LB# 36670

AIR 13-607
NOC 879
Audit 795

STATE OF WASHINGTON
DEPARTMENT OF HEALTH
OFFICE OF RADIATION PROTECTION
309 Bradley Blvd., Suite 201 • Richland, Washington 99352
TDD Relay Service: 1-800-833-6388

June 20, 2013

Mr. Kevin W. Smith, Manager
United States Department of Energy
Office of River Protection
P.O. Box 450, MSIN: H6-60
Richland, Washington 99352

Dear Mr. Smith:

Pursuant to Chapter 246-247 of the Washington Administrative Code (WAC), the modification of Emission Unit (EU) 218 is hereby approved according to the enclosed License for:

Removal and Disposal of the Obsolete 242A Evaporator Building K-1 Exhauster (Replaces NOC 864) (NOC 879; EU 486)

The conditions, controls, monitoring requirements, and limitations of this License must be observed in order for you to be in compliance with WAC 246-247. Failure to meet any provision of this License may result in the revocation of approval, the issuance of Notices of Violation, or other enforcement actions under WAC 246-247-100.

This license approval replaces and obsoletes:

242-A Evaporator Building Exhauster K-1 Upgrade (Replaced NOC 794) (NOC 864; EU 1294)

The issuance of this license approval (NOC 879) also closes:

Audit 795 – Stack Closure for 296-A-21 (EU 141)

If you have any questions regarding this approval, please contact Ernest McCormick at (509) 946-0624.

Sincerely,

John Martell, Manager
Radioactive Air Emissions Section

Enclosure: Applicable Portion of License

cc: (see next page)

cc: Robert Anderson, MSA
Matthew Barnett, PNNL
John Bates, CHPRC
Tom Beam, MSA
Lee Bostic, BNI
Dennis Bowser, USDOE-ORP
Jerry Cammann, MSA
Cliff Clark, USDOE-RL
Jack Donnelly, WRPS
Dennis Faulk, EPA
Phil Gent, Ecology
Michael Greene, WRPS
Robert Haggard, BNI
Dale Jackson, USDOE-RL
Steven Killoy, WRPS
Ernest McCormick, WDOH
Felix Miera, WRPS
Valarie Peery, Ecology
Michael Peloquin, WRPS
Lucinda Penn, WRPS
Crystal Rau, Ecology
John Schmidt, WDOH
Maria Skorska, Ecology
Jeff Voogd, WRPS
Joel Williams, Jr., CHPRC
Davis Zhen, EPA
Environmental Portal
RAES Tracking: RAES# 508; Follow up to LB# 3652; NOC 879; EU 486

Project Title	Approval #	Date Approved	NOC_ID
Removal and Disposal of the Obsolete 242A Evaporator Building K-1 Exhauster (Replaces NOC 864)	AIR 13-607	6/20/2013	879

Conditions (state only enforceable: WAC 246-247-040(5), 060(5) if not specified)

1) The total abated emission limit for this Notice of Construction is limited to 1.54E-04 mrem/year to the Maximally Exposed Individual (WAC 246-247-040(5)). The total limit on the Potential-To-Emit for this Notice of Construction is limited to 1.54E-04 mrem/year to the Maximally Exposed Individual (WAC 246-247-030(21)).

2) The proposed action will be to remove, package, and properly dispose of the following equipment at an approved disposal facility:
• TURBINE BUILDING AND INTERNALS - The sample lines will be contained to reduce the potential for contamination to escape.
• STACK MONITORING EQUIPMENT AND CABINET - The sampling lines that are potentially radiologically contaminated will be removed from the stack and the cabinet.
• STACK/FANS/MOTORS - The stack may be removed in two sections. The top section is the duct. The bottom section may be disconnected from the fan duct connections and from the concrete slab. Each fan assembly includes a fan, electric motor, support base, inlet air-operated damper, and inlet and outlet flexible connections. The potential for radiological contamination exists within this equipment.
• CROSSOVER PLENUM - The plenum, including piping, tubing, and supports will be removed. The air sample lines and instrument sensing lines that originate at the HEPA filter units will be contained to prevent release of internal contamination. The potential for radioactive contamination exists within the crossover plenum.

3) **The Annual Possession Quantity is limited to the following radionuclides (Curies/year):**

Alpha - 0	2.08E-08	Beta - 0	1.54E-04
Based on Am-241 All Alpha radioactivity was attributed to Am-241 The total radioactivity for all radionuclides is limited to 1.54E-4 Curies/year		All Beta radioactivity was attributed to Sr-90 The total radioactivity for all radionuclides is limited to 1.54E-4 Curies/year	

4) ABATEMENT TECHNOLOGY-ALARACT's
Controls such as fixatives, covers, wrapping, containment tents, or glove bags will be utilized in accordance with HNF-5183, "Tank Farms Radiological Control Manual." Abatement controls for the following As Low As Reasonably Achievable Control Technology (ALARACT) Demonstrations will also be followed:
• ALARACT 4.1 Tank Farm ALARACT Demonstration for Packaging and Transportation of Waste.
• ALARACT 12.1 Tank Farm ALARACT Demonstration for Packaging and Transportation of Equipment and Vehicles.
• ALARACT 15.1 Tank Farm ALARACT Demonstration for Size Reduction of Waste Equipment for Disposal. (WAC 246-247-060(5))

5) WDOH NOTIFICATION-Final Disposal
WDOH will be notified when the obsolete K-1 Exhauster filters and housing units are removed as a single unit for final disposal. WDOH will perform a final inspection verifying disposal of the filter and housing unit prior to close-out of this NOC. (WAC 246-247-060(5))

6) WDOH NOTIFICATION- Leakage prior to disposal
If the activities of this NOC are implemented in stages a contamination survey of the filter housing will be performed at a minimum of once every 180 days to verify containment. WDOH will be notified if the activity on the contamination survey exceeds 11,000 dpm/ 100 square centimeter smearable beta activity, at potential leak locations. (WAC 246-247-060(5))

7) CONTAMINATION CONTROL- contamination surveys
At a minimum, pre and post-job contamination surveys (smears) shall be taken. (WAC 246-247-060(5))

8) CONTAMINATION CONTROL-Monitoring standards
Radiological monitoring shall be in accordance with the latest revision of HNF-5183, Tank Farms Radiological Control Manual. (WAC 246-247-060(5))

9) CONTAMINATION CONTROL-exceeding Table 2-2 values
Radioactive material with removable contamination levels in excess of 100 times the latest revision of HNF-5183, Tank Farms Radiological Control Manual, Table 2-2 values shall have additional packaging controls such as double wrapping, use of bags or other controls. (WAC 246-247-060(5))

10) CONTAMINATION CONTROL- storage or transportation
A survey is conducted, prior to storage or transportation of waste within the Department of Energy sites, of the outer most packaging layer to verify that removable contamination meets the requirements of the latest revision of HNF-5183, Tank Farms Radiological Control Manual , Table 2-2. (WAC 246-247-060(5))

11) SOURCE TRACKING-Post isolation
The filters and filter housing unit will be tracked until the filter units have been properly disposed. (WAC 246-247-060(5))