



IM # 8,322

OFFICE OF RIVER PROTECTION

P.O. Box 450, MSIN H6-60
Richland, Washington 99352

OCT 21 2014

14-ECD-0051

RECEIVED

OCT 27 2014

WA Dept of Health
Radioactive Air Emissions Section

Mr. John Martell, Manager
Radioactive Air Emissions Section
Washington State Department of Health
309 Bradley Blvd., Suite 201
Richland, Washington 99352
(Hanford Mailstop: B1-42)

Mr. Martell:

**RADIOACTIVE AIR EMISSIONS NOTICE OF CONSTRUCTION FOR CLEANUP OF
UNPLANNED RADIOACTIVE CONTAMINATION AT THE WASTE TREATMENT AND
IMMOBILIZATION PLANT**

Attached for your review and approval is the U.S. Department of Energy, Office of River Protection's "Radioactive Air Emissions Notice of Construction for Cleanup of Unplanned Radioactive Contamination at the Waste Treatment and Immobilization Plant," (Attachment 1).

This Notice of Construction supports obtaining a license from the Washington State Department of Health to perform as-needed cleanup if radioactively contaminated debris is discovered at the Waste Treatment and Immobilization Plant Site.

Also provided is a Notification of Administrative Amendment (Attachment 2). The notification requests incorporation of the license into the Hanford Site Air Operating Permit upon issuance by the Washington State Department of Health.

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

ECD:DWB

Attachments: (2)

cc: See page 2


Kevin W. Smith
Manager

Mr. John Martell
14-ECD-0051

-2-

OCT 21 2014

cc w/attachs:

P.M. Gent, Ecology
R.A. Kaldor, MSA
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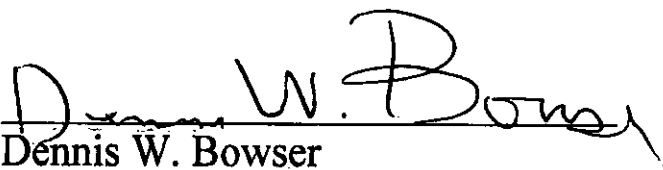
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Attachment 1
14-ECD-0051
(16 Pages)

**Radioactive Air Emissions Notice of Construction
for Cleanup of Unplanned Radioactive Contamination
at the Waste Treatment and Immobilization Plant**

24590-WTP-RPT-ENV-14-004, Revision 0


Dennis W. Bowser



ISSUED BY
RPP-WTP PDC
R11673130

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RPP-WTP PDC

Radioactive Air Emissions Notice of Construction for Cleanup of Unplanned Radioactive Contamination at WTP

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Environmental Protection

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9/8/14
Date

River Protection Project
Waste Treatment Plant
2435 Stevens Center Place
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History Sheet

Rev	Reason for revision	Revised by
0	New notice of construction to clean up unplanned, radioactively-contaminated debris.	H. Groce

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Acronyms

ALARA	as low as reasonably achievable
ALARACT	as low as reasonably achievable control technology
APQ	annual possession quantity
CFR	Code of Federal Regulations
DOE	US Department of Energy
HEPA	high efficiency particulate air (filter)
HLW	High-Level Waste (Facility)
MEI	maximally exposed individual
NOC	Notice of Construction
PTE	potential-to-emit
RCW	Revised Code of Washington
TEDE	total effective dose equivalent
WAC	Washington Administrative Code
WDOH	Washington State Department of Health
WTP	Hanford Tank Waste Treatment and Immobilization Plant

Summary

This notice of construction (NOC) permit application is being submitted to the Washington State Department of Health (WDOH) in accordance with Washington Administrative Code (WAC) 246-247, *Radiation Protection – Air Emissions*.

NOC application requirements, listed in WAC 246-247-110, are included in this application.

During 2013, contaminated bird nests were found in the Hanford Tank Waste Treatment and Immobilization Plant (WTP) High-Level Waste (HLW) Facility. Cleanup of the contaminated nests and debris was completed under a WDOH-approved as low as reasonably achievable control technology (ALARACT) demonstration. Cleanup activities under the ALARACT demonstration concluded in August 2014. In an effort to address any future contamination discoveries, this NOC is being submitted to pursue WDOH approval to perform as-needed cleanup activities if radioactively-contaminated debris is found. Potential future contamination pathways may arise from plant and animal biological vectors.

The estimated total effective dose equivalent (TEDE) to the hypothetical maximally exposed individual (MEI) associated with this activity is approximately $1.09\text{E-}06$ millirem per year for beta-gamma and $5.92\text{E-}05$ millirem per year for alpha. The TEDE is calculated based on the dose conversion factors provided in *Calculating Potential-to-Emit Radiological Releases and Doses* (DOE/RL 2006).

1 Location

The WTP site is located on the eastern part of the 200 East Area on the US Department of Energy (DOE) Hanford Site. The site is northwest of Richland, Washington, on Gable Butte, 7.5-minute quadrangle topographic map in Section 3, T12N, and R26E of the Willamette Base and Meridian. The latitude and longitude coordinates corresponding to the general WTP site are approximately 46° 33' 47"N and 119° 30' 9"W.

The address for the WTP site is:

US Department of Energy, Office of River Protection
Hanford Site
200 East Area, Waste Treatment Plant
Richland, Washington 99352

2 Responsible Manager

Mr. K.W. Smith, Manager
US Department of Energy, Office of River Protection
P.O. Box 450, MSIN H6-60
Richland, Washington 99352
(509) 372-2315

3 Proposed Action

The WTP is a complex of buildings being designed and constructed to treat and process radioactive waste into a stable glass form. Construction of the WTP commenced in 2002 and is ongoing.

The proposed action is as-needed cleanup if radioactively-contaminated debris is discovered on the WTP site. During 2013, contaminated swallow nests were found in the WTP HLW Facility. Cleanup of the contaminated nests and debris was completed under a WDOH-approved ALARACT demonstration during August 2014. This action addresses any cleanup of future contamination discoveries. Contamination pathways may arise from plant and animal biological vectors.

4 State Environmental Policy Act

This Project fulfills the requirements of WAC 197-11, *SEPA Rules*, and RCW 43.21C.030(2)(c), *State Environmental Policy, Guidelines for State Agencies, Local Governments – Statements – Reports – Advice – Information*, per RCW 43.21C.150, *State Environmental Policy*, RCW 43.21C.030(2)(c) Inapplicable When Statement Previously Prepared Pursuant to National Environmental Policy Act, which states:

The requirements of RCW 43.21C.030(2)(c) pertaining to the preparation of a detailed statement by branches of government shall not apply when an adequate detailed statement has been previously prepared pursuant to the national environmental policy act of 1969, in which event said prepared statement may be utilized in lieu of a separately prepared statement under RCW 43.21C.030(2)(c)."

The Final Tank Closure and Waste Management Environmental Impact Statement for the Hanford Site, Richland, Washington (TC & WM EIS), Volume 2, Book 2, Appendix E.1.1.1.2., Operations and Maintenance (DOE 2012) meets the agencies' review needs for the current proposal.

The lead reviewing agency is the DOE Office of River Protection. The point of contact is Mary Beth Burandt, Document Manager. The point of contact's phone number is (509) 372-8828.

5 Process Description

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 1000 dpm/100 cm² beta-gamma or 20 dpm/100 cm² alpha. If action levels are equal to or greater than these limits, cleanup is necessary and implementation of the NOC will commence.

If this NOC is implemented, the following cleanup techniques will be used. High efficiency particulate air (HEPA) vacuums will be used as needed.

- 1 Non-coated concrete surfaces
 - a Scraping devices
 - b Scrub brushes
 - c Strippable coating
 - d Wire brushes
- 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

- 3 Soils and soil like surfaces with debris
 - a Trowel/shovel
 - b Scraping devices
 - c Strip coating

6 Proposed Controls

The following proposed emission controls will be used during cleanup activities and are administrative, based on ALARA principles, and consist of ALARA techniques.

- 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 Sitewide W-PORTEX 007 HEPA Vacuums License (WDOH 2006).
- 4 Liquids and damp wiping will be avoided on concrete to prevent transferring radionuclides into the building materials; however, this technique may be used on coated floors and ducting. Glovebags or containments will be used for decontamination at levels above 1,000 dpm/100 cm² alpha or 50,000 dpm/100 cm² beta-gamma.
- 5 Removable contamination will be maintained less than 2,000 dpm/100 cm² alpha or less than 100,000 dpm/100 cm² beta-gamma on building and surfaces.

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.

Since this is a fugitive emission source and controls are administratively applied consistent with ALARA techniques, the requirement in WAC 246-247-110(6) describing control efficiency and annual average volumetric flow rate for the emission unit is not applicable to this NOC.

7 Drawings of Controls

Drawings of controls are not applicable because the emission controls are administratively defined, based on ALARA principles, and consist of ALARA techniques.

8 Radionuclides of Concern

The radionuclides of concern are conservatively assumed to consist entirely of Sr-90+Progeny (+P) for beta-gamma emitters and Am-241+P for alpha emitters, as shown in Appendix A.

9 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 *WTP Routine Radiological Surveillance Plan* (24590-WTP-PL-ENS-13-0014). Routine contamination surveys of contaminated areas will occur.

The following records and documentation will be kept.

- Radiological survey records and report(s)
- HEPA vacuum log, as needed
- Waste container log

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

10 Annual Possession Quantity

The annual possession quantity (APQ) was determined by the conservative assumption that 1 m³ of contaminated debris may be discovered and cleaned up each year. The beta-gamma contributing radionuclide is conservatively assumed to be Sr-90+P and the alpha contributing radionuclide is conservatively assumed to be Am-241+P. All radionuclides historically associated with Hanford Site activities are conservatively represented by the Sr-90+P and Am-241+P estimates, but may also contribute to the gross alpha and gross beta-gamma measurements.

The input for concentration to instrument reading for the APQ is found in *Soil Containment Standards for Protection of Personnel* (Rittmann 1997). From the document's Table 3, the soil limit for Sr-90 is 1.49E+04 pCi/g and the estimated instrument reading is 4.1E+04 cpm. The soil limit is divided by the instrument reading to obtain 0.363 pCi/g per cpm. Likewise, the soil limit for Am-241 is 18.5 pCi/g and the instrument reading is 1.3 cpm. The soil limit is divided by the instrument reading to obtain 14.23 pCi/g per cpm.

The APQ is calculated by multiplying the assumed contaminated debris volume of 1 m³ by the soil concentration. To obtain soil concentration, the soil density and concentration per mass are multiplied. The soil concentration per mass is calculated by multiplying the concentration to instrument reading (derived from Rittmann 1997, Table 3 as explained above) by the maximum activity level read by the field survey instrument. The maximum activity level is estimated using the limits of 100,000 dpm/100 cm² beta-gamma and 2,000 dpm/100 cm² alpha. This maximum activity level is converted to cpm using an instrument efficiency of 10%, which gives values of 10,000 cpm beta-gamma and 200 cpm alpha.

$$\text{Beta-gamma: } 1 \cdot 10^4 \text{ cpm} \cdot 0.363 \frac{\text{pCi}}{\text{gm-cpm}} \cdot \frac{1 \text{ Ci}}{1 \cdot 10^{12} \text{ pCi}} \cdot 1.6 \cdot 10^6 \frac{\text{gm}}{\text{m}^3} \cdot 1 \text{ m}^3 = 5.81 \times 10^{-3} \text{ Ci}$$

$$\text{Alpha: } 2 \cdot 10^2 \text{ cpm} \cdot 14.23 \frac{\text{pCi}}{\text{gm-cpm}} \cdot \frac{1 \text{ Ci}}{1 \cdot 10^{12} \text{ pCi}} \cdot 1.6 \cdot 10^6 \frac{\text{gm}}{\text{m}^3} \cdot 1 \text{ m}^3 = 4.55 \times 10^{-3} \text{ Ci}$$

The APQ is 5.81E-03 Ci for Sr-90 and 4.55E-03 Ci for Am-241. Refer to Attachment 1 for the APQ calculation.

11 Physical Form

The physical form of each radionuclide is particulate solid.

12 Release Form

The release form of each radionuclide is particulate solid. The release fraction for particulate solids is 0.001 as prescribed in WAC 246-247-030(21), *Radiation Protection – Air Emissions, Definitions*.

13 Release Rates

The release rate estimates are based on the APQ values in Section 10 multiplied by the WAC 246-247-030(21) release fraction of 0.001 for particulate solids. See Appendix A for the calculation. The potential-to-emit (PTE) is calculated to be 5.81E-06 Ci/yr for beta-gamma and 4.55E-06 Ci/yr for alpha.

$$\text{Beta-gamma: } 5.81 \cdot 10^{-3} \frac{\text{Ci}}{\text{yr}} \cdot 0.001 = 5.81 \times 10^{-6} \frac{\text{Ci}}{\text{yr}}$$

$$\text{Alpha: } 4.55 \cdot 10^{-3} \frac{\text{Ci}}{\text{yr}} \cdot 0.001 = 4.55 \times 10^{-6} \frac{\text{Ci}}{\text{yr}}$$

14 Location of the Maximally Exposed Individual

The MEI location is identified in *Calculating Potential-to-Emit Radiological Releases and Doses*, Revision 1 (DOE/RL 2006), which used radiation risk assessment software CAP88-PC Version 3. From Section 3.2.2 of the document, the WTP site is located in emission zone 200 East Area.



From Table 4-2 in the document, the offsite MEI for the 200 East Area is approximately 20,200 meters east southeast.

15 Total Effective Dose Equivalent to the Maximally Exposed Individual

The TEDE was calculated based on the dose-per-unit release factors identified in *Calculating Potential-to-Emit Radiological Releases and Doses*, Revision 1 (DOE/RL 2006) which used CAP88-PC Version 3. Since cleanup activities under this NOC will likely occur at an effective release height less than 40 m, an effective release height of less than 40 m was assumed. The document's Table 4-7, 200 East Area Offsite MEIs Dose-per-Unit-Release Factors (mrem/Ci) by Effective Release Height, lists the dose factors for Sr-90+P (1.88E-01) and Am-241+P (1.30E+01).

The TEDE is calculated by multiplying the PTE from Section 13 of this NOC by the dose factor. The TEDE for beta-gamma is 1.09E-06 for beta-gamma and 5.92E-05 for alpha.

$$\text{Beta-gamma:} \quad 5.81 \cdot 10^{-6} \frac{\text{Ci}}{\text{yr}} \cdot 0.188 \frac{\text{mrem}}{\text{Ci}} = 1.09 \times 10^{-6} \frac{\text{mrem}}{\text{yr}}$$

$$\text{Alpha:} \quad 4.55 \cdot 10^{-6} \frac{\text{Ci}}{\text{yr}} \cdot 13 \frac{\text{mrem}}{\text{Ci}} = 5.92 \times 10^{-5} \frac{\text{mrem}}{\text{yr}}$$

16 Cost Factors of Control Technology Components

The cost factors of control technology components are not applicable to the proposed activity, since the emission controls used during the construction activities consist of ALARA techniques and are defined administratively.

17 Duration or Lifetime

The cleanup activities under this NOC will take place as needed throughout the life of the WTP Project.

18 Standards

This section identifies the technical standards noted in WAC 246-247-110(18) and a summary of their applicability to activities described in this NOC. The standards discussion is separated into two activities, which include general work activities and activities utilizing HEPA filtered vacuums. HEPA filtered vacuums standards applicability is described in the Radioactive Air Emissions Notice of Construction for HEPA Filtered Vacuum Radioactive Air Emission Units (DOE/RL 1999).

ASME/ANSI AG-1

HEPA Filtered Vacuum

The ASME/ANSI AG-1 *Code on Nuclear Air and Gas Treatment* (ASME/ANSI AG-1) standard is addressed in the Radioactive Air Emissions Notice of Construction for HEPA Filtered Vacuum Radioactive Air Emission Units (DOE/RL 1999).

General Work Activities

The ASME/ANSI AG-1 standard applies to nuclear air and gas treatment and does not apply to the proposed controls described in this NOC.

ASME/ANSI N509

HEPA Filtered Vacuum

The *Nuclear Power Plant Air-Cleaning Units and Components* (ASME/ANSI N509) standard is addressed in the Radioactive Air Emissions Notice of Construction for HEPA Filtered Vacuum Radioactive Air Emission Units (DOE/RL 1999).

General Work Activities

The ASME/ANSI N509 standard applies to nuclear power plant air-cleaning units and components and does not apply to the proposed controls described in this NOC.

ASME/ANSI N510

HEPA Filtered Vacuum

The *Testing of Nuclear Air Treatment Systems* (ASME/ANSI N510) standard is addressed in the Radioactive Air Emissions Notice of Construction for HEPA Filtered Vacuum Radioactive Air Emission Units (DOE/RL 1999).

General Work Activities

The ASME/ANSI N510 standard applies to testing of nuclear air treatment systems and does not apply to the proposed controls described in this NOC.

ASME/ANSI NQA-1

HEPA Filtered Vacuum

The *Quality Assurance Requirements for Nuclear Facility Applications* (ASME/ANSI NQA-1) standard is addressed in the Radioactive Air Emissions Notice of Construction for HEPA Filtered Vacuum Radioactive Air Emission Units (DOE/RL 1999).

General Work Activities

The ASME/ANSI NQA-1 standard applies to quality assurance program requirements for nuclear facilities and does not apply to the proposed controls described in this NOC.

ASME/ANSI N13.1

HEPA Filtered Vacuum

The *Sampling and Monitoring Releases of Airborne Radioactive Substances from the Stack and Ducts of Nuclear Facilities* (ASME/ANSI N13.1) standard is addressed in the Radioactive Air Emissions Notice of Construction for HEPA Filtered Vacuum Radioactive Air Emission Units (DOE/RL 1999).

General Work Activities

The ASME/ANSI N13.1 standard applies to airborne radioactive substances from the stacks and ducts of nuclear facilities and does not apply to the proposed controls described in this NOC.

40 CFR 60, Appendix A

HEPA Filtered Vacuum

The *Standards of Performance for New Stationary Sources* (40 CFR 60), Appendix A, Test Methods, standard is addressed in the Radioactive Air Emissions Notice of Construction for HEPA Filtered Vacuum Radioactive Air Emission Units (DOE/RL 1999).

General Work Activities

The 40 CFR 60, Appendix A standard applies to stack sampling and does not apply to the proposed controls described in this NOC.

References

24590-WTP-PL-ENS-13-0014, *WTP Routine Radiological Surveillance Plan*.

24590-WTP-MN-ESH-01-001, *Waste Treatment Plant Radiological Control Manual*.

40 CFR 60. *Standards of Performance for New Stationary Sources*, Appendix A – Test Methods. Code of Federal Regulations.

ANSI/ASME N509. *Nuclear Power Plant Air-Cleaning Units and Components*. American Society of Mechanical Engineers, New York, NY.

ANSI/ASME N510. *Testing of Nuclear Air Treatment Systems*. American Society of Mechanical Engineers, New York, NY.

ANSI N13.1. *Sampling and Monitoring Releases of Airborne Radioactive Substances from the Stack and Ducts of Nuclear Facilities*. American National Standards Institute, New York, NY.

ASME AG-1. *Code on Nuclear Air and Gas Treatment*. American Society of Mechanical Engineers, New York, NY.

ASME NQA-1. *Quality Assurance Requirements for Nuclear Facility Applications*. American Society of Mechanical Engineers, New York, NY.

RCW 43.21C.030. *State Environmental Policy*, Guidelines for State Agencies, Local Governments – Statements – Reports – Advice – Information. Revised Code of Washington. Olympia, WA.

RCW 43.21C.150. *State Environmental Policy*, RCW 43.21C.030(2)(c) Inapplicable When Statement Previously Prepared Pursuant to National Environmental Policy Act. Revised Code of Washington. Olympia, WA.

WAC 197-11. *SEPA Rules*. Washington Administrative Code. Olympia, WA. Revised Code of Washington. Olympia, WA.

WAC 246-247. *Radiation Protection – Air Emissions*. Washington Administrative Code. Olympia, WA.

WAC 246-247-030(21). *Radiation Protection – Air Emissions*, Definitions. Washington Administrative Code. Olympia, WA.

WAC 246-247-060. *Radiation Protection – Air Emissions*, Applications, Registration, and Licensing. Washington Administrative Code. Olympia, WA.

WAC 246-247-110. *Radiation Protection – Air Emissions*, Appendix A – Application Information Requirements. Washington Administrative Code. Olympia, WA.

WDOH. 2006. Hanford Sitewide W-PORTEX 007 HEPA Vacuums License.

24590-WTP-RPT-ENV-14-004, Rev 0
Radioactive Air Emissions Notice of Construction for
Cleanup of Unplanned Radioactive Contamination at WTP

DOE. 2012. *Final Tank Closure and Waste Management Environmental Impact Statement for the Hanford Site, Richland, Washington (TC & WM EIS)*, DOE/EIS-0391. US Department of Energy, Washington, DC.

DOE/RL. 1999. *Radioactive Air Emissions Notice of Construction for HEPA Filtered Vacuum Radioactive Air Emission Units*, DOE/RL-97-50, Revision 1. US Department of Energy, Richland Operations Office, Richland, WA.

DOE/RL. 2006. *Calculating Potential-to-Emit Radiological Releases and Doses*, DOE/RL-2006-29, Rev 0. US Department of Energy, Richland Operations Office, Richland, WA.

Rittmann, PD. 1997. *Soil Contamination Standards for Protection of Personnel*, HNF-2418. Fluor Daniel Hanford, Inc., Richland, WA.

Appendix A

Potential-to-Emit Estimate

Isotope	Field Instrument Activity (cpm) ^{***}	Concentration to Instrument Reading (pCi/g per cpm) [*]	Soil Concentration per Mass (pCi/g)	Soil Density (g/m ³) [†]	Soil Concentration (pCi/m ³)	Contaminated Volume (m ³) ^{**}	Conversion to Curies (Ci/pCi)	Curies Contained in Sediment	Release Fraction	PTE (Ci/yr)	Dose Factor (mrem/Ci) ²	Unabated TEDE to the MEI (mrem/yr)
Sr-90+P [*]	1.00E+04	0.363	3.63E+03	1.60E+06	5.81E+09	1	1.0E-12	5.81E-03	0.001	5.81E-06	0.188	1.09E-06
Am-241+P ^{**}	2.00E+02	14.23	2.85E+03	1.60E+06	4.55E+09	1	1.0E-12	4.55E-03	0.001	4.55E-06	1.30E+01	5.92E-05

* Sr-90+Progeny is used to conservatively represent all beta-gamma constituents.;

** Am-241+Progeny is used to conservatively represent all alpha constituents.

*** The Field Survey Instrument values were estimated using the contamination limits of 100,000 dpm/100 cm² for beta-gamma and 2,000 dpm/100 cm² for alpha. An instrument efficiency of 10% was used.

† Values derived from Table 3 of HNF-2418. The soil limit in column 2 (1.49E+04 pCi/g for Sr-90 and 18.5 pCi/g for Am-241) is divided by the estimated instrument readings found in column 4 for Sr-90 (4.1E+04 cpm) and column 5 for Am-241 (1.3 cpm).

** The contaminated volume of contaminated debris is conservatively assumed to be 1 m³.

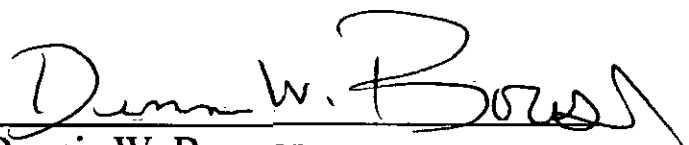
References:

¹Ritmann, PD. 1997. *Soil Contamination Standards for Protection of Personnel*, HNF-2418. Fluor Daniel Hanford, Inc., Richland, WA.

²DOE/RL. 2010. *Calculating Potential-to-Emit Radiological Releases and Doses*, DOE/RL-2006-29, Rev 1. US Department of Energy, Richland Operations Office, Richland, WA.

Attachment 2
14-ECD-0051
(1 Page)

Notification of Administrative Amendment


Dennis W. Bowser

NOTIFICATION OF ADMINISTRATIVE AMENDMENT

Hanford Site AOP Number 00-05-006, Renewal 2, Rev. A

This notification is provided to the Washington State Department of Ecology, Washington State Department of Health, and the U.S. Environmental Protection Agency as notice of an administrative amendment described as follows.

The following changes are allowed pursuant to WAC 173-401-720 as administrative amendments if they only:

1. Correct typographical errors;
2. Identify a change in the name, address, or phone number of any person identified in the AOP, or provide a similar minor administrative change;
3. Require more frequent monitoring or reporting;
4. Allow for a change in ownership or operational control of a source where the permitting authority determines that no other change is necessary (and a written agreement containing the specific details of the transfer has been submitted to the permitting authority); or
5. Incorporate terms, conditions, and provisions from NOC approval orders that have been processed under an EPA-approved program that meets the procedural requirements of WAC 173-401.

Describe the change:

The Radioactive Air Emissions Notice of Construction for Cleanup of Unplanned Radioactive Contamination at WTP supports as-needed cleanup if radioactively contaminated debris is discovered on the WTP site.

During 2013, contaminated swallow nests were found in the WTP High-Level Waste Facility. Cleanup of the contaminated nests and debris commenced after receiving WDOH approval on an ALARACT Demonstration. This action addresses any future contamination discoveries. Upon WDOH review and approval of the NOC, the Hanford Site AOP Number 00-05-006, Renewal 2, Rev. A, Attachment 2, should be revised to incorporate the license.

Date of change:

Upon issuance of the WDOH approved license.

Describe the emissions resulting from issued NOC approval orders that have gone through a WAC 173-401 equivalent public review process:

The NOC permit application estimates annual possession quantity, release rates, and total effective dose equivalent. Beta-gamma radiation is conservatively represented by Sr-90+Projeny (+P), and alpha radiation is conservatively represented by Am-241+P.

The APQ is estimated to be 5.81E-03 Ci for beta-gamma and 4.55E-03 Ci for alpha. The release rates are estimated to be 5.81E-06 Ci/yr for beta-gamma and 4.55E-06 Ci/yr for alpha. The total effective dose equivalent to the maximally exposed individual is estimated to be 1.09E-06 mrem/yr for beta-gamma and 5.92E-05 mrem/yr for alpha.

List the terms, conditions, and provisions from issued NOC approval orders that have gone through a WAC 173-401 equivalent public review process:

Terms, conditions, and provisions will be identified in the license upon WDOH issuance.