

LB# 4318



AIR ¹⁵ 14-213
NOC 947

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

March 5, 2015

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), your application was approved, as negotiated, on March 2, 2015, according to the enclosed license for:

**Cleanup of unplanned radioactive contamination at the Waste Treatment and Immobilization Plant
(NOC 947; EU 1420)**

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.

If you have any questions regarding this approval, please contact Mr. Randy Utley at (509) 946-0534.

Sincerely,


John Martell, Manager
Radioactive Air Emissions Section

Enclosure: Applicable Portion of License

cc: (see next page)



Mr. Kevin W. Smith
March 5, 2015
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cc: Ruth Allen, WRPS
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Maria Skorska, Ecology
Bryan Trimberger, USDOE-ORP
Randy Utley, WDOH
Jeff Voogd, WRPS
Joan Woolard, MSA
Davis Zhen, EPA
Environmental Portal
RAES Tracking: Tracking line 1017; NOC 947; EU 1420

Emission Unit ID: 1420

200E

Unplanned Radioactive Contamination Cleanup @ WTP

This is a MINOR, FUGITIVE, non-point source emission unit.

WTP Diffuse and Fugitive

Abatement Technology BARCT WAC 246-247-040(3), 040(4)

state only enforceable: WAC 246-247-010(4), 040(5), 060(5)

Zone or Area	Abatement Technology	Required # of Units	Additional Description
None	None		

Monitoring Requirements

state enforceable: WAC 246-247-040(5), 060(5), and federally enforceable: 40 CFR 61 subpart H

Federal and State Regulatory	Monitoring and Testing Requirements	Radionuclides Requiring Measurement	Sampling Frequency
WAC 246-247-075 [3]		As listed in condition 3 of this emission unit.	As listed in condition 5 of this emission unit.

Sampling Requirements As listed in the following Conditions and Limitations.

Additional Requirements

Additional monitoring or sampling requirements established by this License will be listed in the Conditions and Limitations section, if applicable.

Operational Status Diffuse and fugitive emission unit for as-needed cleanup of radioactively-contaminated debris.

This Emission Unit has 1 active Notice(s) of Construction.

Project Title	Approval #	Date Approved	NOC_ID
Cleanup of unplanned radioactive contamination at the Waste Treatment and Immobilization Plant	AIR 15-213	3/2/2015	947

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 6.03E-05 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 6.03E-05 mrem/year to the Maximally Exposed Individual (WAC 246-247-030(21)).
- 2) The process for this activity includes cleanup of radioactively-contaminated debris if found during routine radiological surveys. Action levels for implementation of this NOC include levels greater than or equal to 1000 dpm/100 cm2 beta-gamma or 20 dpm/100 cm2 alpha removable contamination. If action levels are equal to or greater than these limits, cleanup is necessary and implementation of the NOC will commence.

When this NOC is implemented, the following cleanup techniques will be used:

1. Non-coated concrete surfaces
 - a) Dry Rags
 - b) Scraping devices
 - c) Scrub brushes
 - d) Strippable coating
 - e) Wire brushes
 - f) High Efficiency Particulate Air (HEPA) vacuums

2. All other surfaces
 - a) Scraping devices
 - b) Damp wiping
 - c) Scrub brushes
 - d) Spray bottles with cleaning compound
 - e) Strippable coating
 - f) Wire brushes
- a) High Efficiency Particulate Air (HEPA) vacuums
3. Soils and soil like surfaces with debris
 - a) Trowel/shovel
 - b) Scraping devices
 - c) Binding compounds

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

Alpha - 0	4.55E-03	B/G - 0	5.81E-03
Alpha is assumed to be all Am-241. Other radionuclides may be encountered and are approved so long as they are conservatively represented by the total alpha and total beta-gamma constituents.		Beta/Gamma is assumed to be all Sr-90. Other radionuclides may be encountered and are approved so long as they are conservatively represented by the total alpha and total beta-gamma constituents.	

4) **ADMINISTRATIVE CONTROLS**

The following Administrative emission controls will be used during cleanup activities:

1. Strippable coatings or coverings may be applied to stabilize contamination.
2. Alpha and beta-gamma contamination surveys will be performed prior to and during cleanup activities. Glovebags or containments will be used when aggressive decontamination methods are implemented.
3. If HEPA vacuums are used, their operation will be conducted consistent with the Hanford Site W-PORTEX 007 HEPA Vacuum License (WDOH 2006) EU 1420
4. Liquids and damp wiping will be allowed on concrete to prevent transferring radionuclides into the building material; however, this technique may be used on coated floors and ducting. Glovebags or containments will be used for decontamination at levels greater than or equal to 1,000 dpm/100 cm² alpha or 50,000 dpm/100 cm² beta-gamma for removable contamination.
5. Removable contamination will be maintained less than 2,000 dpm/100cm² alpha or less than 50,000 dpm/100cm² beta-gamma on building and surfaces.
6. Contaminated debris will be collected and packaged in containers for disposal at an approved disposal facility. Radiological contamination and dose rate monitoring are conducted prior to transporting waste containers. Waste containers are managed consistent with applicable regulatory requirements.

5) **MONITORING**

Radiological monitoring will be performed in accordance with the latest revisions of the Waste Treatment Plant Radiological Control Manual (24590-WTP-MN-ESH-01-001), and the Radiological Routines procedure (24590-WTP-GPP-SRAD-021). Routine contamination surveys of contaminated areas will occur.

The following records and documentation will be kept.

- Radiological survey records and documentation will be kept.
- HEPA vacuum log, as needed
- Waste container log

Periodic air samples will be taken from the demolition area(s) of the area(s) with the highest potential exposure from the decontamination effort.