



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

AIR 16-109  
NOC 950

January 25, 2016

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

Re: Final Approval of Emission Unit (EU) Specific License for Revisions Required per Report of Closure, to be Incorporated in the Next Revision of the Hanford Site Radioactive Air Emissions License (FF-01)

Mr. Smith:

Pursuant to Chapter 246-247 of the Washington Administrative Code (WAC), your revision is hereby approved according to the enclosed EU specific license for:

**Decon Trailer 200 East (Int. Powered Exhaust) Operation (Replaces NOC 856)  
(EU 1289, NOC 950)**

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 Ernest McCormick at [ernest.mccormick@doh.wa.gov](mailto:ernest.mccormick@doh.wa.gov), or by phone at (509) 946-0624.

Sincerely,

John Martell, Manager  
Radioactive Air Emissions Section

Enclosure: (1) NOC 950, Decon Trailer 200 East (Int. Powered Exhaust) Operation  
(Replaced NOC 856)

cc: (see next page)



cc: Ruth Allen, WRPS  
Matthew Barnett, PNNL  
Shawna Berven, WDOH  
Lucinda Borneman, WRPS  
Lee Bostic, BNI  
Dennis Bowser, USDOE-ORP  
Cliff Clark, USDOE-RL  
Jack Donnelly, WRPS  
Rick Engelmann, CHPRC  
Dennis Faulk, EPA  
Eric Faust, USDOE-RL  
Gary Fritz, MSA  
Philip Gent, Ecology  
Robert Haggard, BNI  
Jessica Joyner, WRPS  
Reed Kaldor, MSA  
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Valarie Peery, Ecology  
Bryan Trimberger, USDOE-ORP  
Randy Utley, WDOH  
Jeff Voogd, WRPS  
Joan Woolard, MSA  
Davis Zhen, EPA  
Environmental Portal  
RAES Tracking: Line 15-178; EU 1289; NOC 950

200

**Decon Trailer 200 East ( Int. Power Exhaust)**

This is a MINOR, ACTIVELY ventilated emission unit.

Miscellaneous Support Facilities

**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
			No credit taken for Abatement

**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 246-247-040(5) & WAC 246-247-060(5)	See license condition 5	Per environmental monitoring program	See license condition 4 and 5

**Sampling Requirements** Radiological field surveys and near field monitoring

**Additional Requirements**

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

**Operational Status** Intermittent Powered exhaust of the Decon Trailer at 200 East Tank Farm

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

Project Title	Approval #	Date Approved	NOC_ID
Decon Trailer 200 East (Int. Powered Exhaust) Operation (Replaces NOC 856)	AIR 16-109	1/25/2016	950

**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 1.70E-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 1.70E-05 mrem/year to the Maximally Exposed Individual (WAC 246-247-030(21)).
- 2) This approval applies only to those activities described below. No additional activities or variations on the approved activities that constitute a "modification" to the emission unit, as defined in WAC 246-247-030(16), may be conducted.
  - a.) Upon identification of the need of additional decontamination activities in the 200 area, individuals would be escorted to the nearest decontamination trailer.
  - b.) As appropriate, contaminated clothing, coverings, and/or articles will be removed and packaged for laboratory analysis and/or disposition, in accordance with As Low As Reasonably Achievable Control Technology (ALARACT) 4.1, "Tank Farm ALARACT Demonstration for Packaging and Transportation of Waste" and 12.1, "Tank Farm ALARACT Demonstration for Packaging and Transportation of Equipment and Vehicles."
  - c.) Personnel decontamination processes might include various methods or a combination of cleaning agents and /or chemicals. For example: soap and water, pre-moistened towelettes, removal of hair, abrasive soaps for toughened skin surfaces (e.g., hands and feet), and chelating agents.
  - d.) Spent decontamination solutions will be transferred from the holding tanks and/or bladder and containerized (e.g., packaged in absorbents in drums or placed in drums or carboys) and transported to existing facilities on the Hanford Site for disposal.
  - e.) Periodic maintenance inspection of the decontamination trailers will be performed without the use of containment or portable exhausters.

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

Pu - 239	1.40E-01	Sr - 90	1.40E-01
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Alpha rates are based on PU-239+D. While the potential release rates for all emissions are conservatively represented by Pu-239+D (Alpha) and Sr-90+D (Beta/gamma), essentially any radionuclide may be present.

Beta/Gamma release rates are based on Sr-90+D. While the potential release rates for all emissions are conservatively represented by Pu-239+D (Alpha) and Sr-90+D (Beta/gamma), essentially any radionuclide may be present.

4) **WDOH ALTERNATE APPROVAL - Periodic Confirmatory Measurements (PCM)**

PCM for the vented and diffuse and fugitive emissions will be provided by the established near facility monitoring and augmented by radiological surveys during personnel decontamination operations (e.g., smears and hand-held radiation monitoring measurements of the interior/exterior of the decontamination trailer). These methods are intended to demonstrate compliance by showing that while remaining under the contamination levels by which work is controlled, the actual emissions inherently will be below the emission estimates.

5) **REPORTING - Ambient Air Monitoring**

Emissions will be included in the overall fugitive and diffuse emission estimate for reporting purposes as part of the approved ambient air monitoring conducted at the Hanford Site perimeter.

6) **RECORDS - Log, Emissions Calculations**

A log shall be maintained for each emission unit. The log shall contain records of important operations parameters including the date, location, and duration of the release, measured or calculated radionuclide concentrations, the type of emissions (liquid, gaseous, solid), and type of emission control and monitoring equipment. The emissions may be calculated from either tank water samples or from the best estimate of radiological material from surveys performed during personnel decontamination operations. WAC 246-247-040(5) and WAC 246-247-060(5)