@orp.doe.gov

### Project Billing Contact Information

Ecology will send the responsible official the bills if there are any.

If the project billing contact is different from the responsible official, check this box and provide the required information.

Name, Title Dennis Bowser, Physical Scientist

Mailing address P.O. Box 550, MSIN H6-60

City, State, Zip Richland, WA 99352

Phone, Fax, E-mail (509) 373-2566, Dennis W. Bowser@orp.doe.gov

### Project Consultant Information

If you hired a consultant to prepare the application (or materials), check this box and provide the required information.

Consultant Name, Title Brian Rumburg, Environmental Engineer

Organization Washington River Protection Solutions, LLC

Mailing address P.O. Box 850, MSIN H6-1

City, State, Zip Richland, WA 99352

Phone, Fax, E-mail (509) 373-3438, Brian P. Rumburg@rl.gov



## Notice of Construction Application: New Project or Modification of Existing Stationary Source

**I. RESPONSIBLE OFFICIAL SIGNATURE BLOCK** (The responsible official is the person responsible for overall operation of and ongoing compliance at the facility.)

I certify, based on information and belief formed after reasonable inquiry, the statements and information in this application are true, accurate, and complete.	
Printed Name <u>Scott Samuelson</u>	Title <u>Manager</u>
Signature <u><i>Scott Samuelson</i></u>	Date <u>9/14/12</u>

**II. COMPANY INFORMATION**

1. Legal Name of Company U.S. Department of Energy, Office of River Protection	
2. Company Mailing Address (street, city, state, zip) P.O. Box 550 Richland, WA 99352	
3. Company Responsible Official & Title Scott Samuelson, Manager	
4. Company Phone Number (509) 376-7411	5. Company FAX Number

**III. FACILITY INFORMATION**

1. Facility Name (if different from Legal Company Name above)	
2. Facility Mailing Address (if different from Company Mailing Address above)	
3. Facility Site Legal Description Hanford Site, 200 West and 200 East Areas	
4. Facility Contact Person (if different from Company Responsible Official above) Dennis Bowser	
5. Facility Phone Number (if different from Company Phone # above) (509) 376-7411	6. Facility FAX # (if different from Company FAX # above) (509) 376-1097
7. General Proposal for Facility (see section on next page for specific description of proposal). See attached document	
8. Proposal Construction Starting Date January 4, 2013	9. Proposal Construction Completion Date February 1, 2013



## Notice of Construction Application: New Project or Modification of Existing Stationary Source

### IV. PROPOSAL INFORMATION

<p>1. Complete Description of Specific Proposal (attach Drawings, Schematics, Prints or Block Diagrams): See attached document.</p>				
<p>2. This Application is for (Check one):</p> <p> <input checked="" type="checkbox"/> New Construction                      <input type="checkbox"/> Existing Equipment / Facility Operating without a Permit  <input type="checkbox"/> Change of Control Technology            <input type="checkbox"/> Modification to Facility  <input type="checkbox"/> New Permit Conditions                      <input type="checkbox"/> Production Increase         </p>				
<p>3. Complete Description of Best Available control Technology (BACT) for Proposal (see attached Summary of BACT Process): Attach Manufacturer's or Vendor's Information. See attached document.</p>				
<p>4. Maximum Potential Production Output per Year 31,500,000 gallons of water (assuming 60 gpm, 8,760 hours and one unit)</p>		<p>5. Maximum Potential Production Output per Hour 6,000 gallons of water (assuming 100 gpm and one unit)</p>		
<p>6. Actual Production Output per Year 9,000,000 gallons of water (assuming 60 gpm, 2,500 hours and one unit)</p>		<p>7. Actual Production Output per Hour 3,600 gallons of water (assuming 60 gpm and one unit)</p>		
8. Operating Schedule	Hours Per Day <u>Varies</u>	Days Per Week <u>Varies</u>	Weeks per Year <u>Varies</u>	
9. Percentage of Production	Jan-Feb-Mar <u>Varies</u>	April-May-June <u>Varies</u>	July-Aug-Sept <u>Varies</u>	Oct-Nov-Dec <u>Varies</u>



## Notice of Construction Application: New Project or Modification of Existing Stationary Source

### V. EMISSIONS ESTIMATIONS OF CRITERIA POLLUTANTS

1. Particulate Matter (PM) (Pounds or Tons per Year) Actual Emissions = 0.08 tons/yr                      Potential Emissions = 0.27 tons/yr
2. Nitrogen Oxides (NO <sub>x</sub> ) (Pounds or Tons per Year) Actual Emissions = 0.78 tons/yr                      Potential Emissions = 2.7 tons/yr
3. Carbon Monoxide (CO) (Pounds or tons per Year) Actual Emissions = 0.22 tons/yr                      Potential Emissions = 0.77 tons/yr
4. Sulfur Dioxide (SO <sub>2</sub> ) (Pounds or Tons per Year) Actual Emissions = 1.6 tons/yr                      Potential Emissions = 5.7 tons/yr
5. Volatile Organic Compounds (VOCs) (Pounds or Tons per Year) Actual Emissions = 0.08 tons/yr                      Potential Emissions = 0.27 tons/yr
6. Lead (Pb) (Pounds or Tons per Year) Actual Emissions = 0 tons/yr                      Potential Emissions = 0 tons/yr

### VI. EMISSIONS ESTIMATIONS OF TOXIC AIR POLLUTANTS (consult Chapter 173-460 WAC)

Pollutant #1 (List Pollutant Name, Pounds per Hour/Pounds per Year) Pollutant None                      Actual Emissions = 0                      Potential Emissions = 0
Pollutant #2 (List Pollutant Name, Pounds per Hour/Pounds per Year) Pollutant                      Actual Emissions =                      Potential Emissions =
Pollutant #3 (List Pollutant Name, Pounds per Hour/Pounds per Year) Pollutant                      Actual Emissions =                      Potential Emissions =
Pollutant #4 (List Pollutant Name, Pounds per Hour/Pounds per Year) Pollutant                      Actual Emissions =                      Potential Emissions =
Pollutant #5 (List Pollutant Name, Pounds per Hour/Pounds per Year) Pollutant                      Actual Emissions =                      Potential Emissions =
Pollutant #6 (List Pollutant Name, Pounds per Hour/Pounds per Year) Pollutant                      Actual Emissions =                      Potential Emissions =
Pollutant #7 (List Pollutant Name, Pounds per Hour/Pounds per Year) Pollutant                      Actual Emissions =                      Potential Emissions =

### VII. EMISSIONS ESTIMATIONS OF FUGITIVE AIR POLLUTANTS

Pollutant #1 (List Pollutant Name, Pounds per Hour/Pounds per Year) Pollutant None                      Pounds per Hour = 0                      Pounds per Year = 0
Pollutant #1 (List Pollutant Name, Pounds per Hour/Pounds per Year) Pollutant                      Pounds per Hour =                      Pounds per Year =

### VIII. MODELING RESULTS

1. List Modeling Results of Criteria Air Pollutants (attach any Modeling Printouts) N/A
2. List Modeling Results of Toxic Air Pollutants (attach any Modeling Printouts) N/A



## Notice of Construction Application: New Project or Modification of Existing Stationary Source

### IX. EMISSIONS DATA AT DISCHARGE POINT

Stack Parameters	Other than Stack Parameters
1. List the Number of Stacks under this Proposal Maximum 10, see attached document	1. List the Number of Discharge Points under this Proposal N/A
2. List the Gas Velocity for each Stack 6.6 ft/sec	2. List the Gas Velocity for each Discharge Point
3. List the Height for each Stack 10 feet minimum	3. List the Height for each Discharge Point
4. List the Inside Diameter or Dimensions for each Stack 18 inches	4. List the Inside Diameter or dimensions for each Discharge Point
5. List the Gas Exit Temperature for each Stack 10 -- 20 °F above incoming water temperature	5. List the Gas Exit Temperature for each Discharge Point
6. List the Building Height, Width, Length for each Stack On skid, not a part of a building	6. List the Building Height, Width, Length for each Discharge Point
7. List the Height of the Tallest Building On-site or in the Vicinity Varies	7. List the Height of the Tallest Building On-site or in the Vicinity
8. List Whether the Facility is in an Urban or Rural Location Rural	8. List Whether the Facility is in an Urban or Rural Location
9. List the Distance from each Stack to the Property Line 2.1 miles minimum	9. List the Distance from each Discharge Point to the Property Line
10. Is this Stack Shared by more than One Source? No	10. Is this a Shared Discharge Point?
11. List the Volumetric Flow Rate for each Stack 700 ft <sup>3</sup> /min	11. List the Volumetric Flow Rate for each Discharge Point
12. How does each Stack Discharge, Vertically or Horizontally? Vertically	12. How does each Discharge Point Vent, Vertically or Horizontally?



## Notice of Construction Application: New Project or Modification of Existing Stationary Source

### X. FUEL DATA

	PRIMARY FUEL	SECONDARY FUEL
1. Type (Natural Gas, Oil, Coal, Hogged Fuel, etc.)	Diesel, ultra-low sulfur	N/A
2. Unit of Measure (Gallons, Cubic Feet, Tons, etc)	Gallons	
3. Maximum Consumption Units per Hour	17 gallons per unit	
4. Maximum Consumption Units per Year	149,000 gallons (assuming 8,760 hours for one unit)	
5. Actual Consumption Units per Hour	13 gallons (average)	
6. Actual Consumption Units per Year	32,500 gallons (assuming 2,500 hours for one unit)	
7. BTU per Unit of Measure	140,000 Btu/gallon	
8. Percent Sulfur (if applicable)	Less than 0.0015% or 15 ppm	
9. Percent Ash (if applicable)	N/A	



## Notice of Construction Application: New Project or Modification of Existing Stationary Source

### XI. AIR POLLUTION CONTROL EQUIPMENT (ATTACH VENDOR'S INFO.)

BAGHOUSE	SCRUBBER	CYCLONE	E.S.P.	ADSORPTION
1. Type <u>N/A</u>	1. Type <u>N/A</u>	1. Type <u>N/A</u>	1. Type <u>N/A</u>	1. Type <u>N/A</u>
2. Efficiency <u>      </u>	2. Efficiency <u>      </u>	2. Efficiency <u>      </u>	2. Efficiency <u>      </u>	2. Efficiency <u>      </u>
3. Bag height <u>      </u>	3. Dimensions <u>      </u>	3. Dimensions <u>      </u>	3. Dimensions: Plate spacing, height, length (attach layout) <u>      </u>	3. Gas Flow Rate (cfm) <u>      </u>
4. Bag diameter <u>      </u>	4. Gas Differential Pressure <u>      </u>	4. Gas Differential Pressure <u>      </u>	4. Fields <u>      </u>	4. Bed Media <u>      </u>
5. Number of bags <u>      </u>	5. Type of scrubber liquid <u>      </u>	5. Gas Flow Rate (cfm) <u>      </u>	5. Configuration <u>      </u>	5. Adsorption Isotherm (attach graph) <u>      </u>
6. Filter Area (sq. feet) <u>      </u>	6. Liquid Flow Rate <u>      </u>	6. Other <u>      </u>	6. Gas Velocity (fpm) <u>      </u>	6. Surface Area (sq. feet) <u>      </u>
7. Filter Media <u>      </u>	7. Gas Flow Rate (cfm) <u>      </u>		7. Gas Flow Rate (cfm) <u>      </u>	7. Gas Velocity (fpm) <u>      </u>
8. Gas Flow Rate (cfm) <u>      </u>	8. Scrubber Packing Material <u>      </u>		8. Residence Time <u>      </u>	8. Gas Temperature (deg. F) <u>      </u>
9. Air- to-Cloth Ratio <u>      </u>			9. Gas Differential Pressure <u>      </u>	9. Bed Volume (cubic feet) <u>      </u>
10. Overall Dimensions <u>      </u>			10. Precipitation Rate <u>      </u>	10. Bed Dimensions <u>      </u>
11. Cleaning Mechanism <u>      </u>			11. Prim/Sec. Voltage <u>      </u>	11. Capacity (hours) <u>      </u>
12. Other <u>      </u>			12. Prim/Sec. Current <u>      </u>	12. Contaminant <u>      </u>
13. Other <u>      </u>			13. Corona Strength <u>      </u>	13. Regeneration Time <u>      </u>
14. Other <u>      </u>			14. Gas Temperature (deg. F) <u>      </u>	14. Regeneration Type <u>      </u>



## Notice of Construction Application: New Project or Modification of Existing Stationary Source

### XII. OTHER DATA

1. Site Plan and Equipment Layout for the site attached?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
2. MSDS Sheets for Chemicals or Materials related to this proposal attached?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
3. Vendor's and/or Manufacturer's information attached?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
4. Modeling Information attached?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
5. Fugitive Dust Control Plan attached?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
6. All Enclosures for your Specific Proposal attached?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
7. Name and Title of Person Filling out this Form	
Printed Name <u>Brian Rumburg, Env. Eng</u> Signature <u><i>Brian Rumburg</i></u> Date <u>8/20/2012</u>	
8. Name and Title of Responsible Official	
Printed Name <u>Scott Samuelson, Manager</u> Signature <u><i>Scott Samuelson</i></u> Date <u>9/14/12</u>	



## Notice of Construction Application: New Project or Modification of Existing Stationary Source

### XIII. ADDITIONAL INFORMATION FOR SPECIFIC EQUIPMENT (Attach Vendor's Information)

BOILER	BURNER	ASPHALT PLANT	SAND / GRAVEL	PAINT BOOTH
1. Type and Number <u>N/A</u>	1. Type and Number <u>Webster JB2G-10</u>	1. Type (Drum, Batch) <u>N/A</u>	1. Crusher Type (Prim., Sec., Tertiary) (attach layout) <u>N/A</u>	1. Operation Type <u>N/A</u>
2. Size (BTU per hour input) _____	2. Size (BTU per hour input) <u>2.5 MM</u>	2. Size (tons per hour) _____	2. Size (tons per hour) _____	2. Application Method _____
3. Size (steam pounds per hour) _____	3. NOx Rating (PPPM@7% Oxygen) <u>90 ppm (see attached document)</u>	3. VOC Emission Points (attach layout) _____	3. Number of Screens _____	3. Filter Bank Area _____
4. Efficiency _____	4. CO Rating (PPM @ 7% Oxygen) <u>90 ppm (see attached document)</u>	4. VOC Controls _____	4. Number of Conveyors _____	4. Filter Exhaust Flow _____
5. NOx Rating (PPM @ 7% Oxygen) _____		5. Aggregate Piles (acres) _____	5. Fog Spray Location (attach layout) _____	5. Coating & Solvent Types & MSDS Sheets (attach details) _____
6. CO Rating (PPM @ 7% Oxygen) _____		6. Off Road Vehicle Use (miles per year) _____	6. Aggregate Piles (acres) _____	6. Gun Cleaning Method _____
		7. Power (Line, Genset, etc.) _____	7. Off Road Vehicle Use (miles per year) _____	7. Drying Method _____
		8. Number of Vehicles _____	8. Number of Vehicles _____	



## Notice of Construction Application: New Project or Modification of Existing Stationary Source

LANDFILL	ABRASIVE BLASTING	CONCRETE BATCH	OTHER	OTHER
1. Type <u>N/A</u>	1. Attach details of booth or hanger to be used	1. Size (tons or cubic yards of product))		
2. Capacity (tons) _____	<u>N/A</u>	<u>N/A</u>		
3. Year started _____	2. Abrasive Materials to be used. Attach MSDS Sheet(s)	2. Cement Silo Controls (baghouse, etc.)		
4. Year closed _____	3. Filter Bank Area	_____		
5. Area of Landfill (attach site plan) _____	4. Filter Exhaust Flow	3. Charging Station Controls (baghouse, enclosure, etc.)		
	5. Approximate Number of Items to be Abrasively Blasted each Calendar Year.	4. Conveyor Controls		

If you need this document in a format for the visually impaired, call the Air Quality Program at 360-407-6800. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.