

AR TARGET SHEET

The following document was too large to scan as one unit, therefore, it has been divided into sections.

EDMC#: 0073854

SECTION: 2 OF 4

DOCUMENT #: DOE/RL-2007-04 Rev0

TITLE: Hanford Site Air Operating Permit
Annual Compliance Certification
Report for Period January 1, 2006
through December 31, 2006

APPENDIX B

ATTACHMENT 2 REQUIREMENTS

This page intentionally left blank.

CONTENTS

P-296K142 001 1
R-1706KE-001 9
200 Area Diffuse/Fugitive - LERF/ETF 10
200 Area Diffuse/Fugitive - Tank Farms 18
200 Area Diffuse/Fugitive - TRU Retrieval 60
200 Area Diffuse/Fugitive - WRAP 69
200 Area Diffuse/Fugitive - WTP 76
200 Area ISA 84
296-P-48 89
Drum Venting System (Active Vent) 97
Drum Venting System (Passive Vent) 104
Sitewide PTRAEU at Tank Farms 112
Sitewide HEPA Vac at Tank Farms 117
244-A Primary HEPA 123
244-BX Primary HEPA 131
244-CR Vault Passive Filter A 139
296-A-22 149
Guzzler at WTP 155
Sitewide HEPA Vac at ETF 163
LERF Basin #42 169
LERF Basin #43 176
LERF Basin #44 182
NOC: Construction of (WTP) HLW Vitrification Plant 189
NOC: Construction of (WTP) Laboratory 189
NOC: Construction of (WTP) LAW Vitrification Plant 190
NOC: Construction of (WTP) Pretreatment Plant 191
P-2025E ETF 192
P-241C104-001 199
P-241C105-001 200
P-241C106 200
P-242A-001 201
P-291A001-001 202
P-296A018-001 203
P-296A019-001 203
P-296A020-001 204
P-296A028-001 205
P-296A030-001 206
P-296A041-001 207
P-296A042-001 208
P-296A043-001 216
P-296AN-001 217
P-296AP-001 219
P-296AW-001 220
P-296B001-001 221

CONTENTS

P-296B010-001	222
P-296H212 001	229
P-296P031-001	236
244-S Primary HEPA.....	237
296-P-44.....	245
296-T-18	253
J-CWC 001	254
P-241S102-001	260
P-242S-001	265
P-291S001-001	266
P-291U001-001.....	267
P-296P022-001	268
P-296S016-001	269
P-296SY-001	270
P-296W004 001	278
Sitewide PTRAEU at 219-S	285
Sitewide PTRAEU at PFP	290
P-Trench34 001.....	295
S-296S021-001	300
S-296S023-001	306
S-296S025 001.....	307
300 Area Emissions	308
EP-305B-01-S.....	328
EP-318-01-S.....	335
EP-320-01-S.....	343
EP-320-02-S.....	344
EP-320-04-S.....	345
EP-323-01-S.....	346
EP-324-01-S.....	347
EP-325-01-S Hazardous Waste Treatment Unit.....	359
EP-326-01-S.....	389
EP-327-01-S.....	394
EP-329-01-S Chemical Sciences Laboratory	406
EP-3730-01-S.....	415
P-340DECON-001	415
P-437-002.....	417
P-437MN&ST-001	418
P-FFTFCEBEX-001	420
P-FFTFHTTR-001	421
P-FFTFRESB-001	423
Sodium Storage Facility.....	424
600 Area Diffuse/Fugitive	429
696-W-1	434
696-W-2.....	440

CONTENTS

Purgewater Modutanks 446
Sitewide Guzzler..... 451
Vented Containers..... 455

TABLES

Table 1. Attachment 2 Table 2.1 Emission Units Compliance Demonstration , *Requirements for Minor Passively Ventilated Vents in High Level Waste Tank Farms*B-461

Table 2. Attachment 2 Table 2.2 Emission Units Compliance Demonstration, *Requirements for Legacy Emission Units*.....B-464

Table 3. Attachment 2 Emission Units with All Requirements Irrelevant and Not Applicable During this Certification Period.....B-465

Table 4. Attachment 2 NOCs with all Requirements and Conditions Irrelevant and Not Applicable During this Certification PeriodB-469

P-296K142 001
WDOH Emission Unit ID : 436
Page in AOP : H-0071

Requirement	Compliance Status	Compliance Determination Method
Zone or Area : Process Bay Local Exhaust Abatement Technology : Isolation Damper Required Units : 2 Add'l Description:	Continuous	CDM: Verified by field inspection. Comment:
Zone or Area : Process Bay Local Exhaust Abatement Technology : Backdraft Damper Required Units : 2 Add'l Description:	Continuous	CDM: Verified by field inspection. Comment:
Zone or Area : Process Bay Recirculation Abatement Technology : HEPA Required Units : 4 Add'l Description:	Continuous	CDM: Verified by field inspection. Comment:
Zone or Area : Process Bay Recirculation Abatement Technology : Fan Required Units : 4 Add'l Description:	Continuous	CDM: Verified by field inspection. Comment:
Zone or Area : Process Bay General Exhaust Abatement Technology : HEPA Required Units : 1 Add'l Description: Two Stage HEPA	Continuous	CDM: Verified by field inspection. Comment:
Zone or Area : Process Bay General Exhaust Abatement Technology : Prefilter Required Units : 1 Add'l Description:	Continuous	CDM: Verified by field inspection. Comment:
Zone or Area : Process Bay General Exhaust Abatement Technology : Backdraft Damper Required Units : 2 Add'l Description:	Continuous	CDM: Verified by field inspection. Comment:
Zone or Area : Process Bay General Exhaust Abatement Technology : Isolation Damper Required Units : 2 Add'l Description:	Continuous	CDM: Verified by field inspection. Comment:
Zone or Area : Process Bay General Exhaust Abatement Technology : Fan Required Units : 2 Add'l Description:	Continuous	CDM: Verified by field inspection. Comment:
Zone or Area : Process Bay Local Exhaust Abatement Technology : HEPA Required Units : 1 Add'l Description: Two Stage HEPA	Continuous	CDM: Verified by field inspection. Comment:

Requirement	Compliance Status	Compliance Determination Method
<p>Zone or Area : Process Bay Local Exhaust Abatement Technology : Fan Required Units : 2 Add'l Description:</p>	<p>Continuous</p>	<p>CDM: Verified by field inspection. Comment:</p>
<p>Required Sampling: NESHAP Compliant, meeting ANSI N13.1, 1999. Sampling Frequency: Monthly Sample Radionuclide Requiring Measurement: All radionuclides which could contribute 10% of the potential EDE.</p>	<p>Continuous</p>	<p>CDM: Sampling verified by information in ABCASH. "Statement of Work for Services Provided by the Waste Sampling and Characterization Facility for the Environmental Compliance Program during Calendar Year 2006" (HNF-EP-0835-12) defines what analyses are performed and frequency. "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions" (HNF-EP-0528) specifies the QA requirements. Verified sampling was conducted as described in NOC application, DOE/RL-96-110, per technical procedure RP-50-002V. Comment: Sampling also is verified by completed CVDF Technical Procedure RP-50-002V.</p>
<p>Federal and State Regulatory Requirement: 40 CFR 61.93(b)(4)(i) & WAC 246-247-075(3) Permit Monitoring and Testing Procedure: Appendix B, Method 114</p>	<p>Continuous</p>	<p>CDM: DOE/RL-2007-01, Revision 0, "Radionuclide Air Emissions Report for the Hanford Site, Calendar Year 2006" and the "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions" (HNF-EP-0528) satisfy WAC 246-247-075(1). The Hanford Environmental Monitoring Program satisfies WAC 246-247-075(8). Refer to conditions following, for compliance status with remaining applicable paragraphs of WAC 246-247-075. "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions" (HNF-EP-0528) specifies QA requirements. Comment:</p>

Requirement	Compliance Status	Compliance Determination Method
<p align="center"> Permit: AIR 01-1206 Issue Date: 12-20-01 Obsolete Date: 07-05-06 NOC: Cold Vacuum Drying Facility WDOH NOC ID: 229 Date In AOP: 06-11-02 Page in AOP: H-0071 </p>		
Requirement	Compliance Status	Compliance Determination Method
<p>The U.S. Department of Energy shall comply with all Conditions and Limitations of this license (WAC 246-247-060(5)).</p>	Continuous	<p>CDM: For this approval order, in compliance with all approval conditions. Comment:</p>
<p>The total abated emission limit for this Notice of Construction is limited to 4.95E-03 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 1.27E+01 mrem/year to the Maximally Exposed Individual (WAC 246-247-030(21)).</p>	Continuous	<p>CDM: Abated: DOE/RL-2007-01, Revision 0, "Radionuclide Air Emissions Report for the Hanford Site, Calendar Year 2006". Comment:</p>
<p>This process is limited to: the CVDF located to the west of the K Basins in the 100 K Area of the Hanford Site. The CVDF is limited to the following three adjoining radiological areas: the process bay area, the process support area, and the process water tank room. The process bay area shall contain four process bays and one bay used to off load water. Immediately adjacent and contiguous to the process bay area is the process support area, a steel-framed, two-story metal building that encloses the traffic corridor, process bay support rooms, and the second floor mechanical equipment room. Immediately adjacent to the process bay area on the north side is a single-story concrete and structural steel building that encloses the process water tank room. Each operational process bay shall contain a process equipment skid, a safety-class helium system, a process hood, and a process bay recirculation heating, ventilation, and air conditioning (HVAC) system. Each process equipment skid shall contain a vacuum and purge system and a tempered water (annulus) system. The CVDF interfaces with the 100 K Area, Hanford Site infrastructure services, and the Canister Storage Basin (CSB). The CVDF operation interfaces with K Basins operations by receiving cask- MCO packages for processing. Water removed from the MCO and water used for system flushes shall be cleaned and transported by tanker truck for appropriate dispositioning. The CVDF also interfaces with the CSB operation when the cask-MCO packages are shipped to the CSB after the cold vacuum drying process has been completed. The stack sample line shall be reconfigured in a manner to facilitate inspections and testing as required by ANSI N13.1-1999 (i.e. removable spool piece(s) and tees for installation of pressure gauges). During reconfiguration, there will be no stack sampling and no MCO processing within the facility.</p>	Continuous	<p>CDM: In compliance with all approval conditions described here. These conditions implemented procedurally as described in Process Standard 416, AP-EP-5-018 matrix tables and Technical Procedure CP-48-001V matrix table. Comment:</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The Annual Possession Quantity is limited to the following radionuclides (Curies/year): Ag 110 m 1.07E-02 Ag 110 1.42E-04 Am 241 1.87E+05 Am 242 m 9.74E+01 Am 242 m 9.79E+01 Am 243 6.00E+01 Ba 137 m 6.24E+06 C- 14 3.46E+02 Cd 113 m 1.77E+03 Cd 115 m 0.00E+00 Ce 141 0.00E+00 Ce 144 4.57E+02 Cm 242 8.09E+01 Cm 244 7.19E+02 Co 60 1.98E+03 Cs 134 7.94E+03 Cs 135 3.87E+01 Cs 137 6.59E+06 Eu 152 4.72E+02 Eu 154 5.35E+04 Eu 155 1.10E+04 Fe 55 9.19E+02 Gd 153 6.39E-05 H- 3 1.83E+04 I- 129 3.18E+00 In 113 m 1.07E-07 Kr 85 2.95E+05 Nb 93 m 1.23E+02 Nb 95 1.87E-12 Nb 95 m 6.24E-15 Ni 59 2.05E+01 Ni 63 2.24E+03 Np 237 2.86E+01 Pd 107 8.14E+00 Pm 147 2.31E+05 Pm 148 m 0.00E+00 Pm 148 m 0.00E+00 Pr 143 0.00E+00 Pr 144 4.51E+02 Pr 144 m 5.50E+00 Pu 238 5.55E+04 Pu 239 1.09E+05 Pu 240 5.95E+04 Pu 241 3.34E+06 Pu 242 2.74E+01 Rh 103 m 0.00E+00 Rh 106 9.09E+02 Ru 103 0.00E+00 Ru 106 9.09E+02 Sb 124 1.51E-18 Sb 125 1.67E+04 Sb 126 1.09E+01 Sb 126 m 7.79E+01 Se 79 4.31E+01 Sm 151 8.79E+04 Sn 113 1.07E-07 Sn 119 m 1.48E-01 Sn 121 m 3.98E+01 Sn 123 8.69E-06 Sn 126 7.79E+01 Sr 89 0.00E+00 Sr 90 5.05E+06 Tb 160 1.38E-15 Tc 99 1.44E+03 Te 123 1.38E-11 Te 125 m 4.09E+03 Te 127 4.74E-07 Te 127 m 4.84E-07 Te 129 0.00E+00 Te 129 m 0.00E+00 U- 234 4.37E+02 U- 235 1.68E+01 U- 236 6.34E+01 U- 238 3.48E+02 Y- 90 5.05E+06 Y- 91 1.11E-14 Zr 93 2.00E+02 Zr 95 8.44E-13</p>	Continuous	<p>CDM: Annual NESHAP Report in combination with applicable dose conversion factors. Comment:</p>
<p>The CVDF shall consist of up to four process bays in which SNF transport trailers can be housed while water is drained and vacuum/gas purge process dries SNF. It shall have a support area consisting of a control room, change rooms, and other functions.</p>	Continuous	<p>CDM: Verified by field inspection. Comment: Only two of four bays have been completed for SNF processing.</p>
<p>All controls, as described in the amended NOC are required, and building HEPA filters meet ASME AG-1.</p>	Continuous	<p>CDM: System walk downs and reviews of construction drawings and startup records as documented in Readiness Assessment File MSA 16.0S.c.1 conducted before startup. Further walk downs also performed, e.g., during WDOH Level II inspections, confirming system configuration and operation. Comment:</p>
<p>The stack monitoring system must be continuous and NESHAPs compliant.</p>	Continuous	<p>CDM: Field walk down and review of Readiness Assessment MSA file 16.0S.c.1. WDOH also performed several Level II inspections with no findings. Comment:</p>

Requirement	Compliance Status	Compliance Determination Method
<p>This approval, with its Conditions and Limitations, constitutes and amendment to the Department's Radioactive Air Emission License. This amendment must be included in the next revision of the Hanford Air Operating Permit (WAC 246-247-060(1)(e) and (2)(c)).</p>	<p>Not Applicable</p>	<p>CDM: N/A. Comment: Ecology and WDOH determined the licensee need not certify compliance with conditions conveying a right, are a historical summary or fact, pertaining to actions to be completed in the future, or pertaining to actions required of the agency.</p>
<p>The facility shall notify the department at least seven days prior to any planned preoperational testing of the emission unit's emissions control, monitoring or containment systems. The department reserves the right to observe such tests (WAC 246-247-060(4)).</p>	<p>Not Applicable</p>	<p>CDM: N/A. Comment: Notification of pre-operational testing occurred before the reporting period.</p>
<p>Records must be readily (promptly) available for this unit. Those records must be maintained onsite, and must be retained for at least five years (WAC 246-247-080(8)).</p>	<p>Continuous</p>	<p>CDM: WDOH requested information and records during past Level II stack inspections and records promptly were made available. Records maintained in Job Control System (JCS). Comment:</p>
<p>All reports and records must be kept and reported according to 40 CFR 61, Subpart H (WAC 246-247-080(2)).</p>	<p>Continuous</p>	<p>CDM: For calculations and input data from stack and ambient air monitors, the Environmental Release Summary (ERS) electronic system. Information from other than stacks and ambient air monitors resides at the individual facility. For annual reporting refer to "Radionuclide Air Emissions Report for the Hanford Site, Calendar Year 2006". Comment:</p>
<p>The facility shall make requested documents available in a timely manner for review (WAC 246-247-080(10)).</p>	<p>Continuous</p>	<p>CDM: WDOH conducted Level II stack inspections and all requested documents provided in a timely manner. Comment:</p>

Requirement	Compliance Status	Compliance Determination Method
<p>Prior to permanent shut down of an emission unit or completion of an activity, the permittee shall file a report of closure with the Department of Health. The report of closure shall include the date of the shutdown and indicate whether, despite cessation of operation, there is still a potential for radioactive air emissions and a need for any active or passive ventilation system with emission control and/or monitoring devices. An emission unit or activity will not be considered permanently shut down or completed until a report of closure is received and approved by Health. Once an emission unit is permanently shut down or an activity is completed, thereby rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the shutdown or completion, to meet any monitoring, record keeping, and reporting, requirements which are no longer applicable for that emission unit or activity. All records, relating to the shut down emission unit or completion of an activity, generated while the emission unit or activity was in operation, shall be kept in accordance with WAC 246-247-080(8). (WAC 246-247-080(6)).</p>	<p>Not Applicable</p>	<p>CDM: N/A. Comment: The facility has not yet completed its mission of processing SNF.</p>
<p>All measured or calculated emissions must be reported annually (WAC 246-247-080(3)).</p>	<p>Continuous</p>	<p>CDM: Abated: DOE/RL-2007-01, Revision 0, "Radionuclide Air Emissions Report for the Hanford Site, Calendar Year 2006". Comment:</p>
<p>This unit must be fully accessible to Department of Health inspectors. If there are any specific training requirements or have restrictions or special requirements for entry, they must be given to the department when they are known to allow for unannounced inspections, as required by EPA (WAC 246-247-080(9)). At a minimum, for unannounced inspections, such requirements or restrictions must be told to inspectors that morning, with the opportunity for the inspectors to meet those requirements. For prior announced inspections, such notification must occur far enough in advance for the inspectors to have reasonable time to meet the requirements.</p>	<p>Continuous</p>	<p>CDM: Records review. Inspections occurred as required. Comment:</p>
<p>The department reserves the right to inspect and audit this unit during construction and operation, including all activities, equipment, operations, documents, data, and other records related to compliance with the regulations (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: N/A. Comment: Ecology and WDOH determined the licensee need not certify compliance with conditions conveying a right, are a historical summary or fact, pertaining to actions to be completed in the future, or pertaining to actions required of the agency.</p>
<p>The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: N/A. Comment: Ecology and WDOH determined the licensee need not certify compliance with conditions conveying a right, are a historical summary or fact, pertaining to actions to be completed in the future, or pertaining to actions required of the agency.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>These conditions and limitations must be proceduralized prior to starting the activities described in the Notice of Construction.</p>	<p>Continuous</p>	<p>CDM: These implemented procedurally as described in Process Standard 416, AP-EP-5-018 matrix tables and Technical Procedure CP-48-001V matrix table. Comment:</p>
<p>The facility must be able to demonstrate the reliability and accuracy of emission data and other test results from this unit (WAC 246-247-075(13) and WAC 246-247-075(6)). The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national standards listed in, or equivalent to, those listed in, or equivalent to, those listed in the above cited regulation.</p>	<p>Continuous</p>	<p>CDM: HNF-EP-0528: "NESHAP Quality Assurance Project Plan for Radionuclide Air Emissions". Comment:</p>
<p>If the department finds that the emission unit described in this NOC, is not in compliance with the standards in WAC 245-247-040 during construction, as described in this NOC, or during operation, it reserves the right to require modifications to bring it into compliance (WAC 246-247-060(2)(d)).</p>	<p>Not Applicable</p>	<p>CDM: N/A. Comment: Ecology and WDOH have determined that the licensee need not certify compliance with conditions that convey a right, that are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility must be able to demonstrate that the workers associated with this emission unit are adequately trained in the use an maintenance of emission control and monitoring systems, and in the performance of associated test and emergency response procedures (WAC 246-247-075(12)).</p>	<p>Continuous</p>	<p>CDM: Training of workers follows requirements of KBC Project Training Implementation Matrix (HNF-5441), which is DOE-RL approved. Adequacy of training verified during past startup readiness reviews. Comment:</p>
<p>Equipment and procedures for continuous monitoring shall conform to ANSI N13.1 (1999). The specific design must be approved by the department prior to installation. Any deviation from ANSI N13.1 must be approved by the department prior to construction (WAC 246-247-075(2)).</p>	<p>Continuous</p>	<p>CDM: Equipment meets ANSI N13.1-1999 requirements as evidenced by readiness review MSA 16.0.S.C.1 and past WDOH Level II stack inspections. Procedures required by ANSI N13.1-1999 for calibration and maintenance are specified in Process Standard 416 and procedurally implemented per those procedures listed in technical procedure CP-48-001V. Comment:</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The department retains the right to conduct its own stack sampling, environmental monitoring or other testing, as required around this unit to assure compliance. If directed by the department, the facility must make provision for such testing (WAC 246-247-075(9) and (10)).</p>	<p>Not Applicable</p>	<p>CDM: N/A. Comment: Ecology and WDOH determined the licensee need not certify compliance with conditions conveying a right, are a historical summary or fact, pertaining to actions to be completed in the future, or pertaining to actions required of the agency.</p>
<p>Report to the department within 24 hours, any unexpected release of radioactivity, shutdown or other condition that, if allowed to persist, or lasts more than four hours, would result in the emission of radionuclides in excess of any standards or limitation in the license. Applicable standards (WAC 246-247-040) include unit specific emission limits (paragraph 5), the offsite dose standard (paragraph 1), BARCT (paragraph 3) or ALARACT (paragraph 4), whichever is applicable, or any limitations included in this approval (paragraph 5). The following shut down of the CVDF emission control systems under circumstances specified are allowed and are excluded from the 24 hour reporting requirements: a) Shutdown of the process bay recirculation system when there is no MCO processing within that bay. b) Shutdown of the process bay local exhaust system when there is no MCO processing within that bay. c) Shutdown of the general exhaust system for no more than eight hours during which time there will be no MCO within the CVDF nor transfer of water from process water conditioning tank PWC-TK-4001 to a tanker truck for disposal nor opening of the process bay roll up doors.</p>	<p>Continuous</p>	<p>CDM: There were two instances during the reporting period in which notification to WDOH was made per the process in HNF-PRO-15333. Comment:</p>
<p>The first annual leak testing of the stack emissions sample line is allowed to be deferred until January 2002 to allow installation of an access port in the stack. Future annual leak test shall be based on this new test date.</p>	<p>Continuous</p>	<p>CDM: Leak testing of the sample line was completed and is part of Procedure SP-50-004V and is documented in JCS Work Package 1C-06-05239 on 10/19/2006. Comment:</p>

R-1706KE-001
WDOH Emission Unit ID : 168
Page in AOP : 2-073

Requirement	Compliance Status	Compliance Determination Method
Zone or Area : Abatement Technology : Fan Required Units : 1 Add'l Description: Intermittent operation	Continuous	CDM: Walk down of the system in December 2006. This included review of entries made in the log book kept by the switch by the fan recording when the fan is turned on. Comment: The fan is turned on when work is performed within the laboratory hood.
Zone or Area : Abatement Technology : HEPA Required Units : 1 Add'l Description:	Continuous	CDM: Walk down of the system in December 2006 in which a current DOP test sticker from Vent & Balance was observed. Comment:
Required Sampling: Record Sample Sampling Frequency: 4 week sample/year Radionuclide Requiring Measurement: TOTAL ALPHA TOTAL BETA	Continuous	CDM: Sampling verified by information in ABCASH. "Statement of Work for Services Provided by the Waste Sampling and Characterization Facility for the Environmental Compliance Program during Calendar Year 2006" (HNF-EP-0835-12) defines what analyses are performed and frequency. "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions" (HNF-EP-0528) specifies QA requirements. Comment:
Federal and State Regulatory Requirement: 40 CFR 61.93(b)(4)(i) & WAC 246-247-075(3) Permit Monitoring and Testing Procedure: Appendix B, Method 114(3)	Continuous	CDM: "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions" (HNF-EP-0528) specifies both hardware and method used to sample and analytical methods used in the laboratory. Comment:
No active NOC approvals in the AOP for this certification period.		

200 Area Diffuse/Fugitive - LERF/ETF
WDOH Emission Unit ID : 486
Page in AOP : H-0879

Requirement	Compliance Status	Compliance Determination Method
No active Abatement Controls in the AOP for this certification period.		
Required Sampling: There are no sampling requirements. Sampling Frequency: NA Radionuclide Requiring Measurement: All radionuclides which could contribute 10% of the potential EDE.	Not Applicable	CDM: N/A Comment: Ecology and WDOH have determined the licensee need not certify conditions which provide information, convey a right, pertain to future actions, or pertain to agency actions.
Federal and State Regulatory Requirement: WAC 246-247-075(3) Permit Monitoring and Testing Procedure: Appendix B, Method 114	Continuous	CDM: "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions" (HNF-EP-0528) specifies both hardware and method used to sample and analytical methods used in the laboratory. Comment:
Permit: AIR 04-101 Issue Date: 01-05-04 Effective Date: 01-14-04 Obsolete Date: 07-05-06 NOC: Operation of the Liquid Effluent Retention Facility and the 200 Area Effluent Treatment Facility WDOH NOC ID: 562 Date In AOP: 04-11-05 Page in AOP: H-0879		
Requirement	Compliance Status	Compliance Determination Method
The U.S. Department of Energy shall comply with all Conditions and Limitations of this license (WAC 246-247-060(5)).	Not Applicable	CDM: N/A Comment: Ecology and WDOH have determined the licensee need not certify conditions which provide information, convey a right, pertain to future actions, or pertain to agency actions.
The total abated emission limit for this Notice of Construction is limited to 4.59E-02 mrem/year to the Maximally Exposed Individual (WAC 246-247-040(5)).	Continuous	CDM: Tracking radionuclide data as specified in administrative procedures. Comment: The abated dose is limited by tracking and maintaining the potential-to-emit below the amounts specified by the conditions below.
This approval applies only to those activities described below. No additional activities or variations on the approved	Continuous	CDM: Review of facility and procedure change documents as

Requirement	Compliance Status	Compliance Determination Method
<p>activities that constitute a "modification" to the emission unit, as defined in WAC 246-247-030(16), may be conducted. The operation of the Liquid Effluent Retention Facility/200 Area Effluent Treatment Facility (LERF/ETF), which includes the load-in station and load-in station filter skid. Incoming wastewater can be added directly to the ETF process or received at the LERF or the load-in station. The LERF is allowed to receive wastewaters via underground pipelines from generator facilities, via pipeline from the load-in station, or directly through a series of access ports located at each basin. The load-in station accommodates wastewater receipt via container (e.g., drums, carboys, tankers, etc.). The ETF wastewater treatment process shall be comprised of a main treatment train and a secondary treatment train. The main treatment train shall provide for the removal or destruction of dangerous and radioactive contaminants from incoming wastewater. After treatment, the effluent shall be transferred to the verification tanks where it is sampled then discharged. Treated effluent is comparable to deionized water and contains tritium, which cannot be economically removed. Contaminants removed in the main treatment train are concentrated in the secondary treatment train. The contaminants shall be heated and dried to a powder form or removed as sludge and dried by the addition of absorbents. These residues shall be containerized and disposed on site as radioactive waste. Additional approval of the process for this activity is contained in the following Conditions/Limitations.</p>		<p>specified in administrative procedures. Comment: Facility design and procedure changes require documentation that includes environmental reviews to determine if the change is a modification of the emission unit.</p>
<p>The PTE for this project as determined under WAC 246-247-030(21)(a-c) [as specified in the application] is 8.48E-02 mrem/year. Approved are the associated potential release rates (Curies/year) of: Alpha-0 4.45E-04 Liquid/Particulate Solid WAC 246-247-030(21)(a) Alpha release rate is assumed to be Pu-239/240. The release rate assumes two full basins and the addition of waste water equivalent to ETF's annual operating capacity. In addition to the isotopes specifically listed as approved under this NOC, other radionuclides may be encountered and are approved so long as they are conservatively represented by the total alpha and total beta-gamma constituents. Am-241 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEI, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. B/G-0 2.95E+00 Liquid/Particulate Solid WAC 246-247-030(21)(a) Beta/Gamma release rate is assumed to be Sr-90/Cs-137. The release rate assumes two full basins and the addition of waste water equivalent to ETF's annual operating capacity. In addition to the isotopes specifically listed as approved under this NOC, other radionuclides may be encountered and are approved so long as they are conservatively represented by the total alpha and total beta-gamma constituents. C-14 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEI, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. Ce-144 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEI, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. Cm-244 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEI, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. Co-60 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEI, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. Cs-134 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEI, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. Eu-154 Liquid/Particulate Solid</p>	<p>Continuous</p>	<p>CDM: Tracking radionuclide data as specified in administrative procedures. Comment: The quantities of individual radionuclides are tracked based on sample results, flow rates, and process knowledge. The MEI dose and potential-to-emit are calculated and the results are placed in the facility record.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEL, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. Eu-155 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEL, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. H-3 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEL, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. I-129 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEL, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. K-40 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEL, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. Mn-54 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEL, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. Na-22 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEL, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. Nb-94 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEL, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. Np-237 Liquid/Particulate Solid WAC 246-247-030(21)(a) . Contributes less than 0.1 mrem/yr to the MEL, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. Pu-238 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEL, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. Pu-241 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEL, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. Ra-226 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEL, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. Ru-106 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEL, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. Sb-125 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEL, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. Se-79 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEL, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. Tc-99 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEL, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. U-233 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEL, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. U-234 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEL, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. U-235 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEL, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. U-236 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEL, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. U-238 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEL, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. Zn-65 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEL, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. Zr-95 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEL, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. The radioactive isotopes identified for this emission unit are (no quantities specified): Am-241 C-14 Ce-144 Cm-244 Co-60 Cs-134 Cs-137 Eu-154 Eu-155 H-3 I-129 K-40 Mn-54 Na-22 Nb-94 Np-237 Pu-238 Pu-239/240 Pu-241 Ra-226 Ru-106 Sb-125 Se-79 Sr-90 Tc-99 U-233 U-234 U-235 U-236 U-238 Zn-65 Zr-95 The potential release rates described in this</p>		

Requirement	Compliance Status	Compliance Determination Method
<p>Condition were used to determine control technologies and monitoring requirements for this approval. DOE must notify the Department of a "modification" to the emission unit, as defined in WAC 246-247-030(16). DOE must notify the Department of any changes to a NESHAP major emission unit when a specific isotope is newly identified as contributing greater than 10% of the potential TEDE to the MEI, or greater than 25% of the TEDE to the MEI after controls. WAC 246-247-110(9). DOE must notify the Department of any changes to potential release rates as required by state or federal regulations including changes that would constitute a significant modification to the Air Operating Permit under WAC 173-401-725(4). Notice will be provided according to the particular regulation under which notification is required. If the applicable regulation(s) does not address manner and type of notification, DOE will provide the Department with advance written notice by letter or electronic mail but not solely by copies of documents.</p>		
<p>The 200 Area Diffuse/Fugitive Emission Unit at LERF/ETF is limited to the following: --LERF wastewater receipt via pipeline and LERF access ports. --Minor leaks during transfers when using vented pipelines. --LERF operations and maintenance. --LERF leachate collection system sampling and sump pumping. --Load-in station wastewater receipts via container. --Load-in station filter skid operation and maintenance. --Load-in station tank operation, maintenance, and repair. --Wastewater tanker inspection, pressure testing, and repair. --Minor leaks and spills to secondary containment systems. --Storage and transfer of treated effluent containing tritium. --Effluent sampling. --Purgewater open-top settling tank operation.</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined the licensee need not certify conditions which provide information, convey a right, pertain to future actions, or pertain to agency actions.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>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), maybe conducted. The load-in station consists of two load-in tanks, a sump, transfer pumps, a skid-mounted filtration system, level instrumentation for tanker trucks, underground transfer lines that allow transfers to either the LERF or the ETF, and leak detection capabilities for the containment basin and transfer lines. Containerized wastewaters received at the load-in station are typically routed through the filter skid. When solids buildup causes differential pressure across a filter housing to become excessive, the filter elements are replaced. The filtration system is shut down, the system is vented to atmosphere by opening a quick release vent cap on top of each filter housing, and solution in the housing is drained to the load-in station sump. The housing is then opened and the spent filter elements are placed in a disposal container. After filter change-out, the sump is emptied to the load-in station, the LERF, or the ETF. The capability to filter sump discharges is also provided at the load-in station. Small shipments that cannot be pumped directly into the filter skid are first drained into the sump, then pumped through the filter skid using the sump pump. Wastewater tanker inspection, pressure testing, and repair are also conducted at the load-in station as needed to meet annual U.S. Department of Transportation certification requirements. Tankers, which may contain a wastewater hecl, are pressurized with compressed air, leak checked at 80 percent of service pressure, and integrity tested at 150 percent of service pressure. After the test is complete, the compressed air is gradually vented from the tanker to the atmosphere. Minor repairs (e.g., seal replacement) are performed as needed to successfully complete the certification test. Hydrostatic testing is inherently safer and is preferred over pneumatic testing because it minimizes the volume of pressurized vapor space. When hydrostatic testing is performed, the tanker is filled with verification water or other clean water before pressurizing the tanker. At the conclusion of the test, the used water is treated as a new wastewater.</p>	<p>Continuous</p>	<p>CDM: Review of facility and procedure change documents as specified in administrative procedures. Comment: Facility design and procedure changes require documentation that includes environmental reviews to determine if the change is a modification of the emission unit.</p>
<p>If this emission unit is not in compliance with the standards in WAC 246-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-040-(5) and WAC 246-247-060-(5)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined the licensee need not certify conditions which provide information, convey a right, pertain to future actions, or pertain to agency actions.</p>
<p>The facility shall notify the department at least seven calendar days prior to any planned preoperational tests of new or modified emission units that involve emissions control, monitoring, or containment systems of the emission unit(s). The department reserves the right to witness or require preoperational tests involving the emissions control, monitoring, or containment systems of the emissions unit(s) (WAC 246-247-060(4)).</p>	<p>Not Applicable</p>	<p>CDM: N/A. No preoperational tests were conducted. Comment: Ecology and WDOH have determined the licensee need not certify conditions which provide information, convey a right, pertain to future actions, or pertain to agency actions.</p>
<p>The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national standards (WAC 246-247-075(6)).</p>	<p>Continuous</p>	<p>CDM: "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions" (HNF-EP-0528). Comment:</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The department retains the right to conduct stack sampling, environmental monitoring or other testing around this unit to assure compliance. If directed by the department, the facility must make provision for such testing (WAC 246-247-075(9) and (10)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined the licensee need not certify conditions which provide information, convey a right, pertain to future actions, or pertain to agency actions.</p>
<p>The facility must be able to demonstrate workers associated with this emission unit are trained in the use and maintenance of control and monitoring systems, and in the performance of associated tests and emergency procedures (WAC 246-247-075(12)).</p>	<p>Continuous</p>	<p>CDM: Review of facility personnel certification training and On-the-Job-Training records. Comment: Records of certification training courses and OJT training are placed in the facility record.</p>
<p>All facilities must be able to demonstrate the reliability and accuracy of emissions monitoring data (WAC 246-247-075(13)).</p>	<p>Continuous</p>	<p>CDM: Review of ABCASH data. Comment: The required reliability and accuracy are established by written agreement with the monitoring laboratory. See "Statement of Work for Services Provided by the WSCF for the Effluent & Environmental Monitoring Program" (HNF-EP-0835).</p>
<p>The Department reserves the right to inspect and audit all construction activities, equipment, operations, documents, data and other records related to compliance with the requirements of this chapter (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined the licensee need not certify conditions which provide information, convey a right, pertain to future actions, or pertain to agency actions.</p>
<p>The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined the licensee need not certify conditions which provide information, convey a right, pertain to future actions, or pertain to agency actions.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The facility must meet all reporting and record keeping requirements of 40 CFR 61, Subpart H (WAC 246-247-080(2)).</p>	<p>Continuous</p>	<p>CDM: Reporting: annual "Radionuclide Air Emissions Report for Hanford Site Calendar Year 2006". Recordkeeping: review of ABCASH data and facility records. Comment: Reporting requirements are given in the annual report. Recordkeeping includes ABCASH and radionuclide tracking data, which are in the facility record.</p>
<p>The facility shall report all measured or calculated emissions annually (WAC 246-247-080(3)).</p>	<p>Continuous</p>	<p>CDM: Annual "Radionuclide Air Emissions Report for Hanford Site Calendar Year 2006". Comment:</p>
<p>The facility shall notify the department within twenty-four hours of any shutdown, or of any transient abnormal condition lasting more than four hours or other change in facility operations which, if allowed to persist, would result in emissions of radioactive material in excess of applicable standards or license requirements (WAC 246-247-080(5)).</p>	<p>Not Applicable</p>	<p>CDM: N/A. No such transient abnormal conditions occurred. Comment: Ecology and WDOH have determined the licensee need not certify conditions which provide information, convey a right, pertain to future actions, or pertain to agency actions.</p>
<p>The licensee is not required to conduct the monitoring and associated recordkeeping for any emission unit if the emission unit did not operate at any time between required monitoring events (e.g., if the monitoring requires continuous sampling, such readings would not be required on any full day in which the emission unit did not operate), provided the following conditions are met: In the case of permanent shutdown of the emission unit: (I) the licensee completes the monitoring and associated recordkeeping for that period prior to the shutdown. (ii) the licensee files a report of closure with the Department of Health in accordance with WAC 246-247-080(6). An emission unit will not be considered to be permanently shut down or completed until a report of closure is received by the Department of Health (WAC 246-247-080(6)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined the licensee need not certify conditions which provide information, convey a right, pertain to future actions, or pertain to agency actions.</p>
<p>The facility shall maintain readily (promptly) retrievable storage areas (on site) for all records and documents related to, and which may help establish compliance with, the requirements of this chapter. The facility shall keep these records available for department inspection for at least five years (WAC 246-247-080(8)).</p>	<p>Continuous</p>	<p>CDM: Review of ABCASH and radionuclide tracking data in the facility record. Records are maintained in the facility record as specified by administrative procedures. Comment:</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The facility shall ensure all emissions units are fully accessible to department inspectors. In the event the hazards associated with accessibility to a unit require training and/or restriction or requirements for entry, the facility owner or operator shall inform the department, prior to arrival, of those restrictions or requirements. The owner or operator shall be responsible for providing the necessary training, escorts, and support services to allow the department to inspect the facility. At a minimum for unannounced inspections, such requirements or restrictions must be told to inspectors to provide an opportunity for inspectors to meet those requirements prior to the inspection (WAC 246-247-080(9)).</p>	<p>Continuous</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined the licensee need not certify conditions which provide information, convey a right, pertain to future actions, or pertain to agency actions.</p>
<p>The facility shall make available, in timely manner, all documents requested by the department for review. The facility shall allow the department to review documents in advance of an inspection. The facility shall allow access to classified documents by representatives of the department with the appropriate security clearance and a demonstrable need-to-know (WAC 246-247-080(10)).</p>	<p>Continuous</p>	<p>CDM: Review of ABCASH and radionuclide tracking data in the facility record. Records are maintained in the facility record as specified by administrative procedures. Comment:</p>
<p>Diffuse/Fugitive emissions shall be monitored using the 200 Area near-field ambient air monitors. Sample collection and analysis shall follow that of the near field monitoring program. Analytical results shall be reported in the Annual Air Emissions Report. Any change to this near-field ambient monitoring program must be approved by the department.</p>	<p>Continuous</p>	<p>CDM: Review of ABCASH data. Reporting: annual "Radionuclide Air Emissions Report for Hanford Site Calendar Year 2006". Comment:</p>
<p>The emissions for this activity from the all LERF basins and diffuse/fugitive emissions are limited to 4.59E-02 mrem/year unabated and abated.</p>	<p>Continuous</p>	<p>CDM: Tracking radionuclide data as specified in administrative procedures. Comment: The unabated dose is limited by tracking and maintaining the potential-to-emit below the amounts specified by the conditions above.</p>

200 Area Diffuse/Fugitive - Tank Farms
WDOH Emission Unit ID : 486
Page in AOP : H-0001

Requirement	Compliance Status	Compliance Determination Method
Zone or Area : Abatement Technology : Required Units : Add'l Description: Abatement controls as required in the following Conditions and Limitations.	Continuous	CDM: See conditions and limitations listed in the NOCs below. Comment: None
Required Sampling: Existing near-facility monitoring stations. Sampling Frequency: As listed in the following Conditions and Limitations. Radionuclide Requiring Measurement: All radionuclides which could contribute 10% of the potential TEDE.	Continuous	CDM: Field interviews, Hanford Site near-facility/field monitoring program. Comment: None
Federal and State Regulatory Requirement: WAC 246-247-075(3) Permit Monitoring and Testing Procedure: Appendix B, Method 114	Continuous	CDM: The Hanford Site near-facility/field monitoring program satisfies WAC 246-247-075(3). Comment: None
Permit: AIR 02-1232 Issue Date: 12-31-02 Obsolete Date: 07-05-06 NOC: TWRS Vadose Zone Characterization WDOH NOC ID: 5 Date In AOP: 04-11-05 Page in AOP: H-0001		
Requirement	Compliance Status	Compliance Determination Method
The U.S. Department of Energy shall comply with all Conditions and Limitations of this license (WAC 246-247-060(5)).	Continuous	CDM: Field interviews, and complied with all conditions and limitations in this NOC approval. Comment: None
The total abated emission limit for this Notice of Construction is limited to 7.03E-02 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 7.03E-02 mrem/year to the Maximally Exposed Individual (WAC 246-247-030(21)).	Continuous	CDM: The annual "Radionuclide Air Emissions Report" for the Hanford Site. Comment: None
No activities, other than those explicitly described within this approval, shall be conducted without prior written approval. The approved activities are limited to: the following methods of sampling and drilling techniques, including air rotary drilling, sonic drilling, closed-end probe, cable tool drilling, cone penetrometer, air rotary split spoon, and others. This approval applies only to the following tank farms: 241-A, 241-AX, 241-B, 241-BX, 241-BY, 241-C, 241-S, 241-SX, 241-T, 241-TX, 241-TY and 241-U. Up to ten equivalent boreholes may be drilled or re-entered per year (consecutive 12-month period) by the methods described. An equivalent borehole shall have a nominal top diameter of no larger than ten inches for the first 50 feet, and a nominal bottom diameter of no larger than eight inches for the remaining 200 feet of pipe (average depth is 250 feet). Additionally, an equivalent borehole shall contain a contaminated layer no more than 20 feet	Continuous	CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None

Requirement	Compliance Status	Compliance Determination Method
<p>long in the ten inch portion of the equivalent borehole. Individual methods shall be selected based on the likely level (concentration) of contaminants to be encountered. The most conservative drilling approach (lowest potential-to-emit) shall be applied first. Borehole logging shall be used to determine when it is appropriate to apply drilling techniques that may have a higher potential-to-emit. Zones not sampled during advancement of the borehole due to having a high potential to exceed exposure guidelines may be sampled by side-wall sampling techniques as the boreholes are decommissioned. Samples from air rotary type drilling shall be obtained from the sampling sock located on the side of the cyclone and/or from the drums underneath the cyclone and torit. The material in the drums will be sampled by pulling a mini-core from the drum. Sampling and change-out of the drums shall be performed inside the containment structure with continuous health physics technician (HPT) coverage. Borehole drilling techniques that may be used are limited to those described below: Sonic drilling Closed-end probe Traditional cable tool drilling from top to bottom Cone Penetrometer Geo Probe Auger drilling Soil sampling techniques will include one or a combination of the following techniques: Air Rotary Split Spoon Cable Tool Cable Tool and Auger with a Split Spoon Core Barrel Sonic Core Barrel and Split Spoon Rotary Coring Sidewall Sampling Drive Split-Spoon Sampler Sidewall samples being brought to the surface will be bagged or sleeved-into plastic or other suitable container (e.g. shielded container) after retrieval if decontamination or application of fixatives cannot reduce smearable contamination to less than 100,000 disintegrations per minute (dpm) per 100 cm² for beta/gamma or 2,000 dpm/100 cm² for alpha. The sampler will then be packaged in a container suitable for shipment to the laboratory for analysis. Other sidewall sampling techniques may involve a lever-action sampler (the sampler is driven into the formation through a cantilever action) or a rotating formation "shaving" device with the sample captured in an under-slung basket. The brush, used to clean casings, shall be placed in plastic sleeving if decontamination or application of fixatives cannot reduce smearable contamination to less than 100,000 dpm/100 cm² for beta/gamma or 2,000 dpm/100 cm² for alpha when it is removed from the borehole. Pull the casing into plastic sleeving during removal if decontamination or application of fixatives cannot reduce smearable contamination to less than 100,000 dpm/100 cm² for beta/gamma or 2,000 dpm/100 cm² for alpha. Unthread the casing if possible, or cut using a wheel cutter, or disconnected from other segments into a nominal length of ten feet. A high-speed blade wheel cutter is not allowed. When necessary, either to accomplish casing removal for borehole decommissioning or to enable pull-back for sidewall sampling, the casing will be cut at depth using a Bowen casing cutter (or equivalent). If decontamination or application of fixatives cannot reduce smearable contamination to less than 100,000 dpm/100 cm² for beta/gamma or 2,000 dpm/100 cm² for alpha and the casing is sleeved in plastic, no more than one feet of casing shall be exposed to air during the cutting process. Capture cuttings in draped plastic. If decontamination or application of fixatives cannot reduce smearable contamination to less than 100,000 dpm/100 cm² for beta/gamma or 2,000 dpm/100 cm² for alpha, cap the pieces, cut with plastic or horsetail the sleeving and place sections in a burial box. The hole will be backfilled with clean (nonradioactive) materials (e.g., granular bentonite and/or grout). Casing removal activities are allowed to be performed outside of the containment structure. The closure of the equivalent boreholes may also be performed by backfilling the borehole using a tremie without pulling the casing. Collect any perched water in the drum at the bottom of the cyclone. Approximately 1,000 gallons of purgewater is allowed to be removed from each equivalent borehole prior to inserting a screen below the water table. After installation of the screen, groundwater samples will be taken. An average of 2,000 gallons of water (which includes perched water, purgewater and groundwater sampling) is allowed to be removed from each equivalent borehole. Perched water and purgewater will be collected in passively ventilated open-top containers. Water shall be transferred from the passively ventilated containers into a tanker truck for treatment at the 200 Area Effluent Treatment Facility or other permitted storage/treatment facility. Water may be transferred directly from the borehole to the tanker truck, bypassing the intermediate containers. Approximately 3,500 ft³ of soil may be excavated per year. Perform excavation using manual methods, backhoe, and/or the Guzzler.</p>		

Requirement	Compliance Status	Compliance Determination Method
<p>The Annual Possession Quantity is limited to the following radionuclides (Curies/year): Ac-227 4.55 E-04 Am-241 3.48 E+01 Am-243 7.75 E-04 C-14 2.13 E-01 Cm-242 2.72 E-01 Cm-243 9.47 E-03 Cm-244 8.83 E-02 Co-60 9.66 E-01 Cs-134 1.48 E-02 Cs-137 1.85 E+03 Eu-152 4.13 E-01 Eu-154 8.67 E+00 Eu-155 2.61 E+01 H-3 7.68 E-01 I-129 1.72 E-02 Ni-59 5.13 E-01 Ni-63 4.99 E+01 Np-237 3.55 E-03 Pa-231 4.72 E-04 Pu-238 2.20 E+00 Pu-239 2.00 E+02 Pu-240 2.11 E+01 Pu-241 1.25 E+02 Pu-242 5.98 E-04 Ra-226 3.69 E-05 Ra-228 1.92 E-03 Ru-106 1.71 E-03 Sb-125 7.25 E-01 Sm-151 1.86 E+02 Sn-126 7.97 E-02 Sr-90 2.07 E+04 Tc-99 3.55 E+00 Th-229 7.76 E-05 Th-232 7.60 E-05 U-232 5.87 E-03 U-233 2.25 E-02 U-234 4.45 E-01 U-235 1.97 E-02 U-236 4.55 E-03 U-238 4.48 E-01 Y-90 2.07 E+04 Zr-93 2.41 E-01</p>	Continuous	<p>CDM: Field interviews, WDOH approved logs, and verified basis for APQ in NOC application. Comment: None</p>
<p>These Conditions and Limitations must be documented in an established procedure prior to starting activities granted by this approval (WAC 246-247-040(5)) and (WAC 246-247-060(5)).</p>	Continuous	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None</p>
<p>U.S. DOE shall monitor this project or emission unit as follows: fugitive emissions result from cable tool and sonic drilling, use of the closed end probe and the cone penetrometer, the plastic containment structure during air rotary drilling, and during dismantlement/assembly or relocating the ventilation equipment, plastic containment structure, or process equipment. To confirm low emissions, periodic confirmatory monitoring will be accomplished by operating three fixed head, samplers around the location of where the drilling and sampling operations are occurring. The fixed head samplers will be located within 100 feet of where the drilling and sampling work activities are occurring and will be operated whenever the work activities have the potential-to-emit radionuclides. These samples shall be composited for each three individual sites (total of three samples) and analyzed at the end of each borehole. Packaging of equipment and samples for shipment, shall have surveys (swipes for removable contamination) performed in accordance with TWRS as low as reasonably achievable control technology (ALARACT) demonstration number 12 and subsequent revisions, TWRS ALARACT Demonstration for Packaging and Transportation of Equipment & Vehicles. Fugitive emissions may also result from removing casing from the ground. To confirm low emissions, periodic confirmatory monitoring will be accomplished by operating three fixed head samplers around the location of the work activities. The fixed head samplers shall also be located with 100 feet of where the casing removal activities are occurring and shall be operated when the work activities have the potential-to-emit radionuclides. These samples shall be composited for each three individual sites (total of three samples) and analyzed at the end of each casing removal (WAC 246-247-075(8)).</p>	Continuous	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
This NOC becomes obsolete on July 15, 2019.	Not Applicable	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
The facility shall notify the department at least seven days prior to any planned preoperational testing of the emission units emissions control, monitoring or containment systems. The department reserves the right to observe such tests (WAC 246-247-060(4)).	Not Applicable	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
The department retains the right to conduct stack sampling, environmental monitoring or other testing around this unit to assure compliance. If directed by the department, the facility must make provision for such testing (WAC 246-247-075(9) and (10)).	Not Applicable	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
The facility must be able to demonstrate the reliability and accuracy of emission data and other test results from this unit (WAC 246-247-075(13)).	Continuous	<p>CDM: CH2M HILL quality assurance program, records, and procedures. Comment: None</p>
The facility shall report to the department within 24 hours, any unexpected release of radioactivity, shutdown or other condition that, if allowed to persist, or lasts more than four hours, would result in the emission of radionuclides in excess of any standards or limitation in the license. Applicable standards (WAC 246-247-040) include unit specific emission limits (paragraph 5), the offsite dose standard (paragraph 1), BARCT (paragraph 3) or ALARACT (paragraph 4), whichever is applicable, or any limitation included in this approval (paragraph 5) (WAC 246-247-080(5)).	Continuous	<p>CDM: Field interviews, CH2M HILL notification procedures, and notification logbook. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The Department reserves the right to inspect and audit all construction activities, equipment, operations, documents, data and other records related to compliance with the requirements of this chapter (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility shall make available, in timely manner, all documents requested by the department for review. The facility shall allow the department to review documents in advance of an inspection. The facility shall allow access to classified documents by representatives of the department with the appropriate security clearance and a demonstrable need-to-know (WAC 246-247-080(10)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL records management and procedures. Comment: None</p>
<p>The facility shall report all measured or calculated emissions annually (WAC 246-247-080(3)).</p>	<p>Continuous</p>	<p>CDM: The annual "Radionuclide Air Emissions Report" for the Hanford Site. Comment: None</p>
<p>The facility must meet all reporting and record keeping requirements of 40 CFR 61, Subpart H (WAC 246-247-080(2)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL records management and procedures. Comment: None</p>
<p>The facility shall ensure all emissions units are fully accessible to department inspectors. In the event the hazards associated with accessibility to a unit require training and/or restriction or requirements for entry, the facility owner or operator shall inform the department, prior to arrival, of those restrictions or requirements. The owner or operator shall be responsible for providing the necessary training, escorts, and support services to allow the department to inspect the facility. At a minimum for unannounced inspections, such requirements of restrictions must be told to inspectors to provide an opportunity for inspectors to meet those requirements prior to the inspection (WAC 246-247-080(9)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility shall maintain readily (promptly) retrievable storage areas (on site) for all records and documents related to, and which may help establish compliance with, the requirements of this chapter. The facility shall keep these records available for department inspection for at least five years (WAC 246-247-080(8)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL records management and procedures. Comment: None</p>
<p>The facility must maintain a log in an approved format for this activity or emission unit (WAC 246-247-080(7)).</p>	<p>Continuous</p>	<p>CDM: Field interviews and WDOH approved logs. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).	Not Applicable	CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.
Emissions for these activities shall be tracked via a log approved by the department. This log shall track the hours of operation and location of use for each type of equipment, estimated and calculated curies encountered, and calculated emissions. Air samples used for periodic confirmatory measurement shall be collected no closer than three feet above ground level. These samples shall be composited for each three individual sites (total of three samples) and analyzed at the completion of the borehole or re-entry activity and casing removal. All periodic confirmatory samples will be collected and analyzed following EPA Method 114.	Continuous	CDM: Field interviews and WDOH approved logs. Comment: None
The facility must be able to demonstrate workers associated with this emission unit are trained in the use and maintenance of control and monitoring systems, and in the performance of associated tests and emergency procedures (WAC 246-247-075(12)).	Continuous	CDM: CH2M HILL training program, training records, work controls, and procedures. Comment: None
The following controls shall be mandatory when handling perched water, ground water and ground water sampling. All contaminated liquids shall be contained; all exterior surfaces of liquid holding devices shall be maintained at the current radiological free release limit; vented drums shall be maintained non-smearable; storage and handling of the vented drums shall be as described in the Site Wide Vented Drum Notice of Construction.	Continuous	CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None
No more than an average of 2,000 gallons of water (includes perched water, purge water and groundwater sampling) will be removed from each equivalent bore hole. Not to exceed 20,000 gal/year of water. Perched water and purge water will be collected in passively ventilated open top containers. When a sufficient volume of water has been collected or at the end of groundwater sampling activities, the water shall be transferred from the passively ventilated containers into a tanker truck for treatment at the 200 Area ETF or other permitted storage/treatment facility.	Continuous	CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None

Requirement	Compliance Status	Compliance Determination Method
<p>If this emission unit is not in compliance with the standards in WAC 246-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-060-(2)(d)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The following additional drilling techniques are approved for use: geoprobe and auger drilling. For casing removal or to enable pull back for sidewall sampling, the casing may be cut at depth using a Bowen Casing Cutter (or equivalent with prior DOH approval).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>Approval is given as an alternative to transfer the perched water directly from borehole to the tanker.</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>For various characterization options covered under this NOC, the maximum TEDE to the hypothetical off site MEI shall not exceed 7.03 E-02 mrem/year. The maximum TEDE to the MEI shall not exceed 5.7 E-02 mrem/year at the Energy Northwest location as determined by CAP88PC, Version 2 supplied as supporting documentation.</p>	<p>Continuous</p>	<p>CDM: The annual "Radionuclide Air Emissions Report" for the Hanford Site. Comment: None</p>
<p>No more than 3,500 cubic feet of soil may be excavated per year using manual methods, backhoe, and/or the guzzler. This shall be documented on an approved log.</p>	<p>Continuous</p>	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, WDOH approved logs, and procedures. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p>U.S. DOE shall provide additional monitoring as follows: Fugitive emissions result from excavations using hand tools shall be described as described in TWRS ALARCT 5. Fugitive emissions that result from excavations using backhoe shall consist of the following: a) HPT coverage will be performed as specified in the radiological permit. b) A beta-gamma survey of the ground surface is required prior to excavation in Contamination Areas (CA's), High Contamination Areas (HCA's), Soil Contamination Areas (SCA's), and Underground Radioactive Materials Areas (URMA's). An alpha survey may be required prior to excavation per the "Justification for Dual Survey Exemption in Tank Farm Facilities" HNF-3391. c) For excavations in CA's, HCA's, SCA's, and URMA's, if beta-gamma activity greater than 1000 dpm/probe area (5000 dpm/100 cm²) is identified, alpha surveys will also be performed. d) Suppressants such as water, fixatives, covers, or windscreens will be used as necessary, including at the end of each shift or when sustained or predicted winds are >20 mph. Excavations are not allowed when sustained or predicted winds will be >20 mph. e) If the net alpha for the general area is greater than 140 dpm/probe area, OR if the net beta-gamma activity for the general area is greater than 500,000 dpm/probe area, work will be suspended and worker safety evaluated by radiological control. Direct contact will also be made to WDOH. After it is determined that there is no threat to worker safety, WDOH has been contacted, and the proper controls (e.g., water fixatives, covers, windscreens) have been put in place, excavation may continue. A contact of WDOH will not be needed if the contamination consists of a hot speck. If hot specks are detected during the radiological surveys, the speck will be removed and contained before the activity is allowed to continue unless located in the bottom of the trench after excavation has been completed. Specks found in the bottom of the completed trench may be covered with clean fill. A hot speck will be defined as a very small amount (i.e., less than or equal to 100 cm²) of contamination reading greater than or equal to 1,000,000 dpm/probe size beta-gamma and/or greater than or equal to 490 dpm/probe size alpha.</p>	<p>Continuous</p>	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, radiological surveys, and procedures. Comment: None</p>
<p>Excavations using the Guzzler shall follow the Conditions and Limitations for approval for the Categorical NOC for use of the Guzzler on the Hanford Site. All source term work performed under this activity shall be tracked against this APQ.</p>	<p>Not Applicable</p>	<p>CDM: Field interviews. Comment: There was no Guzzler used on the Hanford Site in 2006.</p>
<p>Casing size reduction may also be by unthreading.</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>Drive Split Spoon Sampler will be included as a soil sampling technique.</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The APQ associated with perch water, purgewater and groundwater sampling shall not exceed 7.57 E-03 curies. The APQ associated with excavation shall not exceed 74.9 curies. These shall be tracked and documented on an approved log.</p>	<p>Continuous</p>	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, WDOH approved logs, and procedures. Comment: None</p>
<p>Emission controls to be used during sonic drilling, cable tool drilling, during use of the cone penetrometer, use of the closed-end probe, and casing removal will be decontamination by nonaggressive manual methods such as wiping, sleeving into plastic or having fixatives applied to prevent the spread of contamination if the smearable contamination levels are greater than 100,000 dpm/100 cm² for beta/gamma or 2000 dpm/100 cm² for alpha. As the core barrel is removed from the ground during cable tool drilling, a smear survey will be taken of the core barrel. Decontamination activities will be performed as needed to reduce smearable contamination. a. At selected depths, samples will be taken and these samples will be removed from the core barrel prior to striking the exterior of the core barrel with a hammer or hard object to dislodge soil into a plastic lined drum. There will be minimal potential for emissions from striking the core barrel to dislodge the soil into the drum. b. When the smearable contamination level is greater than 100,000 dpm/100 cm² for beta/gamma or 2,000 dpm/ 100 cm² for alpha, the core barrel will be sleeved in plastic. The core barrel will be removed from the drill string and placed in a suitable closed container for shipment to the laboratory or placed in a plastic-lined drum. Additionally, other sample containers may be wrapped in plastic after retrieval and the casing may be sleeved into plastic during the removal process to prevent the spread of contamination.</p>	<p>Continuous</p>	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None</p>
<p>Prior to permanent shut down of an emission unit or completion of an activity, the permittee shall file a report of closure with the Department of Health. The report of closure shall include the date of the shutdown and indicate whether, despite cessation of operation, there is still a potential for radioactive air emissions and a need for any active or passive ventilation system with emission control and/or monitoring devices. An emission unit or activity will not be considered permanently shut down or completed until a report of closure is received and approved by Health. Once an emission unit is permanently shut down or an activity is completed, thereby rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the shutdown or completion, to meet any monitoring, record keeping, and reporting, requirements which are no longer applicable for that emission unit or activity. All records, relating to the shut down emission unit or completion of an activity, generated while the emission unit or activity was in operation, shall be kept in accordance with (WAC 246-247-080(8)). (WAC 246-247-080(6)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>

Requirement	Compliance Status	Compliance Determination Method
<p align="center">Permit:AIR 02-1255 Issue Date:12-31-02 Obsolete Date: 07-05-06 NOC: 244-CR Vault Isolation and Interim Stabilization WDOH NOC ID: 548 Date In AOP: 04-11-05 Page in AOP: H-0730</p>		
Requirement	Compliance Status	Compliance Determination Method
<p>The U.S. Department of Energy shall comply with all Conditions and Limitations of this license (WAC 246-247-060(5)).</p>	Continuous	<p>CDM: Field interviews. Comment: None</p>
<p>The total abated emission limit for this Notice of Construction is limited to 5.10E-02 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 5.82E+01 mrem/year to the Maximally Exposed Individual (WAC 246-247-03 0(21)).</p>	Continuous	<p>CDM: Tracking log and Near Field Monitoring input in the Hanford Site Radiological Air Emissions report. Comment: None</p>
<p>No activities, other than those explicitly described within this approval, shall be conducted without prior written approval. The approved activities are limited to: activities performed at the 244-CR Vault Facility, ER-153 and/or 244-A Lift Station. These activities include: Work Area Preparation: - Miscellaneous work including equipment delivery, movement, set up and maintenance in the general work area around the 244-CR Vault Facility. - Construction and take down of open top containment tents (bullpens) over the facility vault area. - Installation of Portable/Temporary Radioactive Air Emission Unit(s) (PTRAEUs). - Installation of portable 1,000 cubic feet per minute (cfm) exhausters. - Removal and/or installation of vault foam covering. - Application of fixative at pit interior. - Temporary power installation. Facility/Interim Stabilization Work: - Operation of PTRAEU for bullpen ventilation. - Removal and/or installation of pit covers. - Inspection of pits, vaults, and tanks. - Removal and disposition of excess equipment and waste in pits, risers, and tanks. - Decontamination activities. - Measurement of liquid level and sludge levels in tanks and sumps. - Sampling activities in pits, vaults, and tanks including chemical addition and/or waste sampling to determine Double Shell Tank waste acceptance. Facility Equipment Activities: - Installation, disconnection, repair, replacement, and/or leak testing, of new and existing facility equipment (valves, jumpers, pumps, leak detectors, or other instrumentation/equipment). - Modifications, maintenance, and/or isolation and sealing of existing risers, pits, vaults and incoming and/or outgoing piping (drain and transfer lines) from 244-CR Vault or connected facility. Excavation: - Installation of permanent power to 244-CR Vault Facility. - Installation/Operation of Passive Breather Filter Assembly. Waste Transfer and Support Activities: - Operation of 1,000 cfm portable exhausters at 244-CR Vault. - New waste transfer system, waste staging/consolidation. Miscellaneous activities shall include: - Construction and take down of open top contaminant tents over the facility vault area. - Open top containment tents (bullpens) shall be constructed over the facility pit area to prevent potential airborne contamination from the effected work area to the environment. Two bullpens shall be erected around two instrumentation pits at the 244-CR Vault. Upon completion of the first pit's work, the bullpens shall be relocated to the other two pits and their work will be completed. - Installation of Portable/Temporary Radioactive Air Emission Unit(s) (PTRAEUs) - A Portable/Temporary Radioactive Air Emission Unit (2,000 cfm) or units (1,000 cfm each) shall be installed to ventilate the bullpens during activities that require work in the pits, cells and tank vault area prior to performing waste transfer activities. One thousand cfm PTRAEUs, if used, shall be directly connected to individual bullpens, while a 2,000 PTRAEU if used, shall be connected to two bullpens. Movement and installation of the PTRAEU can be performed to facilitate ventilation for the four vaults of the 244-CR Vault Facility. The PTRAEU shall operate intermittently (during work activities) and will be operated in accordance with the latest WDOH approval, AIR 99-1102, for the Portable/Temporary</p>	Continuous	<p>CDM: Field interviews and work packages. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p>Radioactive Air Emission Unit (PTRAEU) NOC (DOE/RL-96-75). A portable 1,000 cfm exhauster shall be installed to ventilate the 244-CR Facility vaults and tanks during waste transfer activities. This exhauster shall operate intermittently to support waste transfer and support activities and shall monitor air emissions. The exhauster shall be piped into the existing 244-CR facility ventilation system upstream of the existing (non-operating) exhauster, 296-C-05 and HEPA filters. The existing 244-CR Facility exhaust system shall be isolated and not used. Tie in of the 1,000 cfm exhauster to the existing exhaust system shall be in accordance with ALARACT 16, Tank Farm ALARACT Demonstration for Work on Potentially Contaminated Ventilation System Components. After the waste transfer is completed, the exhauster shall be removed in accordance to the requirements of ALARACT 16. A foam covering has been placed over the 244-CR Vault area to prevent intrusion of precipitation and snowmelt. In order to gain access to the pit cover (metal) plates or concrete cover blocks, sections of the foam shall be removed, packaged, transported and disposed of. ALARACT 4, Tank Farm ALARACT Demonstration for Packaging and Transportation of Waste shall be used to properly disposition the removed foamed covering. Radiation control technicians (RCT) shall monitor the affected work area while the foam covering is being removed. The foam covering shall be replaced after work is complete, as part of intrusion prevention measures completed by the project following waste transfer activities. A fixative shall be applied either with the pit covers on. The fixatives shall be applied to pit surfaces through a port in the pit cover using a 'whirly' or by fogging. A hand held sprayer is used to apply fixatives to local areas within the pit when the pit cover is off. Temporary power installation will be limited to meet the needs to support the work described in this NOC. Temporary installations can be removed when no longer needed. Operation of PTRAEU for Bullpen Ventilation.</p> <p>Ventilation of the bullpens during pre waste transfer tank activities and prior to the installation of the 1,000 cfm portable exhauster shall be accomplished with the use of PTRAEU(s). The PTRAEU(s) shall be operated in accordance with the latest WDOH approval, AIR 99-1102, for the Portable/Temporary Radioactive Air Emission Unit (PTRAEU) NOC (DOE/RL-96-75). Concrete cover key blocks are removed first, and only blocks necessary to perform intended work are removed. Consideration is given to sliding blocks to minimize the number of blocks to be removed. As discussed in the following, pit covers are decontaminated and/or covered with fixative before removal. Pit Covers are raised a minimum distance to safety allow a radiation protection technician to perform a dose rate and contamination survey. Pit covers are wrapped in plastic and set down in a specially prepared lay-down area. On completion of activities, the plastic wrap is removed from the pit covers and the pit covers are re-installed in their original position and orientation. Post-job surveys are performed. Inspections, such as visual, video, or nondestructive inspections, shall be performed with pit covers in place (for pit with access ports) or removed. The pit cover design, historical inspection information, and ALARA information shall be used to determine whether the inspection shall be performed manually (with pit cover removed) or remotely with a camera and the pit covers in place. Excess equipment and debris currently located in the 244-CR vault pits, and in-tank equipment shall be removed to accommodate new waste transfer equipment and piping. Excess equipment shall be replaced with replacement in kind equipment, as necessary. To facilitate the removal and disposition of these items, size reduction and decontamination activities shall be utilized. Size reduction activities shall include cutting up unusable equipment (usually jumpers/blanks) remotely, using hydraulic shears or low revolutions per minute portable hand saws. All size reduction activities shall be performed in accordance with ALARACT Demonstration 15, TWRS ALARACT Demonstration for Size Reduction of Waste Equipment for Disposal. Disposition of excess equipment and waste shall be performed in accordance with ALARACT Demonstration 4, TWRS ALARACT Demonstration for packaging and transportation of waste. Removable contamination in the accessible portions of the pit is reduced to less than 100,000 disintegrations per minute/100 square centimeters beta/gamma and 2,000 disintegrations per minute/100 square centimeters alpha by washing, or an approved fixative is applied to pit surfaces. Initial washing with a low pressure (125 pounds per square inch gauge), or high pressure (3,000 pounds per square inch gauge) 'whirly' is accomplished</p>		

Requirement	Compliance Status	Compliance Determination Method
<p>through a port in the pit cover blocks. Additional decontamination activities (with the cover block off) include the use of chemicals, peel and strip paints, water, or manual scrub brushes. After a section of equipment has been washed it shall be pulled into plastic sleeving and sealed by hose taping and taping. Liquid and sludge levels are determined using zip cords or other appropriate means that shall not disturb the waste more than zip cords. Sampling activities shall be performed in the tank and sump area of 244-CR Vault by way of risers in the riser pit in accordance with ALARACT 7, "Tank Farm ALARACT Demonstration For Tank Waste Grab Sampling." Radiological controls for riser preparation /opening listed in ALARACT 1, "Tank Farm ALARACT Demonstration for Riser Preparation/opening," shall be followed. The waste transfer processes shall transfer waste from tanks CR-011, CR-001, CR-002 and CR-003 and sumps within 244-CR Vault Facility to a staging tank within the 244-CR Facility. The transfer system to consolidate the waste from individual tanks consists of above ground piping of a hose in hose with leak detection at each tank's pit being utilized to support the transfer line. Mixing and dilution of the waste may take place at the receiving tank or within the transfer lines directly. The transfer system may include equipment pump skids and shall include appropriate connections to the transfer lines to accommodate chemical and water addition to the 244-CR Facility tanks and mixing prior to transfer to the designated Double Shell Tank (DST). Before entry into a pit, an evaluation is made by engineering and/or operations personnel to determine the transfer routing configuration after pit work is complete. On removal of cover blocks, a visual inspection of pit contents is made to verify present configuration. Tools such as impact wrenches, T-bars, and pike poles are used to repair or replace pit equipment. All equipment coming out of the pit is wrapped in plastic or otherwise contained or decontaminated for reuse or disposal. Removable contamination on the outer-most container shall not exceed 1,000 disintegrations per minute/100 square centimeters beta/gamma and 20 disintegrations per minute/100 square centimeters alpha before removal from the bullpen. Disposition of non reusable equipment waste shall be performed in accordance with ALARACT Demonstration 4, TWRS ALARACT Demonstration for packaging and transportation of waste. Jumper work shall be preceded by flushing the appropriate transfer lines with water. Jumper work is accomplished remotely, using a crane to maneuver heavy equipment and parts. Installation, disconnection, and/or changing jumpers/blanks are accomplished by slowly loosening the jumper/blank at the connector head. The required jumper/blank is positioned and tightened to the new connector heads. If the process line or equipment being worked on is connected physically to other unnecessary transfer lines, or if the line is to be left unused, a cap, blank, or equivalent is installed on all open nozzles not connected to jumpers. Leak testing of newly installed jumpers/blanks shall be performed with pressurized water before initiating waste transfers. Occasionally, a jumper leak test is performed during the initial stages of the transfer. In either case, cover blocks shall be in place before leak testing is performed. Cutting up unusable pit equipment (usually jumpers/blanks) is accomplished remotely using hydraulic shears or low revolutions per minute portable band saws. Cutting activities shall be performed in the bullpen or in glovebags. The goal shall be to maintain a contamination level equal to or less than 1,000 dpm/100 cm² beta gamma and 20 dpm/100 cm² alpha, during cutting activities, but may not always be attainable. RCT coverage shall be provided. Should contamination levels exceed 1,000-dpm/100 cm² additional sleeving, or use of a glove bag shall be used and/or decontamination activities performed to lower the levels in accordance with ALARA. Welding (if required) shall commence once removable contamination levels in the cut and weld area are reduced to ALARA. Size reduction (cutting) activities shall be performed in accordance with ALARACT Demonstration 15, TWRS ALARACT Demonstration for Size Reduction of Waste Equipment for Disposal. To ensure that water intrusions or potential residual waste in piping are eliminated from the facility, existing piping and transfer lines to and from the 244-CR Vault facility shall be blanked, grouted, or sealed. The isolation includes activities such as installing plugs, caps, blind flanges, or grouting. Isolations may occur at the 244-CR riser pit area or at the other end of the pipe in a diversion or valve box, at the ER153 or the 244A Lift Station. Modifications to existing in-route pits, vaults and piping shall be required to establish the waste transfer</p>		

Requirement	Compliance Status	Compliance Determination Method
<p>route or to ensure the integrity of the system prior to waste transfer. These modifications can include but are not limited to, removal of existing parts and replacement with like parts, installation of new jumpers, or blanking off of equipment. When possible existing blanks shall be utilized. Pipe cutting shall be minimized in compliance with ALARA. If it is determined that the installation of a new above ground transfer line would be the best engineering method to establish a waste transfer route, a temporary transfer route shall be established following existing design and installation procedures. This temporary route will be either above ground or in a shallow trench. If a trench is required excavation shall be performed as described under that activity in this NOC. Pit drains are checked using water from a tanker truck or another source. Water at a flow rate of approximately 20 gallons per minute is added to a pit drain line and subsequently monitored to verify the pit drains are free of restrictions. At times it might be necessary to pump the DCRT that receives the water after the water passes through the pit drain if the volume of test water approaches the capacity of the DCRT. Either flushing with water and/or using a retrieval tool to remove debris from the drain are used to clear plugged drains. Water supply valves are opened slowly to minimize splashing. Pressures above 50 pounds per square inch gauge require approval from the engineering organization. Cover blocks shall remain in place and work is accomplished through a penetration in the cover block. The waste transfer operations involve the pumping of liquid waste that contains dissolved solids. These solids can precipitate out of solution anywhere in the transfer path and cause blockage. If blockage is detected in the system, flushing the lines with hot water is necessary. The hot water is introduced to the system to be flushed through a pressure manifold by piping connected directly to a jumper or nozzle. These operations shall be performed with the pit covers on. To ensure that water intrusions are eliminated from the facility, a foam covering will be placed over the 244-CR Vault area after completion of isolation activities. Other techniques to free blockages could include pressurization, temporary jumpers, and hydraulic scouring. All piping connections are designed to be leak tight and the pit cover block shall be installed before pressurization. If pressurization beyond that obtained from the tank farms water system or supply truck (i.e., approximately 150 pounds per square inch gauge) is necessary to remove blockage, an engineering evaluation shall be performed to determine the maximum allowable pressure for operation. Excavation: Excavation may be required to support installation of ventilation, electrical support and waste transfer equipment. Modifications to existing in route pits, vaults and piping and/or to support installation of new waste transfer lines from the 244-CR Facility to the identified DST may require excavation. Soil excavation activities will be performed in accordance with ALARACT Demonstration 5, TWRS ALARACT Demonstration for Soil Excavation (Using Hand Tools), and will follow the radiological controls specified in that ALARACT. Any Guzzler excavations in contamination areas will be performed in accordance with the December 18, 1998, WDOH approved Site Wide Guzzler NOC (Air 98-1215), or the most current NOC approved for Guzzler use. Excavation of contaminated soils using heavy equipment shall follow the requirement of Site Wide Guzzler NOC. Soil excavation outside the tank farm fence also may be performed with heavy equipment. Soil will be excavated around the 244-CR vault facility to install new piping, equipment slabs, and new waste transfer system support equipment. It is expected that about 1,000 cubic yards may be excavated, with about 600 cubic yards from inside the tank farm. Backfill shall be from the original removed soil or non-contaminated controlled density fill (sand, water and a small amount of cement). Current power within the 244-CR Vault Facility is limited. To provide power for new equipment installed under the project, the existing power distribution system shall be upgraded. Upgrades shall involve modification to the existing Motor Control Center (MCC), installation of equipment control panels, and installation of new conduits. A compliant passive breather filter shall be installed to ventilate the 244-CR Facility vaults and tanks once waste transfer activities are completed. The passive breather filters shall be installed at two locations in the 244-CR facility. A 1,000 cfm HEPA filter shall be installed at the air inlet assembly (previously attached to the evaporative cooler) and a 160 cfm HEPA filter shall be installed upstream of the existing HEPA filter pit. Butterfly valves in the ventilation system just downstream of where the filters shall be installed can be shut to prevent any emission from the facility</p>		

Requirement	Compliance Status	Compliance Determination Method
<p>during filter installation. Installation of the filters shall be performed in accordance with ALARACT Demonstration 16, TWRS ALARACT Demonstration for Work on Potentially Contaminated Ventilation System Components. During waste transfer and support activities the tank and vault air space shall be actively ventilated by a temporary ventilation system. The temporary ventilation system shall consist of a portable exhauster that shall be equipped with compliant monitoring and sampling equipment. The purpose of the exhauster is to ensure potential airborne contamination from the pits, cells, or process tanks, is not being released to the environment. Operation of the 1,000 cfm portable exhauster is considered an emissions control. New waste transfer system, waste staging/consolidation. The planned transfer system can utilize some existing equipment along with installation of new piping and equipment at 244-CR, ER-153 and/or 244-A Lift Station. Maintenance of the transfer system may be required during the waste staging/consolidation. Equipment, which may require on going maintenance includes but is not limited to leak detection and pump system equipment. The waste can be staged/consolidated in one or two of the 244-CR Facility tanks (CR-001, CR-002, CR-003 and CR-011) prior to transfer to a DST. The following controls are used for the pit activities: General Controls: 1. Pre-job and post-job radiation surveys are performed by radiation protection technicians. Radiation work permits specify permissible occupational radiological limits during activities. Radiation control technicians' survey and release equipment, inspect and approve required containment, and provide radiological surveys to verify compliance to radiation work permit limits. 2. Pit work is shut down (or not initiated) when sustained wind speeds exceed 25 miles per hour as measured in the field and/or reported by the Hanford Meteorological Station. 3. Fixatives shall be applied inside the pit (with cover blocks on or off) or accessible portions of the pit decontaminated to less than 100,000 disintegrations per minute/100 square centimeters beta-gamma and 2,000 disintegrations per minute/100 square centimeters alpha. 4. When cover blocks are removed, a fall protection handrail is installed. This handrail is draped in plastic forming a contamination barrier. The plastic extends to the top of the pit and is taped or sealed at the top of the pit. Decontamination of the containment barrier is conducted as required by the job specific radiation work permit. 5. Radiation control technicians monitor the affected work area when the vault foam covering is removed, when jumpers and equipment are being removed from risers and nozzles, and when risers are entered for sampling of tanks and sumps. Jumpers removed from the pit are drained of free liquid and decontaminated or contained before removal. The outermost container shall not exceed 1,000 disintegrations per minute/100 square centimeters beta/gamma and 20 disintegrations per minute/100 square centimeters alpha. If these limits are exceeded, surfaces shall be decontaminated. Disposition of non reusable equipment waste shall be performed in accordance with ALARACT Demonstration 4, TWRS ALARACT Demonstration for packaging and transportation of waste. 6. A bullpen designed to minimize the top opening shall be used. Pit covers or cover blocks will be removed as necessary. If the bullpen is to be left unattended at any time, a temporary cover is placed over the pit or the pit covers or cover blocks are reinstalled. Two tents shall be erected over two pits. Upon completion of the work in the first two 244-CR Facility instrumentation pits, the tents will be relocated to the other 244-CR facility instrumentation pits. 7. PTRAEU(s) shall actively ventilate the bullpens during activities that require work in the pits (after removal of the cover blocks) to control radiological releases. The PTRAEU(s) shall operate intermittently and shall be operated in accordance with the latest revision to the WDOH approved. Portable/Temporary Radioactive Air Emission Unit (PTRAEU) NOC (DOE/RL-96-75). 8. A compliant exhauster skid shall ventilate the process cells and tanks during waste transfer activities. The exhauster shall maintain a negative pressure under the cover blocks and prevent contaminants from reaching the environment. The exhauster skid shall be connected to the existing exhaust ductwork with rigid or flexible ductwork. 9. The 1,000 cfm exhauster shall be equipped with a two-stage HEPA filter, which meets the requirements of ASME AG-1, Section FC and shall be tested annually to requirements of ASME N510. The HEPA filters shall have an efficiency of 99.95 percent for 0.3-micron median diameter. Each filter housing shall meet the applicable sections of ASME N509 and the test requirement of ASME N510. The</p>		

Requirement	Compliance Status	Compliance Determination Method
<p>exhaust stack houses a Generic Effluent Monitoring System (GEMS) that contains an air velocity probe and the air sampling probe. 10. The breather filter shall consist of a housing that contains a HEPA filter, an outlet screen, and a small seal loop. Air flowing to and from the 244-CR Facility shall pass horizontally through the filter and vertically through the downward-facing exit weather hood. Seat loops, installed in the exhaust lines, are designed as a safety feature to prevent unlikely accident in which an over pressurization occurs when the HEPA filter is isolated for occasional (infrequent) maintenance. Specific Controls include: - Installation of portable 1,000 cfm exhauster shall use ALARACT 16. - Removal and/or installation of vault foam covering - ALARACT 4. - Application of fixative at pit interior - see General Controls. - Temporary power installation - ALARA. - Operation of PTRAEU for bullpen ventilation - Latest WDOH approval, AIR 99 1102, for the Portable/Temporary Radioactive Air Emission Unit (PTRAEU) NOC (DOE/RL-96-75). - Removal and/or installation of pit covers - General Controls. - Inspection of pits, vaults, and tanks - General Controls. - Removal and disposition of excess equipment and waste in pits, risers, and tanks - ALARACT 15, and ALARACT 4. - Decontamination activities - General Controls. - Measurement of liquid level and sludge levels in tanks and sumps - General Controls. - Sampling activities in pits, vaults, and tanks including chemical addition and/or waste sampling to determine Double Shell Tank waste acceptance - ALARACT 7 and ALARACT 1. - Facility Equipment Activities: installation, disconnection, repair, replacement, and/or leak testing, of new and existing facility equipment (valves, jumpers, pumps, leak defectors, or other instrumentation/equipment) - ALARACT 4, and ALARACT 15. - Modifications, maintenance, and/or isolation and sealing of existing in route pits, vaults and piping (drain and transfer lines) to support and/or installation of new transfer lines - General Controls. - Excavation - ALARACT 5, and/or WDOH approved Site Wide Guzzler NOC (Air 98-1215), or the most current NOC approved for Guzzler use. - Installation of permanent power to 244-CR Vault Facility - ALARA. - Installation of passive breather filter assembly - ALARACT 16. - Operation of a portable exhauster at 244-CR vault for ventilation - ALARA. - New waste transfer system, waste staging/consolidation - General Controls.</p>		
<p>The Annual Possession Quantity is limited to the following radionuclides (Curies/year): Ac-227 1.60 E-05 Am-241 8.39 E-04 Am-243 1.26 E-07 Ba-137 m 4.81 E-01 C-14 2.76 E-05 Cd-113 m 1.90 E-04 Cm-242 1.56 E-05 Cm-243 1.85 E-06 Cm-244 4.24 E-05 Co-60 1.33 E-03 Cs-134 1.71 E-06 Cs-137 5.08 E+01 Eu-152 4.40 E-05 Eu-154 5.47 E-03 Eu-15 5.19 E-03 H-3 3.54 E-05 I-129 7.59 E-08 Nb-93 m 1.11 E-04 Ni-59 7.11 E-05 Ni-63 6.99 E-03 Np-237 1.82 E-04 Pa-231 1.24 E-05 Pu-238 8.11 E-05 Pu-239 7.99 E-03 Pu-240 1.44 E-03 Pu-241 1.01 E-02 Pu-242 1.26 E-02 Ra-226 5.50 E-09 Ra-228 2.99 E-05 Ru-106 2.54 E-07 Sb-125 7.12 E-04 Se-79 2.65 E-05 Sm-151 9.77 E-02 Sn-126 4.18 E-05 Sr-90 4.93 E+00 Tc-99 3.25 E-04 Th-229 2.63 E-07 Th-232 4.99 E-05 U-232 6.40 E-06 U-233 2.45 E-05 U-234 1.61 E-05 U-235 6.78 E-07 U-236 4.08 E-07 U-238 5.77 E-06 Y-90 4.91 E+00 Zr-93 9.68 E-05</p>	<p>Continuous</p>	<p>CDM: Tracking log and Near Field Monitoring input in the Hanford Site Radiological Air Emissions report. Comment: None</p>
<p>These Conditions and Limitations must be documented in an established procedure prior to starting activities granted by this approval (WAC 246-247-040(5)) and (WAC 246-247-060(5)).</p>	<p>Continuous</p>	<p>CDM: Field interviews. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p>If this emission unit is not in compliance with the standards in WAC 246-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-060-(2)(d)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility shall notify the department seven days in advance of any planned pre-operational testing of the emission unit's control, monitoring or containment systems. The department reserves the right to observe such tests (WAC 246-247-060(4)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national standards (WAC 246-247-075(6)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL quality assurance program. Comment: None</p>
<p>The department retains the right to conduct stack sampling, environmental monitoring or other testing around this unit to assure compliance. If directed by the department, the facility must make provision for such testing (WAC 246-247-075(9) and (10)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility must be able to demonstrate that workers associated with this emission unit are trained in the use and maintenance of control and monitoring systems, and in the performance of associated tests and emergency procedures (WAC 246-247-075(12)).</p>	<p>Continuous</p>	<p>CDM: Field interviews. Comment: None</p>
<p>The facility must be able to demonstrate the reliability and accuracy of emissions data and other test results from this emission unit (WAC 246-247-075(13)).</p>	<p>Continuous</p>	<p>CDM: Near Field Monitoring Program and tracking logs. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The department reserves the right to inspect and audit all construction activities, equipment, operations, documents, data and other records related to compliance with the requirements of this chapter (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility must meet all reporting and record keeping requirements of 40 CFR 61, Subpart H (WAC 246-247-080(2)).</p>	<p>Continuous</p>	<p>CDM: Near Field Monitoring Program. Comment: None</p>
<p>The facility shall report all measured or calculated emissions annually (WAC 246-247-080(3)).</p>	<p>Continuous</p>	<p>CDM: Annual radiological air emissions report. Comment: none</p>
<p>The facility shall report to the department within 24 hours, any unexpected release of radioactivity, shutdown or other condition that, if allowed to persist, or lasts more than four hours, would result in the emission of radionuclides in excess of any standards or limitation in the license. Applicable standards (WAC 246-247-040) include unit specific emission limits (paragraph 5), the offsite dose standard (paragraph 1), BARCT (paragraph 3) or ALARACT (paragraph 4), whichever is applicable, or any limitation included in this approval (paragraph 5) (WAC 246-247-080(5)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL occurrence reporting program. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p>Prior to permanent shut down of an emission unit or completion of an activity, the permittee shall file a report of closure with the Department of Health. The report of closure shall include the date of the shutdown and indicate whether, despite cessation of operation, there is still a potential for radioactive air emissions and a need for any active or passive ventilation system with emission control and/or monitoring devices. An emission unit or activity will not be considered permanently shut down or completed until a report of closure is received and approved by Health. Once an emission unit is permanently shut down or an activity is completed, thereby rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the shutdown or completion, to meet any monitoring, record keeping, and reporting requirements which are no longer applicable for that emission unit or activity. All records, relating to the shut down emission unit or completion of an activity, generated while the emission unit or activity was in operation, shall be kept in accordance with (WAC 246-247-080(8)). (WAC 246-247-080(6))</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility shall maintain readily (promptly) retrievable storage areas (on site) for all records and documents related to, and which may help establish compliance with, the requirements of this chapter. The facility shall keep these records available for department inspection for at least five years (WAC 246-247-080(8)).</p>	<p>Continuous</p>	<p>CDM: Field interviews. Comment: None</p>
<p>The facility shall ensure all emissions units are fully accessible to department inspectors. In the event the hazards associated with accessibility to a unit require training and/or restriction or requirements for entry, the facility owner or operator shall inform the department, prior to arrival, of those restrictions or requirements. The owner or operator shall be responsible for providing the necessary training, escorts, and support services to allow the department to inspect the facility. At a minimum for unannounced inspections, such requirements or restrictions must be told to inspectors to provide an opportunity for inspectors to meet those requirements prior to the inspection (WAC 246-247-080(9)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility shall make available, in timely manner, all documents requested by the department for review. The facility shall allow the department to review documents in advance of an inspection. The facility shall allow access to classified documents by representatives of the department with the appropriate security clearance and a demonstrable need-to-know (WAC 246-247-080(10)).</p>	<p>Continuous</p>	<p>CDM: Field interviews. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
Diffuse/Fugitive emissions shall be monitored using the 200 Area near-field ambient air monitors. Sample collection and analysis shall follow that of the near field monitoring program. Analytical results shall be reported in the Annual Air Emissions Report. Any change to this near-field ambient monitoring program must be approved by the department.	Continuous	CDM: Hanford Site near-facility/field monitoring program. Comment: None
When a Portable/Temporary Radioactive Air Emission Unit (PTRAF-U) is used to ventilate the bullpens, the conditions, controls, monitoring requirements and limitations of the PTRAEU NOC, latest approved version, shall be required.	Not Applicable	CDM: Field interviews. Comment: No PTRAEU activities occurred at 244-CR Vault in 2006.
Excavation of contaminated soils using heavy equipment shall follow the requirements of the Site Wide Guzzler NOC.	Not Applicable	CDM: Field interviews. Comment: There was no Guzzler used on the Hanford Site in 2006.
All above ground transfers shall be double contained and the hose in hose connections leak tested.	Not Applicable	CDM: Field interviews. Comment: No hose in hose activities occurred at 244-CR Vault in 2006.
If pressures above 50 psi are used. WDOH shall be notified with the controls to be used.	Not Applicable	CDM: Field interviews. Comment: No activities required the use of pressure above 50 psi at 244-CR Vault in 2006.
WDOH requires that log sheets used are in accordance to PTRAEU NOC (DOE/RL-96-75).	Continuous	CDM: Field interviews and WDOH approved logs. Comment: None
All above ground transfer lines shall be double contained and leak tested.	Not Applicable	CDM: Field interviews. Comment: No above ground transfer activities occurred at 244-CR Vault in 2006.

Requirement	Compliance Status	Compliance Determination Method
<p align="center">Permit:AIR 03-502 Issue Date:05-23-03 Obsolete Date: 07-05-06 NOC: Tank Farm Decontamination Trailers WDOH NOC ID: 571 Date In AOP: 04-11-05 Page in AOP: H-0943</p>		
Requirement	Compliance Status	Compliance Determination Method
<p>The U.S. Department of Energy shall comply with all Conditions and Limitations of this license (WAC 246-247-060(5)).</p>	Continuous	<p>CDM: Field interviews, and complied with all conditions and limitations in this NOC approval. Comment: None</p>
<p>The total abated emission limit for this Notice of Construction is limited to 1.66E-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 1.66E-05 mrem/year to the Maximally Exposed Individual (WAC 246-247-030(21)).</p>	Continuous	<p>CDM: The annual "Radionuclide Air Emissions Report" for the Hanford Site. Comment: None</p>
<p>No activities, other than those explicitly described within this approval, shall be conducted without prior written approval. The approved activities are limited to: the following general chemical and physical processes associated with the decontamination activities in the decontamination trailer: 1. Upon identification of the need of additional decontamination activities in the individuals would be escorted to the nearest decontamination trailer. 2. As appropriate, contaminated clothing, coverings, and/or articles would be removed and packaged for laboratory analysis and/or disposition, in accordance with As Low As Reasonably Achievable Control Technology (ALARACT) 4 and 12, Tank Farm ALARACT Demonstration for Packaging and Transportation of Waste and Tank Farm ALARACT Demonstration for Packaging and Transportation of Equipment and Vehicles, RPP HNF-4327. 3. 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. 4. Spent decontamination solutions would 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. 5. Periodic maintenance inspection of the decontamination trailers will be performed without the use of containment or portable exhausters.</p>	Continuous	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None</p>
<p>The Annual Possession Quantity is limited to the following radionuclides (Curies/year): Pu-239 1.40E-01 Sr-90 1.40E-01</p>	Continuous	<p>CDM: Field interviews, WDOH approved logs, and verified basis for APQ in NOC application. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
These Conditions and Limitations must be documented in an established procedure prior to starting activities granted by this approval (WAC 246-247-040(5)) and (WAC 246-247-060(5)).	Continuous	CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None
If this emission unit is not in compliance with the standards in WAC 246-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-060-(2)(d)).	Not Applicable	CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.
The facility shall notify the department seven days in advance of any planned pre-operational testing of the emission unit's control, monitoring or containment systems. The department reserves the right to observe such tests (WAC 246-247-060(4)).	Not Applicable	CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.
The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national standards (WAC 246-247-075(6)).	Continuous	CDM: CH2M HILL quality assurance program, records, and procedures. Comment: None
The facility must be able to demonstrate that workers associated with this emission unit are trained in the use and maintenance of control and monitoring systems, and in the performance of associated tests and emergency procedures (WAC 246-247-075(12)).	Continuous	CDM: CH2M HILL training program, training records, work controls, and procedures. Comment: None
The facility must be able to demonstrate the reliability and accuracy of emissions data and other test results from this emission unit (WAC 246-247-075(13)).	Continuous	CDM: CH2M HILL quality assurance program, records, and procedures. Comment: None
The department reserves the right to inspect and audit all construction activities, equipment, operations, documents, data and other records related to compliance with the requirements of this chapter (WAC 246-247-080(1)).	Not Applicable	CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.

Requirement	Compliance Status	Compliance Determination Method
The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).	Not Applicable	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
The facility must meet all reporting and record keeping requirements of 40 CFR 61, Subpart H (WAC 246-247-080(2)).	Continuous	<p>CDM: CH2M HILL records management and procedures. Comment: None</p>
The facility shall report to the department within 24 hours, any unexpected release of radioactivity, shutdown or other condition that, if allowed to persist, or lasts more than four hours, would result in the emission of radionuclides in excess of any standards or limitation in the license. Applicable standards (WAC 246-247-040) include unit specific emission limits (paragraph 5), the offsite dose standard (paragraph 1), BARCT (paragraph 3) or ALARACT (paragraph 4), whichever is applicable, or any limitation included in this approval (paragraph 5) (WAC 246-247-080(5)).	Continuous	<p>CDM: Field interview, CH2M HILL notification procedures, and notification logbook. Comment: None</p>
Prior to permanent shut down of an emission unit or completion of an activity, the permittee shall file a report of closure with the Department of Health. The report of closure shall include the date of the shutdown and indicate whether, despite cessation of operation, there is still a potential for radioactive air emissions and a need for any active or passive ventilation system with emission control and/or monitoring devices. An emission unit or activity will not be considered permanently shut down or completed until a report of closure is received and approved by Health. Once an emission unit is permanently shut down or an activity is completed, thereby rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the shutdown or completion, to meet any monitoring, record keeping, and reporting, requirements which are no longer applicable for that emission unit or activity. All records, relating to the shut down emission unit or completion of an activity, generated while the emission unit or activity was in operation, shall be kept in accordance with (WAC 246-247-080(8)). (WAC 246-247-080(6))	Not Applicable	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
The facility shall maintain readily (promptly) retrievable storage areas (on site) for all records and documents related to, and which may help establish compliance with, the requirements of this chapter. The facility shall keep these records available for department inspection for at least five years (WAC 246-247-080(8)).	Continuous	<p>CDM: CH2M HILL records management and procedures. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The facility shall ensure all emissions units are fully accessible to department inspectors. In the event the hazards associated with accessibility to a unit require training and/or restriction or requirements for entry, the facility owner or operator shall inform the department, prior to arrival, of those restrictions or requirements. The owner or operator shall be responsible for providing the necessary training, escorts, and support services to allow the department to inspect the facility. At a minimum for unannounced inspections, such requirements or restrictions must be told to inspectors to provide an opportunity for inspectors to meet those requirements prior to the inspection (WAC 246-247-080(9)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility shall make available, in timely manner, all documents requested by the department for review. The facility shall allow the department to review documents in advance of an inspection. The facility shall allow access to classified documents by representatives of the department with the appropriate security clearance and a demonstrable need-to-know (WAC 246-247-080(10)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL records management and procedures. Comment: None</p>
<p>Diffuse-Fugitive emissions shall be monitored using the 200 Area near-field ambient air monitors. Sample collection and analysis shall follow that of the near field monitoring program. Analytical results shall be reported in the Annual Air Emissions Report. Any change to this near-field ambient monitoring program must be approved by the department.</p>	<p>Continuous</p>	<p>CDM: Hanford Site near-facility/field monitoring program. Comment: None</p>
<p>When Portable Temporary Radioactive Air Emission Units are used they shall follow all the requirements of the latest revision of the Radioactive Air Emissions Notice of Construction for Portable Temporary Radioactive Air Emission Units (DOE/RL-96-75).</p>	<p>Not Applicable</p>	<p>CDM: Field interviews. Comment: None</p>
<p>The proposed PCM for the diffuse and fugitive emissions shall consist of the radiological surveys during and at the completion of personnel decontamination operations (e.g., smears and direct readings on the interior of the decontamination trailers). The methods of PCM are not a direct measurement of effluent emissions. The methods are intended to demonstrate compliance by showing that the levels on the interior of the trailers, during a personnel decontamination operation, are controlled; and the levels on the interior of the trailers after a decontamination operation shall keep the trailers from being posted a radiological buffer area (RBA) for contamination control and/or a contamination area (CA). This shall make the actual emissions below the estimated emissions, which shall be based and calculated from the same contamination levels.</p>	<p>Continuous</p>	<p>CDM: Field interviews and radiological survey reports. Comment: The decontamination trailer located in 200 West Area was not used in 2006. The 200-East decontamination trailer was used in January 2006.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The department retains the right to conduct stack sampling, environmental monitoring or other testing around this unit to assure compliance. If directed by the department, the facility must make provision for such testing (WAC 246-247-075(9) and (10)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility shall report all measured or calculated emissions annually (WAC 246-247-080(3)).</p>	<p>Continuous</p>	<p>CDM: The annual "Radionuclide Air Emissions Report" for the Hanford Site. Comment: None</p>
<p align="center">Permit: AIR 03-611 Issue Date:06-26-03 Obsolete Date: 07-05-06 NOC: Isolation and Closure of Exhaust Stacks 296-A-25, 296-B-28, 296-S-22, and 296-T-18 WDOH NOC ID: 578 Date In AOP: 04-11-05 Page in AOP: H-0947</p>		
Requirement	Compliance Status	Compliance Determination Method
<p>The U.S. Department of Energy shall comply with all Conditions and Limitations of this license (WAC 246-247-060(5)).</p>	<p>Continuous</p>	<p>CDM: Field interviews, and complied with all conditions and limitations in this NOC approval. Comment: None</p>
<p>The total abated emission limit for this Notice of Construction is limited to 1.20E-03 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 1.20E-01 mrem/year to the Maximally Exposed Individual (WAC 246-247-030(21)).</p>	<p>Continuous</p>	<p>CDM: The annual "Radionuclide Air Emissions Report" for the Hanford Site. Comment: None</p>
<p>No activities, other than those explicitly described within this approval, shall be conducted without prior written approval. The approved activities are limited to: the following DCRT and associated stacks: 244-A (296-A-25), 244-BX (296-B-28), 244-S (296-S-22), and 244-TX (296-T-18); 244-A DCRT (296-A-25 STACK) Passive Ventilation Breather Filter System Installation: A passive ventilation breather filter system shall be installed on an existing above-grade riser on the primary receiver tank, in accordance with ALARACT Demonstration 1 and 16. The primary tank breather filter will serve as the static vent for the instrument air injected (at a maximum of 9 cubic feet per hour) into the receiver tank through a set of three weight-factor dip tubes, which mixes with and dilutes any flammable gases. The primary tank breather filter will allow flammable gases to escape through the breather filter while collecting any airborne radioactive particulates. A passive ventilation breather filter system shall be installed above-grade' on an existing riser or the existing annulus inlet filter riser, in accordance with ALARACT 1 and 16 "TWRS ALARACT Demonstration for Work on Potentially Contaminated Ventilation System Components". The annulus breather filter will provide for the exchange of ambient air with the annulus tank during atmospheric pressure fluctuations and will allow vapors to escape. The breather filter systems will, at a minimum, consist of an isolation valve (normally open during operation), filter housing, HEPA filter, and loop seal assembly. The isolation valve will isolate the HEPA filter from the tank to facilitate testing of the filter, and to isolate the system until the filter or</p>	<p>Continuous</p>	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p>housing can be replaced. HEPA Filter Bank Isolation and Removal: The isolation and removal of the HEPA filter bank located in the 2M-A DCRT filter pit will require the deactivation of the HEPA filter bank instrumentation and alarms, the removal and disposal of the HEPA filter bank, and the installation of the filter pit duct jumper assembly, in accordance with ALARACT Demonstrations 6, 14, and 16. The 296-A-25 exhaust is equipped with a HEPA filter bank inside the filter pit. The HEPA filter bank is attached to three nozzles in the filter pit: one nozzle to the catch tank, one nozzle to the annulus, and one nozzle to the ventilation exhaust ductwork. The HEPA filter bank will be disconnected from the nozzles and removed for disposal. A filter pit duct jumper assembly (4" schedule 40 pipe) will be connected to the catch tank nozzle and ventilation exhaust ductwork nozzle to provide the ventilation path to the newly installed passive breather filters. The third nozzle to the annulus will be closed in the filter pit. The filter pit duct jumper assembly will be fabricated in accordance with American Society of Mechanical Engineers (ASME) B31.3 and tested in accordance with ASME AG-1. Electrical Equipment and Instrumentation Isolation: The isolation of electrical equipment and instrumentation on the 244-A DCRT will require the disconnection of various power supplies (e.g., exhaust fan, motor, operated valves, heat trace, sampler pumps, continuous air monitor, and alarms) and isolation of instrumentation (e.g., HEPA filter bank pressure indicators) that support operation and monitoring of the stack ventilation system, in accordance with ALARACT Demonstrations 6 and 14. Disconnection is the physical disconnection and removal of wires from the power source. Pit entries are not required to disconnect power or isolate instrumentation. 296-A-25 Stack Isolation: The 296-A-25 stack will be isolated via mechanical isolations. Blank flanges will be installed on the duct end and on the suction side of the exhaust fan. A closure cap will be installed on top of the exhaust stack. The exhaust stack drain line will be cut and capped above grade, in accordance with ALARACT Demonstration 16. 244-BX DCRT (296-B-28 STACK) Passive Ventilation Breather Filter System Installation: A passive ventilation breather filter system shall be installed on an existing above-grade riser on the primary receiver tank in accordance with ALARACT Demonstration 1 and 16. The primary tank breather filter will serve as the static vent for the instrument air injected (at a maximum of 9 cubic feet per hour) into the receiver tank through a set of three weight-factor dip tubes, which mixes with and dilutes any flammable gases. The primary tank breather filter will allow flammable gases to escape while collecting any airborne radioactive particulates. A passive ventilation breather filter system will be installed above-grade on an existing riser or the existing annulus inlet filter riser in accordance with ALARACT Demonstration 1 and 16. The annulus breather filter will provide for the exchange of ambient air with the annulus tank during atmospheric pressure fluctuations and will allow vapors to escape. The breather filter system will, at a minimum, consist of an isolation valve (normally open during operation), filter housing, HEPA filter, and loop seal assembly. The isolation valve will isolate the HEPA filter from the tank to facilitate testing of the filter, and to isolate the system until the filter or housing can be replaced. HEPA Filter Bank Isolation and Removal: Removal of the HEPA filter bank in the 244-BX DCRT filter pit is not required. The HEPA filter bank will be isolated via closure of manual valves and the deactivation of motor-controlled valves. Above-grade duct/pipe will be capped. The associated HEPA filter bank instrumentation and alarms will be deactivated. This work will be in accordance with ALARACT 16. Electrical Equipment and Instrumentation Isolation: The isolation of electrical equipment and instrumentation on the 244-BX DCRT will require the disconnection of various power supplies (e.g., exhaust fan, motor operated valves, heat trace, sampler pumps, continuous air monitor, and alarms) and isolation of instrumentation (e.g., HEPA filter bank pressure indicators) that support operation and monitoring of the stack ventilation system in accordance with ALARACT Demonstration 16. Disconnection is the physical disconnection and removal of wires from the power source. Pit entries are not required to disconnect power or isolate instrumentation. 296-B-28 Stack Isolation: The 296-B-28 stack will be isolated via mechanical isolations. A blank flange will be installed at the suction side of the exhaust fan or at another suitable location near the filter pit outlet to the exhaust stack. A closure cap will be installed on top of the exhaust stack. The exhaust</p>		

Requirement	Compliance Status	Compliance Determination Method
<p>stack drain line will be cut and capped above grade. This work will be in accordance with ALARACT 16. 244-S DCRT (296-S-22 STACK) Passive Ventilation Breather Filter System Installation: A passive ventilation breather filter system will be installed on an existing above-grade riser on the primary receiver tank in accordance with ALARACT Demonstration 1 and 16. The primary tank breather filter will serve as the static vent for the instrument air injected (at a maximum of 9 cubic feet per hour) into the receiver tank through a set of three weight-factor dip tubes, which mixes with, and dilutes, any flammable gases. The primary tank breather filter will allow flammable gases to escape while collecting any airborne radioactive particulates. A passive ventilation breather filter system will be installed above-grade on an existing riser or the existing annulus inlet filter riser in accordance with ALARACT 1 and 16. The annulus breather filter will provide for the exchange of ambient air with the annulus tank during atmospheric pressure fluctuations and will allow vapors to escape. The breather filter system will, at a minimum, consist of an isolation valve (normally open during operation), filter housing, HEPA filter, and loop seal assembly. The isolation valve will isolate the HEPA filter from the tank to facilitate testing of the filter, and to isolate the system until the filter or housing can be replaced. HEPA Filter Bank Isolation and Removal: The isolation and removal of the HEPA filter bank located in the 244-S DCRT filter pit will require the deactivation of the HEPA filter bank instrumentation and alarms, the removal and disposal of the HEPA filter bank, and the installation of the filter pit duct jumper assembly, in accordance with ALARACT Demonstrations 6, 14, and 16. The 296-S-22 exhauster is equipped with a HEPA filter bank inside the filter pit. The HEPA filter bank is attached to three nozzles in the filter pit: one nozzle to the catch tank, one nozzle to the annulus, and one nozzle to the ventilation exhaust ductwork. The HEPA filter bank will be disconnected from the nozzles and removed for disposal. A filter pit duct jumper assembly (4" schedule 40 pipe) will be connected to the catch tank nozzle and ventilation exhaust ductwork nozzle to provide the ventilation path to the newly installed passive breather filters. The third nozzle to the annulus will be closed in the filter pit. The filter pit duct jumper assembly will be fabricated in accordance with ASME B31.3 and tested in accordance with ASME AG-1. Electrical Equipment and Instrumentation Isolation: The isolation of electrical equipment and instrumentation on the 244-S DCRT will require the disconnection of various power supplies (e.g., exhaust fan, motor operated valves, heat trace, sampler pumps, continuous air monitor, and alarms) and isolation of instrumentation (e.g., HEPA filter bank pressure indicators) that support operation and monitoring of the stack ventilation system in accordance with ALARACT 16. Disconnection is the physical disconnection and removal of wires from the power source. Pit entries are not required to disconnect power or isolate instrumentation. 296-S-22 Stack Isolation: The 296-S-22 stack will be isolated via mechanical isolations. Blank flanges will be installed on the duct end and on the suction side of the exhaust fan. A closure cap will be installed on top of the exhaust stack. The exhaust stack drain line will be cut and capped above grade. This work will be done in accordance with ALARACT Demonstration 16. 244-TX DCRT (296-T-18 STACK) Passive Ventilation Breather Filter Installation: A passive ventilation breather filter system will be installed on an existing above-grade riser on the primary receiver tank in accordance with ALARACT Demonstration 1 and 16. The primary tank breather filter will serve as the static vent for the instrument air injected (at a maximum of 9 cubic feet per hour) into the receiver tank through a set of three weight-factor dip tubes, which mixes with, and dilutes, any flammable gases. The primary tank breather filter will allow flammable gases to escape while collecting any airborne radioactive particulates. A passive ventilation breather filter system will be installed above-grade on an existing riser or the existing annulus inlet filter riser in accordance with ALARACT 1 and 16. The annulus breather filter will provide for the exchange of ambient air with the annulus tank during atmospheric pressure fluctuations and will collect potential airborne radioactive particulates from the annulus space while allowing vapors to escape. The breather filter system will, at a minimum, consist of an isolation valve (normally open during operation), filter housing, HEPA filter, and loop seal assembly. The isolation valve will isolate the HEPA filter from the tank to facilitate testing of the filter, and to isolate the system until the filter or</p>		

Requirement	Compliance Status	Compliance Determination Method
<p>housing can be replaced. HEPA Filter Bank Isolation and Removal: Removal of the HEPA filter bank in the 244- TX DCR T filter pit is not required. The HEPA filter bank will be isolated via closure of manual valves and the deactivation of motor-controlled valves. Above- grade duct/pipe will be capped. The associated HEPA filter bank instrumentation and alarms will be deactivated. This work will be done in accordance with ALARACT 16.</p> <p>Electrical Equipment and Instrumentation Isolation: The isolation of electrical equipment and instrumentation on the 244- TX DCRT will require the disconnection of various power supplies (e.g., exhaust fan, motor operated valves, heat trace, sampler pumps, continuous air monitor, and alarms) and isolation of instrumentation (e.g., HEPA filter bank pressure indicators) that support operation and monitoring of the stack ventilation system. Disconnection is the physical disconnection and removal of wires from the power source in accordance with ALARACT Demonstration 16. Pit entries are not required to disconnect power or isolate instrumentation.</p> <p>296-T-18 Stack Isolation: The 296-T-18 stack will be isolated via mechanical isolations. A blank flange will be installed at the suction side of the exhaust fan or at another suitable location near the filter pit outlet to the exhaust stack. A closure cap will be installed on top of the exhaust stack. The exhaust stack drain line will be cut and capped above grade. This work will be done in accordance with ALARACT Demonstration 16.</p>		
<p>The Annual Possession Quantity is limited to the following radionuclides (Curies/year): Alpha 0 1.80E-06 Beta -0 8.80E-02</p>	<p>Continuous</p>	<p>CDM: Field interviews, WDOH approved logs, and verified basis for APQ in NOC application. Comment: None</p>
<p>These Conditions and Limitations must be documented in an established procedure prior to starting activities granted by this approval (WAC 246-247-040(5) and (WAC 246-247-060(5)).</p>	<p>Continuous</p>	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None</p>
<p>If this emission unit is not in compliance with the standards in WAC 246-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-060-(2)(d)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility shall notify the department seven days in advance of any planned pre-operational testing of the emission unit's control, monitoring or containment systems. The department reserves the right to observe such tests (WAC 246-247-060(4)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>

Requirement	Compliance Status	Compliance Determination Method
The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national standards (WAC 246-247-075(6)).	Continuous	CDM: CH2M HILL quality assurance program, records, and procedures. Comment: None
The department retains the right to conduct stack sampling, environmental monitoring or other testing around this unit to assure compliance. If directed by the department, the facility must make provision for such testing (WAC 246-247-075(9) and (10)).	Not Applicable	CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.
The facility must be able to demonstrate that workers associated with this emission unit are trained in the use and maintenance of control and monitoring systems, and in the performance of associated tests and emergency procedures (WAC 246-247-075(12)).	Continuous	CDM: CH2M HILL training program, training records, work controls, and procedures. Comment: None
The facility must be able to demonstrate the reliability and accuracy of emissions data and other test results from this emission unit (WAC 246-247-075(13)).	Continuous	CDM: CH2M HILL quality assurance program, records, and procedures. Comment: None
The department reserves the right to inspect and audit all construction activities, equipment, operations, documents, data and other records related to compliance with the requirements of this chapter (WAC 246-247-080(1)).	Not Applicable	CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.
The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).	Not Applicable	CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.
The facility must meet all reporting and record keeping requirements of 40 CFR 61, Subpart H. (WAC 246-247-080(2)).	Continuous	CDM: CH2M HILL records management and procedures. Comment: None

Requirement	Compliance Status	Compliance Determination Method
The facility shall report all measured or calculated emissions annually (WAC 246-247-080(3)).	Continuous	CDM: The annual "Radionuclide Air Emissions Report" for the Hanford Site. Comment: None
The facility shall report to the department within 24 hours, any unexpected release of radioactivity, shutdown or other condition that, if allowed to persist, or lasts more than four hours, would result in the emission of radionuclides in excess of any standards or limitation in the license. Applicable standards (WAC 246-247-040) include unit specific emission limits (paragraph 5), the offsite dose standard (paragraph 1), BARCT (paragraph 3) or ALARACT (paragraph 4), whichever is applicable, or any limitation included in this approval (paragraph 5) (WAC 246-247-080(5)).	Continuous	CDM: Field interviews, CH2M HILL notification procedures, and notification logbook. Comment: None
Prior to permanent shut down of an emission unit or completion of an activity, the permittee shall file a report of closure with the Department of Health. The report of closure shall include the date of the shutdown and indicate whether, despite cessation of operation, there is still a potential for radioactive air emissions and a need for any active or passive ventilation system with emission control and/or monitoring devices. An emission unit or activity will not be considered permanently shut down or completed until a report of closure is received and approved by Health. Once an emission unit is permanently shut down or an activity is completed, thereby rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the shutdown or completion, to meet any monitoring, record keeping, and reporting requirements which are no longer applicable for that emission unit or activity. All records, relating to the shut down emission unit or completion of an activity, generated while the emission unit or activity was in operation, shall be kept in accordance with (WAC 246-247-080(8)). (WAC 246-247-080(6))	Not Applicable	CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.
The facility shall maintain readily (promptly) retrievable storage areas (on site) for all records and documents related to, and which may help establish compliance with, the requirements of this chapter. The facility shall keep these records available for department inspection for at least five years (WAC 246-247-080(8)).	Continuous	CDM: CH2M HILL records management and procedures. Comment: None

Requirement	Compliance Status	Compliance Determination Method
<p>The facility shall ensure all emissions units are fully accessible to department inspectors. In the event the hazards associated with accessibility to a unit require training and/or restriction or requirements for entry, the facility owner or operator shall inform the department, prior to arrival, of those restrictions or requirements. The owner or operator shall be responsible for providing the necessary training, escorts, and support services to allow the department to inspect the facility. At a minimum for unannounced inspections, such requirements or restrictions must be told to inspectors to provide an opportunity for inspectors to meet those requirements prior to the inspection (WAC 246-247-080(9)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility shall make available, in timely manner, all documents requested by the department for review. The facility shall allow the department to review documents in advance of an inspection. The facility shall allow access to classified documents by representatives of the department with the appropriate security clearance and a demonstrable need-to-know (WAC 246-247-080(10)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL records management and procedures. Comment: None</p>
<p>Diffuse/Fugitive emissions shall be monitored using the 200 Area near-field ambient air monitors. Sample collection and analysis shall follow that of the near field monitoring program. Analytical results shall be reported in the Annual Air Emissions Report. Any change to this near-field ambient monitoring program must be approved by the department.</p>	<p>Continuous</p>	<p>CDM: Hanford Site near-facility/field monitoring program. Comment: None</p>
<p>The Annual Possession Quantity shall be tracked on a WDOH approved log.</p>	<p>Continuous</p>	<p>CDM: Field interviews and WDOH approved logs for APQ tracking. Comment: None</p>
<p>The emission limit for all diffuse and fugitive emissions shall not exceed 1.0E-06 mrem/year.</p>	<p>Continuous</p>	<p>CDM: Hanford Site near-facility/field monitoring program. Comment: None</p>
<p>All radioactive air emissions licenses issued by the department, except those issued to radioactive materials licensees, shall have an expiration date of five years from date of issuance or as specified in the air operating permit. For radioactive material licensees, the requirements and limitations for the operation of emission units shall be incorporated into their radioactive materials license, and shall expire when the radioactive materials license expires. (WAC 246-247-060 (6)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>All facilities with licensed emission units, except for radioactive materials licensees, shall submit a request to the department for renewal of their radioactive air emissions license at least sixty days prior to expiration of the license or as required by the air operating permit. All renewal requests shall include a summary of the operational status of all emission units, the status of facility compliance with the standards of WAC 246-247-040, and the status of any corrective actions necessary to achieve compliance with the requirements of this chapter. Facilities with licensed emission units that also hold a radioactive materials license issued by the department shall submit this information along with their radioactive material license renewal submittal. If the department is unable to renew a radioactive air emissions license before its expiration date, the existing license, with all of its requirements and limitations, remains in force until the department either renews or revokes the license. (WAC 246-247-040 (9)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>

Permit: AIR 04-401 **Issue Date:**04-05-04 **Obsolete Date:** 07-05-06
NOC: 241-C-200 Series Tanks Retrieval
WDOH NOC ID: 579 **Date In AOP:** 04-11-05 **Page in AOP:** H-0987

Requirement	Compliance Status	Compliance Determination Method
<p>Zone or Area : Abatement Technology : Excavation Restriction Required Units : Add'l Description: Abatement controls as required in the following Conditions and Limitations.</p>	<p>Continuous</p>	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None</p>
<p>Zone or Area : Abatement Technology : Fixatives (paint, water, dust suppressants) Required Units : Add'l Description: Abatement controls as required in the following Conditions and Limitations.</p>	<p>Continuous</p>	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None</p>
<p>Required Sampling: Existing near-facility monitoring stations. Sampling Frequency: As listed in the following Conditions and Limitations. Radionuclide Requiring Measurement: All radionuclides which could contribute 10% of the potential TEDE.</p>	<p>Continuous</p>	<p>CDM: Field interviews and Hanford Site near-facility/field monitoring program. Comment: None</p>
<p>Federal and State Regulatory Requirement: WAC 246-247-075[3] Permit Monitoring and Testing Procedure: Appendix B, Method 114</p>	<p>Continuous</p>	<p>CDM: The Hanford Site near-facility/field monitoring program satisfies WAC 246-247-075(3). Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
The U.S. Department of Energy shall comply with all Conditions and Limitations of this license (WAC 246-247-060(5)).	Continuous	CDM: Field interviews and complied with all conditions in this NOC approval. Comment: None
The total abated emission limit for this Notice of Construction is limited to 1.72E-02 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 2.18E+00 mrem/year to the Maximally Exposed Individual (WAC 246-247-030(21)).	Continuous	CDM: Tracking log and Near Field Monitoring input in the Hanford Site Radiological Air Emissions report. Comment: None
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. The activities listed below are approved for the C-200 Series Waste Retrieval effort: Retrieval Activities (Stack): i. Operation of the new portable exhauster and ventilation system. ii. Retrieve wastes from C-201, C-202, C-203, and C-204 using the AMS to vacuum wastes to the central vessel skid. iii. Pump waste from central vessel skid to the double shell tank system using OGT lines Diffuse and Fugitive: a. Proposed Actions for Tanks C-201 through C-204: i. Removal of weather covers and debris from jet pump pits and ventilation hatchways (ALARACTs 1, 4, 6, 12, 13, 14, and 15) ii. Remove condenser pit filter assembly and replace tank breather filter with a Y-duct assembly (ALARACTs 1, 4, 12, 15, and 16) iii. Remove liquid level reels and thermocouple trees, 1 each per tank (ALARACTs 1, 4, 6, 12, 13, 14, and 15) iv. Remove sluice eductor pump from Tank C-204, if necessary (ALARACTs 1, 4, 6, 12, 13, 14, and 15) b. Tank Equipment Installations: i. AMS with connected hydraulic power pack, one per tank (ALARACTs 1, 4, 6, 12, 13, and 14) ii. Ventilation inlet filter assembly, one per tank (ALARACTs 1, 4, 12, 13 and 16) iii. Ventilation exhaust ducting, one per tank (ALARACTs 1, 4, 12, and 16) iv. Closed circuit TV s, one per tank (ALARACT 1, 4, 12, 13, and 16) v. Master camera control system skid, and connects to in-tank cameras (ALARACT 6, 13, and 16) vi. Central vessel skid, connect to individual AMS units, connect to the double shell tank via OGT lines (using hand digging or Guzzler, latest approved revision) (ALARACT 1, 4, 5, 6, 13, and 14) vii. Pump skid with connected hydraulic power pack, and OGT lines (ALARACT 1, 4, 6, 12, 13, and 14) viii. Vacuum skid with connected hydraulic power pack (ALARACT 1, 4, 6, 12, 13, and 14) ix. Portable exhauster skid, connect via HVAC ducting to individual tank ventilation exhaust ducts (ALARACTs 1, 4, 6, 12, 13, and 14) x. Electrical cable and electric supply to hydraulic power packs, vessel skid, pump skid, vacuum skid, portable exhauster skid, inlet filter, in-tank cameras, and generator, control instrumentation (ALARACT 5) xi. Air compressor and associated air supply lines to AMS, vessel skid, vacuum skid (ALARACT 5) xii. Instrumentation control room, water distribution sled, instrument electrical skid, diesel generator c. Remove tank equipment installed under this NOC for maintenance, repair, disposal, or re-use for future tank retrievals. (ALARACTs 1, 4, 6, 12, 13, 14, 15 and 16)	Continuous	CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None

Requirement	Compliance Status	Compliance Determination Method
<p>The Annual Possession Quantity is limited to the following radionuclides (Curies/year): Ac 227 4.84E-06 Am 241 4.17E-01 Am 243 4.67E-06 Ba 137 m 1.41E+00 C 14 3.80E-05 Cd 113 m 1.36E-03 Cm 242 3.03E-04 Cm 243 1.45E-05 Cm 244 6.39E-06 Co 60 1.59E-05 Cs 134 1.41E-08 Cs 137 1.49E+00 Eu 152 7.67E-03 Eu 154 3.62E-03 Eu 155 2.69E-01 H 3 1.86E-05 I 129 5.19E-07 Nb 93 m 6.53E-04 Ni 59 1.42E-02 Ni 63 1.33E+00 Np 237 8.11E-07 Pa 231 1.64E-07 Pu 238 1.29E-02 Pu 239 5.76E-01 Pu 240 9.49E-02 Pu 241 7.03E-01 Pu 242 4.85E-06 Ra 226 1.23E-06 Ra 228 3.37E-12 Ru 106 2.58E-09 Sb 125 2.67E-05 Se 79 1.67E-05 Sm 151 5.91E-01 Sn 126 1.06E-04 Sr 90 3.50E+01 Tc 99 2.67E-04 Th 229 1.26E-09 Th 232 9.06E-15 U 232 1.98E-10 U 233 7.54E-12 U 234 7.15E-06 U 235 3.15E-07 U 236 8.27E-08 U 238 7.20E-06 Y 90 7.83E+00 Zr 93 7.35E-04</p>	Continuous	<p>CDM: Field interviews, WDOH approved logs, and verified basis for APQ in NOC application. Comment: None</p>
<p>The total diffuse and fugitive abated emission limit for this Notice of Construction is limited to 1.61E-02 mrem/year to the Maximally Exposed Individual, comprised of 6.76E-03 mrem/year offsite and 9.37E-03 mrem/year onsite. The total unabated diffuse and fugitive emission limit for this Notice of Construction is limited to 1.61E-02 mrem/yr to the Maximally Exposed Individual, comprised of 6.76E-03 mrem/year offsite and 9.37E-03 mrem/year onsite (WAC 246-247-040(5)).</p>	Continuous	<p>CDM: Tracking log and Near Field Monitoring input in the Hanford Site Radiological Air Emissions report. Comment: None</p>
<p>ALARACTs 1, 4, 5, 6, 12, 13, 14, 15, and 16 shall be used as detailed in Condition 3 above [WAC 246-247-040(5)].</p>	Continuous	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None</p>
<p>Soil excavation performed using the Guzzler shall conform to approval conditions and limitations of the latest approved revision to the Guzzler NOC [WAC 246-247-040(5)].</p>	Not Applicable	<p>CDM: N/A Comment: There was no Guzzler used on the Hanford Site in 2006.</p>
<p>Radiological monitoring of all soil excavation work shall be performed and documented to ensure releases remain within releases estimated in the NOC. Soil volume excavated shall be tracked and documented and shall not exceed 8,500 cubic feet. Soil shall be monitored per ALARACT 5. Contamination levels for excavation shall remain on average equal to or less than 1 E+06 dpm beta and 20 dpm alpha [WAC 246-247-040(5)].</p>	Continuous	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p>Radiological monitoring of all pit openings and pit work shall be performed and documented to ensure that maximum pit surface/pit contents contamination levels remain on average below those assumed in NOC release estimates for these activities: (a) 241-C-200 Series Tanks: 1 E+06 dpm Beta/Gamma, 1400 dpm alpha (b) Tank 241-AY-101: 8.5 E+05 dpm Beta/Gamma, 20 dpm alpha No more than 16 C-200 series pit openings shall occur, and no more than four AY-101 pit openings shall occur. These shall be tracked and documented. The total surface area of C-200 Series pits opened plus the surface area of pit contents shall not exceed that used in the NOC support calculations. The total surface area of double-shell tank pits opened plus the surface area of pit contents shall not exceed that used in the NOC support calculations [WAC 246-247-040(5)].</p>	<p>Continuous</p>	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None</p>
<p>Diffuse/Fugitive emissions shall be monitored using the 200 Area near-field ambient air monitors. Sample collection and analysis shall follow that of the near field monitoring program. Analytical results shall be reported in the Annual Air Emissions Report. Any change to this near-field ambient monitoring program must be approved by the department [WAC 246-247-040(5)].</p>	<p>Continuous</p>	<p>CDM: Field interviews and Hanford Site near-facility/field monitoring program. Comment: None</p>
<p>If this emission unit is not in compliance with the standards in WAC 246-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-040(5)) and WAC 246-247-060(5).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility shall notify the department at least seven calendar days prior to any planned preoperational tests of new or modified emission units that involve emissions control, monitoring, or containment systems of the emission unit(s). The department reserves the right to witness or require preoperational tests involving the emissions control, monitoring, or containment systems of the emissions unit(s) (WAC 246-247-060(4)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national standards (WAC 246-247-075(6)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL quality assurance program, records, and procedures. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The department retains the right to conduct stack sampling, environmental monitoring or other testing around this unit to assure compliance. If directed by the department, the facility must make provision for such testing (WAC 246-247-075(9) and (10)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility must be able to demonstrate that workers associated with this emission unit are trained in the use and maintenance of control and monitoring systems, and in the performance of associated tests and emergency procedures (WAC 246-247-075(12)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL training program, training records, work controls, and procedures. Comment: None</p>
<p>All facilities must be able to demonstrate the reliability and accuracy of emissions monitoring data (WAC 246-247-075(13)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL quality assurance program, records, and procedures. Comment: None</p>
<p>The department reserves the right to inspect and audit all construction activities, equipment, operations, documents, data and other records related to compliance with the requirements of this chapter (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility must meet all reporting and record keeping requirements of 40 CFR 61, Subpart H. (WAC 246-247-080(2)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL records management and procedures. Comment: None</p>
<p>The facility shall report all measured or calculated emissions annually (WAC 246-247-080(3)).</p>	<p>Continuous</p>	<p>CDM: The annual "Radionuclide Air Emissions Report" for the Hanford Site. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
The facility shall notify the department within twenty-four hours of any shutdown, or of any transient abnormal condition lasting more than four hours or other change in facility operations which, if allowed to persist, would result in emissions of radioactive material in excess of applicable standards or license requirements (WAC 246-247-080(5)).	Continuous	CDM: Field interviews, CH2M HILL notification procedures, and notification logbook. Comment: None
The facility shall file a report of closure with the department whenever operations producing emissions of radioactive material are permanently ceased at any emission unit (except temporary emission units) regulated under this chapter. The closure report shall indicate whether, despite cessation of operations, there is still a potential for radioactive air emissions and a need for an active or passive ventilation system with emission control and/or monitoring devices. If decommissioning is planned and will constitute a modification, a NOC is required, as applicable, in accordance with WAC 246-247-060. (WAC 246-247-080(6))	Not Applicable	CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.
The facility shall maintain readily (promptly) retrievable storage areas (on site) for all records and documents related to, and which may help establish compliance with, the requirements of this chapter. The facility shall keep these records available for department inspection for at least five years (WAC 246-247-080(8)).	Continuous	CDM: CH2M HILL records management and procedures. Comment: None
The facility shall ensure all emissions units are fully accessible to department inspectors. In the event the hazards associated with accessibility to a unit require training and/or restriction or requirements for entry, the facility owner or operator shall inform the department, prior to arrival, of those restrictions or requirements. The owner or operator shall be responsible for providing the necessary training, escorts, and support services to allow the department to inspect the facility. At a minimum for unannounced inspections, such requirements or restrictions must be told to inspectors to provide an opportunity for inspectors to meet those requirements prior to the inspection (WAC 246-247-080(9)).	Not Applicable	CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.
The facility shall make available, in timely manner, all documents requested by the department for review. The facility shall allow the department to review documents in advance of an inspection. The facility shall allow access to classified documents by representatives of the department with the appropriate security clearance and a demonstrable need-to-know (WAC 246-247-080(10)).	Continuous	CDM: CH2M HILL records management and procedures. Comment: None
The condenser pit filter shall be withdrawn into a fully enclosed plastic sleeving. Once removed, the sleeve enclosing the filter shall be pigtailed, sealed, and disposed of within a mixed waste disposal box. The filter shall not be exposed to the environment. The condenser pit filter removal activities shall use ALARACTS 1, 4, 6, 13, 14, and 15 as guidance for contamination levels and controls.	Continuous	CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None

Requirement	Compliance Status	Compliance Determination Method
<p>A work place air sampler shall be in operation during all condenser pit filter removal activities. The air sampler shall be placed in the downwind direction.</p>	<p>Continuous</p>	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None</p>
<p>A health physics technician shall be present during all condenser pit filter removal activities. Any contamination levels or dose rate readings exceeding the radiation work permit limits shall be notified to WDOH.</p>	<p>Continuous</p>	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, radiation work permit, and procedures. Comment: None</p>
<p>Prior to moving the HIHTL the lines shall be flushed and checked by a health physics technician to ensure minimal contamination. The valve on the tank manifold box shall be closed and the end of the line shall be wrapped in plastic, then removed from the manifold. The HIHTL will then be hooked up to the next tank.</p>	<p>Continuous</p>	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, radiation work permit, and procedures. Comment: None</p>
<p>One liquid level reel per tank, one thermocouple assembly per tank, one condenser pit filter per tank, and a sluice pump in 241-C-204, may be removed. If the total adherent waste volume basis used in the supporting calculations for equipment removal is not exceeded, other equipment removals may be performed as noted in Condition 3, Item c. [WAC 246-247-040(5)].</p>	<p>Continuous</p>	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, NOC calculations, logs, and procedures. Comment: None</p>
<p>All facilities with licensed emission units, except for radioactive materials licensees, shall submit a request to the department for renewal of their radioactive air emissions license at least sixty days prior to expiration of the license or as required by the Air Operating Permit. All renewal requests shall include a summary of the operational status of all emission units, the status of facility compliance with the standards of WAC 246-247-040, and the status of any corrective actions necessary to achieve compliance with the requirements of this chapter. Facilities with licensed emission units that also hold a radioactive materials license issued by the department shall submit this information along with their radioactive material license renewal submittal. If the department is unable to renew a radioactive air emissions license before its expiration date, the existing license, with all of its requirements and limitations, remains in force until the department either renews or revokes the license (WAC 246-247-060(9)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>

Requirement	Compliance Status	Compliance Determination Method
All radioactive air emissions licenses issued by the department, except those issued to radioactive materials licensees, shall have an expiration date of five years from date of issuance or as specified in the Air Operating Permit. For radioactive material licensees, the requirements and limitations for the operation of emission units shall be incorporated into their radioactive materials license, and shall expire when the radioactive materials license expires (WAC 246-247-060(6)).	Not Applicable	CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.
The Annual Possession Quantity shall be tracked on a WDOH approved log.	Continuous	CDM: Field interviews and WDOH approved log for APQ tracking. Comment: None
<p align="center">Permit: AIR 04-503 Issue Date:05-17-04 Obsolete Date: 07-05-06 NOC: 241-S-102 Installation and Operation of Waste Retrieval Systems WDOH NOC ID: 567 Date In AOP: 04-11-05 Page in AOP: H-0938</p>		
Requirement	Compliance Status	Compliance Determination Method
The U.S. Department of Energy shall comply with all Conditions and Limitations of this license (WAC 246-247-060(5)).	Continuous	CDM: Field interviews, and complied with all conditions and limitations in this NOC approval. Comment: None
The total abated emission limit for this Notice of Construction is limited to 1.80E-01 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 8.40E+01 mrem/year to the Maximally Exposed Individual (WAC 246-247-030(21)).	Continuous	CDM: The annual "Radionuclide Air Emissions Report" for the Hanford Site. Comment: None
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. The salt cake dissolution activity associated with 241-S-102 shall include the following: pit work, soil excavation, in-tank equipment installation/removal, water dilution, and waste transfers. Pit Work (Diffuse and Fugitive): - Open the 241-S-102B Distributor pit and cut flange in riser with hold saw or plasma cutter, to install instrumentation manifold and new progressive cavity transfer pump (ALARACT 1, 6, 12, 13, 14); - Open the two 241-S-102 Condenser pits to replace two existing cover plates with new cover plates. Connect the passive breather filter assembly and connect the trunk of the portable exhauster (ALARACT 4, 6, 14); - Open the 241-S-A Valve pit, and connect the HIHTL from the 241-S-102 tank to the DST system (ALARACT 6, 14). Soil Excavation (Diffuse and Fugitive): - Excavate trenches for tie-in of instrumentation and power systems (ALARACT 5); - Excavate for HIHTL placement from 241-S-102 to 241-S-A Valve pit (ALARACT 5). Other Equipment Installation/Removal (Diffuse and Fugitive): - Install motor controlled spray devices in three risers near the outside perimeter of tank 241-S-102 (ALARACT 1, 13); - Install automatic spray indexing device in a central riser (ALARACT 1, 13); - Remove motor controlled and automatic spray indexing devices if necessary (ALARACT 1, 13); - Place water distribution skid and connect to the raw water header between 241-SY and 241-S tank farms. Connect water distribution skid to	Continuous	CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None

Requirement	Compliance Status	Compliance Determination Method
<p>spray devices. - Remove standard hydrogen monitoring system vapor probe (ALARACT 4, 15, 13); - Place and hook up exhauster and exhauster system; - Remove unused flammable gas cabinet (per Tank Farm Radcon Control Manual, HNF 5183); - Place Field Instrument Electrical Skid and connect associated cabling; - Install stilling well for Enraf Liquid Indicating Transmitter (ALARACT 1, 13); - Install camera monitoring system (ALARACT 1,13); - Remove Liquid Observation Well if necessary (ALARACT 1, 13). Water Dilution and Waste Transfer: - Water shall be sprayed onto the surface of the in-tank salt cake to dissolve the cake; - The new progressive cavity pump and HIHTL shall be used to transfer waste from tank 241-S-102 to the DST (ALARACT 11); - Operation and maintenance of the portable exhauster(s). Waste Transfer (S102): - The new progressive cavity pump and HIHTL shall be used to transfer waste from tank 241-S-102 to the DST (ALARACT 11).</p>		
<p>The Annual Possession Quantity is limited to the following radionuclides (Curies/year): Am- 241 2.53E-02 Sr- 90 2.51E-01</p>	Continuous	<p>CDM: Field interviews, WDOH approved logs, and verified basis for APQ in NOC application. Comment: None</p>
<p>The total diffuse and fugitive abated emission limit for this Notice of Construction is limited to 4.32E-04 mrem/year to the Maximally Exposed Individual. The total unabated diffuse and fugitive emission limit for this Notice of Construction is limited to 4.32E-04 mrem/year to the Maximally Exposed Individual (WAC 246-247-040(5)).</p>	Continuous	<p>CDM: The annual "Radionuclide Air Emissions Report" for the Hanford Site. Comment: None</p>
<p>ALARACTs 1, 4, 5, 6, 11, 12, 13, 14, 15, and 16 shall be used as detailed in Condition 3 above [WAC 246-247-040(5)].</p>	Continuous	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None</p>
<p>Radiological monitoring of all soil excavation work shall be performed and documented to ensure releases remain within releases estimated in the NOC. Soil volume excavated shall be tracked and documented and shall not exceed 1,000 cubic feet. Soil shall be monitored per ALARACT 5. Contamination levels for excavation shall remain on average equal to or less than: 8.0 E -04 dpm/100 sq. cm. Beta 2.0 E+02 dpm/100 sq. cm. Alpha [WAC 246-247-040(5)].</p>	Continuous	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, WDOH approved logs, and procedures. Comment: None</p>
<p>Radiological monitoring of all pit openings and pit work shall be performed and documented to ensure that maximum pit surface/pit contents contamination levels remain on average below those assumed in NOC release estimates for these activities: 1.0 E+05 dpm/100 sq. cm. Beta/Gamma 20 dpm/100 sq. cm. Alpha No more than 10 pit openings shall occur. These shall be tracked and documented. The total surface area of pits opened plus the surface area of pit contents shall not exceed 5,000 square feet [WAC 246-247-040(5)].</p>	Continuous	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
Diffuse/Fugitive emissions shall be monitored using the 200 Area near-field ambient air monitors. Sample collection and analysis shall follow that of the near field monitoring program. Analytical results shall be reported in the Annual Air Emissions Report. Any change to this near-field ambient monitoring program must be approved by the department.	Continuous	CDM: Hanford Site near-facility/field monitoring program. Comment: None
Containments shall be used in removing the hydrogen probe, the motor controlled spray devices, and the automatic spray indexing devices from the tank [WAC 246-247-040(5)].	Continuous	CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None
These Conditions and Limitations must be documented in an established procedure prior to starting activities granted by this approval (WAC 246-247-040(5)) and (WAC 246-247-060(5)).	Continuous	CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None
If this emission unit is not in compliance with the standards in WAC 246-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-060-(2)(d)).	Not Applicable	CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.
The facility shall notify the department seven days in advance of any planned pre-operational testing of the emission unit's control, monitoring or containment systems. The department reserves the right to observe such tests (WAC 246-247-060(4)).	Not Applicable	CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.
The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national standards (WAC 246-247-075(6)).	Continuous	CDM: CH2M HILL quality assurance program, records, and procedures. Comment: None

Requirement	Compliance Status	Compliance Determination Method
The department retains the right to conduct stack sampling, environmental monitoring or other testing around this unit to assure compliance. If directed by the department, the facility must make provision for such testing (WAC 246-247-075(9) and (10)).	Not Applicable	CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.
The facility must be able to demonstrate that workers associated with this emission unit are trained in the use and maintenance of control and monitoring systems, and in the performance of associated tests and emergency procedures (WAC 246-247-075(12)).	Continuous	CDM: CH2M HILL training program, training records, work controls, and procedures. Comment: None
The facility must be able to demonstrate the reliability and accuracy of emissions data and other test results from this emission unit (WAC 246-247-075(13)).	Continuous	CDM: CH2M HILL quality assurance program, records, and procedures. Comment: None
The department reserves the right to inspect and audit all construction activities, equipment, operations, documents, data and other records related to compliance with the requirements of this chapter (WAC 246-247-080(1)).	Not Applicable	CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.
The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).	Not Applicable	CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.
The facility must meet all reporting and record keeping requirements of 40 CFR 61, Subpart H. (WAC 246-247-080(2)).	Continuous	CDM: CH2M HILL records management and procedures. Comment: None
The facility shall report all measured or calculated emissions annually (WAC 246-247-080(3)).	Continuous	CDM: The annual "Radionuclide Air Emissions Report" for the Hanford Site. Comment: None

Requirement	Compliance Status	Compliance Determination Method
<p>The facility shall report to the department within 24 hours, any unexpected release of radioactivity, shutdown or other condition that, if allowed to persist, or lasts more than four hours, would result in the emission of radionuclides in excess of any standards or limitation in the license. Applicable standards (WAC 246-247-040) include unit specific emission limits (paragraph 5), the offsite dose standard (paragraph 1), BARCT (paragraph 3), or ALARACT (paragraph 4), whichever is applicable, or any limitation included in this approval (paragraph 5), (WAC 246-247-080(5)).</p>	Continuous	<p>CDM: Field interviews, CH2M HILL notification procedure, and notification logbook. Comment: None</p>
<p>Prior to permanent shut down of an emission unit or completion of an activity, the permittee shall file a report of closure with the Department of Health. The report of closure shall include the date of the shutdown and indicate whether, despite cessation of operation, there is still a potential for radioactive air emissions and a need for any active or passive ventilation system with emission control and/or monitoring devices. An emission unit or activity will not be considered permanently shut down or completed until a report of closure is received and approved by Health. Once an emission unit is permanently shut down or an activity is completed, thereby rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the shutdown or completion, to meet any monitoring, record keeping, and reporting requirements which are no longer applicable for that emission unit or activity. All records, relating to the shut down emission unit or completion of an activity, generated while the emission unit or activity was in operation, shall be kept in accordance with (WAC 246-247-080(8)). (WAC 246-247-080(6))</p>	Not Applicable	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility shall maintain readily (promptly) retrievable storage areas (on site) for all records and documents related to, and which may help establish compliance with, the requirements of this chapter. The facility shall keep these records available for department inspection for at least five years (WAC 246-247-080(8)).</p>	Continuous	<p>CDM: CH2M HILL records management and procedures. Comment: None</p>
<p>The facility shall ensure all emissions units are fully accessible to department inspectors. In the event the hazards associated with accessibility to a unit require training and/or restriction or requirements for entry, the facility owner or operator shall inform the department, prior to arrival, of those restrictions or requirements. The owner or operator shall be responsible for providing the necessary training, escorts, and support services to allow the department to inspect the facility. At a minimum for unannounced inspections, such requirements or restrictions must be told to inspectors to provide an opportunity for inspectors to meet those requirements prior to the inspection (WAC 246-247-080(9)).</p>	Not Applicable	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>

Requirement	Compliance Status	Compliance Determination Method
The facility shall make available, in timely manner, all documents requested by the department for review. The facility shall allow the department to review documents in advance of an inspection. The facility shall allow access to classified documents by representatives of the department with the appropriate security clearance and a demonstrable need-to-know (WAC 246-247-080(10)).	Continuous	CDM: CH2M HILL records management and procedures. Comment: None

200 Area Diffuse/Fugitive - TRU Retrieval
WDOH Emission Unit ID : 486
Page in AOP : H-1004

Requirement	Compliance Status	Compliance Determination Method
No active Abatement Controls in the AOP for this certification period.		
Required Sampling: Existing near-facility monitoring stations. Sampling Frequency: As listed in the Conditions and Limitations. Radionuclide Requiring Measurement: All radionuclides which could contribute 10% of the potential TEDE.	Continuous	CDM: Required near-facility monitoring was conducted as reported in the ABCASH database. Comment:
Federal and State Regulatory Requirement: WAC 246-247-075(3) Permit Monitoring and Testing Procedure: Appendix B, Method 114	Continuous	CDM: HNF-EP-0528-7 "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions". Comment:

Permit: AIR 03-1206 **Issue Date:** 12-09-03 **Effective Date:** 01-14-04 **Obsolete Date:** 07-05-06
NOC: Operation of the Transuranic Waste Retrieval Project
WDOH NOC ID: 582 **Date In AOP:** 04-11-05 **Page in AOP:** H-1004

Requirement	Compliance Status	Compliance Determination Method
The U.S. Department of Energy shall comply with all Conditions and Limitations of this license (WAC 246-247-060(5)).	Continuous	CDM: For this approval order, in compliance with all approval conditions. Comment:
The total abated emission limit for this Notice of Construction is limited to 4.30E-03 mrem/year to the Maximally Exposed Individual (WAC 246-247-040(5)).	Continuous	CDM: Annual evaluation of retrieval rates, containers/curies managed. Comment:
The PTE for this project as determined under WAC 246-247-030(21)(a-e) [as specified in the application] is 5.40E-02 mrem/year. Approved are the associated potential release rates (Curies/year) of: Alpha- 0 1.40E-04 Liquid/Particulate Solid WAC 246-247-030(21)(e) Alpha release rate based on Am-241. Release rate for installation of Nucfil filters using the Dart	Continuous	CDM: Annual evaluation of retrieval rates, containers/curies managed. Comment:

Requirement	Compliance Status	Compliance Determination Method
<p>System. See Condition 38. Alpha- 0 3.30E-05 Liquid/Particulate Solid WAC 246-247-030(21)(a) Alpha release rate based on Am-241. Release rate for excavation of soil (contamination detected). See condition 39. Alpha- 0 6.70E-05 Liquid/Particulate Solid WAC 246-247-030(21)(a) Alpha release rate based on Am-241. Release rate for excavation of soil (Higher contamination level, controls required). See condition 39. Alpha- 0 9.40E-05 Liquid/Particulate Solid WAC 246-247-030(21)(a) Alpha release rate based on Am-241. Release rate for excavation of soil (notification level). See condition 39. Alpha- 0 2.80E-05 Solid WAC 246-247-030(21)(e) Release rate based on Am-241. Release rate for staging/handling vented containers. See Condition 37. B/G- 0 2.10E-03 Liquid/Particulate Solid WAC 246-247-030(21)(c) Beta/Gamma release rate based on Cs-137. Release rate for installation of Nucfil filters using the Dart System. See condition 38. B/G- 0 2.20E-04 Liquid/Particulate Solid WAC 246-247-030(21)(a) Beta/Gamma release rate based on Cs-137. Release rate for excavation of soil (contamination detected). See condition 39. B/G- 0 4.40E-04 Liquid/Particulate Solid WAC 246-247-030(21)(a) Beta/Gamma release rate based on Cs-137. Release rate for excavation of soil (Higher contamination level, controls required). See condition 39. B/G- 0 6.20E-04 Liquid/Particulate Solid WAC 246-247-030(21)(a) Beta/Gamma release rate based on Cs-137. Release rate for excavation of soil (notification level). See condition 39. Beta- 0 4.10E-04 Solid WAC 246-247-030(21)(e) Release rate based on Cs-137. Release rate for staging/handling vented containers. See Condition 37. The radioactive isotopes identified for this emission unit are (no quantities specified): Am- 241 Am- 243 Cf- 252 Cm- 244 Cs- 134 Cs- 137 Eu- 152 Eu- 154 Pu- 238 Pu- 239/240 Pu- 241 Sr- 90 U- 234 U- 235 U- 236 U- 238 The potential release rates described in this Condition were used to determine control technologies and monitoring requirements for this approval. DOE must notify the Department of a "modification" to the emission unit, as defined in WAC 246-247-030(16). DOE must notify the Department of any changes to a NESHAP major emission unit when a specific isotope is newly identified as contributing greater than 10% of the potential TEDE to the MEI, or greater than 25% of the TEDE to the MEI after controls. WAC 246-247-110(9). DOE must notify the Department of any changes to potential release rates as required by state or federal regulations including changes that would constitute a significant modification to the Air Operating Permit under WAC 173-401-725(4). Notice will be provided according to the particular regulation under which notification is required. If the applicable regulation(s) does not address manner and type of notification, DOE will provide the Department with advance written notice by letter or electronic mail but not solely by copies of documents.</p>		
<p>The department retains the right to conduct stack sampling, environmental monitoring or other testing around this unit to assure compliance. If directed by the department, the facility must make provision for such testing (WAC 246-247-075(9) and (10)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH determined the licensee need not certify compliance with conditions conveying a right, are a historical summary or fact, pertaining to actions to be completed in the future, or pertaining to actions required of the agency.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The department reserves the right to inspect and audit all construction activities, equipment, operations, documents, data and other records related to compliance with the requirements of this chapter (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH determined the licensee need not certify compliance with conditions conveying a right, are a historical summary or fact, pertaining to actions to be completed in the future, or pertaining to actions required of the agency.</p>
<p>The facility must meet all reporting and record keeping requirements of 40 CFR 61, Subpart H. (WAC 246-247-080(2)).</p>	<p>Continuous</p>	<p>CDM: For calculations and input data from stack and ambient air monitors, the ERS electronic system. Information from other than stacks and ambient air monitors resides at the individual facility. For annual reporting DOE/RL-2007-01 Radionuclide Air Emissions Report for the Hanford Site Calendar Year 2006 satisfies the requirement. Comment:</p>
<p>The facility shall notify the department within twenty-four hours of any shutdown, or of any transient abnormal condition lasting more than four hours or other change in facility operations which, if allowed to persist, would result in emissions of radioactive material in excess of applicable standards or license requirements (WAC 246-247-080(5)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: No reports required.</p>
<p>The facility shall maintain readily (promptly) retrievable storage areas (on site) for all records and documents related to, and which may help establish compliance with, the requirements of this chapter. The facility shall keep these records available for department inspection for at least five years (WAC 246-247-080(8)).</p>	<p>Continuous</p>	<p>CDM: WDOH has requested information and records during past inspections and records promptly were made available. Records are maintained per HNF-RD-210. Comment:</p>
<p>The facility shall make available, in timely manner, all documents requested by the department for review. The facility shall allow the department to review documents in advance of an inspection. The facility shall allow access to classified documents by representatives of the department with the appropriate security clearance and a demonstrable need-to-know (WAC 246-247-080(10)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: No documents requested.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>All radioactive air emissions licenses issued by the department, except those issued to radioactive materials licensees, shall have an expiration date of five years from date of issuance or as specified in the Air Operating Permit. For radioactive material licensees, the requirements and limitations for the operation of emission units shall be incorporated into their radioactive materials license, and shall expire when the radioactive materials license expires (WAC 246-247-060(6)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Nothing facility specific to certify.</p>
<p>The facility must be able to demonstrate that workers associated with this emission unit are trained in the use and maintenance of control and monitoring systems, and in the performance of associated tests and emergency procedures (WAC 246-247-075(12)).</p>	<p>Continuous</p>	<p>CDM: Training records. Comment:</p>
<p>If this emission unit is not in compliance with the standards in WAC 246-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-040(5)) and WAC 246-247-060(5)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH determined the licensee need not certify compliance with conditions conveying a right, are a historical summary or fact, pertaining to actions to be completed in the future, or pertaining to actions required of the agency.</p>
<p>The facility shall notify the department at least seven calendar days prior to any planned preoperational tests of new or modified emission units that involve emissions control, monitoring, or containment systems of the emission unit(s). The department reserves the right to witness or require preoperational tests involving the emissions control, monitoring, or containment systems of the emissions unit(s) (WAC 246-247-060(4)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: No planned pre-operational testing occurred during reporting period.</p>
<p>The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national standards (WAC 246-247-075(6)).</p>	<p>Continuous</p>	<p>CDM: HNF-EP-0528-7 "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions". Comment:</p>
<p>All facilities must be able to demonstrate the reliability and accuracy of emissions monitoring data (WAC 246-247-075(13)).</p>	<p>Continuous</p>	<p>CDM: HNF-EP-0528-7 "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions". Comment:</p>

Requirement	Compliance Status	Compliance Determination Method
The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).	Not Applicable	<p>CDM: N/A Comment: Ecology and WDOH determined the licensee need not certify compliance with conditions conveying a right, are a historical summary or fact, pertaining to actions to be completed in the future, or pertaining to actions required of the agency.</p>
The facility shall report all measured or calculated emissions annually (WAC 246-247-080(3)).	Continuous	<p>CDM: DOE/RL-2007-01 "Radionuclide Air Emissions Report for the Hanford Site Calendar Year 2006". Comment:</p>
The facility shall file a report of closure with the department whenever operations producing emissions of radioactive material are permanently ceased at any emission unit (except temporary emission units) regulated under this chapter. The closure report shall indicate whether, despite cessation of operations, there is still a potential for radioactive air emissions and a need for an active or passive ventilation system with emission control and/or monitoring devices. If decommissioning is planned and will constitute a modification, a NOC is required, as applicable, in accordance with WAC 246-247-060. (WAC 246-247-080(6))	Not Applicable	<p>CDM: N/A Comment: Ecology and WDOH determined the licensee need not certify compliance with conditions conveying a right, are a historical summary or fact, pertaining to actions to be completed in the future, or pertaining to actions required of the agency.</p>
The facility shall ensure all emissions units are fully accessible to department inspectors. In the event the hazards associated with accessibility to a unit require training and/or restriction or requirements for entry, the facility owner or operator shall inform the department, prior to arrival, of those restrictions or requirements. The owner or operator shall be responsible for providing the necessary training, escorts, and support services to allow the department to inspect the facility. At a minimum for unannounced inspections, such requirements or restrictions must be told to inspectors to provide an opportunity for inspectors to meet those requirements prior to the inspection (WAC 246-247-080(9)).	Not Applicable	<p>CDM: N/A Comment: No WDOH inspections occurred during the reporting period.</p>
Diffuse/Fugitive emissions shall be monitored using the 200 Area near-field ambient air monitors. Sample collection and analysis shall follow that of the near field monitoring program. Analytical results shall be reported in the Annual Air Emissions Report. Any change to this near-field ambient monitoring program must be approved by the department.	Continuous	<p>CDM: Required near-facility monitoring conducted as reported in DOE/RL-2007-01 "Radionuclide Air Emissions Report for the Hanford Site Calendar Year 2006". Comment:</p>

Requirement	Compliance Status	Compliance Determination Method
<p>All facilities with licensed emission units, except for radioactive materials licensees, shall submit a request to the department for renewal of their radioactive air emissions license at least sixty days prior to expiration of the license or as required by the Air Operating Permit. All renewal requests shall include a summary of the operational status of all emission units, the status of facility compliance with the standards of WAC 246-247-040, and the status of any corrective actions necessary to achieve compliance with the requirements of this chapter. Facilities with licensed emission units that also hold a radioactive materials license issued by the department shall submit this information along with their radioactive material license renewal submittal. If the department is unable to renew a radioactive air emissions license before its expiration date, the existing license, with all of its requirements and limitations, remains in force until the department either renews or revokes the license (WAC 246-247-060(9)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Nothing facility specific to certify.</p>
<p>This approval applies to these additional 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. TRU Waste Retrieval The area to be excavated is managed as a 'clean' area, free of surface contamination measurable with field survey instruments. Because of the possibility of encountering previously undetected subsurface contamination, or future contamination from windblown sources, all work will be performed in accordance with as low as reasonably achievable (ALARA) requirements as determined by the Radiological Control organization. These requirements shall be carried out through the activity work packages and associated radiological work permits (RWP) which will be managed as required retrievable records for this activity. The overburden soil will be removed to expose the waste containers. Excavation equipment will be chosen to effectively remove soil and retrieve the waste containers while minimizing damage to the containers. Excavation activities will be monitored to identify contamination that might be present and to minimize emissions. Any contaminated soils will be managed in accordance with applicable requirements and regulations. The most efficient methodology for removing the uncontaminated overburden from the containers will include the maximum use of conventional methods such as backhoes, frontend loaders, mechanical brooms (boom mounted), or manual digging with shovels and similar hand tools. Only manual methods (hand tools) shall be used to excavate contaminated soil. All facilities must be able to demonstrate the reliability and accuracy of emissions monitoring data (WAC 246-247-075(13)). The specific steps or approach to uncovering the containers will vary according to the configuration of the trench to be uncovered, the nearby trenches or fences, the designated location of the spoils pile, the planned extent of the soil removal, etc. Therefore, excavation activities will be planned before arriving at the job site. Excavation activities will be controlled closely. When the quantity of soil removed with heavy equipment has reached the logical end, hand tools or HVUs could be used to complete the uncontaminated soil removal operations to access and remove the plastic and plywood materials (to be set aside for reuse or disposal) covering the containers. The exposed containers will be visually inspected and surveyed for contamination. Abnormal drum conditions will be managed as follow: Contaminated containers will be decontaminated or overpacked. Bulging or potentially pressurized containers will be vented as described in the Venting Containers Section. Retrieval activities will include appropriate disposition of small amounts of incidental contaminated soil (e.g., containerized or fixed in place). Larger areas of contamination shall be fixed and the area posted as required by the Radiological Control organization for later disposition. Bulk transfer of contaminated soils for disposal in another trench also could occur. All containers will be inspected to verify integrity.</p>	<p>Continuous</p>	<p>CDM: Comment: This is a description of retrieval operations. These activities are encompasses by many procedures and radiological survey plans. Periodic review and approval of these documents by the ECO demonstrates compliance.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The container inspection will consist of a visual examination to determine if there are significant corrosion, holes, dents or other visual deformities. All containers may be moved, turned, or otherwise relocated (manually or with powered equipment, slings, clamps, or appropriate rigging) to facilitate an adequate visual inspection. Overpacking containers with minor defects (pinholes, corrosion) is routinely performed at the LLBG and CWC and is expected for up to 10 to 50 percent of the retrieved containers. Precautions will be provided to safely retrieve containers of questionable integrity. The process description for management of abnormal containers will be maintained in written procedures. Operating procedures will be established to safely deal with these containers. Containers that obviously are reached or deformed also will be safely removed. Removal methods will be determined on a case-by-case basis. A breached container that can provide secure confinement will be relocated to an area for repackaging or overpacking. If the container cannot provide adequate confinement for the contents, the container and contents will be overpacked before being relocated. The overpacked containers will be managed according to the LLW (including mixed waste) or TRU waste designation (TRU containers are those with TRU content greater than 100 nCi/g), established by records or assay. After a container is inspected visually and the structural integrity established, the container (if shown by assay or records to be designated as TRU) will be staged for venting, if necessary, or moved to another TSD unit for venting. Retrieved TRU waste containers in their staged configuration at the LLBG will be inspected for outwardly visible signs of corrosion or degradation (overpacking as needed).</p>		
<p>This approval applies to these additional 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. Venting of Containers All work shall be performed in accordance with the LLBG radiological control procedures and ALARA requirements. These requirements are carried out through the procedures, activity work packages, and associated RWPs. The vent filters will be installed in designated containers by using the Drum Venting System (DVS) and/or Dart System. The methodology will require penetrating the container and inserting a vent. Penetration of the lid will be accomplished by either drilling through the lid with a filter assembly fitted with a short hollow drill bit (using DVS) or puncturing the lid with a filter dart (using Dart system). Either method will result in emissions being routed through a filter during the venting process. Most drums slated for venting will be vented with the DVS, consisting of a trailer with a chamber allowing an operator to sample the drum (screening HSGS for hydrogen content) and install a NucFil filter. Potential emissions from these operations are point source emissions. Bulging or potentially pressurized drums will be evaluated to determine best method and location to vent (Dart-in place, Dart-relocate, or move to the DVS). The Dart System is a portable unit that straps directly onto a drum, using a pneumatic driver remotely activated by wire or radio transmitter. This system penetrates the drum lid without risk of contamination release to install a NucFil filter with an aluminum bronze housing to prevent the possibility of sparking. Potential emissions from these operations will be considered diffuse and fugitive. The same Dart System will be used to install sample ports, consisting of a closure set screw covering a septum for withdrawing a sample for HSGS, in containers with existing vents at the LLBG, CWC, WRAP, or T Plant Complex, without creating a new pathway for potential emissions.</p>	<p>Continuous</p>	<p>CDM: Comment: This is a description of retrieval operations. These activities are encompassed by many procedures and radiological survey plans. Periodic review and approval of these documents by the ECO demonstrates compliance.</p>
<p>Health physics technician (HPT) coverage will be provided during the excavation activities, continuously when in close proximity to containers.</p>	<p>Continuous</p>	<p>CDM: Documented via procedure. Comment:</p>

Requirement	Compliance Status	Compliance Determination Method
Both alpha and beta/gamma surveys shall be performed for all removable contamination surveys and for soil surveys (direct reading). Alpha surveys alone shall be performed for direct readings of container surfaces. Beta/gamma direct readings are influenced by container contents, so are not as useful and are not required.	Continuous	CDM: Documented via procedure. Comment:
Dust controls such as water, fixatives, covers, or windscreens will be applied, as determined by the Radiological Control organization.	Continuous	CDM: Documented via procedure. Comment:
Spoil piles containing contaminated soil will be segregated from the clean soil and dust controls such as water, fixatives, or covers will be applied at the end of each shift or when sustained or predicted windspeeds are >20 mph. Containerizing spoils for disposal may be performed.	Continuous	CDM: Contaminated soil packaged per plant operating procedure SW-100-134. Comment: Contaminated soil has not been placed into spoil piles.
Manual methods will be used to excavate soil in close proximity to containers (after overburden is removed).	Continuous	CDM: Documented via procedure. Comment:
Operational limits for TRU retrieval (contamination levels) will be established in the activity work packages and associated RWPs. Fixatives or other controls will be employed if contamination levels (other than spot contamination) exceed 100,000 disintegrations per minute per 100 square centimeters (dpm/100 cm ²) beta/gamma or exceed 2,000 dpm/100 cm ² alpha.	Continuous	CDM: Survey plans, survey reports and radiological work permits. Comment:
Excavation activities will be stopped if contamination (other than spot contamination) with detection readings greater than 500,000 dpm/100 cm ² beta/gamma or greater than 28,000 dpm/100 cm ² alpha is encountered. Excavation will not continue at that site (but may proceed at other sites) until an internal review of the work and encountered conditions has been performed and an internal determination has been made that no threat to personnel safety or the environment exists, or until proper controls (i.e., removal and disposal, water, fixatives, or covers) have been put in place to mitigate any further potential for emissions; and the WDOH has been contacted and briefed of the situation.	Continuous	CDM: Survey plans, survey reports and radiological work permits. Comment:
WDOH will be notified per WAC 246-247-080(5) if a loss of containment occurs (dropping, spilling, puncturing a container, or otherwise encountering loss of integrity where contamination escapes containment), which exceeds 100,000 dpm/100 cm ² beta/gamma or 2,000 dpm/100 cm ² alpha removable contamination.	Continuous	CDM: There had been instances as described during the reporting period in which notification to WDOH was made. The FH single POC and ONC would have records of these notifications. Comment:

Requirement	Compliance Status	Compliance Determination Method
<p>The process description for management of abnormal containers will be maintained in written procedures. Operating procedures will be established to safely deal with these containers. These procedures will be provided to the department for review prior to operations under this license.</p>	<p>Continuous</p>	<p>CDM: Procedures. Comment: Procedure were provided via email on 12/10/2003.</p>
<p>It is recognized that other radionuclides may be present in very limited quantities.</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Nothing facility specific to certify.</p>
<p>Additional monitoring for the diffuse and fugitive emissions will consist of radiological surveys from the soil excavation activities.</p>	<p>Continuous</p>	<p>CDM: Radiological survey reports. Comment:</p>
<p>The department shall be notified within 24 hours of all drum vents that fail to be installed properly when using the dart system (an example of a "failure" would be where the Dart is used in a thin or corroded spot where the dart punches a hole through the lid).</p>	<p>Continuous</p>	<p>CDM: There had been instances as described during the reporting period in which notification to WDOH was made. The FH single POC and ONC would have records of these notifications. Comment:</p>
<p>A maximum of 11,000 vented containers of waste (including 1,000 containers that are not designated s TRU waste, which could be retrieved with vents in place) are approved to be retrieved per year. Once vented, the containers are allowed to be staged with the other retrieved containers for further handling, resulting in the staging/storage of a maximum of 11,000 vented containers per year at the LLBG. Using an average release fraction of 2.00 E-09 for fugitive emissions from vented containers (as used in the WRAP NOC, DOE/RL-2000-34), the potential unabated release rate from the staging of vented containers is 2.8 E-05 Ci/yr americium-241 and 4.1 E-04 Ci/yr cesium-137. This alternative release fraction is approved for this emission unit.</p>	<p>Continuous</p>	<p>CDM: Annual evaluation of retrieval rates, containers/curies managed. Comment:</p>
<p>A maximum of 1,000 containers/yr are approved to have installation of NucFil filters using the Dart System. The potential unabated release rate from using the Dart System for installation of NucFil filters is 1.4 E-4 Ci/yr americium-241 and 2.1 E-3 Ci/yr cesium-137 and is based on a release fraction of 1.0E-3 and a pressure release time of 1 hour. All of the emissions from a pressurized container are routed through the HEPA-type NucFil filter (certified 99.97% removal efficiency); therefore, the abated release rate is 4.8 E-8 Ci/yr americium-241 and 7.1 E-7 Ci/yr cesium-137. This alternative release fraction is approved for this emission unit.</p>	<p>Continuous</p>	<p>CDM: Annual compliance evaluation. Comment:</p>
<p>The potential unabated release rate from manual excavation is based on a release fraction of 1.0E-3.</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Nothing facility specific to certify.</p>

Requirement	Compliance Status	Compliance Determination Method
Deteriorated containers involving a loss of containment from handling/retrieval of such containers (dropping, spilling, puncturing or crushing a container, where containment is lost, or otherwise encountering loss of containment) have a probability of greater than 1% while excavating the V-Notch Trench. Planning for such incidents shall be addressed prior to performing retrieval work in the horizontal V-notched trench configuration. A new application shall be submitted to the department for approval prior doing any work on the horizontal V-notched trench configuration.	Not Applicable	CDM: N/A Comment: No retrieval from v-notched trenches occurred during the reporting period.
A final of 2003-RSP-TRU-01, Transuranic (TRU) Retrieval Project Survey Plan, will be provided to the department when the document is completed.	Not Applicable	CDM: N/A Comment: This document was provided to WDOH on 1/14/2004.
For bulk transfer of contaminated soils, a backhoe or front-end loader may only be used when the material is wetted during the transfer process.	Not Applicable	CDM: N/A Comment: No bulk transfer of contaminated soil occurred during the reporting period.

200 Area Diffuse/Fugitive - WRAP
WDOH Emission Unit ID : 486
Page in AOP : H-0041

Requirement	Compliance Status	Compliance Determination Method
No active Abatement Controls in the AOP for this certification period.		
Required Sampling: Existing near-facility monitoring stations. Sampling Frequency: NA Radionuclide Requiring Measurement: All radionuclides which could contribute 10% of the potential EDE.	Continuous	CDM: In continuous compliance as stated in AOP Semiannual Reports for CY2006. Comment:

Requirement	Compliance Status	Compliance Determination Method
<p>Federal and State Regulatory Requirement: WAC 246-247-075(3) Permit Monitoring and Testing Procedure: Appendix B, Method 114</p>	Continuous	<p>CDM: DOE/RL-2007-01, Revision 0, "Radionuclide Air Emissions Report for the Hanford Site, Calendar Year 2006" and the "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions" (HNF-EP-0528) satisfy WAC 246-247-075(1). See conditions below for compliance status with the remaining applicable paragraphs of WAC 246-247-075. The "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions" (HNF-EP-0528) specifies both the hardware and method used to sample and the analytical methods used in the laboratory.</p> <p>Comment:</p>

Permit: AIR 02-703 **Issue Date:**07-22-02 **Obsolete Date:** 07-05-06
NOC: Construction and Operation of the Waste Receiving and Processing Facility
WDOH NOC ID: 23 **Date In AOP:** 12-31-02 **Page in AOP:** H-0041

Requirement	Compliance Status	Compliance Determination Method
<p>The U.S. Department of Energy shall comply with all Conditions and Limitations of this license (WAC 246-247-060(5)).</p>	Continuous	<p>CDM: Complied with all conditions in this NOC approval. Comment:</p>
<p>The total abated emission limit for this Notice of Construction is limited to 5.63E-02 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 1.13E+02 mrem/year to the Maximally Exposed Individual (WAC 246-247-030(21)).</p>	Continuous	<p>CDM: Verified that the basis for determining the unabated emissions in the NOC application has not changed. Comment:</p>
<p>This process is limited to: At the WRAP FACILITY-- Examining, assaying, characterizing, treating, verifying, and repackaging solid radioactive material and mixed waste to enable treatment, storage, or disposal of low-level waste (LLW), transuranic (TRU) waste, TRU mixed waste, and low-level mixed waste (LLMW) in contact handled (CH) containers where the external surface dose rate does not exceed 200 millirem per hour. At SHIPPING AND RECEIVING (200 Area Diffuse/Fugitive Emissions)-- Containers delivered to and transferred/shipped from the shipping and receiving shall be unloaded, visually inspected, bar code labeled, and radiologically surveyed with information pertaining to each container entered into the data management system. Following visual inspection, transfer incoming drums to the NDE/NDA area for further characterization using the process described for the NDE/NDA below. Once characterized, verified, and/or certified, the certified TRU waste must be loaded into a transuranic package transporter (TRUPACT-2) shipping cask for shipment to the Waste Isolation Pilot Plant (WIPP) in New Mexico. Verified LLW shall be transferred for</p>	Continuous	<p>CDM: Project procedures. Comment: Process descriptions are contained in procedures. Process did not change during reporting period.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>disposal onsite. Mixed waste must be moved to an offsite treatment or permitted storage facility, or to an onsite treatment, disposal, and/or storage unit. Radioactive material that fails verification shall be returned to the generator, processed to correct the problem, or sent to another facility for further reprocessing. During NONDESTRUCTIVE EXAMINATION/NONDESTRUCTIVE ASSAY SYSTEMS (200 Area Diffuse/Fugitive Emissions)-- The NDE/NDA shall used to examine and to certify LLW, LLMW, TRU, and TRU mixed waste container contents without opening the containers. In the PROCESS AREA (296-W-4 Emission Unit)-- The process area consists of four glovebox lines: a TRU waste process glovebox, a TRU waste restricted waste management (RWM) glovebox, a LLW process glovebox (with supercompaction capability that also can be used for TRU waste processing), and a LLW RWM glovebox. The following is allowed in the process gloveboxes: drums opened, contents sorted and sampled, if necessary, noncompliant items removed and transferred to the RWM gloveboxes, and remaining compliant waste repackaged into new drums. Incoming drums generally shall be opened in gloveboxes. However, loosening of a lid or replace a damaged lid outside of a glovebox is allowed. In the TRANSURANIC WASTE PROCESS LINE-- The TRU waste process glovebox line consists of stainless steel modular gloveboxes bolted together in a linear configuration. Windows shall be gasketed and bolted to the glovebox wall, and gloveports shall be fitted to the glovebox wall and windows to accept push-through type gloves. Glovebox ventilation shall be the once-through type. Air shall be drawn from the process room, through a nontestable high-efficiency process filter, and into the glovebox. The air shall be exhausted from the glovebox through another nontestable high-efficiency process filter to the combined glovebox exhaust system. Process operations shall be performed inside of the gloveboxes by using the gloves and/or remote controlled manipulators. Drums shall be loaded into the glovebox through airlock and sealed-type entry systems. In the TRANSURANIC WASTE RESTRICTED WASTE MANAGEMENT LINE-- The TRU waste RWM glovebox line consists of stainless steel. Window, gloveport, ventilation, and manipulator features shall comply to those described for the TRU waste process line glovebox. Glovebox ventilation shall be the once-through type. Air shall be drawn from the process room, through a nontestable Diffuse/Fugitive process filter, and into the glovebox. The air shall be exhausted from the glovebox through another nontestable high-efficiency process filter to the combined glovebox exhaust system. The treatment and repackaging operations that occur in the TRU waste RWM glovebox is limited to the following. Aerosol cans are depressurized and drained. The drained liquids are treated within the gloveboxes or retained in containers, which are sent to storage outside of the WRAP Facility. Vapors from the aerosol cans shall pass through a series of demisters for removal of entrained liquids, and shall be vented to the glovebox exhaust. Miscellaneous inorganic liquids shall be sampled for characterization, neutralized if required, and solidified using stabilizing additives. Miscellaneous organic liquids shall be sampled for characterization, treated within the gloveboxes or repackaged for transfer to storage facilities pending future treatment. Corrosive materials shall be neutralized. After neutralization, the materials shall be solidified or loaded out for storage or treatment outside the WRAP Facility. Other treatment such as mercury amalgamation, stabilization of heavy metals, and macroencapsulation are allowed to be performed. Radioactive material shall be repackaged to meet acceptance criteria of the receiving facility. Radioactive material is sampled. The empty aerosol cans and other treated LLW packages will be loaded into new drums and routed to the LLW process glovebox for compaction or loaded out of the RWM glovebox for storage, disposal, or additional treatment. In the LOW-LEVEL WASTE PROCESS LINE-- The LLW process glovebox line consists of stainless steel modular gloveboxes bolted together in a linear configuration. Glovebox ventilation shall be of the once-through type. Air shall be drawn from the process room, through a nontestable high-efficiency process filter, and into the glovebox. The air shall be exhausted from the glovebox through another nontestable high-efficiency process filter to the combined glovebox exhaust system. Drums shall enter the glovebox through an airlock entry system. Noncompliant items shall be bar code labeled and transferred to the LLW RWM glovebox using a reusable transfer system. Compliant waste shall be</p>		

Requirement	Compliance Status	Compliance Determination Method
<p>compacted and repackaged into new drums. The LLW process glovebox will be modified to support CH-TRU processing, and include the capability for supercompaction. A one-trip drum exit port will be installed on the LLW glovebox. An improved drum tipper will be used to enable sorting capability, and a commercial non-destructive assay system for glovebox material balance control will be installed. In the LOW-LEVEL WASTE RESTRICTED WASTE MANAGEMENT PROCESS LINE-- The operations in the LLW RWM process line is limited those as described for the operations in the TRU waste RWM line.</p>		
<p>The Annual Possession Quantity is limited to the following radionuclides (Curies/year): Alpha 0 1.71E+04 Beta 0 2.56E+05</p>	Continuous	<p>CDM: Verified basis for APQ's in NOC application. Comment:</p>
<p>Diffuse/Fugitive emissions associated with drum storage shall be monitored using the 200 Area near-field ambient air monitors. Any change to this near-field ambient monitoring program must be approved by the department.</p>	Continuous	<p>CDM: Sampling is verified by information in ABCASH. Comment:</p>
<p>The sampling frequency shall follow that of the ambient near-field program.</p>	Continuous	<p>CDM: Sampling frequency is verified by information in the "Environmental Monitoring Schedule for Calendar Year 2006" (HNF-SP-0098). Comment:</p>
<p>Single station composites of ambient near-field air samples shall be analyzed for radionuclide expected to stored and handled at the facility.</p>	Continuous	<p>CDM: The "Statement of Work for Services Provided by the Waste Sampling and Characterization Facility for the Environmental Compliance Program during Calendar Year 2006" (HNF-EP-0835) defines what analyses are performed and the frequency. Comment:</p>
<p>This approval, with its Conditions and Limitations, constitutes an amendment to the Department's Radioactive Air Emission License, and must be included in the next revision of the Hanford Air Operating Permit (WAC 246-247-060(1)(e) and (2)(c).</p>	Not Applicable	<p>CDM: N/A. Comment: Ecology and WDOH have determined that the licensee need not certify compliance with conditions that convey a right, that are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>If this emission unit is not in compliance with the standards in WAC 245-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-060-(2)(d)).</p>	<p>Not Applicable</p>	<p>CDM: N/A. Comment: Ecology and WDOH have determined that the licensee need not certify compliance with conditions that convey a right, that are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility shall notify the department seven days in advance of any planned pre-operational testing of the emission unit's control, monitoring or containment systems. The department reserves the right to observe such tests (WAC 246-247-060(4)).</p>	<p>Not Applicable</p>	<p>CDM: N/A. Comment: This fugitive emission unit does not have control, monitoring or containment systems.</p>
<p>The department retains the right to conduct stack sampling, environmental monitoring or other testing around this unit to assure compliance. If directed by the department, the facility must make provision for such testing (WAC 246-247-075(10) and (11)).</p>	<p>Not Applicable</p>	<p>CDM: N/A. Comment: Ecology and WDOH have determined that the licensee need not certify compliance with conditions that convey a right, that are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility must be able to demonstrate workers associated with this emission unit are trained in the use and maintenance of control and monitoring systems, and in the performance of associated tests and emergency procedures (WAC 246-247-075(12)).</p>	<p>Continuous</p>	<p>CDM: Training records. Comment:</p>
<p>The facility must be able to demonstrate the reliability and accuracy of emissions data and other test results from this emission unit (WAC 246-247-075(13)) and (WAC 246-247-075(6)).</p>	<p>Continuous</p>	<p>CDM: HNF-EP-0528, "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions". Comment:</p>
<p>The department reserves the right to inspect and audit this emission unit during construction and operation-- including all activities, equipment, operations, documents, data, and other records related to compliance with (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: N/A. Comment: Ecology and WDOH have determined that the licensee need not certify compliance with conditions that convey a right, that are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national standards such as ANSI/ASME NQA-1-1988, ANSI/ASME NQA-2-1986, QAMS-004 and QAMS-005. (WAC 246-247-075(6)).</p>	<p>Continuous</p>	<p>CDM: HNF-EP-0528, "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions". Comment:</p>
<p>The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: N/A. Comment: Ecology and WDOH have determined that the licensee need not certify compliance with conditions that convey a right, that are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>All reports and records must be kept and reported according to 40 CFR 61, Subpart H (WAC 246-247-080(2)).</p>	<p>Continuous</p>	<p>CDM: For calculations and input data from stack and ambient air monitors, the Environmental Release Summary (ERS) electronic system. Information from other than stacks and ambient air monitors resides at the individual facility. For annual reporting, DOE/RL-2007-01, Revision 0, "Radionuclide Air Emissions Report for the Hanford Site, Calendar Year 2006". Comment:</p>
<p>All measured or calculated emissions must be reported annually (WAC 246-247-080(3)).</p>	<p>Continuous</p>	<p>CDM: DOE/RL-2007-01, Revision 0, "Radionuclide Air Emissions Report for the Hanford Site, Calendar Year 2006". Comment:</p>
<p>Any unexpected release of radioactivity, shutdown or other condition that if allowed to persist, would result in the emission of radionuclides in excess of any standards or limitation in the license, or that lasts more than four hours, must be reported to the department within 24 hours. Applicable standards (WAC 246-247-040) including unit specific emission limits, the offsite dose standard, BARCT or ALARACT, whichever is applicable, or any limitations included in the approval.</p>	<p>Not Applicable</p>	<p>CDM: N/A. Comment: This requirement not applicable to a fugitive emission unit.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>When this project is complete, or operations cease, the facility must notify the department via a report of closure, including whether or not any potential for airborne releases occurred (WAC 246-247-080(5)).</p>	<p>Not Applicable</p>	<p>CDM: N/A. Comment: Ecology and WDOH have determined that the licensee need not certify compliance with conditions that convey a right, that are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility shall make requested documents available in a timely manner for review (WAC 246-247-080(10)).</p>	<p>Continuous</p>	<p>CDM: Requested documents supplied in a timely manner. Comment:</p>
<p>The owner/operator must inform the Department of Health whenever the activity associated with this NOC or any of the conditions or limits contained in this approval are completed, abandoned, or otherwise made obsolete.</p>	<p>Not Applicable</p>	<p>CDM: N/A. Comment: Ecology and WDOH have determined that the licensee need not certify compliance with conditions that convey a right, that are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>Prior to permanent shut down of an emission unit or completion of an activity, the permittee shall file a report of closure with the Department of Health. The report of closure shall include the date of the shutdown and indicate whether, despite cessation of operation, there is still a potential for radioactive air emissions and a need for any active or passive ventilation system with emission control and/or monitoring devices. An emission unit or activity will not be considered permanently shut down or completed until a report of closure is received and approved by Health. Once an emission unit is permanently shut down or an activity is completed, thereby rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the shutdown or completion, to meet any monitoring, record keeping, and reporting requirements which are no longer applicable for that emission unit or activity. All records, relating to the shut down emission unit or completion of an activity, generated while the emission unit or activity was in operation, shall be kept in accordance with (WAC 246-247-080(8)). (WAC 246-247-080(6)).</p>	<p>Not Applicable</p>	<p>CDM: N/A. Comment: Ecology and WDOH have determined that the licensee need not certify compliance with conditions that convey a right, that are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>

200 Area Diffuse/Fugitive - WTP
WDOH Emission Unit ID : 486
Page in AOP : H-0398

Requirement	Compliance Status	Compliance Determination Method
No active Abatement Controls in the AOP for this certification period.		
<p>Required Sampling: Existing near-facility monitoring stations. Sampling Frequency: As listed in the following Conditions and Limitations. Radionuclide Requiring Measurement: All radionuclides which could contribute 10% of the potential EDE.</p>	Not Applicable	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval, including near-facility monitoring, has not occurred because the routine soil surveys have not detected contamination.</p>
<p>Federal and State Regulatory Requirement: WAC 246-247-075(3) Permit Monitoring and Testing Procedure: Appendix B, Method 114</p>	Not Applicable	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval, including including Appendix B, Method 114 sampling and monitoring, has not occurred because the routine soil surveys have not detected contamination.</p>

Requirement	Compliance Status	Compliance Determination Method
<p align="center">Permit: AIR 02-1014 Issue Date: 10-24-02 Obsolete Date: 07-05-06 NOC: Excavation Activities for the Building of the RPP Waste Treatment Plant WDOH NOC ID: 482 Date In AOP: 04-11-05 Page in AOP: H-0398</p>		
Requirement	Compliance Status	Compliance Determination Method
<p>The U.S. Department of Energy shall comply with all Conditions and Limitations of this license (WAC 246-247-060(5)).</p>	<p align="center">Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
<p>The total abated emission limit for this Notice of Construction is limited to 3.80E-02 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 3.80E-02 mrem/year to the Maximally Exposed Individual (WAC 246-247-030(21)).</p>	<p align="center">Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
<p>This process is limited to: the excavation activities associated with the building of temporary construction facilities and the main facilities for the River Protection Project-Waste Treatment Plant (RPP-WTP). Excavation and general grading will be performed for the WTP site, including excavation for the mat foundations, for the four main process facilities: Pretreatment (PT), high-level waste (HLW), low-activity waste (LAW), and LAW pretreatment plant (LPP) areas, including installation of sheet piles, where applicable. The excavation is limited to the removal of the dune sand, subsurface soil, and excavation to the desired elevation for the founding of structures and slope of the finished site layout. Over excavation is allowed to remove the dune sand if it is found at the exposed subgrade elevation. Excavated soil removed beyond the required footing elevation will be replaced with compacted structural fill, to the required footing elevation. Conventional methods such as the use of large excavators, scrapers, dozers, backhoes, front-end manual digging with shovels or the "clean" guzzler will be used.</p>	<p align="center">Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The Annual Possession Quantity is limited to the following radionuclides (Curies/year): Alpha 0 2.19E+00 Beta 0 9.44E+01</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
<p>If this emission unit is not in compliance with the standards in WAC 246-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-060-(2)(d)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
<p>The department retains the right to conduct stack sampling, environmental monitoring or other testing around this unit to assure compliance. If directed by the department, the facility must make provision for such testing (WAC 246-247-075(10) and (11)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
<p>The facility must be able to demonstrate workers associated with this emission unit are trained in the use and maintenance of control and monitoring systems, and in the performance of associated tests and emergency procedures (WAC 246-247-075(12)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The facility must be able to demonstrate the reliability and accuracy of emissions data and other test results from this emission unit (WAC 246-247-075(13)) and (WAC 246-247-075(6)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
<p>Prior to hot start-up, restart or operation of a new or existing emission unit, the owner/operator must notify and provide the department the access to inspect and audit all construction activities, equipment, operations, documents, data, and other records related to compliance with the requirements of WAC 246-247 (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
<p>The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national standards (WAC 246-247-075(6)).</p>	<p>Continuous</p>	<p>CDM: Documentation of the quality assurance program is maintained in the project document control. Comment:</p>
<p>The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
<p>The facility shall maintain and report all records and reports according to 40 CFR 61, Subpart H (WAC 246-247-080(2)).</p>	<p>Continuous</p>	<p>CDM: Recordkeeping and reporting. Comment: Documentation of routine soil surveys are maintained in the project document control.</p>

Requirement	Compliance Status	Compliance Determination Method
All measured or calculated emissions shall be reported annually (WAC 246-247-080(3)).	Not Applicable	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
The USDOE shall report to the department within 24 hours, any unexpected release of radioactivity, shutdown or other condition that, if allowed to persist, or lasts more than four hours, would result in the emission of radionuclides in excess of any standards or limitation in the license. Applicable standards (WAC 246-247-040) include unit specific emission limits (paragraph 5), the offsite dose standard (paragraph 1), BARCT (paragraph 3) or ALARACT (paragraph 4), whichever is applicable, or any limitations included in this approval (paragraph 5) (WAC 246-247-080(5)).	Not Applicable	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
The facility shall make requested documents available in a timely manner for review (WAC 246-247-080(10)).	Not Applicable	<p>CDM: N/A Comment: Ecology and WDOH determined the licensee need not certify compliance with conditions conveying a right, are a historical summary or fact, pertaining to actions required of the agency.</p>
This unit must be fully accessible to Department of Health inspectors. Any specific training requirements, restrictions or special entry requirements must be given to the department when known to allow for unannounced inspections, as required by EPA (WAC 246-247-080(9)). At a minimum for unannounced inspections, such requirements or restrictions must be told to inspectors that morning, to provide an opportunity for inspectors to meet those requirements. For prior announced inspections, such notification must occur far enough in advance for the inspectors to have reasonable time to meet the requirements.	Continuous	<p>CDM: The Washington Department of Health inspectors were not denied access. Comment:</p>
Records must be readily (promptly) available for this unit. Those records must be maintained onsite, and must be retained for at least five years (WAC 246-247-080(8)).	Continuous	<p>CDM: Records. Comment: Records are available electronically from project document control.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The owner/operator must inform the Department of Health whenever the activity associated with this NOC or any of the Conditions or Limitations contained in this approval are completed, abandoned, or otherwise made obsolete.</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
<p>These Conditions and Limitations must be proceduralized prior to starting the radiological activities by including these requirements within the appropriate activity work packages and associated radiological work permits.</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
<p>The facility must maintain a log in an approved format for this activity to track the total volume of contaminated soil (to ensure that the contaminated soil volumes in conjunction with their respective contamination levels do not exceed the approved estimated potential-to-emit). This log shall track the hours of operation and location of use for each type of equipment, estimated and calculated curies encountered, and calculated emissions. The emissions log format approval is required prior to startup.</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
<p>If contaminated soil is detected during routine surveys, controls such as water, fixatives, covers, or windscreens will then be applied, as determined by the Health Physics organization. Spoil piles containing contaminated soil will be segregated from the clean soil. Containerizing spoils for disposal may also be performed. A general radiological work permit shall implement these controls.</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>Excavation activities will be stopped if evenly distributed contamination with detection readings greater than 500,000 dpm/100 cm² beta-gamma, or greater than 200 dpm/100 cm² above background alpha is encountered. Excavation will not continue until: a. A review of the work and encountered conditions has been performed and a plan for managing equipment and personnel in these "contaminated areas" has been addressed. b. It has been determined that no threat to worker safety or the environment exists. c. Proper controls (i.e., removal and disposal, water, fixatives, covers, and so on) have been put in place to mitigate any further threat. d. The sustained wind speed is predicted to be less than 20 miles per hour. e. The extent of soil contaminated has been fully identified by stakes or other markings and the estimated soil volume contaminated has been logged into the field log book. f. And the WDOH has been contacted and briefed of the situation.</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
<p>Excavation activities are allowed to continue if hot specks or "specky" contamination is encountered as long as: a. The specky contamination estimate is included in the approved emissions log; and b. The emissions contribution from the specky contamination does not put the total logged emissions estimate over the allowed Annual Possession Quantity. It shall be assumed that hot specks are very small volumes of contamination. The specks shall be removed as they are encountered and containerized for disposal.</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
<p>Excavation activities will cease and WDOH shall be contacted if the total soil volume estimated to be contaminated from the field log reaches 4,000 cubic yards. A modification will then be made to the NOC to account for the increased contamination prior to restarting the excavation activities. WDOH shall be notified if more than 443,700 cubic yards of surface dune sand and soil need to be excavated for the WTP facilities using conventional excavation equipment.</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
<p>After the excavation, containerizing, and removal, of any contaminated soil, the area will be backfilled with clean soil. After backfilling, the area shall be surveyed to verify that radiological contamination levels on the soil surface are less than 5,000 dpm/100 cm² beta-gamma and less than 100 dpm/100 cm² alpha. If contamination is present on the surface above these levels, it will be removed and containerized for disposal or covered or fixed to provide containment of the contamination. Dust shall be controlled by water spraying or other approved methods. The active excavation faces that are exposed for periods of less than 24 hours shall receive dust control measures during excavation operations such as spray applications of water. Excavated areas, and/or stockpiles that will be inactive for periods of greater than 24 hours shall receive dust control measures other than water alone, such as surficial suppressants, or penetrating crusting agents.</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>For the reporting requirements of (WAC 246-247-080(3)), all results of the contamination surveys, emissions estimate logs, and the near field monitoring results must be kept on file as confirmation of low emissions and shall be reported annually in the Hanford Site Air Emissions Report. All periodic confirmatory air samples (PCM) will be collected and analyzed following EPA Method 114.</p>	<p>Continuous</p>	<p>CDM: Records are maintained by project document control. Comment:</p>
<p>Periodic Confirmatory Measurements. As the potential unabated offsite dose associated with this activity is calculated to be less than 0.1 mrem/year, in accordance with 40 CFR 61, Subpart H, periodic confirmatory measurements (PCM) shall be made to verify emissions. For this activity the estimated emission levels are too low to measure using conventional stack sampling methods so the PCM shall consist of the following measurement methods: *</p> <p>Radiological soil contamination surveys shall be used to verify compliance administratively, as the performed surveys shall limit activities to those with a potential-to-emit below the maximum threshold contamination work levels. As the emission estimates are based and calculated from the maximum threshold contamination levels and the maximum volume of contaminated soil, the true emissions shall inherently be below the estimated emissions. * In the event that soil contamination is discovered during radiological soil surveys, the use of the near field monitoring grid shall consist of the existing 200 East Area near field monitors; an existing PNNL 200 East Area ambient monitor (east of WTP construction area); and the new ambient monitor (near an existing power pole north of WTP construction area). * Any change to the location of the ambient air monitors must be approved by WDOH. * In the event that soil contamination is discovered during radiological soil surveys, operation of the two ambient air monitors shall be required during excavation activities. Both WTP ambient air monitors shall run on a 24-hour basis if soil contamination is discovered. WDOH shall be notified within 24 hours if contamination is encountered prior to the WTP ambient air monitors running on the 24-hour basis. WDOH shall be notified when the WTP ambient air monitors are running on the 24-hour basis.</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
<p>Prior to permanent shut down of an emission unit or completion of an activity, the permittee shall file a report of closure with the Department of Health. The report of closure shall include the date of the shutdown and indicate whether, despite cessation of operation, there is still a potential for radioactive air emissions and a need for any active or passive ventilation system with emission control and/or monitoring devices. An emission unit or activity will not be considered permanently shut down or completed until a report of closure is received and approved by Health. Once an emission unit is permanently shut down or an activity is completed, thereby rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the shutdown or completion, to meet any monitoring, record keeping, and reporting requirements which are no longer applicable for that emission unit or activity. All records, relating to the shut down emission unit or completion of an activity, generated while the emission unit or activity was in operation, shall be kept in accordance with (WAC 246-247-080(8)). (WAC 246-247-080(6)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>

200 Area ISA
WDOH Emission Unit ID : 454
Page in AOP : H-0106

Requirement	Compliance Status	Compliance Determination Method
No active Abatement Controls in the AOP for this certification period.		
Required Sampling: Smear survey. Sampling Frequency: Annual.	Continuous	CDM: Annual Smears taken per PS-418 B Comment:
Federal and State Regulatory Requirement: 40 CFR 61.93(b)(4)(i) & WAC 246-247-075(3)	Continuous	CDM: Smears are taken of the ISA casks per PS-418 B Comment:
Permit: AIR 02-709 Issue Date: 07-24-02 Obsolete Date: 07-05-06 NOC: Construction and Operation of the 200 Area Interim Storage Area WDOH NOC ID: 272 Date In AOP: 04-11-05 Page in AOP: H-0106		
Requirement	Compliance Status	Compliance Determination Method
The U.S. Department of Energy shall comply with all Conditions and Limitations of this license (WAC 246-247-060(5)).	Continuous	CDM: For this approval order, in compliance with all applicable conditions. Comment:
The total abated emission limit for this Notice of Construction is limited to 1.92E-03 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 1.92E-03 mrem/year to the Maximally Exposed Individual (WAC 246-247-030(21)).	Continuous	CDM: DOE/RL-2007-01 "Radionuclide Air Emissions Report for the Hanford Site Calendar Year 2006". Comment:
This process is limited to: the construction and operation of the 200 Area ISA. The 200 Area ISA will be constructed and operated for the interim storage of non-defense production reactor SNF in dry cask storage systems (DCSSs). [Note: Dry cask storage system is a generic term referring to the various storage systems employed for SNF storage at the 200 Area ISA and does not refer to a specific storage system.] Dry Cask Storage System Interim Storage Once the DCSSs are prepared for interim storage the systems can be transferred to the 200 Area ISA for interim storage. Up to sixty Interim Storage Casks (ISCs) storing FFTF SNF, 7 NAC-1 casks storing LWR SNF, and 12 NRF TRIGA casks and 2 DOT-6M containers storing TRIGA SNF will be required for storage at the 200 Area ISA. Each of the dry cask storage systems will be transported via road to the 200 Area ISA and unloaded using a mobile crane. Each DCSS will be placed at a specific location within the 200 Area ISA. Dry Cask Storage System Equipment Different DCSSs are utilized for the different SNF types to be stored at the 200 Area ISA to accommodate the particular characteristics of the SNF. The FFTF SNF DCSS, the NRF TRIGA SNF DCSS, and the LWR SNF DCSS. 200 Area ISA Design and Construction The 200 Area ISA consists of concrete pads, perimeter fencing and lighting, access for transporters and mobile cranes, and conduit for potential future electrical service and instrumentation. This construction will not involve contaminated items. The 200 Area ISA will be situated within the current CSB	Continuous	CDM: PS-418 Section B Comment:

Requirement	Compliance Status	Compliance Determination Method
<p>construction site. This site is currently not a radiological area nor does it contain an underground radioactive material area. No contaminated excavation will be involved.</p>		
<p>The Annual Possession Quantity is limited to the following radionuclides (Curies/year): Am 241 6.89E+04 Am 242 m 2.71E+03 Am 242 2.69E+03 Am 243 8.96E+01 Ba 137 m 2.98E+06 C 14 2.70E+01 Cd 113 m 9.17E+01 Ce 144 4.15E+05 Cm 242 2.91E+03 Cm 243 7.35E+01 Cm 244 8.45E+03 Co 60 5.59E+04 Cs 134 3.69E+05 Cs 137 3.14E+06 Eu 154 8.84E+04 Eu 155 2.66E+05 Fe 55 4.75E+04 H 3 1.76E+04 I 129 1.53E+00 Kr 85 1.54E+05 Mn 54 4.49E+04 Ni 63 4.32E+03 Np 237 9.38E-01 Np 239 8.96E+01 Pm 147 2.27E+06 Pr 144 4.15E+05 Pr 144 m 5.42E+03 Pu 238 4.02E+04 Pu 239 1.31E+05 Pu 240 1.15E+05 Pu 241 4.39E+06 Pu 242 6.57E+00 Rh 106 1.30E+06 Ru 106 1.30E+06 Sb 125 2.85E+05 Sm 151 1.22E+05 Sr 90 1.21E+06 Tc 99 3.65E+01 Te 125 m 6.96E+04 U 234 3.54E+00 U 235 5.64E-02 U 236 7.53E-01 U 238 9.15E-01 Y 90 1.21E+06</p>	<p>Continuous</p>	<p>CDM: Short Form NOC Application, numbers verified Comment:</p>
<p>The NOC constitutes a contract between the department and the facility. Any changes must be approved by the department.</p>	<p>Continuous</p>	<p>CDM: HNF-PRO-15335 Section 5.4 Comment:</p>
<p>The department retains the right to conduct stack sampling, environmental monitoring or other testing around this unit to assure compliance. If directed by the department, the facility must make provision for such testing (WAC 246-247-075(9) and (10)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH determined the licensee need not certify compliance with conditions conveying a right, are a historical summary or fact, pertaining to actions to be completed in the future, or pertaining to actions required of the agency.</p>
<p>These Conditions and Limitations must be documented in an established procedure prior to starting activities granted by this approval (WAC 246-247-040(5)) and (WAC 246-247-060(5)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: See settlement agreement language.</p>
<p>If this emission unit is not in compliance with the standards in WAC 246-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-060-(2)(d)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH determined the licensee need not certify compliance with conditions conveying a right, are a historical summary or fact, pertaining to actions to be completed in the future, or pertaining to actions required of the agency.</p>

Requirement	Compliance Status	Compliance Determination Method
The facility must be able to demonstrate the reliability and accuracy of emissions data and other test results from this emission unit (WAC 246-247-075(13)).	Continuous	CDM: ABCASH, HNF-EP-0528 NESHAP Quality Assurance Project Plan for Radioactive Emissions Comment:
There are no preoperational tests planned for this unit, so the requirement for notification at least seven days prior to such testing under (WAC 246-247-060(4)) will not apply.	Not Applicable	CDM: N/A Comment: Ecology and WDOH determined the licensee need not certify compliance with conditions conveying a right, are a historical summary or fact, pertaining to actions to be completed in the future, or pertaining to actions required of the agency.
The emission limit for this emission unit is no smearable contamination above 2200 dpm/100 cm ² Beta-Gamma or 220 dpm/100 cm ² Alpha using standard portable instruments used, and survey methods followed at Hanford (WAC 246-247-040(5)).	Continuous	CDM: Smears taken per PS-418 B Comment:
The facility shall maintain readily (promptly) retrievable storage areas (on site) for all records and documents related to, and which may help establish compliance with, the requirements of this chapter. The facility shall keep these records available for department inspection for at least five years (WAC 246-247-080(8)).	Continuous	CDM: HNF-RD-15332, Section 2.14 HNF-PRO-15333, Section 5.14, HNF-PRO-15334, Section 5.99, HNF-RD-210 Comment:
The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).	Not Applicable	CDM: N/A Comment: Ecology and WDOH determined the licensee need not certify compliance with conditions conveying a right, are a historical summary or fact, pertaining to actions to be completed in the future, or pertaining to actions required of the agency.
Nothing may be inferred that is not specifically described in this NOC.	Not Applicable	CDM: N/A Comment: Ecology and WDOH determined the licensee need not certify compliance with conditions conveying a right, are a historical summary or fact, pertaining to actions to be completed in the future, or pertaining to actions required of the agency.

Requirement	Compliance Status	Compliance Determination Method
Periodic confirmatory monitoring shall consist of annual smears or swipes of the outer surfaces of the containers using hand held survey instruments capable of detecting contamination above 2200 dpm/100 cm ² Beta-Gamma or 220 dpm/100 cm ² Alpha.	Continuous	CDM: Smears taken per PS-418 B Comment:
Any detectable contamination above 2200 dpm/100 cm ² Beta-Gamma or 220 dpm/100 cm ² Alpha as a result of the ISA specific monitoring shall be reported to the department.	Not Applicable	CDM: All Smears were less than 2200 dpm/100 cm ² Beta-gamma or 220 dpm/100 cm ² Alpha. Comment: No reporting required.
The facility must meet all reporting and record keeping requirements of 40 CFR 61, Subpart H (WAC 246-247-080(2)).	Continuous	CDM: Information from other than stacks and ambient air monitors resides at the individual facility. For annual reporting, DOE/RL-2007-01, "Radionuclide Air Emissions Report for the Hanford Site, Calendar Year 2006". Comment:
If construction is not commenced within two years from the date of this letter, the approval is void.	Not Applicable	CDM: N/A Comment:
The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national standards (WAC 246-247-075(6)).	Continuous	CDM: ABCASH, HNF-EP-0528 NESHAP Quality Assurance Project Plan for Radioactive Emissions Comment:
The facility must be able to demonstrate workers associated with this emission unit are trained in the use and maintenance of control and monitoring systems, and in the performance of associated tests and emergency procedures (WAC 246-247-075(12)).	Continuous	CDM: The records of Qual Cards and OJT's are kept in 200E/2750/D-238 in a locked file cabinet in a locked room and contains Certification 060049, Vent System Testing and Adjusting. The completed certifications are kept in this file. The courses taken are tracked using ITEM Comment:
The Department reserves the right to inspect and audit all construction activities, equipment, operations, documents, data and other records related to compliance with the requirements of this chapter (WAC 246-247-080(1)).	Not Applicable	CDM: N/A Comment: Ecology and WDOH determined the licensee need not certify compliance with conditions conveying a right, are a historical summary or fact, pertaining to actions to be completed in the future, or pertaining to actions required of the agency.

Requirement	Compliance Status	Compliance Determination Method
<p>The facility shall report to the department within 24 hours, any unexpected release of radioactivity, shutdown or other condition that, if allowed to persist, or lasts more than four hours, would result in the emission of radionuclides in excess of any standards or limitation in the license. Applicable standards (WAC 246-247-040) include unit specific emission limits (paragraph 5), the offsite dose standard (paragraph 1), BARCT (paragraph 3) or ALARACT (paragraph 4), whichever is applicable, or any limitation included in this approval (paragraph 5) (WAC 246-247-080(3)).</p>	<p>Continuous</p>	<p>CDM: HNF-PRO-15333, PS-414 notification procedure. Comment:</p>
<p>The facility shall report all measured or calculated emissions annually (WAC 246-247-080(3)).</p>	<p>Continuous</p>	<p>CDM: DOE/RL-2007-01 "Radionuclide Air Emissions Report for the Hanford Site Calendar Year 2006". Comment:</p>
<p>Prior to permanent shut down of an emission unit or completion of an activity, the permittee shall file a report of closure with the Department of Health. The report of closure shall include the date of the shutdown and indicate whether, despite cessation of operation, there is still a potential for radioactive air emissions and a need for any active or passive ventilation system with emission control and/or monitoring devices. An emission unit or activity will not be considered permanently shut down or completed until a report of closure is received and approved by Health. Once an emission unit is permanently shut down or an activity is completed, thereby rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the shutdown or completion, to meet any monitoring, record keeping, and reporting, requirements which are no longer applicable for that emission unit or activity. All records, relating to the shut down emission unit or completion of an activity, generated while the emission unit or activity was in operation, shall be kept in accordance with (WAC 246-247-080(8)). (WAC 246-247-080(6)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH determined the licensee need not certify compliance with conditions conveying a right, are a historical summary or fact, pertaining to actions to be completed in the future, or pertaining to actions required of the agency.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The facility shall ensure all emissions units are fully accessible to department inspectors. In the event the hazards associated with accessibility to a unit require training and/or restriction or requirements for entry, the facility owner or operator shall inform the department, prior to arrival, of those restrictions or requirements. The owner or operator shall be responsible for providing the necessary training, escorts, and support services to allow the department to inspect the facility. At a minimum for unannounced inspections, such requirements or restrictions must be told to inspectors to provide an opportunity for inspectors to meet those requirements prior to the inspection (WAC 246-247-080(9)).</p>	<p>Continuous</p>	<p>CDM: The EP Project Services group is responsible for facilitating regulatory inspections and provides an inspection point-of-contact to the Washington State Department of Health (WDOH) inspectors for the Hanford Site. Services provided include verification of access requirements (training) of agency personnel, organizing and coordinating the inspection and any follow-on visits for the affected project/company, and documenting the inspection and the resolution of any noncompliant issues. Comment:</p>
<p>The facility shall make available, in timely manner, all documents requested by the department for review. The facility shall allow the department to review documents in advance of an inspection. The facility shall allow access to classified documents by representatives of the department with the appropriate security clearance and a demonstrable need-to-know (WAC 246-247-080910)).</p>	<p>Continuous</p>	<p>CDM: HNF-RD-15332, Section 2.14 HNF-PRO-15333, Section 5.14, HNF-PRO-15334, Section 5.99, HNF-RD-210 Comment:</p>

296-P-48
WDOH Emission Unit ID : 749
Page in AOP : H-0993

Requirement	Compliance Status	Compliance Determination Method
<p>Zone or Area : Abatement Technology : Demister Required Units : 1 Add'l Description:</p>	<p>Continuous</p>	<p>CDM: Field interviews. Comment: None</p>
<p>Zone or Area : Abatement Technology : Heater Required Units : 1 Add'l Description:</p>	<p>Continuous</p>	<p>CDM: Field interviews. Comment: None</p>
<p>Zone or Area : Abatement Technology : Prefilter Required Units : 1 Add'l Description:</p>	<p>Continuous</p>	<p>CDM: Field interviews. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
Zone or Area : Abatement Technology : HEPA Required Units : 2 Add'l Description: Two in series.	Continuous	CDM: Field interviews. Comment: None
Zone or Area : Abatement Technology : Fan Required Units : 1 Add'l Description:	Continuous	CDM: Field interviews, CH2M HILL notification procedure and notification logbook. Comment: Exhauster shut down once during the reporting period; reported per the CH2M HILL notification procedure.
Required Sampling: Continuous with a record sample. Sampling Frequency: During exhauster operation. Collect samples biweekly at a minimum. Radionuclide Requiring Measurement: All radionuclides that could contribute greater than 10 percent of the potential-to-emit TEDE to the MEI, greater than 0.1 mrem/yr potential-to-emit TEDE to the MEI, and greater than 25 percent of the TEDE to the MEI after controls, and gross Alpha & Beta	Continuous	CDM: ABCASH Program. Comment: ABCASH Program, EDP code number E098.
Federal and State Regulatory Requirement: WAC 246-247-075 Permit Monitoring and Testing Procedure: Appendix B, Method 114(2), (3), and (4)	Continuous	CDM: CH2M HILL NESHAP quality assurance program. Comment: None
Permit: AIR 04-401 Issue Date: 04-05-04 Obsolete Date: 07-05-06 NOC: 241-C-200 Series Tanks Retrieval WDOH NOC ID: 579 Date In AOP: 04-11-05 Page in AOP: H-0993		
Requirement	Compliance Status	Compliance Determination Method
The U.S. Department of Energy shall comply with all Conditions and Limitations of this license (WAC 246-247-060(5)).	Continuous	CDM: Field interviews, and complied with all conditions and limitations in this NOC approval. Comment: None
The total abated emission limit for this Notice of Construction is limited to 1.72E-02 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 2.18E+00 mrem/year to the Maximally Exposed Individual (WAC 246-247-030(21)).	Continuous	CDM: The annual "Radionuclide Air Emissions Report" for the Hanford Site. Comment: None
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. The activities listed below are approved for the C-200 Series Waste Retrieval effort: Retrieval Activities (Stack): i. Operation of the new portable exhauster and ventilation system. ii. Retrieve wastes from C-201, C-202, C-203, and C-204 using the AMS to vacuum wastes to the central vessel skid. iii. Pump waste from central vessel skid to the double shell tank system using OGT lines Diffuse and Fugitive: a. Proposed Actions for Tanks C-201 through C-204: i. Removal of weather covers and debris	Continuous	CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None

Requirement	Compliance Status	Compliance Determination Method
<p>from jet pump pits and ventilation hatchways (ALARACTs 1, 4, 6, 12, 13, 14, and 15) ii. Remove condenser pit filter assembly and replace tank breather filter with a Y-duct assembly (ALARACTs 1, 4, 12, 15, and 16) iii. Remove liquid level reels and thermocouple trees, 1 each per tank (ALARACTs 1, 4, 6, 12, 13, 14, and 15) iv. Remove sluice eductor pump from Tank C-204, if necessary (ALARACTs 1, 4, 6, 12, 13, 14, and 15) b. Tank Equipment Installations: i. AMS with connected hydraulic power pack, one per tank (ALARACTs 1, 4, 6, 12, 13, and 14) ii. Ventilation inlet filter assembly, one per tank (ALARACTs 1, 4, 12, 13 and 16) iii. Ventilation exhaust ducting, one per tank (ALARACTs 1, 4, 12, and 16) iv. Closed circuit TV s, one per tank (ALARACT 1, 4, 12, 13, and 16) v. Master camera control system skid, and connects to in-tank camcras (ALARACT 6, 13, and 16) vi. Central vessel skid, connect to individual AMS units, connect to the double shell tank via OGT lines (using hand digging or Guzzler, latest approved revision) (ALARACT 1, 4, 5, 6, 13, and 14) vii. Pump skid with connected hydraulic power pack, and OGT lines (ALARACT 1, 4, 6, 12, 13, and 14) viii. Vacuum skid with connected hydraulic power pack (ALARACT 1, 4, 6, 12, 13, and 14) ix. Portable exhauster skid, connect via HVAC ducting to individual tank ventilation exhaust ducts (ALARACTs 1, 4, 6, 12, 13, and 14) x. Electrical cable and electric supply to hydraulic power packs, vessel skid, pump skid, vacuum skid, portable exhauster skid, inlet filter, in-tank cameras, and generator, control instrumentation (ALARACT 5) xi. Air compressor and associated air supply lines to AMS, vessel skid, vacuum skid (ALARACT 5) xii. Instrumentation control room, water distribution sled, instrument electrical skid, diesel generator c. Remove tank equipment installed under this NOC for maintenance, repair, disposal, or re-use for future tank retrievals. (ALARACTs 1, 4, 6, 12, 13, 14, 15 and 16)</p>		
<p>The Annual Possession Quantity is limited to the following radionuclides (Curies/year): Ac 227 1.36E-03 Am 241 4.07E+01 Am 243 9.41E-04 Ba 137 m 3.96E+02 C 14 1.07E-02 Cd 113 m 3.83E-01 Cm 242 6.10E-02 Cm 243 2.92E-03 Cm 244 1.29E-03 Co 60 4.48E-03 Cs 134 3.97E-06 Cs 137 4.19E+02 Eu 152 2.16E+00 Eu 154 1.02E+00 Eu 155 7.55E+01 H 3 5.21E-03 I 129 1.46E-04 Nb 93 m 1.84E-01 Ni 59 4.00E+00 Ni 63 3.73E+02 Np 237 2.28E-04 Pa 231 4.61E-05 Pu 238 2.60E+00 Pu 239 1.16E+02 Pu 240 1.91E+01 Pu 241 1.42E+02 Pu 242 9.77E-04 Ra 226 3.47E-04 Ra 228 9.45E-10 Ru 106 7.24E-07 Sb 125 7.50E-03 Se 79 4.68E-03 Sm 151 1.66E+02 Sn 126 2.99E-02 Sr 90 2.20E+03 Tc 99 7.51E-02 Th 229 3.53E-07 Th 232 2.54E-12 U 232 4.38E-08 U 233 1.87E-09 U 234 2.00E-03 U 235 8.90E-05 U 236 1.95E-05 U 238 2.02E-03 Y 90 2.20E+03 Zr 93 2.06E-01</p>	<p>Continuous</p>	<p>CDM: Field interviews, WDOH approved logs, and verified basis for APQ in NOC application. Comment: None</p>
<p>The total abated emission limit for 296-P-48 under this Notice of Construction is limited to 1.12E-03 to the Maximally Exposed Individual, comprised of 2.62E-04 mrem/year offsite and 8.53 E-04 mrem/year onsite. The total unabated emission limit on the potential-to-emit for 296-P-48 under this Notice of Construction is limited to 2.17 mrem/year to the Maximally Exposed Individual, comprised of 4.62E-01 offsite and 1.7E+00 mrem/year onsite to the Maximally Exposed Individual [WAC 246-247-040(5)].</p>	<p>Continuous</p>	<p>CDM: Field interviews, ABCASH isotopic analysis of record sampler, tracked via ERS and reported in the annual radiological air emissions report, and verified basis for APQ in NOC application. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
The number of gallons of waste retrieved from each C-200 series tank shall be documented and reported to WDOH on completion [WAC 246-247-040(5)].	Continuous	CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Requested documents were submitted to WDOH. Comment: None
All activities performed under this NOC shall be performed in accord with ALARA principles [WAC 246-247-040(1)].	Continuous	CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None
A cold test shall be performed on the new portable exhauster system. An acceptance test plan shall be provided to WDOH. Test results shall be reported to WDOH [WAC 246-247-040(5)].	Continuous	CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Requested documents were submitted to WDOH. Comment: None
Once the new portable exhauster system is connected to the new farm ductwork, an operability/acceptance test shall be performed on the system. A test plan shall be provided to WDOH. Test results shall be reported to WDOH [WAC 246-247-040(5)].	Continuous	CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Requested documents were submitted to WDOH. Comment: None
The new portable exhauster shall provide two banks of HEPA filters in series, and the glycol heater shall be provided with an automatic heater trip function actuated by exhaust stream temperature indication. The trip set point shall be set below 200 F. HEPAs shall be individually aerosol tested, annually, to the requirements of ASME N510, and shall have a minimum efficiency of 99.95% [WAC 246-247-040(5)].	Continuous	CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None
The new portable exhauster shall operate continuously when the AMS are operating in the tanks. Waste retrieval activities shall cease if the exhauster is not operating [WAC 246-247-040(5)].	Continuous	CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None
Licensee shall provide a written justification for use of a humidity probe in determining stack gas moisture content under 40 CFR 60 Appendix A, Method 2. Retrieval operations shall not proceed under this NOC until WDOH has approved the justification [WAC 246-247-040(5)].	Continuous	CDM: Field interviews. Requested documents were submitted to WDOH. Comment: None
A written technical basis for the stack monitoring system, as required by ANSI 13.1-1999, Section 4, shall be provided to WDOH. Waste retrieval operations under this NOC shall not commence until WDOH has reviewed the stack monitoring technical basis [WAC 246-247-040(5)].	Continuous	CDM: Field interviews. Requested documents were submitted to WDOH. Comment: None

Requirement	Compliance Status	Compliance Determination Method
<p>Vacuum exhaust drawn from the batch holding vessel shall be routed back to tanks. The tanks shall be maintained under a negative pressure during tank retrieval activities [WAC 246-247-040(5)].</p>	<p>Continuous</p>	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None</p>
<p>The batch holding vessel and associated piping shall be contained in a Conex-type container. That container shall be equipped with a single passive HEPA filter and leak detection devices. The leak detection shall be maintained and monitored in the two manifold boxes while in use [WAC 246-247-040(5)].</p>	<p>Continuous</p>	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None</p>
<p>A copy of the hose-in-hose transfer line management plan accepted by the Washington State Department of Ecology as meeting WAC-173-303 for hazardous waste lines shall be provided to WDOH, RPP-12711 [WAC 246-247-040(5)].</p>	<p>Continuous</p>	<p>CDM: Field interviews. Requested documents were submitted to WDOH. Comment: None</p>
<p>The 241-C-200 Series Waste Retrieval Concept HAZOP report shall be issued prior to beginning waste retrieval operations under this NOC. A copy shall be provided to WDOH on issue [WAC 246-247-040(5)].</p>	<p>Continuous</p>	<p>CDM: Field interviews. Requested documents were submitted to WDOH. Comment: None</p>
<p>If this emission unit is not in compliance with the standards in WAC 246-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-040(5)) and (WAC 246-247-060(5)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility shall notify the department at least seven calendar days prior to any planned preoperational tests of new or modified emission units that involve emissions control, monitoring, or containment systems of the emission unit(s). The department reserves the right to witness or require preoperational tests involving the emissions control, monitoring, or containment systems of the emissions unit(s) (WAC 246-247-060(4)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national standards (WAC 246-247-075(6)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL quality assurance program, records, and procedures. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The department retains the right to conduct stack sampling, environmental monitoring or other testing around this unit to assure compliance. If directed by the department, the facility must make provision for such testing (WAC 246-247-075(9) and (10)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility must be able to demonstrate that workers associated with this emission unit are trained in the use and maintenance of control and monitoring systems, and in the performance of associated tests and emergency procedures (WAC 246-247-075(12)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL training program, training records, work controls, and procedures. Comment: None</p>
<p>The facility must be able to demonstrate the reliability and accuracy of emissions data and other test results from this emission unit (WAC 246-247-075(13)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL quality assurance program, records, and procedures. Comment: None</p>
<p>The department reserves the right to inspect and audit all construction activities, equipment, operations, documents, data and other records related to compliance with the requirements of this chapter (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility must meet all reporting and record keeping requirements of 40 CFR 61, Subpart H. (WAC 246-247-080(2)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL records management and procedures. Comment: None</p>
<p>The facility shall report all measured or calculated emissions annually (WAC 246-247-080(3)).</p>	<p>Continuous</p>	<p>CDM: The annual "Radionuclide Air Emissions Report" for the Hanford Site. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The facility shall notify the department within twenty-four hours of any shutdown, or of any transient abnormal condition lasting more than four hours or other change in facility operations which, if allowed to persist, would result in emissions of radioactive material in excess of applicable standards or license requirements (WAC 246-247-080(5)).</p>	<p>Continuous</p>	<p>CDM: Field interviews, CH2M HILL notification procedures, and notification logbook. Comment: Exhauster shut down once during the reporting period; reported per the CH2M HILL notification procedure.</p>
<p>The facility shall file a report of closure with the department whenever operations producing emissions of radioactive material are permanently ceased at any emission unit (except temporary emission units) regulated under this chapter. The closure report shall indicate whether, despite cessation of operations, there is still a potential for radioactive air emissions and a need for an active or passive ventilation system with emission control and/or monitoring devices. If decommissioning is planned and will constitute a modification, a NOC is required, as applicable, in accordance with WAC 246-247-060. (WAC 246-247-080(6))</p>	<p>Continuous</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility shall maintain readily (promptly) retrievable storage areas (on site) for all records and documents related to, and which may help establish compliance with, the requirements of this chapter. The facility shall keep these records available for department inspection for at least five years (WAC 246-247-080(8)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL records management and procedures. Comment: None</p>
<p>The facility shall ensure all emissions units are fully accessible to department inspectors. In the event the hazards associated with accessibility to a unit require training and/or restriction or requirements for entry, the facility owner or operator shall inform the department, prior to arrival, of those restrictions or requirements. The owner or operator shall be responsible for providing the necessary training, escorts, and support services to allow the department to inspect the facility. At a minimum for unannounced inspections, such requirements or restrictions must be told to inspectors to provide an opportunity for inspectors to meet those requirements prior to the inspection (WAC 246-247-080(9)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility shall make available, in timely manner, all documents requested by the department for review. The facility shall allow the department to review documents in advance of an inspection. The facility shall allow access to classified documents by representatives of the department with the appropriate security clearance and a demonstrable need-to-know (WAC 246-247-080(10)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL records management and procedures. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p>All facilities with licensed emission units, except for radioactive materials licensees, shall submit a request to the department for renewal of their radioactive air emissions license at least sixty days prior to expiration of the license or as required by the Air Operating Permit. All renewal requests shall include a summary of the operational status of all emission units, the status of facility compliance with the standards of WAC 246-247-040, and the status of any corrective actions necessary to achieve compliance with the requirements of this chapter. Facilities with licensed emission units that also hold a radioactive materials license issued by the department shall submit this information along with their radioactive material license renewal submittal. If the department is unable to renew a radioactive air emissions license before its expiration date, the existing license, with all of its requirements and limitations, remains in force until the department either renews or revokes the license (WAC 246-247-060(9)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>All radioactive air emissions licenses issued by the department, except those issued to radioactive materials licensees, shall have an expiration date of five years from date of issuance or as specified in the Air Operating Permit. For radioactive material licensees, the requirements and limitations for the operation of emission units shall be incorporated into their radioactive materials license, and shall expire when the radioactive materials license expires (WAC 246-247-060(6)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The following shall be provided to WDOH for review one month prior to commencement of waste retrieval operations: 1) Code compliance matrix for exhauster and new ventilation system; 2) Acceptance test plan and operating test plan, and test results for exhauster; 3) Exhauster design specifications; 4) Copies of exhauster manufacturer's qualification test records; 5) Operation of the 296-P-48 exhauster will be conducted with radiation contamination controls, compliance, and alarm response specific to procedure T0-060-010 , Operate POR03 Exhauster 6) Operating procedures or other documentation demonstrating administrative/other controls adequate to ensure conformance of exhauster/vent system and waste retrieval operations to the conditions and limitations of this NOC [WAC 246-247-040(5)].</p>	<p>Continuous</p>	<p>CDM: Field interviews. Requested documents were submitted to WDOH. Comment: None</p>
<p>At least once a shift a visual inspection of the ductwork, HEPA filter housing, fan, and flex connections shall be performed to verify the integrity of the ventilation system. Any deficiencies shall be reported to WDOH.</p>	<p>Continuous</p>	<p>CDM: Field interviews, operating rounds, CH2M HILL notification procedure and notification logbook, and work control/planning/documents and procedures. Comment: Exhauster shut down once during the reporting period; reported per the CH2M HILL notification procedure.</p>
<p>A daily radiological survey of all the ductwork flange connections shall be performed to verify there is no leakage of radiological contamination from the exhauster ductwork.</p>	<p>Continuous</p>	<p>CDM: Field interviews, operating rounds, work control/planning/documents and procedures. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
The differential pressure across the pre-filter, primary HEPA filter, secondary HEPA filter and total differential pressure across the pre-filter, primary HEPA filter and secondary HEPA filter shall be measured and recorded at least once each shift. The differential pressure readings shall be trended and any unexpected fluctuations in the differential pressure shall be reported to WDOH.	Continuous	CDM: Field interviews, operating rounds, work control/planning/documents and procedures. Comment: None

Drum Venting System (Active Vent)
WDOH Emission Unit ID : 755
Page in AOP : H-1012

Requirement	Compliance Status	Compliance Determination Method
Zone or Area : Abatement Technology : HEPA Type Filter Required Units : 1 Add'l Description: Shall be a NucFil Model IHF-004 or other with prior approval by the department.	Continuous	CDM: Preventative Maintenance #2X-00552. Comment:
Required Sampling: Smears of the exhaust vent at the end of each shift of operation. Sampling Frequency: End of each shift of operation Radionuclide Requiring Measurement: TOTAL ALPHA TOTAL BETA TOTAL GAMMA	Continuous	CDM: Survey reports. Comment:
Federal and State Regulatory Requirement: WAC 246-247-075	Continuous	CDM: Comment: Nothing facility specific to certify.
Permit: AIR 03-1206 Issue Date: 12-09-03 Effective Date: 01-14-04 Obsolete Date: 07-05-06 NOC: Operation of the Transuranic Waste Retrieval Project WDOH NOC ID: 582 Date In AOP: 04-11-05 Page in AOP: H-1012		
Requirement	Compliance Status	Compliance Determination Method
The U.S. Department of Energy shall comply with all Conditions and Limitations of this license (WAC 246-247-060(5)).	Continuous	CDM: For this approval order, in compliance with all approval conditions. Comment:
The total abated emission limit for this Notice of Construction is limited to 4.30E-03 mrem/year to the Maximally Exposed Individual (WAC 246-247-040(5)).	Continuous	CDM: Annual evaluation of retrieval rates, containers/curies managed. Comment:

Requirement	Compliance Status	Compliance Determination Method
<p>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. Approved is the retrieval (unearth) and inspection of containers of suspect-transuranic (TRU) and TRU waste from trenches in the Low Level Burial Grounds (LLBG) and install NucFil filters or equivalent (as approved by the department) in the unvented (or inadequately vented) TRU containers. Venting and headspace gas sampling (HSGS) may be performed at the LLBG (in place with engineering controls or within venting enclosure) or at the following facilities licensed for such work (CWC, WRAP, or T Plant Complex). In addition, LLW containers posing a safety hazard (e.g., potential for pressurization, bulging, or similar abnormal condition) may also be vented. Additional approval of the process for this activity is contained in the following Conditions/Limitations.</p>	<p>Continuous</p>	<p>CDM: Comment: This text is just discussion of retrieval activities, there is nothing to certify compliance with.</p>
<p>The PTE for this project as determined under WAC 246-247-030(21)(a-e) [as specified in the application] is 5.40E-02 mrem/year. Approved are the associated potential release rates (Curies/year) of: Alpha- 0 4.30E-04 Liquid/Particulate Solid WAC 246-247-030(21)(e) Alpha release rate based on Am-241. See condition 26. B/G- 0 6.40E-03 Liquid/Particulate Solid WAC 246-247-030(21)(e) Beta/Gamma release rate based on Cs-137. See condition 26. The radioactive isotopes identified for this emission unit are (no quantities specified): Am 241 Am 243 Cf 252 Cm 244 Cs 134 Cs 137 Eu 152 Eu 154 Pu 238 Pu 239/240 Pu 241 Sr 90 U 234 U 235 U 236 U 238 The potential release rates described in this Condition were used to determine control technologies and monitoring requirements for this approval. DOE must notify the Department of a "modification" to the emission unit, as defined in WAC 246-247-030(16). DOE must notify the Department of any changes to a NESHAP major emission unit when a specific isotope is newly identified as contributing greater than 10% of the potential TEDE to the MEI, or greater than 25% of the TEDE to the MEI after controls. WAC 246-247-110(9). DOE must notify the Department of any changes to potential release rates as required by state or federal regulations including changes that would constitute a significant modification to the Air Operating Permit under WAC 173-401-725(4). Notice will be provided according to the particular regulation under which notification is required. If the applicable regulation(s) does not address manner and type of notification, DOE will provide the Department with advance written notice by letter or electronic mail but not solely by copies of documents.</p>	<p>Continuous</p>	<p>CDM: Annual evaluation of retrieval rates, containers/curies managed. Comment:</p>
<p>The department retains the right to conduct stack sampling, environmental monitoring or other testing around this unit to assure compliance. If directed by the department, the facility must make provision for such testing (WAC 246-247-075(9) and (10)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH determined the licensee need not certify compliance with conditions conveying a right, are a historical summary or fact, pertaining to actions to be completed in the future, or pertaining to actions required of the agency.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The department reserves the right to inspect and audit all construction activities, equipment, operations, documents, data and other records related to compliance with the requirements of this chapter (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH determined the licensee need not certify compliance with conditions conveying a right, are a historical summary or fact, pertaining to actions to be completed in the future, or pertaining to actions required of the agency.</p>
<p>The facility must meet all reporting and record keeping requirements of 40 CFR 61, Subpart H. (WAC 246-247-080(2)).</p>	<p>Continuous</p>	<p>CDM: For calculations and input data from stack and ambient air monitors, the ERS electronic system. Information from other than stacks and ambient air monitors resides at the individual facility. For annual reporting DOE/RL-2007-01 Radionuclide Air Emissions Report for the Hanford Site Calendar Year 2006 satisfies the requirement. Comment:</p>
<p>The facility shall notify the department within twenty-four hours of any shutdown, or of any transient abnormal condition lasting more than four hours or other change in facility operations which, if allowed to persist, would result in emissions of radioactive material in excess of applicable standards or license requirements (WAC 246-247-080(5)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: No reports required.</p>
<p>The facility shall maintain readily (promptly) retrievable storage areas (on site) for all records and documents related to, and which may help establish compliance with, the requirements of this chapter. The facility shall keep these records available for department inspection for at least five years (WAC 246-247-080(8)).</p>	<p>Continuous</p>	<p>CDM: WDOH has requested information and records during past inspections and records promptly were made available. Records are maintained per HNF-RD-210. Comment:</p>
<p>The facility shall make available, in timely manner, all documents requested by the department for review. The facility shall allow the department to review documents in advance of an inspection. The facility shall allow access to classified documents by representatives of the department with the appropriate security clearance and a demonstrable need-to-know (WAC 246-247-080(10)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: No documents requested.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>All radioactive air emissions licenses issued by the department, except those issued to radioactive materials licensees, shall have an expiration date of five years from date of issuance or as specified in the Air Operating Permit. For radioactive material licensees, the requirements and limitations for the operation of emission units shall be incorporated into their radioactive materials license, and shall expire when the radioactive materials license expires (WAC 246-247-060(6)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Nothing facility specific to certify.</p>
<p>The facility must be able to demonstrate that workers associated with this emission unit are trained in the use and maintenance of control and monitoring systems, and in the performance of associated tests and emergency procedures (WAC 246-247-075(12)).</p>	<p>Continuous</p>	<p>CDM: Training records. Comment:</p>
<p>If this emission unit is not in compliance with the standards in WAC 246-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-040(5)) and WAC 246-247-060(5)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH determined the licensee need not certify compliance with conditions conveying a right, are a historical summary or fact, pertaining to actions to be completed in the future, or pertaining to actions required of the agency.</p>
<p>The facility shall notify the department at least seven calendar days prior to any planned preoperational tests of new or modified emission units that involve emissions control, monitoring, or containment systems of the emission unit(s). The department reserves the right to witness or require preoperational tests involving the emissions control, monitoring, or containment systems of the emissions unit(s) (WAC 246-247-060(4)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: No planned pre-operational testing occurred during the reporting period.</p>
<p>The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national standards (WAC 246-247-075(6)).</p>	<p>Continuous</p>	<p>CDM: HNF-EP-0528-7 "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions". Comment:</p>
<p>All facilities must be able to demonstrate the reliability and accuracy of emissions monitoring data (WAC 246-247-075(13)).</p>	<p>Continuous</p>	<p>CDM: HNF-EP-0528-7 "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions". Comment:</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH determined the licensee need not certify compliance with conditions conveying a right, are a historical summary or fact, pertaining to actions to be completed in the future, or pertaining to actions required of the agency.</p>
<p>The facility shall report all measured or calculated emissions annually (WAC 246-247-080(3)).</p>	<p>Continuous</p>	<p>CDM: DOE/RL-2007-01 "Radionuclide Air Emissions Report for the Hanford Site Calendar Year 2006". Comment:</p>
<p>The facility shall file a report of closure with the department whenever operations producing emissions of radioactive material are permanently ceased at any emission unit (except temporary emission units) regulated under this chapter. The closure report shall indicate whether, despite cessation of operations, there is still a potential for radioactive air emissions and a need for an active or passive ventilation system with emission control and/or monitoring devices. If decommissioning is planned and will constitute a modification, a NOC is required, as applicable, in accordance with WAC 246-247-060. (WAC 246-247-080(6))</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH determined the licensee need not certify compliance with conditions conveying a right, are a historical summary or fact, pertaining to actions to be completed in the future, or pertaining to actions required of the agency.</p>
<p>The facility shall ensure all emissions units are fully accessible to department inspectors. In the event the hazards associated with accessibility to a unit require training and/or restriction or requirements for entry, the facility owner or operator shall inform the department, prior to arrival, of those restrictions or requirements. The owner or operator shall be responsible for providing the necessary training, escorts, and support services to allow the department to inspect the facility. At a minimum for unannounced inspections, such requirements or restrictions must be told to inspectors to provide an opportunity for inspectors to meet those requirements prior to the inspection (WAC 246-247-080(9)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: No WDOH inspections occurred during the reporting period.</p>
<p>Diffuse/Fugitive emissions shall be monitored using the 200 Area near-field ambient air monitors. Sample collection and analysis shall follow that of the near field monitoring program. Analytical results shall be reported in the Annual Air Emissions Report. Any change to this near-field ambient monitoring program must be approved by the department.</p>	<p>Continuous</p>	<p>CDM: Required near-facility monitoring conducted as reported in DOE/RL-2007-01 "Radionuclide Air Emissions Report for the Hanford Site Calendar Year 2006". Comment:</p>

Requirement	Compliance Status	Compliance Determination Method
<p>All facilities with licensed emission units, except for radioactive materials licensees, shall submit a request to the department for renewal of their radioactive air emissions license at least sixty days prior to expiration of the license or as required by the Air Operating Permit. All renewal requests shall include a summary of the operational status of all emission units, the status of facility compliance with the standards of WAC 246-247-040, and the status of any corrective actions necessary to achieve compliance with the requirements of this chapter. Facilities with licensed emission units that also hold a radioactive materials license issued by the department shall submit this information along with their radioactive material license renewal submittal. If the department is unable to renew a radioactive air emissions license before its expiration date, the existing license, with all of its requirements and limitations, remains in force until the department either renews or revokes the license (WAC 246-247-060(9)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Nothing facility specific to certify.</p>
<p>This approval applies to these additional 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. TRU Waste Retrieval The area to be excavated is managed as a 'clean' area, free of surface contamination measurable with field survey instruments. Because of the possibility of encountering previously undetected subsurface contamination, or future contamination from windblown sources, all work will be performed in accordance with as low as reasonably achievable (ALARA) requirements as determined by the Radiological Control organization. These requirements shall be carried out through the activity work packages and associated radiological work permits (RWP) which will be managed as required retrievable records for this activity. The overburden soil will be removed to expose the waste containers. Excavation equipment will be chosen to effectively remove soil and retrieve the waste containers while minimizing damage to the containers. Excavation activities will be monitored to identify contamination that might be present and to minimize emissions. Any contaminated soils will be managed in accordance with applicable requirements and regulations. The most efficient methodology for removing the uncontaminated overburden from the containers will include the maximum use of conventional methods such as backhoes, front-end loaders, mechanical brooms (boom mounted), or manual digging with shovels and similar hand tools. Only manual methods shall be used to excavate contaminated soil. High-efficiency particulate air (HEPA) filtered vacuums are allowed for use for spot contamination in accordance with the HEPA-filtered vacuum unit (HVU) NOC (DOE/RL-97-50, as amended). The specific steps or approach to uncovering the containers will vary according to the configuration of the trench to be uncovered, the nearby trenches or fences, the designated location of the spoils pile, the planned extent of the soil removal, etc. Therefore, excavation activities will be planned before arriving at the job site. Excavation activities will be controlled closely. When the quantity of soil removed with heavy equipment has reached the logical end, hand tools or HVUs could be used to complete the uncontaminated soil removal operations to access and remove the plastic and plywood materials (to be set aside for reuse or disposal) covering the containers. The exposed containers will be visually inspected and surveyed for contamination. Abnormal drum conditions will be managed as follow: Contaminated containers will be decontaminated or overpacked. Bulging or potentially pressurized containers will be vented as described in the Venting Containers Section. Retrieval activities will include appropriate disposition of small amounts of incidental contaminated soil (e.g., containerized or fixed in place). Larger areas of contamination shall be fixed and the area posted as required by the Radiological Control organization for later disposition. Bulk transfer of contaminated soils for disposal in another trench also could occur.</p>	<p>Continuous</p>	<p>CDM: Comment: This is a description of retrieval operations. These activities are encompassed by many procedures and radiological survey plans. Periodic review and approval of these documents by the ECO demonstrates compliance.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>All containers will be inspected to verify integrity. The container inspection will consist of a visual examination to determine if there are significant corrosion, holes, dents or other visual deformities. All containers may be moved, turned, or otherwise relocated (manually or with powered equipment, slings, clamps, or appropriate rigging) to facilitate an adequate visual inspection. Overpacking containers with minor defects (pinholes, corrosion) is routinely performed at the LLBG and CWC and is expected for up to 10 to 50 percent of the retrieved containers. Precautions will be provided to safely retrieve containers of questionable integrity. The process description for management of abnormal containers will be maintained in written procedures. Operating procedures will be established to safely deal with these containers. Containers that obviously are reached or deformed also will be safely removed. Removal methods will be determined on a case-by-case basis. A breached container that can provide secure confinement will be relocated to an area for repackaging or overpacking. If the container cannot provide adequate confinement for the contents, the container and contents will be overpacked before being relocated. The overpacked containers will be managed according to the LLW (including mixed waste) or TRU waste designation (TRU containers are those with TRU content greater than 100 nCi/g), established by records or assay. After a container is inspected visually and the structural integrity established, the container (if shown by assay or records to be designated as TRU) will be staged for venting, if necessary, or moved to another TSD unit for venting. Retrieved TRU waste containers in their staged configuration at the LLBG will be inspected for outwardly visible signs of corrosion or degradation (overpacking as needed).</p>		
<p>This approval applies to these additional 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. Venting of Containers All work shall be performed in accordance with the LLBG radiological control procedures and ALARA requirements. These requirements are carried out through the procedures, activity work packages, and associated RWPs. The vent filters will be installed in designated containers by using the Drum Venting System (DVS) and/or Dart System that ensures personnel and environmental protection. The methodology will require penetrating the container and inserting a vent. Penetration of the lid will be accomplished by either drilling through the lid with a filter assembly fitted with a short hollow drill bit (using DVS) or puncturing the lid with a filter dart (using Dart system). Either method will result in emissions being routed through a filter during the venting process. Most drums slated for venting will be vented with the DVS, consisting of a trailer with a chamber allowing an operator to sample the drum (screening HSGS for hydrogen content) and install a NucFil filter. Potential emissions from these operations are point source emissions. Bulging or potentially pressurized drums will be evaluated to determine best method and location to vent (Dart-in place, Dart-relocate, or move to the DVS). The Dart System is a portable unit that straps directly onto a drum, using a pneumatic driver remotely activated by wire or radio transmitter. This system penetrates the drum lid to install a NucFil filter with an aluminum bronze housing to prevent the possibility of sparking. Potential emissions from these operations will be considered diffuse and fugitive. The same Dart System will be used to install sample ports, consisting of a closure set screw covering a septum for withdrawing a sample for HSGS, in containers with existing vents at the LLBG, CWC, WRAP, or T Plant Complex, without creating a new pathway for potential emissions.</p>	<p>Continuous</p>	<p>CDM: Comment: This is a description of retrieval operations. These activities are encompassed by many procedures and radiological survey plans. Periodic review and approval of the documents by the ECO demonstrates compliance.</p>
<p>The system shall be built to meet NQA-1 requirements and shall be aerosol tested annually using ANSI N-510 as guidance for non-ANSI N-509 systems. If in-field aerosol testing is not feasible, an approved alternative is given to replace the filters on an annual basis with the manufacturer tested and certification of HEPA filter with a tested rating of 99.97% efficiency. Records of this testing shall be maintained on file.</p>	<p>Continuous</p>	<p>CDM: Preventative maintenance #2X-00552. Comment:</p>

Requirement	Compliance Status	Compliance Determination Method
A maximum of 9,000 containers of TRU waste are approved to be processed per year using the DVS. The processing rate is designed to be 3 to 6 drums per hour, or a maximum of 20 minutes per drum. Only one drum shall be process at a time per DVS unit (If a second DVS is acquired, it shall be registered and licensed by the department prior to use). Using the release fraction of 1.0E-3 for particulates and a time factor of 1.9E-1 (20 minutes per container multiplied by 9,000 containers and divided by 526,000 minutes per year) the potential unabated release rates using the DVS is 4.3E-4 Ci/yr americium 241 and 3.2E-6 Ci/yr cesium 137. This alternative release fraction is approved for this emission unit.	Continuous	CDM: Annual compliance evaluation. Comment:
Final copies of the Scheduled Radiation Task Descriptions for this emission unit will be provided to the department when completed.	Not Applicable	CDM: N/A Comment: These documents were provided on 1/14/2004.
Final copies of the Mobile Drum Venting System (mDVS) Filter Test Performance QA Test Data for this emission unit will be provided to the department when completed.	Not Applicable	CDM: N/A Comment: This document was provided on 1/14/2004.
The department shall be notified within 24 hours of all drum vents that fail to be installed properly when using the drum venting system.	Not Applicable	CDM: N/A Comment: There were no drum venting system failures that encountered a pressure release that blows past the seal of the boot or a deflagration during the reporting period.
It is recognized that other radionuclides may be present in very limited quantities.	Not Applicable	CDM: N/A Comment: Nothing facility specific to certify.

Drum Venting System (Passive Vent)

WDOH Emission Unit ID : 756

Page in AOP : H-1019

Requirement	Compliance Status	Compliance Determination Method
Zone or Area : Abatement Technology : HEPA Type Filter Required Units : 1 Add'l Description: Shall be a Pall Model Ultramet or other with prior approval by the department.	Continuous	CDM: Preventative maintenance #2X-17509. Comment:
Required Sampling: Smears of the exhaust vent at the end of each shift of operation. Sampling Frequency: End of each shift of operation. Radionuclide Requiring Measurement: TOTAL ALPHA TOTAL BETA TOTAL GAMMA	Continuous	CDM: Survey reports. Comment:

Requirement	Compliance Status	Compliance Determination Method
Federal and State Regulatory Requirement: WAC 246-247-075	Continuous	CDM: Comment: Nothing facility specific to certify.
Permit: AIR 03-1206 Issue Date:12-09-03 Effective Date:01-14-04 Obsolete Date: 07-05-06 NOC: Operation of the Transuranic Waste Retrieval Project WDOH NOC ID: 582 Date In AOP: 04-11-05 Page in AOP: H-1019		
Requirement	Compliance Status	Compliance Determination Method
The U.S. Department of Energy shall comply with all Conditions and Limitations of this license (WAC 246-247-060(5)).	Continuous	CDM: For this approval order, in compliance with all approval conditions. Comment:
The total abated emission limit for this Notice of Construction is limited to 4.30E-03 mrem/year to the Maximally Exposed Individual (WAC 246-247-040(5)).	Continuous	CDM: Annual evaluation of retrieval rates, containers/curies managed. Comment:
<p>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. Approved is the retrieval (unearth) and inspection of containers of suspect-transuranic (TRU) and TRU waste from trenches in the Low Level Burial Grounds (LLBG) and install NucFil filters or equivalent (as approved by the department) in the unvented (or inadequately vented) TRU containers. Venting and headspace gas sampling (HSGS) may be performed at the LLBG (in place with engineering controls or within venting enclosure) or at the following facilities licensed for such work (CWC, WRAP, or T Plant Complex). In addition, LLW containers posing a safety hazard (e.g., potential for pressurization, bulging, or similar abnormal condition) may also be vented. Additional approval of the process for this activity is contained in the following Conditions/Limitations.</p>	Continuous	CDM: Comment: This text is just discussion of retrieval activities, there is nothing to certify compliance with.

Requirement	Compliance Status	Compliance Determination Method
<p>The PTE for this project as determined under WAC 246-247-030(21)(a-e) [as specified in the application] is 5.40E-02 mrem/year. Approved are the associated potential release rates (Curies/year) of: Alpha- 0 4.30E-07 Liquid/Particulate Solid WAC 246-247-030(21)(e) Alpha release rate based on Am-241. See condition 30. B/G- 0 2.20E-05 Liquid/Particulate Solid WAC 246-247-030(21)(e) Beta/Gamma release rate based on Cs-137. See condition 30. The radioactive isotopes identified for this emission unit are (no quantities specified): Am 241 Am 243 Cf 252 Cm 244 Cs 134 Cs 137 Eu 152 Eu 154 Pu 238 Pu 239/240 Pu 241 Sr 90 U 234 U 235 U 236 U 238 The potential release rates described in this Condition were used to determine control technologies and monitoring requirements for this approval. DOE must notify the Department of a "modification" to the emission unit, as defined in WAC 246-247-030(16). DOE must notify the Department of any changes to a NESHAP major emission unit when a specific isotope is newly identified as contributing greater than 10% of the potential TEDE to the MEI, or greater than 25% of the TEDE to the MEI after controls. WAC 246-247-110(9). DOE must notify the Department of any changes to potential release rates as required by state or federal regulations including changes that would constitute a significant modification to the Air Operating Permit under WAC 173-401-725(4). Notice will be provided according to the particular regulation under which notification is required. If the applicable regulation(s) does not address manner and type of notification, DOE will provide the Department with advance written notice by letter or electronic mail but not solely by copies of documents.</p>	<p>Continuous</p>	<p>CDM: Annual evaluation of retrieval rates, containers/curies managed. Comment:</p>
<p>The department reserves the right to inspect and audit all construction activities, equipment, operations, documents, data and other records related to compliance with the requirements of this chapter (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: Comment: Ecology and WDOH determined the licensee need not certify compliance with conditions conveying a right, are a historical summary or fact, pertaining to actions to be completed in the future, or pertaining to actions required of the agency.</p>
<p>The facility shall notify the department within twenty-four hours of any shutdown, or of any transient abnormal condition lasting more than four hours or other change in facility operations which, if allowed to persist, would result in emissions of radioactive material in excess of applicable standards or license requirements (WAC 246-247-080(5)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: No reports required.</p>
<p>The facility shall make available, in timely manner, all documents requested by the department for review. The facility shall allow the department to review documents in advance of an inspection. The facility shall allow access to classified documents by representatives of the department with the appropriate security clearance and a demonstrable need-to-know (WAC 246-247-080(10)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: No documents requested.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>If this emission unit is not in compliance with the standards in WAC 246-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-040(5)) and WAC 246-247-060(5).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH determined the licensee need not certify compliance with conditions conveying a right, are a historical summary or fact, pertaining to actions to be completed in the future, or pertaining to actions required of the agency.</p>
<p>The department retains the right to conduct stack sampling, environmental monitoring or other testing around this unit to assure compliance. If directed by the department, the facility must make provision for such testing (WAC 246-247-075(9) and (10)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH determined the licensee need not certify compliance with conditions conveying a right, are a historical summary or fact, pertaining to actions to be completed in the future, or pertaining to actions required of the agency.</p>
<p>The facility must meet all reporting and record keeping requirements of 40 CFR 61, Subpart H. (WAC 246-247-080(2)).</p>	<p>Continuous</p>	<p>CDM: For calculations and input data from stack and ambient air monitors, the ERS electronic system. Information from other than stacks and ambient air monitors resides at the individual facility. For annual reporting DOE/RL-2007-01 Radionuclide Air Emissions Report for the Hanford Site Calendar Year 2006 satisfies the requirement. Comment:</p>
<p>The facility shall maintain readily (promptly) retrievable storage areas (on site) for all records and documents related to, and which may help establish compliance with, the requirements of this chapter. The facility shall keep these records available for department inspection for at least five years (WAC 246-247-080(8)).</p>	<p>Continuous</p>	<p>CDM: WDOH has requested information and records during past inspections and record promptly were made available. Records are maintained per HNF-RD-210. Comment:</p>
<p>All radioactive air emissions licenses issued by the department, except those issued to radioactive materials licensees, shall have an expiration date of five years from date of issuance or as specified in the Air Operating Permit. For radioactive material licensees, the requirements and limitations for the operation of emission units shall be incorporated into their radioactive materials license, and shall expire when the radioactive materials license expires (WAC 246-247-060(6)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Nothing facility specific to certify.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The facility must be able to demonstrate that workers associated with this emission unit are trained in the use and maintenance of control and monitoring systems, and in the performance of associated tests and emergency procedures (WAC 246-247-075(12)).</p>	<p>Continuous</p>	<p>CDM: Training records. Comment:</p>
<p>The facility shall notify the department at least seven calendar days prior to any planned preoperational tests of new or modified emission units that involve emissions control, monitoring, or containment systems of the emission unit(s). The department reserves the right to witness or require preoperational tests involving the emissions control, monitoring, or containment systems of the emissions unit(s) (WAC 246-247-060(4)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: No planned pre-operational testing occurred during reporting period.</p>
<p>The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national standards (WAC 246-247-075(6)).</p>	<p>Continuous</p>	<p>CDM: HNF-EP-0528-7 "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions". Comment:</p>
<p>All facilities must be able to demonstrate the reliability and accuracy of emissions monitoring data (WAC 246-247-075(13)).</p>	<p>Continuous</p>	<p>CDM: HNF-EP-0528-7 "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions." Comment:</p>
<p>The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH determined the licensee need not certify compliance with conditions conveying a right, are a historical summary or fact, pertaining to actions to be completed in the future, or pertaining to actions required of the agency.</p>
<p>The facility shall report all measured or calculated emissions annually (WAC 246-247-080(3)).</p>	<p>Continuous</p>	<p>CDM: DOE/RL-2007-01 "Radionuclide Air Emissions Report for the Hanford Site Calendar Year 2006" Comment:</p>
<p>The facility shall file a report of closure with the department whenever operations producing emissions of radioactive material are permanently ceased at any emission unit (except temporary emission units) regulated under this chapter. The closure report shall indicate whether, despite cessation of operations, there is still a potential for radioactive air emissions and a need for an active or passive ventilation system with emission control and/or monitoring devices. If decommissioning is planned and will constitute a modification, a NOC is required, as applicable, in accordance with WAC 246-247-060. (WAC 246-247-080(6))</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH determined the licensee need not certify compliance with conditions conveying a right, are a historical summary or fact, pertaining to actions to be completed in the future, or pertaining to actions required of the agency.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The facility shall ensure all emissions units are fully accessible to department inspectors. In the event the hazards associated with accessibility to a unit require training and/or restriction or requirements for entry, the facility owner or operator shall inform the department, prior to arrival, of those restrictions or requirements. The owner or operator shall be responsible for providing the necessary training, escorts, and support services to allow the department to inspect the facility. At a minimum for unannounced inspections, such requirements or restrictions must be told to inspectors to provide an opportunity for inspectors to meet those requirements prior to the inspection (WAC 246-247-080(9)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: No WDOH inspections occurred during the reporting period.</p>
<p>All facilities with licensed emission units, except for radioactive materials licensees, shall submit a request to the department for renewal of their radioactive air emissions license at least sixty days prior to expiration of the license or as required by the Air Operating Permit. All renewal requests shall include a summary of the operational status of all emission units, the status of facility compliance with the standards of WAC 246-247-040, and the status of any corrective actions necessary to achieve compliance with the requirements of this chapter. Facilities with licensed emission units that also hold a radioactive materials license issued by the department shall submit this information along with their radioactive material license renewal submittal. If the department is unable to renew a radioactive air emissions license before its expiration date, the existing license, with all of its requirements and limitations, remains in force until the department either renews or revokes the license (WAC 246-247-060(9)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Nothing facility specific to certify.</p>
<p>This approval applies to these additional 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. TRU Waste Retrieval The area to be excavated is managed as a 'clean' area, free of surface contamination measurable with field survey instruments. Because of the possibility of encountering previously undetected subsurface contamination, or future contamination from windblown sources, all work will be performed in accordance with as low as reasonably achievable (ALARA) requirements as determined by the Radiological Control organization. These requirements shall be carried out through the activity work packages and associated radiological work permits (RWP) which will be managed as required retrievable records for this activity. The overburden soil will be removed to expose the waste containers. Excavation equipment will be chosen to effectively remove soil and retrieve the waste containers while minimizing damage to the containers. Excavation activities will be monitored to identify contamination that might be present and to minimize emissions. Any contaminated soils will be managed in accordance with applicable requirements and regulations. The most efficient methodology for removing the uncontaminated overburden from the containers will include the maximum use of conventional methods such as backhoes, front end loaders, mechanical brooms (boom mounted), or manual digging with shovels and similar hand tools. Only manual methods shall be used to excavate contaminated soil. High-efficiency particulate air (HEPA) filtered vacuums are allowed for use for spot contamination in accordance with the HEPA-filtered vacuum unit (HVU) NOC (DOE/RL-97-50, as amended). The specific steps or approach to uncovering the containers will vary according to the configuration of the trench to be uncovered, the nearby</p>	<p>Continuous</p>	<p>CDM: Comment: This is a description of retrieval operations. These activities are encompassed by many procedures and radiological survey plans. Periodic review and approval of these documents by the ECO demonstrates compliance.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>trenches or fences, the designated location of the spoils pile, the planned extent of the soil removal, etc. Therefore, excavation activities will be planned before arriving at the job site. Excavation activities will be controlled closely. When the quantity of soil removed with heavy equipment has reached the logical end, hand tools or HVUs could be used to complete the uncontaminated soil removal operations to access and remove the plastic and plywood materials (to be set aside for reuse or disposal) covering the containers. The exposed containers will be visually inspected and surveyed for contamination. Abnormal drum conditions will be managed as follow: Contaminated containers will be decontaminated or overpacked. Bulging or potentially pressurized containers will be vented as described in the Venting Containers Section. Retrieval activities will include appropriate disposition of small amounts of incidental contaminated soil (c.g., containerized or fixed in place). Larger areas of contamination shall be fixed and the area posted as required by the Radiological Control organization for later disposition. Bulk transfer of contaminated soils for disposal in another trench also could occur. All containers will be inspected to verify integrity. The container inspection will consist of a visual examination to determine if there are significant corrosion, holes, dents or other visual deformities. All containers may be moved, turned, or otherwise relocated (manually or with powered equipment, slings, clamps, or appropriate rigging) to facilitate an adequate visual inspection. Overpacking containers with minor defects (pinholes, corrosion) is routinely performed at the LLBG and CWC and is expected for up to 10 to 50 percent of the retrieved containers. Precautions will be provided to safely retrieve containers of questionable integrity. The process description for management of abnormal containers will be maintained in written procedures. Operating procedures will be established to safely deal with these containers. Containers that obviously are reached or deformed also will be safely removed. Removal methods will be determined on a case-by-case basis. A breached container that can provide secure confinement will be relocated to an area for repackaging or overpacking. If the container cannot provide adequate confinement for the contents, the container and contents will be overpacked before being relocated. The overpacked containers will be managed according to the LLW (including mixed waste) or TRU waste designation (TRU containers are those with TRU content greater than 100 nCi/g), established by records or assay. After a container is inspected visually and the structural integrity established, the container (if shown by assay or records to be designated as TRU) will be staged for venting, if necessary, or moved to another TSD unit for venting. Retrieved TRU waste containers in their staged configuration at the LLBG will be inspected for outwardly visible signs of corrosion or degradation (overpacking as needed).</p>		
<p>This approval applies to these additional 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. Venting of Containers All work shall be performed in accordance with the LLBG radiological control procedures and ALARA requirements. These requirements are carried out through the procedures, activity work packages, and associated RWPs. The vent filters will be installed in designated containers by using the Drum Venting System (DVS) and/or Dart System that ensures personnel and environmental protection. The methodology will require penetrating the container and inserting a vent. Penetration of the lid will be accomplished by either drilling through the lid with a filter assembly fitted with a short hollow drill bit (using DVS) or puncturing the lid with a filter dart (using Dart system). Either method will result in emissions being routed through a filter during the venting process. Most drums slated for venting will be vented with the DVS, consisting of a trailer with a chamber allowing an operator to sample the drum (screening HSGS for hydrogen content) and install a NucFil filter. Potential emissions from these operations are point source emissions. Bulging or potentially pressurized drums will be evaluated to determine best method and location to vent (Dart-in place, Dart-relocate, or move to the DVS). The Dart System is a portable unit that straps directly onto a drum, using a pneumatic driver remotely activated by wire or radio transmitter. This system penetrates the drum lid to install a NucFil filter with an aluminum bronze housing to prevent the possibility of sparking. Potential emissions from these operations will be considered diffuse and fugitive. The same Dart System will be used</p>	<p>Continuous</p>	<p>CDM: Comment: This is a description of retrieval operations. These activities are encompassed by many procedures and radiological survey plans. Periodic review and approval of these documents by the ECO demonstrates compliance.</p>

Requirement	Compliance Status	Compliance Determination Method
to install sample ports, consisting of a closure set screw covering a septum for withdrawing a sample for HSGS, in containers with existing vents at the LLBG, CWC, WRAP, or T Plant Complex, without creating a new pathway for potential emissions.		
The system shall be built to meet NQA-1 requirements and shall be aerosol tested annually using ANSI N-510 as guidance for non-ANSI N-509 systems. If in-field aerosol testing is not feasible, an approved alternative is given to replace the filters on an annual basis with the manufacturer tested and certification of HEPA filter with a tested rating of 99.97% efficiency. Records of this testing shall be maintained on file.	Continuous	<p>CDM: Preventative maintenance #2X-17509 for testing, #2X-00548 for replacement. Comment:</p>
The top of the drum shall be surveyed while inside the DVS, after installation of the NucFil filter. If removable contamination is found, the drum lid shall be decontaminated before removal from the DVS. The drum shall be surveyed immediately after removal from the DVS. Once removed from the DVS, the drum must be immediately decontaminated or contained such that the drum is free of removable contamination (i.e., less than 20 dpm/ 100 cm ² alpha and less than 1000 dpm/100 cm ² beta/gamma). Decontamination at the LLBG is attempted in a graded approach (dry rags, wet rags, decontamination solutions, fixatives, or overpacking if other methods prove unsuccessful).	Continuous	<p>CDM: Survey reports. Comment:</p>
The test compartment is passively ventilated with a HEPA-type filter and is designed to withstand a deflagration as described in the performance specification for this venting system. If deflagration occurs, all activities associated with this license shall cease and the department shall be notified.	Not Applicable	<p>CDM: N/A Comment: No deflagrations have occurred.</p>
Final copies of the Scheduled Radiation Task Descriptions for this emission unit will be provided to the department when completed.	Not Applicable	<p>CDM: N/A Comment: This information was provided on 1/14/2004.</p>
Final copies of the Mobile Drum Venting System (mDVS) Filter Test Performance QA Test Data for this emission unit will be provided to the department when completed.	Not Applicable	<p>CDM: N/A Comment: This information was provided on 1/14/2004.</p>
The department shall be notified within 24 hours of all drum vents that fail to be installed properly when using the drum venting system (An example of a "failure" is a pressure release that blows past the seal of the boot or a deflagration).	Not Applicable	<p>CDM: N/A Comment: No drum venting system failures involving a pressure release that blows past the boot of the seal or a deflagration occurred during the reporting period.</p>

Requirement	Compliance Status	Compliance Determination Method
The passive vent of the DVS exhausts potential emissions from the use of the HEPA Vacuum mounted in the test chamber to collect metal filings after installation of a NucFil filter. Release rates are calculated by multiplying surface area vacuumed by the contamination level. An estimate of the release rate is calculated by assuming the surface area of the boot that covers the drum lid during the filter installation process (8.3 square inches) multiplied by 9,000 drums with an average contamination level of 10,000 dpm/100 cm ² beta/gamma and 200 dpm/100 cm ² alpha. Using a release fraction of 1.0 for the HEPA vacuum use, the potential release rates from using the DVS is 4.3E-7 Ci/yr americium-241 and 2.2E-05 Ci/yr cesium-137. This alternative release fraction is approved for this emission unit.	Continuous	CDM: Annual compliance evaluation. Comment:
It is recognized that other radionuclides may be present in very limited quantities.	Not Applicable	CDM: N/A Comment: Nothing facility specific to certify.

Sitewide PTRAEU at Tank Farms
WDOH Emission Unit ID : 447
Page in AOP : H-0272

Requirement	Compliance Status	Compliance Determination Method
Zone or Area : Abatement Technology : Required Units : 1 Add'l Description: Type - 1	Continuous	CDM: Field interviews. Comment: None
Zone or Area : Abatement Technology : HEPA Required Units : 1 Add'l Description: Type - 2 and Type - 3	Continuous	CDM: Field interviews. Comment: None
Zone or Area : Abatement Technology : Charcoal Filter Required Units : 1 Add'l Description: Type - 2 and Type - 3	Continuous	CDM: Field interviews. Comment: None
Required Sampling: One of the following methods may be chosen for actual emissions reporting: nondestructive assay, record sampler, or continuous air monitoring, whichever is more appropriate. Sampling Frequency: Annual, unless specified by the NOC. Radionuclide Requiring Measurement: Gross Alpha/Beta	Continuous	CDM: Field interviews. Comment: None
Federal and State Regulatory Requirement: WAC 246-247-075[3] Permit Monitoring and Testing Procedure: Appendix B, Method 114 [see AIR 05-303 for clarification details]	Continuous	CDM: CH2M HILL NESHAP quality assurance program. Comment: None

Requirement	Compliance Status	Compliance Determination Method
Permit: AIR 02-1220 Issue Date: 12-13-02 Obsolete Date: 07-05-06 NOC: Portable/Temporary Radionuclide Airborne Emissions Units (PTRAEU) WDOH NOC ID: 411 Date In AOP: 04-11-05 Page in AOP: H-0272		
Requirement	Compliance Status	Compliance Determination Method
<p>The U.S. Department of Energy shall comply with all Conditions and Limitations of this license (WAC 246-247-060)(5)).</p>	Continuous	<p>CDM: Field interviews, and work packages for evidence of meeting all conditions and limitations in this NOC approval. Comment: None</p>
<p>The total abated emission limit for this Notice of Construction is limited to 1.91E-05 mrem/year to the Maximally Exposed Individual (WAC 246-247-040(5)). The total limit on the Potential-To-Emit for Notice of Construction is limited to 8.90E-02 mrem/year to the Maximally Exposed Individual (WAC 246-247-030(21)).</p>	Continuous	<p>CDM: The annual "Radionuclide Air Emissions Report" for the Hanford Site. Comment: None</p>
<p>No activities, other than those explicitly described within this approval, shall be conducted without prior written approval. The approved activities are limited to: the following PTRAEUs: Type I PTRAEUs are portable ventilation-filter units. Type II PTRAEUs are mobile sample preparation units. Type III PTRAEUs are mobile screening and analysis units. Each type of PTRAEU is described in the following paragraphs. Most of the PTRAEUs are portable ventilation-filter units (Type I) with a capacity from approximately 50 to 2,000+ cubic feet per minute exhaust flow rate. The portable ventilation filter units control radionuclide emissions by providing filtered ventilation on sites where work activities potentially could disturb areas with radioactive contamination. Type I units that are vacuums are listed to be used as ventilation units. If the vacuum is used in any other manner/process, the WDOH must approve its use under separate application before the activity commences. Mobile sample preparation units (Type II) decrease the chance of unintentional cross-contamination of samples and enhance personnel radiological safety. The sample preparation units enable technicians to remove material from core barrels, homogenize the material, and fill prescribed sample containers for onsite and offsite analysis. In enclosed, self-contained sample preparation units, radiological exposure and interference from environmental conditions (i.e., wind, precipitation, and exhaust fumes) are minimized. Mobile sample screening and analysis units (Type III) provide preliminary screening of samples to determine potential problem areas at a site. The units also screen samples to identify those samples requiring further in-depth analysis. Screening samples decreases the number of samples transported for analysis. The fast turnaround time can provide results for a field situation requiring expeditious response. The source of radionuclides handled by the mobile sample preparation facilities and mobile screening and analysis facilities is contaminated soils and/or liquids extracted from cribs, ditches, ponds, burial sites, and other such areas with surficial soil contamination. An additional source of radionuclides is preparation of radioactive standards to be used for instrument calibration.</p>	Continuous	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
This NOC does not have "Annual Possession Quantity" limits.	Not Applicable	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
The department reserves the right to inspect and audit all construction activities, equipment, operations, documents, data and other records related to compliance with the requirements of this chapter (WAC 246-247-080(1)).	Not Applicable	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
The facility shall report all measured or calculated emissions annually (WAC 246-247-080(3)).	Continuous	<p>CDM: The annual "Radionuclide Air Emissions Report" for the Hanford Site. Comment: None</p>
The facility must be able to demonstrate the reliability and accuracy of emissions data and other test results from this emission unit (WAC 246-247-075(13)).	Continuous	<p>CDM: CH2M HILL quality assurance program, records, and procedures. Comment: None</p>
These Conditions and Limitations must be documented in an established procedure prior to starting activities granted by this approval (WAC 246-247-040(5)) and (WAC 246-247-060(5)).	Continuous	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None</p>
Department of Health reserves the right to request an nondestructive analysis (NDA) after each exhaust job assignment (WAC 246-247-075(3)). The monitoring includes: emission estimates to include the methodology, all monitoring measurement results taken during the operation, copy of all logs submitted to the department on June 30th. One of the following methods may be chosen for actual emissions reporting, nondestructive assay, record sampler, or continuous air monitoring, whichever is more appropriate.	Not Applicable	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The department retains the right to conduct its own stack sampling, environmental monitoring or other testing, as required around this unit to assure compliance. If the department so decides, the facility must make provision for such testing (WAC 246-247-075(9) and (10)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility shall notify the department seven days in advance of any planned pre-operational testing of the emission unit's control, monitoring or containment systems. The department reserves the right to observe such tests (WAC 246-247-060(4)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility must be able to demonstrate that the workers associated with this emission unit are adequately trained in the use and maintenance of emission control and monitoring systems, and in the performance of associated test and emergency response procedures (WAC 246-247-075(12)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL training program, training records, work controls, and procedures. Comment: None</p>
<p>If this emission unit is not in compliance with the standards in WAC 246-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-060-(2)(d)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The facility shall report to the department within 24 hours, any unexpected release of radioactivity, shutdown or other condition that, if allowed to persist, or lasts more than four hours, would result in the emission of radionuclides in excess of any standards or limitation in the license. Applicable standards (WAC 246-247-040) include unit specific emission limits (paragraph 5), the offsite dose standard (paragraph 1), BARCT (paragraph 3) or ALARACT (paragraph 4), whichever is applicable, or any limitation included in this approval (paragraph 5) (WAC 246-247-080(5)).</p>	<p>Continuous</p>	<p>CDM: Field interviews, CH2M HILL notification procedures, and notification logbook. Comment: None</p>
<p>The facility shall make available, in timely manner, all documents requested by the department for review. The facility shall allow the department to review documents in advance of an inspection. The facility shall allow access to classified documents by representatives of the department with the appropriate security clearance and a demonstrable need-to-know (WAC 246-247-080(10)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL records management and procedures. Comment: None</p>
<p>The required possession quantity is RHL's calculated for a daily use because many of the activities are of short duration. In calculating the RHL's 0.1 mrem per year criteria will be used as a beginning point and the source term, which can be handled each day, is back calculate.</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility shall ensure all emissions units are fully accessible to department inspectors. In the event the hazards associated with accessibility to a unit require training and/or restriction or requirements for entry, the facility owner or operator shall inform the department, prior to arrival, of those restrictions or requirements. The owner or operator shall be responsible for providing the necessary training, escorts, and support services to allow the department to inspect the facility. At a minimum for unannounced inspections, such requirements or restrictions must be told to inspectors to provide an opportunity for inspectors to meet those requirements prior to the inspection (WAC 246-247-080(9)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility must meet all reporting and record keeping requirements of 40 CFR 61, Subpart H (WAC 246-247-080(2)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL records management and procedures. Comment: None</p>
<p>The facility shall maintain readily (promptly) retrievable storage areas (on site) for all records and documents related to, and which may help establish compliance with, the requirements of this chapter. The facility shall keep these records available for department inspection for at least five years (WAC 246-247-080(8)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL records management and procedures. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
Ductwork, seams, and potential release locations on the portable exhausters are to be monitored on a routine basis for potential radionuclide releases and noted on the log sheets (e.g., post survey results negative). These routine checks should be kept as retrievable records.	Continuous	CDM: Field interviews, operating rounds, work control/planning/documents and procedures. Comment: None
The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national standards (WAC 246-247-075(6)).	Continuous	CDM: CH2M HILL quality assurance program, records, and procedures. Comment: None
Prior to permanent shut down of an emission unit or completion of an activity, the permittee shall file a report of closure with the Department of Health. The report of closure shall include the date of the shutdown and indicate whether, despite cessation of operation, there is still a potential for radioactive air emissions and a need for any active or passive ventilation system with emission control and/or monitoring devices. An emission unit or activity will not be considered permanently shut down or completed until a report of closure is received and approved by Health. Once an emission unit is permanently shut down or an activity is completed, thereby rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the shutdown or completion, to meet any monitoring, record keeping, and reporting, requirements which are no longer applicable for that emission unit or activity. All records, relating to the shut down emission unit or completion of an activity, generated while the emission unit or activity was in operation, shall be kept in accordance with (WAC 246-247-080(8)).	Not Applicable	CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.

Sitewide HEPA Vac at Tank Farms
WDOH Emission Unit ID : 455
Page in AOP : H-0266

Requirement	Compliance Status	Compliance Determination Method
No active Abatement Controls in the AOP for this certification period.		
No active Monitoring in the AOP for this certification period.		

Requirement	Compliance Status	Compliance Determination Method
<p align="center">Permit: AIR 03-1217 Issue Date:12-23-03 Effective Date:01-08-04 Obsolete Date: 07-05-06 NOC: HEPA Filtered Vacuum Radioactive Air Emission Units (HVU) WDOH NOC ID: 410 Date In AOP: 04-11-05 Page in AOP: H-0266</p>		
Requirement	Compliance Status	Compliance Determination Method
<p>The U.S. Department of Energy shall comply with all Conditions and Limitations of this license (WAC 246-247-060(5)).</p>	Continuous	<p>CDM: Field interviews, and work packages as evidence of compliance with conditions and limitations in this NOC approval. Comment: None</p>
<p>The total abated emission limit for this Notice of Construction is limited to 2.50E-05 mrem/year to the Maximally Exposed Individual (WAC 246-247-040(5)).</p>	Continuous	<p>CDM: The annual "Radionuclide Air Emissions Report" for the Hanford Site. Comment: None</p>
<p>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. The use of specified HVUs located and operated on the Hanford Site, and represents establishment of unregistered, portable and temporary, insignificant emission units. For the purposes of estimating (modeling) offsite exposures for this application, all applicable HVU emissions at an individual facility (e.g., B Plant Complex, C Tank Farm, SX Tank Farm, T Plant Complex, 100-K East Basin, 100-K West Basin, 324 Building, 340 Complex, etc.) or activity (e.g., D&D of a building) will be considered as a single emission point for that facility. HVUs are portable cleaners with exhaust flow rates ranging from 50 to 300 cubic feet per minute. The units control radionuclide emissions by providing filtered vacuuming for surfaces that radioactively are contaminated. HVUs fall into two categories of use, those used for the reduction of smearable contamination and those used to reduce fixed contamination. For smearable contamination, the use of HVUs is limited to reduction of contamination on hard surfaces (e.g., concrete, permanently installed metal equipment such as risers, ventilation system components, piping, etc.). Soil matrices are excluded from this NOC. Smearable contamination on these hard surfaces will not exceed limits established in DOE/RL-96-109. These limits, if exceeded, require the affected areas to be posted as a high contamination area. The limits are 2,000 disintegrations per minute per 100 square centimeters (dpm/100 cm²) alpha contamination and 100,000 dpm/100 cm² beta/gamma contamination. An exception to these limits is restricted to spot surface contamination areas found during outdoor radiological field surveys, and to clean up localized, radiologically contaminated material (e.g., dust, dirt, bird droppings, animal feces, insects, spider webs, tumbleweed fragments, etc.). These types of materials could have beta/gamma contamination levels exceeding 1 million dpm/100 cm², but are very localized (i.e., a few square meters, rather than hundreds of square meters) and could occur in contamination areas, buffer zones, and clean zones. This exception does not apply to areas normally posted as high contamination areas. The second category of use is for reduction of fixed contamination, involving the removal and/or penetration of contaminated surfaces. This category of use includes using HVUs and associated shrouded tools for sanding, stripping, spalling, drilling, and cutting operations. Limits in areas of fixed contamination to ensure compliance will be established before these tools are used.</p>	Continuous	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None</p>
<p>The PTE for this project as determined under WAC 246-247-030(21)(a-e) [as specified in the application] is 4.97E-02 mrem/year. Approved are the associated potential release rates (Curies/year) of: Alpha 0.229E-04 Liquid/Particulate Solid WAC 246-247-030(21)(a) Alpha release rate for 300</p>	Continuous	<p>CDM: Field interviews, WDOH approved logs, and verified basis for APQ in NOC</p>

Requirement	Compliance Status	Compliance Determination Method
<p>Area, emission calculation will assume Pu-239/240. Alpha 0 3.44E-03 Liquid/Particulate Solid WAC 246-247-030(21)(a) Alpha release rate for 400 East Area, emission calculation will assume Pu-239/240 Alpha 0 4.57E-03 Liquid/Particulate Solid WAC 246-247-030(21)(a) Alpha release rate for 200 East Area, emission calculation will assume Pu-239/240 Alpha 0 7.70E-03 Liquid/Particulate Solid WAC 246-247-030(21)(a) Alpha release rate for 200 West Area, emission calculation will assume Pu-239/240 Alpha 0 3.09E-03 Liquid/Particulate Solid WAC 246-247-030(21)(a) Alpha release rate for 100 Areas, emission calculations will assume Pu-239/240 B/G 0 1.16E-02 Liquid/Particulate Solid WAC 246-247-030(21)(a) B/G release rate for 300 Area, emission calculations will assume Sr-90. B/G 1.74E-01 0 Liquid/Particulate Solid WAC 246-247-030(21)(a) B/G release rate for 400 Area, emission calculations will assume Sr-90. B/G 0 1.56E-01 Liquid/Particulate Solid WAC 246-247-030(21)(a) B/G release rate for 100 Areas, emission calculations will assume Sr-90. B/G 0 2.30E-01 Liquid/Particulate Solid WAC 246-247-030(21)(a) B/G release rate for 200 East Area, emission calculations will assume Sr-90. B/G 0 3.88E-01 Liquid/Particulate Solid WAC 246-247-030(21)(a) B/G release rate for 200 West Area, emission calculations will assume Sr-90. The radioactive isotopes identified for this emission unit are (no quantities specified): Pu 239/240 Sr 90 The potential release rates described in this Condition were used to determine control technologies and monitoring requirements for this approval. DOE must notify the Department of a "modification" to the emission unit, as defined in WAC 246-247-030(16). DOE must notify the Department of any changes to a NESHAP major emission unit when a specific isotope is newly identified as contributing greater than 10% of the potential TEDE to the MEI, or greater than 25% of the TEDE to the MEI after controls. WAC 246-247-110(9). DOE must notify the Department of any changes to potential release rates as required by state or federal regulations including changes that would constitute a significant modification to the Air Operating Permit under WAC 173-401-725(4). Notice will be provided according to the particular regulation under which notification is required. If the applicable regulation(s) does not address manner and type of notification, DOE will provide the Department with advance written notice by letter or electronic mail but not solely by copies of documents.</p>		<p>application. Comment: None</p>
<p>The facility shall notify the department at least seven calendar days prior to any planned preoperational tests of new or modified emission units that involve emissions control, monitoring, or containment systems of the emission unit(s). The department reserves the right to witness or require preoperational tests involving the emissions control, monitoring, or containment systems of the emissions unit(s) (WAC 246-247-060(4)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>If this emission unit is not in compliance with the standards in WAC 246-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-040-(5) and WAC 246-247-060-(5)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The required controls are described as follows: The HVU's must be field tested annually requiring an aerosol test/efficiency test or equivalent pass/fail criteria of 95.95% using an aerosol defined in ASME N510 or approved equivalent. In addition, the HVU's filtration systems are to be tested whenever the configuration is modified and/or the filtration system is opened. A smear of the exhaust port shall be conducted before and after each use of HVU's. If the exhaust port smear is positive, the unit shall be tagged and removed from service.</p>	<p>Continuous</p>	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None</p>
<p>The facility must meet all reporting and record keeping requirements of 40 CFR 61, Subpart H (WAC 246-247-080(2)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL records management and procedures. Comment: None</p>
<p>The facility shall make available in a timely manner, all documents requested by the department for review. The facility shall allow the department to review documents in advance of an inspection. The facility shall allow access to classified documents by representatives of the department with the appropriate security clearance and a demonstrable need-to-know. (WAC 246-247-080(10)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL records management and procedures. Comment: None</p>
<p>The facility shall ensure all emissions units are fully accessible to department inspectors. In the event the hazards associated with accessibility to a unit require training and/or restrictions or requirements for entry, the facility owner or operator shall inform the department, prior to arrival, of those restrictions or requirements. The owner or operator shall be responsible for providing the necessary training, escorts, and support services to allow the department to inspect the facility. At a minimum for unannounced inspections, such requirements or restrictions must be told to inspectors to provide an opportunity for inspectors to provide an opportunity for inspectors to meet those requirements prior to the inspection (WAC 246-247-080(9)).</p>	<p>Not Applicable</p>	<p>CDM: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The department retains the right to conduct stack sampling, environmental monitoring or other testing around this unit to assure compliance. If directed by the department, the facility must make provision for such testing (WAC 246-247-075(9) and (10)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility must be able to demonstrate that workers associated with this emission unit are adequately trained in the use and maintenance of emission control and monitoring systems, and in the performance of associated test and emergency response procedures (WAC 246-247-075(12)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL training program, training records, work controls, and procedures. Comment: None</p>
<p>The facility shall notify the department within twenty-four hours of any shutdown, or of any transient abnormal condition lasting more than four hours or other change in facility operations which, if allowed to persist, would result in emissions of radioactive material in excess of applicable standards or license requirements (WAC 246-247-080(5)).</p>	<p>Not Applicable</p>	<p>CDM: Field interviews, CH2M HILL notification procedures, and notification logbook. Comment: None</p>
<p>All facilities must be able to demonstrate the reliability and accuracy of the radioactive air emissions monitoring data (WAC 246-247-075(13)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL quality assurance program, records, and procedures. Comment: None</p>
<p>The department reserves the right to inspect and audit all construction activities, equipment, operations, documents, data and other records related to compliance with the requirements of this chapter (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility shall maintain readily (promptly) retrievable storage areas (on site) for all records and documents related to and which may help establish compliance with, the requirements of this chapter. The facility shall keep these records available for department inspection for at least five years (WAC 246-247-080(8)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL records management and procedures. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p>Monitoring requirements are as follows: In the event that the exhauster is used on different emission units, the Department of Health reserves the right to request a nondestructive analysis/assay (NDA) after each exhaust job assignment (WAC 246-247-075(3)). The monitoring includes: emission estimates to include the methodology, all monitoring measurement results taken during the operation, copy of all logs kept on site and the summary submitted to the department on June 30th. Log sheets will include the following information: Results of smears on the exhaust ports; Maximum contamination level encountered or analysis results, area cleaned, and air emission source constituents if other than plutonium 239 and strontium 90 potential radionuclide releases.</p>	<p>Continuous</p>	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None</p>
<p>The approved process is as follows: The HVU's fall into two categories. The first category is the use if the HVU's for the reduction of smearable contamination (including the special cases listed in Appendix C) and the other is to reduce fixed contamination. Soil matrices are excluded from this NOC.</p>	<p>Continuous</p>	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None</p>
<p>All HEPA vacuum logs shall be submitted to the department on a quarterly basis (beginning with the first quarter of 2002). This submittal shall be to the department 30 days after the end of each quarter.</p>	<p>Continuous</p>	<p>CDM: Field interviews and WDOH approved logs. Comment: None</p>
<p>This NOC shall be revised no later than September 1, 2002. Revision 2 was received in September, 2002. The NOC application was determined to be incomplete, a new NOC application shall be submitted.</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national standards (WAC 246-247-075(6)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL quality assurance program, records, and procedures. Comment: None</p>
<p>The facility shall report all measured or calculated emissions annually (WAC 246-247-080(3)).</p>	<p>Continuous</p>	<p>CDM: The annual "Radionuclide Air Emissions Report" for the Hanford Site. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The facility shall file a report of closure with the department whenever operations producing emissions of radioactive material are permanently ceased at any emission unit (except temporary emission units) regulated under this chapter. The closure report shall indicate whether, despite cessation of operations, there is still a potential for radioactive air emissions and a need for an active or passive ventilation system with emission control and/or monitoring devices. If decommissioning is planned and will constitute a modification, a NOC is required, as applicable, in accordance with WAC 246-247-060. (WAC 246-247-080(6))</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>

244-A Primary HEPA
WDOH Emission Unit ID : 738
Page in AOP : H-0955

Requirement	Compliance Status	Compliance Determination Method
<p>Zone or Area : Abatement Technology : HEPA Required Units : 1 Add'l Description: Single Breather Filter</p>	<p>Continuous</p>	<p>CDM: Field interviews. Comment: None</p>
<p>Required Sampling: PCM will be a smear survey on the inside surface of the ducting and downstream of the HEPA filter or on the outside of the screen covering the outlet of the vent. Sampling Frequency: 1 per year. Radionuclide Requiring Measurement: Levels below 10,000 dpm/100cm² beta/gamma and 200 dpm/100cm² alpha will verify low emissions.</p>	<p>Continuous</p>	<p>CDM: Annual Radiological Surveillance Task, Radiological Survey Records, and field interviews. Comment: None</p>
<p>Federal and State Regulatory Requirement: WAC 246-247-075</p>	<p>Continuous</p>	<p>CDM: CH2M HILL NESHAP quality assurance program. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p align="center">Permit: AIR 03-611 Issue Date:06-26-03 Obsolete Date: 07-05-06 NOC: Isolation and Closure of Exhaust Stacks 296-A-25, 296-B-28, 296-S-22, and 296-T-18 WDOH NOC ID: 578 Date In AOP: 04-11-05 Page in AOP: H-0955</p>		
Requirement	Compliance Status	Compliance Determination Method
<p>The U.S. Department of Energy shall comply with all Conditions and Limitations of this license (WAC 246-247-060(5)).</p>	Continuous	<p>CDM: Field interviews, and complied with all conditions and limitations in this NOC approval. Comment: None</p>
<p>The total abated emission limit for this Notice of Construction is limited to 1.20E-03 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 1.20E-01 mrem/year to the Maximally Exposed Individual (WAC 246-247-030(21)).</p>	Continuous	<p>CDM: The annual "Radionuclide Air Emissions Report" for the Hanford Site. Comment: None</p>
<p>No activities, other than those explicitly described within this approval, shall be conducted without prior written approval. The approved activities are limited to: the following DCRT and associated stacks: 244-A (296-A-25), 244-BX (296-B-28), 244-S (296-S-22), and 244-TX (296-T-18): 244-A DCRT (296-A-25 STACK) Passive Ventilation Breather Filter System Installation: A passive ventilation breather filter system shall be installed on an existing above-grade riser on the primary receiver tank, in accordance with ALARACT Demonstration 1 and 16. The primary tank breather filter will serve as the static vent for the instrument air injected (at a maximum of 9 cubic feet per hour) into the receiver tank through a set of three weight-factor dip tubes, which mixes with and dilutes any flammable gases. The primary tank breather filter will allow flammable gases to escape through the breather filter while collecting any airborne radioactive particulates. A passive ventilation breather filter system shall be installed above-grade on an existing riser or the existing annulus inlet filter riser, in accordance with ALARACT 1 and 16 "TWRS ALARACT. Demonstration for Work on Potentially Contaminated Ventilation System Components". The annulus breather filter will provide for the exchange of ambient air with the annulus tank during atmospheric pressure fluctuations and will allow vapors to escape. The breather filter systems will, at a minimum, consist of an isolation valve (normally open during operation), filter housing, HEPA filter, and loop seal assembly. The isolation valve will isolate the HEPA filter from the tank to facilitate testing of the filter, and to isolate the system until the filter or housing can be replaced. HEPA Filter Bank Isolation and Removal: The isolation and removal of the HEPA filter bank located in the 244-A DCRT filter pit will require the deactivation of the HEPA filter bank instrumentation and alarms, the removal and disposal of the HEPA filter bank, and the installation of the filter pit duct jumper assembly, in accordance with ALARACT Demonstrations 6, 14, and 16. The 296-A-25 exhauster is equipped with a HEPA filter bank inside the filter pit. The HEPA filter bank is attached to three nozzles in the filter pit: one nozzle to the catch tank, one nozzle to the annulus, and one nozzle to the ventilation exhaust ductwork. The HEPA filter bank will be disconnected from the nozzles and removed for disposal. A filter pit duct jumper assembly (4" schedule 40 pipe) will be connected to the catch tank nozzle and ventilation exhaust ductwork nozzle to provide the ventilation path to the newly installed passive breather filters. The third nozzle to the annulus will be closed in the filter pit. The filter pit duct jumper assembly will be fabricated in accordance with American Society of Mechanical Engineers (ASME) B31.3 and tested in accordance with ASME AG-1. Electrical Equipment and Instrumentation Isolation: The isolation of electrical equipment and instrumentation on the 244-A DCRT will require the disconnection of</p>	Continuous	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p>various power supplies (e.g., exhaust fan, motor, operated valves, heat trace, sampler pumps, continuous air monitor, and alarms) and isolation of instrumentation (e.g., HEPA filter bank pressure indicators) that support operation and monitoring of the stack ventilation system, in accordance with ALARACT Demonstrations 6 and 14. Disconnection is the physical disconnection and removal of wires from the power source. Pit entries are not required to disconnect power or isolate instrumentation. 296-A-25 Stack Isolation: The 296-A-25 stack will be isolated via mechanical isolations. Blank flanges will be installed on the duct end and on the suction side of the exhaust fan. A closure cap will be installed on top of the exhaust stack. The exhaust stack drain line will be cut and capped above grade, in accordance with ALARACT Demonstration 16. 244-BX DCRT (296-B-28 STACK) Passive Ventilation Breather Filter System Installation: A passive ventilation breather filter system shall be installed on an existing above-grade riser on the primary receiver tank in accordance with ALARACT Demonstration 1 and 16. The primary tank breather filter will serve as the static vent for the instrument air injected (at a maximum of 9 cubic feet per hour) into the receiver tank through a set of three weight-factor dip tubes, which mixes with and dilutes any flammable gases. The primary tank breather filter will allow flammable gases to escape while collecting any airborne radioactive particulates. A passive ventilation breather filter system will be installed above-grade on an existing riser or the existing annulus inlet filter riser in accordance with ALARACT Demonstration 1 and 16. The annulus breather filter will provide for the exchange of ambient air with the annulus tank during atmospheric pressure fluctuations and will allow vapors to escape. The breather filter system will, at a minimum, consist of an isolation valve (normally open during operation), filter housing, HEPA filter, and loop seal assembly. The isolation valve will isolate the HEPA filter from the tank to facilitate testing of the filter, and to isolate the system until the filter or housing can be replaced. HEPA Filter Bank Isolation and Removal: Removal of the HEPA filter bank in the 244-BX DCRT filter pit is not required. The HEPA filter bank will be isolated via closure of manual valves and the deactivation of motor-controlled valves. Above-grade duct/pipe will be capped. The associated HEPA filter bank instrumentation and alarms will be deactivated. This work will be in accordance with ALARACT 16. Electrical Equipment and Instrumentation Isolation: The isolation of electrical equipment and instrumentation on the 244-BX DCRT will require the disconnection of various power supplies (e.g., exhaust fan, motor operated valves, heat trace, sampler pumps, continuous air monitor, and alarms) and isolation of instrumentation (e.g., HEPA filter bank pressure indicators) that support operation and monitoring of the stack ventilation system in accordance with ALARACT Demonstration 16. Disconnection is the physical disconnection and removal of wires from the power source. Pit entries are not required to disconnect power or isolate instrumentation. 296-B-28 Stack Isolation: The 296-B-28 stack will be isolated via mechanical isolations. A blank flange will be installed at the suction side of the exhaust fan or at another suitable location near the filter pit outlet to the exhaust stack. A closure cap will be installed on top of the exhaust stack. The exhaust stack drain line will be cut and capped above grade. This work will be in accordance with ALARACT 16. 244-S DCRT (296-S-22 STACK) Passive Ventilation Breather Filter System Installation: A passive ventilation breather filter system will be installed on an existing above-grade riser on the primary receiver tank in accordance with ALARACT Demonstration 1 and 16. The primary tank breather filter will serve as the static vent for the instrument air injected (at a maximum of 9 cubic feet per hour) into the receiver tank through a set of three weight-factor dip tubes, which mixes with, and dilutes, any flammable gases. The primary tank breather filter will allow flammable gases to escape while collecting any airborne radioactive particulates. A passive ventilation breather filter system will be installed above-grade on an existing riser or the existing annulus inlet filter riser in accordance with ALARACT 1 and 16. The annulus breather filter will provide for the exchange of ambient air with the annulus tank during atmospheric pressure fluctuations and will allow vapors to escape. The breather filter system will, at a minimum, consist of an isolation valve (normally open during operation), filter housing, HEPA filter, and loop seal assembly. The isolation valve will isolate the HEPA filter from the tank to facilitate testing of the filter, and to isolate the system until the filter or</p>		

Requirement	Compliance Status	Compliance Determination Method
<p>housing can be replaced. HEPA Filter Bank Isolation and Removal: The isolation and removal of the HEPA filter bank located in the 244-S DCRT filter pit will require the deactivation of the HEPA filter bank instrumentation and alarms, the removal and disposal of the HEPA filter bank, and the installation of the filter pit duct jumper assembly, in accordance with ALARACT Demonstrations 6, 14, and 16. The 296-S-22 exhauster is equipped with a HEPA filter bank inside the filter pit. The HEPA filter bank is attached to three nozzles in the filter pit: one nozzle to the catch tank, one nozzle to the annulus, and one nozzle to the ventilation exhaust ductwork. The HEPA filter bank will be disconnected from the nozzles and removed for disposal. A filter pit duct jumper assembly (4" schedule 40 pipe) will be connected to the catch tank nozzle and ventilation exhaust ductwork nozzle to provide the ventilation path to the newly installed passive breather filters. The third nozzle to the annulus will be closed in the filter pit. The filter pit duct jumper assembly will be fabricated in accordance with ASME B31.3 and tested in accordance with ASME AG-1. Electrical Equipment and Instrumentation Isolation: The isolation of electrical equipment and instrumentation on the 244-S DCRT will require the disconnection of various power supplies (e.g., exhaust fan, motor operated valves, heat trace, sampler pumps, continuous air monitor, and alarms) and isolation of instrumentation (e.g., HEPA filter bank pressure indicators) that support operation and monitoring of the stack ventilation system in accordance with ALARACT 16. Disconnection is the physical disconnection and removal of wires from the power source. Pit entries are not required to disconnect power or isolate instrumentation. 296-S-22 Stack Isolation: The 296-S-22 stack will be isolated via mechanical isolations. Blank flanges will be installed on the duct end and on the suction side of the exhaust fan. A closure cap will be installed on top of the exhaust stack. The exhaust stack drain line will be cut and capped above grade. This work will be done in accordance with ALARACT Demonstration 16. 244-TX DCRT (296-T-18 STACK) Passive Ventilation Breather Filter Installation: A passive ventilation breather filter system will be installed on an existing above-grade riser on the primary receiver tank in accordance with ALARACT Demonstration 1 and 16. The primary tank breather filter will serve as the static vent for the instrument air injected (at a maximum of 9 cubic feet per hour) into the receiver tank through a set of three weight-factor dip tubes, which mixes with, and dilutes, any flammable gases. The primary tank breather filter will allow flammable gases to escape while collecting any airborne radioactive particulates. A passive ventilation breather filter system will be installed above-grade on an existing riser or the existing annulus inlet filter riser in accordance with ALARACT 1 and 16. The annulus breather filter will provide for the exchange of ambient air with the annulus tank during atmospheric pressure fluctuations and will collect potential airborne radioactive particulates from the annulus space while allowing vapors to escape. The breather filter system will, at a minimum, consist of an isolation valve (normally open during operation), filter housing, HEPA filter, and loop seal assembly. The isolation valve will isolate the HEPA filter from the tank to facilitate testing of the filter, and to isolate the system until the filter or housing can be replaced. HEPA Filter Bank Isolation and Removal: Removal of the HEPA filter bank in the 244-TX DCR T filter pit is not required. The HEPA filter bank will be isolated via closure of manual valves and the deactivation of motor-controlled valves. Above-grade duct/pipe will be capped. The associated HEPA filter bank instrumentation and alarms will be deactivated. This work will be done in accordance with ALARACT 16. Electrical Equipment and Instrumentation Isolation: The isolation of electrical equipment and instrumentation on the 244-TX DCRT will require the disconnection of various power supplies (e.g., exhaust fan, motor operated valves, heat trace, sampler pumps, continuous air monitor, and alarms) and isolation of instrumentation (e.g., HEPA filter bank pressure indicators) that support operation and monitoring of the stack ventilation system. Disconnection is the physical disconnection and removal of wires from the power source in accordance with ALARACT Demonstration 16. Pit entries are not required to disconnect power or isolate instrumentation. 296-T-18 Stack Isolation: The 296-T-18 stack will be isolated via mechanical isolations. A blank flange will be installed at the suction side of the exhaust fan or at another suitable location near the filter pit outlet to the exhaust stack. A closure cap will be installed on top of the exhaust stack. The exhaust</p>		

Requirement	Compliance Status	Compliance Determination Method
stack drain line will be cut and capped above grade. This work will be done in accordance with ALARACT Demonstration 16.		
<p>The Annual Possession Quantity is limited to the following radionuclides (Curies/year): Ac-227 2.04E-02 Am-241 1.17E+01 Am-243 3.58E-04 Ba-137 m 2.69E+03 C-14 4.06E-01 Cd-113 m 1.40E+00 Cm-242 1.19 E-02 Cm-243 6.91E-04 Cm-244 1.26E-02 Co-60 6.18E-01 Cs-134 6.84E-03 Cs-137 2.84E+03 Eu-152 1.18E-01 Eu-154 9.29E+00 Eu-155 5.09E+00 H-3 1.53E+00 I-129 5.01E-03 Nb-93 m 4.18E-01 Ni-59 1.57E-01 Ni-63 1.46E+01 Np-237 9.67E-03 Pa-231 4.25E-02 Pu-238 4.84E-01 Pu-239 9.45E+00 Pu-240 1.57E+00 Pu-241 1.23E+01 Pu-242 8.61E-05 Ra-226 3.73E-02 Ra-228 8.82E-03 Ru-106 8.01E-06 Sb-125 6.95E-01 Se-79 1.22E-02 Sm-151 3.74E+02 Sn-126 6.02E-02 Sr-90 5.31E+03 Tc-99 2.76E+00 Th-229 4.01E-03 Th-232 1.13E-03 U-232 6.22E-03 U-233 7.78E-02 U-234 3.07E-02 U-235 1.28E-03 U-236 6.36E-04 U-238 2.87E-02 Y-90 m 5.31E+03 Zr-93 5.03E-01</p>	Continuous	<p>CDM: Field interviews, WDOH approved logs, and verified basis for APQ in NOC application. Comment: None</p>
<p>If this emission unit is not in compliance with the standards in WAC 246-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-060-(2)(d)).</p>	Not Applicable	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national standards (WAC 246-247-075(6)).</p>	Continuous	<p>CDM: CH2M HILL quality assurance program, records, and procedures. Comment: None</p>
<p>The facility must be able to demonstrate that workers associated with this emission unit are trained in the use and maintenance of control and monitoring systems, and in the performance of associated tests and emergency procedures (WAC 246-247-075(12)).</p>	Continuous	<p>CDM: CH2M HILL training program, training records, work controls, and procedures. Comment: None</p>
<p>The department reserves the right to inspect and audit all construction activities, equipment, operations, documents, data and other records related to compliance with the requirements of this chapter (WAC 246-247-080(1)).</p>	Not Applicable	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>

Requirement	Compliance Status	Compliance Determination Method
The facility must meet all reporting and record keeping requirements of 40 CFR 61, Subpart H. (WAC 246-247 - 080(2)).	Continuous	CDM: CH2M HILL records management and procedures. Comment: None
The facility shall report to the department within 24 hours, any unexpected release of radioactivity, shutdown or other condition that, if allowed to persist, or lasts more than four hours, would result in the emission of radionuclides in excess of any standards or limitation in the license. Applicable standards (WAC 246-247-040) include unit specific emission limits (paragraph 5), the offsite dose standard (paragraph 1), BARCT (paragraph 3) or ALARACT (paragraph 4), whichever is applicable, or any limitation included in this approval (paragraph 5) (WAC 246-247-080(5)).	Continuous	CDM: Field interviews, CH2M HILL notification procedures, and notification logbook. Comment: None
The facility shall maintain readily (promptly) retrievable storage areas (on site) for all records and documents related to, and which may help establish compliance with, the requirements of this chapter. The facility shall keep these records available for department inspection for at least five years (WAC 246-247-080(8)).	Continuous	CDM: CH2M HILL records management and procedures. Comment: None
The facility shall ensure all emissions Units are fully accessible to department inspectors. In the event the hazards associated with accessibility to a unit require training and/or restriction or requirements for entry, the facility owner or operator shall inform the department, prior to arrival, of those restrictions or requirements. The owner or operator shall be responsible for providing the necessary training, escorts, and support services to allow the department to inspect the facility. At a minimum for unannounced inspections, such requirements or restrictions must be told to inspectors to provide an opportunity for inspectors to meet those requirements prior to the inspection (WAC 246-247-080(9)).	Not Applicable	CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.
The facility shall make available, in timely manner, all documents requested by the department for review. The facility shall allow the department to review documents in advance of an inspection. The facility shall allow access to classified documents by representatives of the department with the appropriate security clearance and a demonstrable need-to-know (WAC 246-247-080(10)).	Continuous	CDM: CH2M HILL records management and procedures. Comment: None
Diffuse/Fugitive emissions shall be monitored using the 200 Area near-field ambient air monitors. Sample collection and analysis shall follow that of the near field monitoring program. Analytical results shall be reported in the Annual Air Emissions Report. Any change to this near-field ambient monitoring program must be approved by the department.	Continuous	CDM: Hanford Site near-facility/field monitoring program. Comment: None
These Conditions and Limitations must be documented in an established procedure prior to starting activities granted by this approval (WAC 246-247-040(5)) and (WAC 246-247-060(5)).	Continuous	CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None

Requirement	Compliance Status	Compliance Determination Method
<p>The facility shall notify the department seven days in advance of any planned pre-operational testing of the emission unit's control, monitoring or containment systems. The department reserves the right to observe such tests (WAC 246-247-060(4)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The department retains the right to conduct stack sampling, environmental monitoring or other testing around this unit to assure compliance. If directed by the department, the facility must make provision for such testing (WAC 246-247-075(9) and (10)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility must be able to demonstrate the reliability and accuracy of emissions data and other test results from this emission unit (WAC 246-247-075(13)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL quality assurance program, records, and procedures. Comment: None</p>
<p>The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility shall report all measured or calculated emissions annually (WAC 246-247-080(3)).</p>	<p>Continuous</p>	<p>CDM: The annual "Radionuclide Air Emissions Report" for the Hanford Site. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p>Prior to permanent shut down of an emission unit or completion of an activity) the permittee shall file a report of closure with the Department of Health. The report of closure shall include the date of the shutdown and indicate whether, despite cessation of operation, there is still a potential for radioactive air emissions and a need for any active or passive ventilation system with emission control and/or monitoring devices. An emission unit or activity will not be considered permanently shut down or completed until a report of closure is received and approved by Health. Once an emission unit is permanently shut down or an activity is completed, thereby rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the shutdown or completion, to meet any monitoring, record keeping, and reporting requirements which are no longer applicable for that emission unit or activity. All records, relating to the shut down emission unit or completion of an activity, generated while the emission unit or activity was in operation, shall be kept in accordance with (WAC 246-247-080(8)). (WAC 246-247-080(6))</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>Each breather filter shall be individually tested, annually, to the requirements of ASME N510, and shall have a minimum efficiency of 99.95%.</p>	<p>Continuous</p>	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None</p>
<p>Under passive ventilation no activities shall be conducted which could generate aerosols within the 244-A DCRT.</p>	<p>Continuous</p>	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None</p>
<p>The emissions shall be limited to 2.81E-02 mrem/year unabated and 2.81E-04 mrem/yr abated.</p>	<p>Continuous</p>	<p>CDM: The annual "Radionuclide Air Emissions Report" for the Hanford Site. Comment: None</p>
<p>All radioactive air emissions licenses issued by the department, except those issued to radioactive materials licensees, shall have an expiration date of five years from date of issuance or as specified in the air operating permit. For radioactive material licensees, the requirements and limitations for the operation of emission units shall be incorporated into their radioactive materials license, and shall expire when the radioactive materials license expires. (WAC 246-247-060 (6)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>All facilities with licensed emission units, except for radioactive materials licensees, shall submit a request to the department for renewal of their radioactive air emissions license at least sixty days prior to expiration of the license or as required by the air operating permit. All renewal requests shall include a summary of the operational status of all emission units, the status of facility compliance with the standards of WAC 246-247-040, and the status of any corrective actions necessary to achieve compliance with the requirements of this chapter. Facilities with licensed emission units that also hold a radioactive materials license issued by the department shall submit this information along with their radioactive material license renewal submittal. If the department is unable to renew a radioactive air emissions license before its expiration date, the existing license, with all of its requirements and limitations, remains in force until the department either renews or revokes the license. (WAC 246-247-040 (9)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>

244-BX Primary HEPA
WDOH Emission Unit ID : 740
Page in AOP : H-0963

Requirement	Compliance Status	Compliance Determination Method
<p>Zone or Area : Abatement Technology : HEPA Required Units : Add'l Description: Single Breather Filter</p>	<p>Continuous</p>	<p>CDM: Field interviews. Comment: None</p>
<p>Required Sampling: PCM will be a smear survey on the inside surface of the ducting and downstream of the HEPA filter or on the outside of the screen covering the outlet of the vent. Sampling Frequency: 1 per year. Radionuclide Requiring Measurement: Levels below 10,000 dpm/100cm² beta/gamma and 200 dpm/100cm² alpha will verify low emissions.</p>	<p>Continuous</p>	<p>CDM: Annual Radiological Surveillance Task, Radiological Survey Records, and field interviews. Comment: None</p>
<p>Federal and State Regulatory Requirement: WAC 246-247-075</p>	<p>Continuous</p>	<p>CDM: CH2M HILL NESHAP quality assurance program. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p align="center">Permit: AIR 03-611 Issue Date:06-26-03 Obsolete Date: 07-05-06 NOC: Isolation and Closure of Exhaust Stacks 296-A-25, 296-B-28, 296-S-22, and 296-T-18 WDOH NOC ID: 578 Date In AOP: 04-11-05 Page in AOP: H-0963</p>		
Requirement	Compliance Status	Compliance Determination Method
<p>The U.S. Department of Energy shall comply with all Conditions and Limitations of this license (WAC 246-247-060(5)).</p>	Continuous	<p>CDM: Field interviews, and complied with all conditions and limitations in this NOC approval. Comment: None</p>
<p>The total abated emission limit for this Notice of Construction is limited to 1.20E-03 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 1.20E-01 mrem/year to the Maximally Exposed Individual (WAC 246-247-030(21)).</p>	Continuous	<p>CDM: The annual "Radionuclide Air Emissions Report" for the Hanford Site. Comment: None</p>
<p>No activities, other than those explicitly described within this approval, shall be conducted without prior written approval. The approved activities are limited to: the following DCRT and associated stacks: 244-A (296-A-25), 244-BX (296-B-28), 244-S (296-S-22), and 244-TX (296-T-18): 244-A DCRT (296-A-25 STACK) Passive Ventilation Breather Filter System Installation: A passive ventilation breather filter system shall be installed on an existing above-grade riser on the primary receiver tank, in accordance with ALARACT Demonstration 1 and 16. The primary tank breather filter will serve as the static vent for the instrument air injected (at a maximum of 9 cubic feet per hour) into the receiver tank through a set of three weight-factor dip tubes, which mixes with and dilutes any flammable gases. The primary tank breather filter will allow flammable gases to escape through the breather filter while collecting any airborne radioactive particulates. A passive ventilation breather filter system shall be installed above-grade on an existing riser or the existing annulus inlet filter riser, in accordance with ALARACT 1 and 16 "TWRS ALARACT. Demonstration for Work on Potentially Contaminated Ventilation System Components". The annulus breather filter will provide for the exchange of ambient air with the annulus tank during atmospheric pressure fluctuations and will allow vapors to escape. The breather filter systems will, at a minimum, consist of an isolation valve (normally open during operation), filter housing, HEPA filter, and loop seal assembly. The isolation valve will isolate the HEPA filter from the tank to facilitate testing of the filter, and to isolate the system until the filter or housing can be replaced. HEPA Filter Bank Isolation and Removal: The isolation and removal of the HEPA filter bank located in the 244-A DCRT filter pit will require the deactivation of the HEPA filter bank instrumentation and alarms, the removal and disposal of the HEPA filter bank, and the installation of the filter pit duct jumper assembly, in accordance with ALARACT Demonstrations 6, 14, and 16. The 296-A-25 exhauster is equipped with a HEPA filter bank inside the filter pit. The HEPA filter bank is attached to three nozzles in the filter pit: one nozzle to the catch tank, one nozzle to the annulus, and one nozzle to the ventilation exhaust ductwork. The HEPA filter bank will be disconnected from the nozzles and removed for disposal. A filter pit duct jumper assembly (4" schedule 40 pipe) will be connected to the catch tank nozzle and ventilation exhaust ductwork nozzle to provide the ventilation path to the newly installed passive breather filters. The third nozzle to the annulus will be closed in the filter pit. The filter pit duct jumper assembly will be fabricated in accordance with American Society of Mechanical Engineers (ASME) B31.3 and tested in accordance with ASME AG-1. Electrical Equipment and Instrumentation Isolation: The isolation of electrical equipment and instrumentation on the 244-A DCRT will require the disconnection of</p>	Continuous	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p>various power supplies (e.g., exhaust fan, motor, operated valves, heat trace, sampler pumps, continuous air monitor, and alarms) and isolation of instrumentation (e.g., HEPA filter bank pressure indicators) that support operation and monitoring of the stack ventilation system, in accordance with ALARACT Demonstrations 6 and 14. Disconnection is the physical disconnection and removal of wires from the power source. Pit entries are not required to disconnect power or isolate instrumentation. 296-A-25 Stack Isolation: The 296-A-25 stack will be isolated via mechanical isolations. Blank flanges will be installed on the duct end and on the suction side of the exhaust fan. A closure cap will be installed on top of the exhaust stack. The exhaust stack drain line will be cut and capped above grade, in accordance with ALARACT Demonstration 16. 244-BX DCRT (296-B-28 STACK) Passive Ventilation Breather Filter System Installation: A passive ventilation breather filter system shall be installed on an existing above-grade riser on the primary receiver tank in accordance with ALARACT Demonstration 1 and 16. The primary tank breather filter will serve as the static vent for the instrument air injected (at a maximum of 9 cubic feet per hour) into the receiver tank through a set of three weight-factor dip tubes, which mixes with and dilutes any flammable gases. The primary tank breather filter will allow flammable gases to escape while collecting any airborne radioactive particulates. A passive ventilation breather filter system will be installed above-grade on an existing riser or the existing annulus inlet filter riser in accordance with ALARACT Demonstration 1 and 16. The annulus breather filter will provide for the exchange of ambient air with the annulus tank during atmospheric pressure fluctuations and will allow vapors to escape. The breather filter system will, at a minimum, consist of an isolation valve (normally open during operation), filter housing, HEPA filter, and loop seal assembly. The isolation valve will isolate the HEPA filter from the tank to facilitate testing of the filter, and to isolate the system until the filter or housing can be replaced. HEPA Filter Bank Isolation and Removal: Removal of the HEPA filter bank in the 244-BX DCRT filter pit is not required. The HEPA filter bank will be isolated via closure of manual valves and the deactivation of motor-controlled valves. Above-grade duct/pipe will be capped. The associated HEPA filter bank instrumentation and alarms will be deactivated. This work will be in accordance with ALARACT 16. Electrical Equipment and Instrumentation Isolation: The isolation of electrical equipment and instrumentation on the 244-BX DCRT will require the disconnection of various power supplies (e.g., exhaust fan, motor operated valves, heat trace, sampler pumps, continuous air monitor, and alarms) and isolation of instrumentation (e.g., HEPA filter bank pressure indicators) that support operation and monitoring of the stack ventilation system in accordance with ALARACT Demonstration 16. Disconnection is the physical disconnection and removal of wires from the power source. Pit entries are not required to disconnect power or isolate instrumentation. 296-B-28 Stack Isolation: The 296-B-28 stack will be isolated via mechanical isolations. A blank flange will be installed at the suction side of the exhaust fan or at another suitable location near the filter pit outlet to the exhaust stack. A closure cap will be installed on top of the exhaust stack. The exhaust stack drain line will be cut and capped above grade. This work will be in accordance with ALARACT 16. 244-S DCRT (296-S-22 STACK) Passive Ventilation Breather Filter System Installation: A passive ventilation breather filter system will be installed on an existing above-grade riser on the primary receiver tank in accordance with ALARACT Demonstration 1 and 16. The primary tank breather filter will serve as the static vent for the instrument air injected (at a maximum of 9 cubic feet per hour) into the receiver tank through a set of three weight-factor dip tubes, which mixes with, and dilutes, any flammable gases. The primary tank breather filter will allow flammable gases to escape while collecting any airborne radioactive particulates. A passive ventilation breather filter system will be installed above-grade on an existing riser or the existing annulus inlet filter riser in accordance with ALARACT 1 and 16. The annulus breather filter will provide for the exchange of ambient air with the annulus tank during atmospheric pressure fluctuations and will allow vapors to escape. The breather filter system will, at a minimum, consist of an isolation valve (normally open during operation), filter housing, HEPA filter, and loop seal assembly. The isolation valve will isolate the HEPA filter from the tank to facilitate testing of the filter, and to isolate the system until the filter or</p>		

Requirement	Compliance Status	Compliance Determination Method
<p>housing can be replaced. HEPA Filter Bank Isolation and Removal: The isolation and removal of the HEPA filter bank located in the 244-S DCRT filter pit will require the deactivation of the HEPA filter bank instrumentation and alarms, the removal and disposal of the HEPA filter bank, and the installation of the filter pit duct jumper assembly, in accordance with ALARACT Demonstrations 6, 14, and 16. The 296-S-22 exhauster is equipped with a HEPA filter bank inside the filter pit. The HEPA filter bank is attached to three nozzles in the filter pit: one nozzle to the catch tank, one nozzle to the annulus, and one nozzle to the ventilation exhaust ductwork. The HEPA filter bank will be disconnected from the nozzles and removed for disposal. A filter pit duct jumper assembly (4" schedule 40 pipe) will be connected to the catch tank nozzle and ventilation exhaust ductwork nozzle to provide the ventilation path to the newly installed passive breather filters. The third nozzle to the annulus will be closed in the filter pit. The filter pit duct jumper assembly will be fabricated in accordance with ASME B31.3 and tested in accordance with ASME AG-1. Electrical Equipment and Instrumentation Isolation: The isolation of electrical equipment and instrumentation on the 244-S DCRT will require the disconnection of various power supplies (e.g., exhaust fan, motor operated valves, heat trace, sampler pumps, continuous air monitor, and alarms) and isolation of instrumentation (e.g., HEPA filter bank pressure indicators) that support operation and monitoring of the stack ventilation system in accordance with ALARACT 16. Disconnection is the physical disconnection and removal of wires from the power source. Pit entries are not required to disconnect power or isolate instrumentation. 296-S-22 Stack Isolation: The 296-S-22 stack will be isolated via mechanical isolations. Blank flanges will be installed on the duct end and on the suction side of the exhaust fan. A closure cap will be installed on top of the exhaust stack. The exhaust stack drain line will be cut and capped above grade. This work will be done in accordance with ALARACT Demonstration 16. 244-TX DCRT (296-T-18 STACK) Passive Ventilation Breather Filter Installation: A passive ventilation breather filter system will be installed on an existing above-grade riser on the primary receiver tank in accordance with ALARACT Demonstration 1 and 16. The primary tank breather filter will serve as the static vent for the instrument air injected (at a maximum of 9 cubic feet per hour) into the receiver tank through a set of three weight-factor dip tubes, which mixes with, and dilutes, any flammable gases. The primary tank breather filter will allow flammable gases to escape while collecting any airborne radioactive particulates. A passive ventilation breather filter system will be installed above-grade on an existing riser or the existing annulus inlet filter riser in accordance with ALARACT 1 and 16. The annulus breather filter will provide for the exchange of ambient air with the annulus tank during atmospheric pressure fluctuations and will collect potential airborne radioactive particulates from the annulus space while allowing vapors to escape. The breather filter system will, at a minimum, consist of an isolation valve (normally open during operation), filter housing, HEPA filter, and loop seal assembly. The isolation valve will isolate the HEPA filter from the tank to facilitate testing of the filter, and to isolate the system until the filter or housing can be replaced. HEPA Filter Bank Isolation and Removal: Removal of the HEPA filter bank in the 244-TX DCRT filter pit is not required. The HEPA filter bank will be isolated via closure of manual valves and the deactivation of motor-controlled valves. Above-grade duct/pipe will be capped. The associated HEPA filter bank instrumentation and alarms will be deactivated. This work will be done in accordance with ALARACT 16. Electrical Equipment and Instrumentation Isolation: The isolation of electrical equipment and instrumentation on the 244-TX DCRT will require the disconnection of various power supplies (e.g., exhaust fan, motor operated valves, heat trace, sampler pumps, continuous air monitor, and alarms) and isolation of instrumentation (e.g., HEPA filter bank pressure indicators) that support operation and monitoring of the stack ventilation system. Disconnection is the physical disconnection and removal of wires from the power source in accordance with ALARACT Demonstration 16. Pit entries are not required to disconnect power or isolate instrumentation. 296-T-18 Stack Isolation: The 296-T-18 stack will be isolated via mechanical isolations. A blank flange will be installed at the suction side of the exhaust fan or at another suitable location near the filter pit outlet to the exhaust stack. A closure cap will be installed on top of the exhaust stack. The exhaust</p>		

Requirement	Compliance Status	Compliance Determination Method
stack drain line will be cut and capped above grade. This work will be done in accordance with ALARACT Demonstration 16.		
<p>The Annual Possession Quantity is limited to the following radionuclides (Curies/year): Ac-227 4.12E-02 Am-241 2.37E+01 Am-243 7.23E-04 Ba-137 m 5.43E+03 C-14 8.19E-01 Cd-113 m 2.83E+00 Cm-242 2.40E-02 Cm-243 1.39E-03 Cm-244 2.56E-02 Co-60 1.25E+00 Cs-134 1.38E-02 Cs-137 5.74E+03 Eu-152 2.38E-01 Eu-154 1.88E+01 Eu-155 1.03E+01 H-3 3.09E+00 I-129 1.03E-02 Nb-93 m 8.44E-01 Ni-59 3.18E-01 Ni-63 2.95E+01 Np-237 1.95E-02 Pa-231 8.58E-02 Pu-238 9.78E-01 Pu-239 1.91E+01 Pu-240 3.17E+00 Pu-241 2.48E+01 Pu-242 1.74E-04 Ra-226 7.54E-02 Ra-228 1.78E-02 Ru-106 1.62E-05 Sb-125 1.40E+00 Se-79 2.46E-02 Sm-151 7.55E+02 Sn-126 1.22E-01 Sr-90 1.07E+04 Tc-99 5.57E+00 Th-229 8.09E-03 Th-232 2.28E-03 U-232 1.26E-02 U-233 1.57E-01 U-234 6.19E-02 U-235 2.59E-03 U-236 1.28E-03 U-238 5.80E-02 Y-90 1.07E+04 Zr-93 1.02E+00</p>	Continuous	<p>CDM: Field interviews, WDOH approved logs, and verified basis for APQ in NOC application. Comment: None</p>
<p>If this emission unit is not in compliance with the standards in WAC 246-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-060-(2)(d)).</p>	Not Applicable	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national standards (WAC 246-247-075(6)).</p>	Continuous	<p>CDM: CH2M HILL quality assurance program, records, and procedures. Comment: None</p>
<p>The facility must be able to demonstrate that workers associated with this emission unit are trained in the use and maintenance of control and monitoring systems, and in the performance of associated tests and emergency procedures (WAC 246-247-075(12)).</p>	Continuous	<p>CDM: CH2M HILL training program, training records, work controls, and procedures. Comment: None</p>
<p>The department reserves the right to inspect and audit all construction activities, equipment, operations, documents, data and other records related to compliance with the requirements of this chapter (WAC 246-247-080(1)).</p>	Not Applicable	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>

Requirement	Compliance Status	Compliance Determination Method
The facility must meet all reporting and record keeping requirements of 40 CFR 61, Subpart H. (WAC 246-247-080(2)).	Continuous	CDM: CH2M HILL records management and procedures. Comment: None
The facility shall report to the department within 24 hours, any unexpected release of radioactivity, shutdown or other condition that, if allowed to persist, or lasts more than four hours, would result in the emission of radionuclides in excess of any standards or limitation in the license. Applicable standards (WAC 246-247-040) include unit specific emission limits (paragraph 5), the offsite dose standard (paragraph 1), BARCT (paragraph 3) or ALARACT (paragraph 4), whichever is applicable, or any limitation included in this approval (paragraph 5) (WAC 246-247-080(5)).	Continuous	CDM: Field interviews, CH2M HILL notification procedure, and notification logbook. Comment: None
The facility shall maintain readily (promptly) retrievable storage areas (on site) for all records and documents related to, and which may help establish compliance with, the requirements of this chapter. The facility shall keep these records available for department inspection for at least five years (WAC 246-247-080(8)).	Continuous	CDM: CH2M HILL records management and procedures. Comment: None
The facility shall ensure all emissions units are fully accessible to department inspectors. In the event the hazards associated with accessibility to a unit require training and/or restriction or requirements for entry, the facility owner or operator shall inform the department, prior to arrival, of those restrictions or requirements. The owner or operator shall be responsible for providing the necessary training, escorts, and support services to allow the department to inspect the facility. At a minimum for unannounced inspections, such requirements or restrictions must be told to inspectors to provide an opportunity for Inspectors to meet those requirements prior to the inspection (WAC 246-247-080(9)).	Not Applicable	CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.
The facility shall make available, in timely manner, all documents requested by the department for review. The facility shall allow the department to review documents in advance of an inspection. The facility shall allow access to classified documents by representatives of the department with the appropriate security clearance and a demonstrable need-to-know (W A9246-247-080(10)).	Continuous	CDM: CH2M HILL records management and procedures. Comment: None
Diffuse/Fugitive emissions shall be monitored using the 200 Area near-field ambient air monitors. Sample collection and analysis shall follow that of the near field monitoring program. Analytical results shall be reported in the Annual Air Emissions Report. Any change to this near-field ambient monitoring program must be approved by the department.	Continuous	CDM: Hanford Site near-facility/field monitoring program. Comment: None
These Conditions and Limitations must be documented in an established procedure prior to starting activities granted by this approval (WAC 246-247-040(5) and (WAC 246-247-060(5)).	Continuous	CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None

Requirement	Compliance Status	Compliance Determination Method
<p>The facility shall notify the department seven days in advance of any planned pre-operational testing of the emission unit's control, monitoring or containment systems. The department reserves the right to observe such tests (WAC 246-247-060(4)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The department retains the right to conduct stack sampling, environmental monitoring or other testing around this unit to assure compliance. If directed by the department, the facility must make provision for such testing (WAC 246-247-075(9) and (10)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility must be able to demonstrate the reliability and accuracy of emissions data and other test results from this emission unit (WAC 246-247-075(13)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL quality assurance program, records, and procedures. Comment: None</p>
<p>The department may require an ALARACT demonstration at anytime (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility shall report all measured or calculated emissions annually (WAC 246-247-080(3)).</p>	<p>Continuous</p>	<p>CDM: The annual "Radionuclide Air Emissions Report" for the Hanford Site. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p>Prior to permanent shut down of an emission unit or completion of an activity, the permittee shall file a report of closure with the Department of Health. The report of closure shall include the date of the shutdown and indicate whether, despite cessation of operation, there is still a potential for radioactive air emissions and a need for any active or passive ventilation system with emission control and/or monitoring devices. An emission unit or activity will not be considered permanently shut down or completed until a report of closure is received and approved by Health. Once an emission unit is permanently shut down or an activity is completed, thereby rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the shutdown or completion, to meet any monitoring, record keeping, and reporting requirements which are no longer applicable for that emission unit or activity. All records relating to the shut down emission unit or completion of an activity, generated while the emission unit or activity was in operation, shall be kept in accordance with (WAC 246-247-080(8)). (WAC 246-247-080(6))</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>Each breather filter shall be individually tested, annually, to the requirements of ASME N510, and shall have a minimum efficiency of 99.95%.</p>	<p>Continuous</p>	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None</p>
<p>Under passive ventilation no activities shall be conducted which could generate aerosols within the 244-BX DCRT.</p>	<p>Continuous</p>	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None</p>
<p>The emissions shall be limited to 2.81E-02 mrem/yr unabated and 2.81E-04 mrem/yr abated.</p>	<p>Continuous</p>	<p>CDM: The annual "Radionuclide Air Emissions Report" for the Hanford Site. Comment: None</p>
<p>All radioactive air emissions licenses issued by the department, except those issued to radioactive materials licensees, shall have an expiration date of five years from date of issuance or as specified in the air operating permit. For radioactive material licensees, the requirements and limitations for the operation of emission units shall be incorporated into their radioactive materials license, and shall expire when the radioactive materials license expires. (WAC 246-247-060(6)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>All facilities with licensed emission units, except for radioactive materials licensees, shall submit a request to the department for renewal of their radioactive air emissions license at least sixty days prior to expiration of the license or as required by the air operating permit. All renewal requests shall include a summary of the operational status of all emission units, the status of facility compliance with the standards of WAC 246-247-040, and the status of any corrective actions necessary to achieve compliance with the requirements of this chapter. Facilities with licensed emission units that also hold a radioactive materials license issued by the department shall submit this information along with their radioactive material license renewal submittal. If the department is unable to renew a radioactive air emissions license before its expiration date, the existing license, with all of its requirements and limitations, remains in force until the department either renews or revokes the license. (WAC 246-247-040(9)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>

244-CR Vault Passive Filter A
WDOH Emission Unit ID : 713
Page in AOP : H-0754

Requirement	Compliance Status	Compliance Determination Method
<p>Zone or Area : Abatement Technology : HEPA Required Units : Add'l Description: Single Passive HEPA Filter</p>	<p>Continuous</p>	<p>CDM: Field interviews. Comment: None</p>
<p>Required Sampling: PCM will be a smear survey on the inside surface of the ducting and downstream of the HEPA filter or on the outside of the screen covering the outlet of the vent. Sampling Frequency: 1 per year Radionuclide Requiring Measurement: Levels below 10,000 dpm/cm2 beta/gamma and 200 dpm/100cm2 alpha will verify low emission.</p>	<p>Continuous</p>	<p>CDM: Annual Radiological Surveillance Task, Radiological Survey Records, and field interviews. Comment: None</p>
<p>Federal and State Regulatory Requirement: WAC 246-247-075(3)</p>	<p>Continuous</p>	<p>CDM: CH2M HILL NESHAP quality assurance program. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p align="center">Permit: AIR 02-1255 Issue Date: 12-31-02 Obsolete Date: 07-05-06 NOC: 244-CR Vault Isolation and Interim Stabilization WDOH NOC ID: 548 Date In AOP: 04-11-05 Page in AOP: H-0754</p>		
Requirement	Compliance Status	Compliance Determination Method
<p>The U.S. Department of Energy shall comply with all Conditions and Limitations of this license (WAC 246-247-060(5)).</p>	Continuous	<p>CDM: Field interviews. Comment: None</p>
<p>The total abated emission limit for this Notice of Construction is limited to 5.10E-02 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 5.82E+01 mrem/year to the Maximally Exposed Individual (WAC 246-247-030(21)).</p>	Continuous	<p>CDM: Tracking log and Near Field Monitoring input in the Hanford Site Radiological Air Emissions report. Comment: None</p>
<p>No activities, other than those explicitly described within this approval, shall be conducted without prior written approval. The approved activities are limited to: activities performed at the 244-CR Vault Facility, ER-153 and/or 244-A Lift Station. These activities include: Work Area Preparation: - Miscellaneous work including equipment delivery, movement, set up and maintenance in the general work area around the 244-CR Vault Facility. - Construction and take down of open top containment tents (bullpens) over the facility vault area. - Installation of Portable/Temporary Radioactive Air Emission Unit(s) (PTRAEUs). - Installation of portable 1,000 cubic feet per minute (cfm) exhausters. - Removal and/or installation of vault foam covering. - Application of fixative at pit interior. - Temporary power installation. Facility/Interim Stabilization Work: - Operation of PTRAEU for bullpen ventilation. - Removal and/or installation of pit covers. - Inspection of pits, vaults, and tanks. - Removal and disposition of excess equipment and waste in pits, risers, and tanks. - Decontamination activities. - Measurement of liquid level and sludge levels in tanks and sumps. - Sampling activities in pits, vaults, and tanks including chemical addition and/or waste sampling to determine Double Shell Tank waste acceptance. Facility Equipment Activities: - Installation, disconnection, repair, replacement, and/or leak testing, of new and existing facility equipment (valves, jumpers, pumps, leak detectors, or other instrumentation/equipment). - Modifications, maintenance, and/or isolation and sealing of existing risers, pits, vaults and incoming and/or outgoing piping (drain and transfer lines) from 244-CR Vault or connected facility. Excavation: - Installation of permanent power to 244-CR Vault Facility. - Installation/Operation of Passive Breather Filter Assembly. Waste Transfer and Support Activities: - Operation of 1,000 cfm portable exhausters at 244-CR Vault. - New waste transfer system, waste staging/consolidation. Miscellaneous activities shall include: - Construction and take down of open top containment tents over the facility vault area. - Open top containment tents (bullpens) shall be constructed over the facility pit area to prevent potential airborne contamination from the effected work area to the environment. Two bullpens shall be erected around two instrumentation pits at the 244-CR Vault. Upon completion of the first pit's work, the bullpens shall be relocated to the other two pits and their work will be completed. - Installation of Portable/Temporary Radioactive Air Emission Unit(s) (PTRAEUs) - A Portable/Temporary Radioactive Air Emission Unit (2,000 cfm) or units (1,000 cfm each) shall be installed to ventilate the bullpens during activities that require work in the pits, cells and tank vault area prior to performing waste transfer activities. One thousand cfm PTRAEUs, if used, shall be directly connected to individual bullpens, while a 2,000 PTRAEU if used, shall be connected to two bullpens. Movement and installation of the PTRAEU can be performed to facilitate ventilation for the four vaults of the 244-CR Vault Facility. The PTRAEU shall operate intermittently (during work activities) and will be operated in accordance with the latest WDOH approval, AIR 99-1102, for the Portable/Temporary</p>	Continuous	<p>CDM: Field interviews and work packages. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p>Radioactive Air Emission Unit (PTRAEU) NOC (DOE/RL-96-75). A portable 1,000 cfm exhauster shall be installed to ventilate the 244-CR Facility vaults and tanks during waste transfer activities. This exhauster shall operate intermittently to support waste transfer and support activities and shall monitor air emissions. The exhauster shall be piped into the existing 244-CR facility ventilation system upstream of the existing (non-operating) exhauster, 296-C-05 and HEPA filters. The existing 244-CR Facility exhaust system shall be isolated and not used. Tie in of the 1,000 cfm exhauster to the existing exhaust system shall be in accordance with ALARACT 16, Tank Farm ALARACT Demonstration for Work on Potentially Contaminated Ventilation System Components. After the waste transfer is completed, the exhauster shall be removed in accordance to the requirements of ALARACT 16. A foam covering has been placed over the 244-CR Vault area to prevent intrusion of precipitation and snowmelt. In order to gain access to the pit cover (metal) plates or concrete cover blocks, sections of the foam shall be removed, packaged, transported and disposed of. ALARACT 4, Tank Farm ALARACT Demonstration for Packaging and Transportation of Waste shall be used to properly disposition the removed foamed covering. Radiation control technicians (RCT) shall monitor the affected work area while the foam covering is being removed. The foam covering shall be replaced after work is complete, as part of intrusion prevention measures completed by the project following waste transfer activities. A fixative shall be applied either with the pit covers on. The fixatives shall be applied to pit surfaces through a port in the pit cover using a 'whirly' or by fogging. A hand held sprayer is used to apply fixatives to local areas within the pit when the pit cover is off. Temporary power installation will be limited to meet the needs to support the work described in this NOC. Temporary installations can be removed when no longer needed. Operation of PTRAEU for Bullpen Ventilation. Ventilation of the bullpens during pre waste transfer tank activities and prior to the installation of the 1,000 cfm portable exhauster shall be accomplished with the use of PTRAEU(s). The PTRAEU(s) shall be operated in accordance with the latest WDOH approval, AIR 99-1102, for the Portable/Temporary Radioactive Air Emission Unit (PTRAEU) NOC (DOE/RL-96-75). Concrete cover key blocks are removed first, and only blocks necessary to perform intended work are removed. Consideration is given to sliding blocks to minimize the number of blocks to be removed. As discussed in the following, pit covers are decontaminated and/or covered with fixative before removal. Pit Covers are raised a minimum distance to safety allow a radiation protection technician to perform a dose rate and contamination survey. Pit covers are wrapped in plastic and set down in a specially prepared lay-down area. On completion of activities, the plastic wrap is removed from the pit covers and the pit covers are re-installed in their original position and orientation. Post-job surveys are performed. Inspections, such as visual, video, or nondestructive inspections, shall be performed with pit covers in place (for pit with access ports) or removed. The pit cover design, historical inspection information, and ALARA information shall be used to determine whether the inspection shall be performed manually (with pit cover removed) or remotely with a camera and the pit covers in place. Excess equipment and debris currently located in the 244-CR vault pits, and in-tank equipment shall be removed to accommodate new waste transfer equipment and piping. Excess equipment shall be replaced with replacement in kind equipment, as necessary. To facilitate the removal and disposition of these items, size reduction and decontamination activities shall be utilized. Size reduction activities shall include cutting up unusable equipment (usually jumpers/blanks) remotely, using hydraulic shears or low revolutions per minute portable band saws. All size reduction activities shall be performed in accordance with ALARACT Demonstration 15, TWRS ALARACT Demonstration for Size Reduction of Waste Equipment for Disposal. Disposition of excess equipment and waste shall be performed in accordance with ALARACT Demonstration 4, TWRS ALARACT Demonstration for packaging and transportation of waste. Removable contamination in the accessible portions of the pit is reduced to less than 100,000 disintegrations per minute/100 square centimeters beta/gamma and 2,000 disintegrations per minute/100 square centimeters alpha by washing, or an approved fixative is applied to pit surfaces. Initial washing with a low pressure (125 pounds per square inch gauge), or high pressure (3,000 pounds per square inch gauge) 'whirly' is accomplished</p>		

Requirement	Compliance Status	Compliance Determination Method
<p>through a port in the pit cover blocks. Additional decontamination activities (with the cover block off) include the use of chemicals, peel and strip paints, water, or manual scrub brushes. After a section of equipment has been washed it shall be pulled into plastic sleeving and sealed by hose taping and taping. Liquid and sludge levels are determined using zip cords or other appropriate means that shall not disturb the waste more than zip cords. Sampling activities shall be performed in the tank and sump area of 244-CR Vault by way of risers in the riser pit in accordance with ALARACT 7, "Tank Farm ALARACT Demonstration For Tank Waste Grab Sampling," Radiological controls for riser preparation /opening listed in ALARACT 1, "Tank Farm ALARACT Demonstration for Riser Preparation/opening," shall be followed. The waste transfer processes shall transfer waste from tanks CR-011, CR-001, CR-002 and CR-003 and sumps within 244-CR Vault Facility to a staging tank within the 244-CR Facility. The transfer system to consolidate the waste from individual tanks consists of above ground piping of a hose in hose with leak detection at each tank's pit being utilized to support the transfer line. Mixing and dilution of the waste may take place at the receiving tank or within the transfer lines directly. The transfer system may include equipment pump skids and shall include appropriate connections to the transfer lines to accommodate chemical and water addition to the 244-CR Facility tanks and mixing prior to transfer to the designated Double Shell Tank (DST). Before entry into a pit, an evaluation is made by engineering and/or operations personnel to determine the transfer routing configuration after pit work is complete. On removal of cover blocks, a visual inspection of pit contents is made to verify present configuration. Tools such as impact wrenches, T-bars, and pike poles are used to repair or replace pit equipment. All equipment coming out of the pit is wrapped in plastic or otherwise contained or decontaminated for reuse or disposal. Removable contamination on the outer-most container shall not exceed 1,000 disintegrations per minute/100 square centimeters beta/gamma and 20 disintegrations per minute/100 square centimeters alpha before removal from the bullpen. Disposition of non reusable equipment waste shall be performed in accordance with ALARACT Demonstration 4, TWRS ALARACT Demonstration for packaging and transportation of waste. Jumper work shall be preceded by flushing the appropriate transfer lines with water. Jumper work is accomplished remotely, using a crane to maneuver heavy equipment and parts. Installation, disconnection, and/or changing jumpers/blanks are accomplished by slowly loosening the jumper/blank at the connector head. The required jumper/blank is positioned and tightened to the new connector heads. If the process line or equipment being worked on is connected physically to other unnecessary transfer lines, or if the line is to be left unused, a cap, blank, or equivalent is installed on all open nozzles not connected to jumpers. Leak testing of newly installed jumpers/blanks shall be performed with pressurized water before initiating waste transfers. Occasionally, a jumper leak test is performed during the initial stages of the transfer. In either case, cover blocks shall be in place before leak testing is performed. Cutting up unusable pit equipment (usually jumpers/blanks) is accomplished remotely using hydraulic shears or low revolutions per minute portable band saws. Cutting activities shall be performed in the bullpen or in glovebags. The goal shall be to maintain a contamination level equal to or less than 1,000 dpm/100 cm² beta gamma and 20 dpm/100 cm² alpha, during cutting activities, but may not always be attainable. RCT coverage shall be provided. Should contamination levels exceed 1,000-dpm/100 cm² additional sleeving, or use of a glove bag shall be used and/or decontamination activities performed to lower the levels in accordance with ALARA. Welding (if required) shall commence once removable contamination levels in the cut and weld area are reduced to ALARA. Size reduction (cutting) activities shall be performed in accordance with ALARACT Demonstration 15, TWRS ALARACT Demonstration for Size Reduction of Waste Equipment for Disposal. To ensure that water intrusions or potential residual waste in piping are eliminated from the facility, existing piping and transfer lines to and from the 244-CR Vault facility shall be blanked, grouted, or sealed. The isolation includes activities such as installing plugs, caps, blind flanges, or grouting. Isolations may occur at the 244-CR riser pit area or at the other end of the pipe in a diversion or valve box, at the ER153 or the 244A Lift Station. Modifications to existing in-route pits, vaults and piping shall be required to establish the waste transfer</p>		

Requirement	Compliance Status	Compliance Determination Method
<p>route or to ensure the integrity of the system prior to waste transfer. These modifications can include but are not limited to, removal of existing parts and replacement with like parts, installation of new jumpers, or blanking off of equipment. When possible existing blanks shall be utilized. Pipe cutting shall be minimized in compliance with ALA.RA. If it is determined that the installation of a new above ground transfer line would be the best engineering method to establish a waste transfer route, a temporary transfer route shall be established following existing design and installation procedures. This temporary route will be either above ground or in a shallow trench. If a trench is required excavation shall be performed as described under that activity in this NOC. Pit drains are checked using water from a tanker truck or another source. Water at a flow rate of approximately 20 gallons per minute is added to a pit drain line and subsequently monitored to verify the pit drains are free of restrictions. At times it might be necessary to pump the DCRT that receives the water after the water passes through the pit drain if the volume of test water approaches the capacity of the DCRT. Either flushing with water and/or using a retrieval tool to remove debris from the drain are used to clear plugged drains. Water supply valves are opened slowly to minimize splashing. Pressures above 50 pounds per square inch gauge require approval from the engineering organization. Cover blocks shall remain in place and work is accomplished through a penetration in the cover block. The waste transfer operations involve the pumping of liquid waste that contains dissolved solids. These solids can precipitate out of solution anywhere in the transfer path and cause blockage. If blockage is detected in the system, flushing the lines with hot water is necessary. The hot water is introduced to the system to be flushed through a pressure manifold by piping connected directly to a jumper or nozzle. These operations shall be performed with the pit covers on. To ensure that water intrusions are eliminated from the facility, a foam covering will be placed over the 244-CR Vault area after completion of isolation activities. Other techniques to free blockages could include pressurization, temporary jumpers, and hydraulic scouring. All piping connections are designed to be leak tight and the pit cover block shall be installed before pressurization. If pressurization beyond that obtained from the tank farms water system or supply truck (i.e., approximately 150 pounds per square inch gauge) is necessary to remove blockage, an engineering evaluation shall be performed to determine the maximum allowable pressure for operation. Excavation: Excavation may be required to support installation of ventilation, electrical support and waste transfer equipment. Modifications to existing in route pits, vaults and piping and/or to support installation of new waste transfer lines from the 244-CR Facility to the identified DST may require excavation. Soil excavation activities will be performed in accordance with ALARACT Demonstration 5, TWRS ALARACT Demonstration for Soil Excavation (Using Hand Tools), and will follow the radiological controls specified in that ALARACT. Any Guzzler excavations in contamination areas will be performed in accordance with the December 18, 1998, WDOH approved Site Wide Guzzler NOC (Air 98-1215), or the most current NOC approved for Guzzler use. Excavation of contaminated soils using heavy equipment shall follow the requirement of Site Wide Guzzler NOC. Soil excavation outside the tank farm fence also may be performed with heavy equipment. Soil will be excavated around the 244-CR vault facility to install new piping, equipment slabs, and new waste transfer system support equipment. It is expected that about 1,000 cubic yards may be excavated, with about 600 cubic yards from inside the tank farm. Backfill shall be from the original removed soil or non-contaminated controlled density fill (sand, water and a small amount of cement). Current power within the 244-CR Vault Facility is limited. To provide power for new equipment installed under the project, the existing power distribution system shall be upgraded. Upgrades shall involve modification to the existing Motor Control Center (MCC), installation of equipment control panels, and installation of new conduits. A compliant passive breather filter shall be installed to ventilate the 244-CR Facility vaults and tanks once waste transfer activities are completed. The passive breather filters shall be installed at two locations in the 244-CR facility. A 1,000 cfm HEPA filter shall be installed at the air inlet assembly (previously attached to the evaporative cooler) and a 160 cfm HEPA filter shall be installed upstream of the existing HEPA filter pit. Butterfly valves in the ventilation system just downstream of where the filters shall be installed can be shut to prevent any emission from the facility</p>		

Requirement	Compliance Status	Compliance Determination Method
<p>during filter installation. Installation of the filters shall be performed in accordance with ALARACT Demonstration 16, TWRS ALARACT Demonstration for Work on Potentially Contaminated Ventilation System Components. During waste transfer and support activities the tank and vault air space shall be actively ventilated by a temporary ventilation system. The temporary ventilation system shall consist of a portable exhauster that shall be equipped with compliant monitoring and sampling equipment. The purpose of the exhauster is to ensure potential airborne contamination from the pits, cells, or process tanks, is not being released to the environment. Operation of the 1,000 cfm portable exhauster is considered an emissions control. New waste transfer system, waste staging/consolidation. The planned transfer system can utilize some existing equipment along with installation of new piping and equipment at 244-CR, ER-153 and/or 244-A Lift Station. Maintenance of the transfer system may be required during the waste staging/consolidation. Equipment, which may require on going maintenance includes but is not limited to leak detection and pump system equipment. The waste can be staged/consolidated in one or two of the 244-CR Facility tanks (CR-001, CR-002, CR-003 and CR-011) prior to transfer to a DST. The following controls are used for the pit activities: General Controls: 1. Pre-job and post-job radiation surveys are performed by radiation protection technicians. Radiation work permits specify permissible occupational radiological limits during activities. Radiation control technicians' survey and release equipment, inspect and approve required containment, and provide radiological surveys to verify compliance to radiation work permit limits. 2. Pit work is shut down (or not initiated) when sustained wind speeds exceed 25 miles per hour as measured in the field and/or reported by the Hanford Meteorological Station. 3. Fixatives shall be applied inside the pit (with cover blocks on or off) or accessible portions of the pit decontaminated to less than 100,000 disintegrations per minute/100 square centimeters beta-gamma and 2,000 disintegrations per minute/100 square centimeters alpha. 4. When cover blocks are removed, a fall protection handrail is installed. This handrail is draped in plastic forming a contamination barrier. The plastic extends to the top of the pit and is taped or sealed at the top of the pit. Decontamination of the containment barrier is conducted as required by the job specific radiation work permit. 5. Radiation control technicians monitor the affected work area when the vault foam covering is removed, when jumpers and equipment are being removed from risers and nozzles, and when risers are entered for sampling of tanks and sumps. Jumpers removed from the pit are drained of free liquid and decontaminated or contained before removal. The outermost container shall not exceed 1,000 disintegrations per minute/100 square centimeters beta/gamma and 20 disintegrations per minute/100 square centimeters alpha. If these limits are exceeded, surfaces shall be decontaminated. Disposition of non reusable equipment waste shall be performed in accordance with ALARACT Demonstration 4, TWRS ALARACT Demonstration for packaging and transportation of waste. 6. A bullpen designed to minimize the top opening shall be used. Pit covers or cover blocks will be removed as necessary. If the bullpen is to be left unattended at any time, a temporary cover is placed over the pit or the pit covers or cover blocks are reinstalled. Two tents shall be erected over two pits. Upon completion of the work in the first two 244-CR Facility instrumentation pits, the tents will be relocated to the other 244-CR facility instrumentation pits. 7. PTRAEU(s) shall actively ventilate the bullpens during activities that require work in the pits (after removal of the cover blocks) to control radiological releases. The PTRAEU(s) shall operate intermittently and shall be operated in accordance with the latest revision to the WDOH approved. Portable/Temporary Radioactive Air Emission Unit (PTRAEU) NOC (DOE/RL-96-75). 8. A compliant exhauster skid shall ventilate the process cells and tanks during waste transfer activities. The exhauster shall maintain a negative pressure under the cover blocks and prevent contaminants from reaching the environment. The exhauster skid shall be connected to the existing exhaust ductwork with rigid or flexible ductwork. 9. The 1,000 cfm exhauster shall be equipped with a two-stage HEPA filter, which meets the requirements of ASME AG-1, Section FC and shall be tested annually to requirements of ASME N510. The HEPA filters shall have an efficiency of 99.95 percent for 0.3-micron median diameter. Each filter housing shall meet the applicable sections of ASME N509 and the test requirement of ASME N510. The</p>		

Requirement	Compliance Status	Compliance Determination Method
<p>exhaust stack houses a Generic Effluent Monitoring System (GEMS) that contains an air velocity probe and the air sampling probe. 10. The breather filter shall consist of a housing that contains a HEPA filter, an outlet screen, and a small seal loop. Air flowing to and from the 244-CR Facility shall pass horizontally through the filter and vertically through the downward-facing exit weather hood. Seal loops, installed in the exhaust lines, are designed as a safety feature to prevent unlikely accident in which an over pressurization occurs when the HEPA filter is isolated for occasional (infrequent) maintenance. Specific Controls include: - Installation of portable 1,000 cfm exhauster shall use ALARACT 16. - Removal and/or installation of vault foam covering - ALARACT 4. - Application of fixative at pit interior - see General Controls. - Temporary power installation - ALARA. - Operation of PTRAEU for bullpen ventilation - Latest WDOH approval, AIR 99 1102, for the Portable/Temporary Radioactive Air Emission Unit (PTRAEU) NOC (DOE/RL-96-75). - Removal and/or installation of pit covers - General Controls. - Inspection of pits, vaults, and tanks - General Controls. - Removal and disposition of excess equipment and waste in pits, risers, and tanks - ALARACT 15, and ALARACT 4. - Decontamination activities - General Controls. - Measurement of liquid level and sludge levels in tanks and sumps - General Controls. - Sampling activities in pits, vaults, and tanks including chemical addition and/or waste sampling to determine Double Shell Tank waste acceptance - ALARACT 7 and ALARACT 1. - Facility Equipment Activities: installation, disconnection, repair, replacement, and/or leak testing, of new and existing facility equipment (valves, jumpers, pumps, leak defectors, or other instrumentation/equipment) - ALARACT 4, and ALARACT 15. - Modifications, maintenance, and/or isolation and sealing of existing in route pits, vaults and piping (drain and transfer lines) to support and/or installation of new transfer lines - General Controls. - Excavation - ALARACT 5, and/or WDOH approved Site Wide Guzzler NOC (Air 98-1215), or the most current NOC approved for Guzzler use. - Installation of permanent power to 244-CR Vault Facility - ALARA. - Installation of passive breather filter assembly - ALARACT 16. - Operation of a portable exhauster at 244-CR vault for ventilation - ALARA. - New waste transfer system, waste staging/consolidation - General Controls.</p>		
<p>The Annual Possession Quantity is limited to the following radionuclides (Curies/year): Ac-227 6.85 E-06 Am-241 3.13 E-03 Am-243 3.96 E-05 Ba-137 m 6.41 E+03 C-14 3.62 E-02 Cd-113 m 1.99 E-02 Cm-242 8.48 E-05 Cm-243 5.01 E-04 Cm-244 9.49 E-03 Co-60 1.31 E-03 Cs-134 4.22 E-04 Cs-137 6.78 E+03 Eu-152 5.31 E-02 Eu-154 7.09 E+00 Eu-155 1.22 E+01 H-3 3.57 E-01 I-129 6.95 E-05 Nb-93 m 8.10 E-03 Ni-59 1.88 E-01 Ni-63 1.82 E+01 Np-237 1.75 E-01 Pa-231 3.19 E-07 Pu-238 1.75 E-01 Pu-239 7.01 E+00 Pu-240 1.02 E+00 Pu-241 3.66 E+00 Pu-242 8.89 E+00 Ra-226 5.30 E-06 Ra-228 4.68 E-05 Ru-106 1.29 E-06 Sb-125 1.80 E-03 Se-79 1.88 E-02 Sm-151 6.55 E+00 Sn-126 2.69 E-03 Sr-90 3.02 E+04 Tc-99 1.63 E+00 Th-229 3.11 E-06 Th-232 3.53 E-05 U-232 2.61 E-03 U-233 1.01 E-02 U-234 1.72 E-01 U-235 7.61 E-03 U-236 1.95 E-03 U-238 5.05 E-03 Y-90 3.02 E+04 Zr-93 6.85 E-03</p>	<p>Continuous</p>	<p>CDM: Tracking log and Near Field Monitoring input in the Hanford Site Radiological Air Emissions report. Comment: None</p>
<p>These Conditions and Limitations must be documented in an established procedure prior to starting activities granted by this approval (WAC 246-247-040(5)) and (WAC 246-247-060(5)).</p>	<p>Continuous</p>	<p>CDM: Field interviews. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p>If this emission unit is not in compliance with the standards in WAC 246-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-060-(2)(d)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility shall notify the department seven days in advance of any planned pre-operational testing of the emission unit's control, monitoring or containment systems. The department reserves the right to observe such tests (WAC 246-247-060(4)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national standards (WAC 246-247-075(6)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL quality assurance program. Comment: None</p>
<p>The department retains the right to conduct stack sampling, environmental monitoring or other testing around this unit to assure compliance. If directed by the department, the facility must make provision for such testing (WAC 246-247-075(9) and (10)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility must be able to demonstrate that workers associated with this emission unit are trained in the use and maintenance of control and monitoring systems, and in the performance of associated tests and emergency procedures (WAC 246-247-075(12)).</p>	<p>Continuous</p>	<p>CDM: Field interviews. Comment: None</p>
<p>The facility must be able to demonstrate the reliability and accuracy of emissions data and other test results from this emission unit (WAC 246-247-075(13)).</p>	<p>Continuous</p>	<p>CDM: Near Field Monitoring Program and tracking logs. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The department reserves the right to inspect and audit all construction activities, equipment, operations, documents, data and other records related to compliance with the requirements of this chapter (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility must meet all reporting and record keeping requirements of 40 CFR 61, Subpart H (WAC 246-247-080(2)).</p>	<p>Continuous</p>	<p>CDM: Near Field Monitoring Program. Comment: None</p>
<p>The facility shall report all measured or calculated emissions annually (WAC 246-247-080(3)).</p>	<p>Continuous</p>	<p>CDM: Annual radiological air emissions report. Comment: None</p>
<p>The facility shall report to the department within 24 hours, any unexpected release of radioactivity, shutdown or other condition that, if allowed to persist, or lasts more than four hours, would result in the emission of radionuclides in excess of any standards or limitation in the license. Applicable standards (WAC 246-247-040) include unit specific emission limits (paragraph 5), the offsite dose standard (paragraph 1), BARCT (paragraph 3) or ALARACT (paragraph 4), whichever is applicable, or any limitation included in this approval (paragraph 5) (WAC 246-247-080(5)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL occurrence reporting program. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p>Prior to permanent shut down of an emission unit or completion of an activity, the permittee shall file a report of closure with the Department of Health. The report of closure shall include the date of the shutdown and indicate whether, despite cessation of operation, there is still a potential for radioactive air emissions and a need for any active or passive ventilation system with emission control and/or monitoring devices. An emission unit or activity will not be considered permanently shut down or completed until a report of closure is received and approved by Health. Once an emission unit is permanently shut down or an activity is completed, thereby rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the shutdown or completion, to meet any monitoring, record keeping, and reporting requirements which are no longer applicable for that emission unit or activity. All records, relating to the shut down emission unit or completion of an activity, generated while the emission unit or activity was in operation, shall be kept in accordance with (WAC 246-247-080(8)). (WAC 246-247-080(6))</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility shall maintain readily (promptly) retrievable storage areas (on site) for all records and documents related to, and which may help establish compliance with, the requirements of this chapter. The facility shall keep these records available for department inspection for at least five years (WAC 246-247-080(8)).</p>	<p>Continuous</p>	<p>CDM: Field interviews. Comment: None</p>
<p>The facility shall ensure all emissions units are fully accessible to department inspectors. In the event the hazards associated with accessibility to a unit require training and/or restriction or requirements for entry, the facility owner or operator shall inform the department, prior to arrival, of those restrictions or requirements. The owner or operator shall be responsible for providing the necessary training, escorts, and support services to allow the department to inspect the facility. At a minimum for unannounced inspections, such requirements or restrictions must be told to inspectors to provide an opportunity for inspectors to meet those requirements prior to the inspection (WAC 246-247-080(9)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility shall make available, in timely manner, all documents requested by the department for review. The facility shall allow the department to review documents in advance of an inspection. The facility shall allow access to classified documents by representatives of the department with the appropriate security clearance and a demonstrable need-to-know (WAC 246-247-080(10)).</p>	<p>Continuous</p>	<p>CDM: Field interviews. Comment: None</p>
<p>The filter shall be tested in-place annually to the requirements of ASME N510 and have an efficiency of 99.95 percent.</p>	<p>Continuous</p>	<p>CDM: Work package documenting aerosol challenge test results. Comment: None</p>

296-A-22
WDOH Emission Unit ID : 142
Page in AOP : H-0110

Requirement	Compliance Status	Compliance Determination Method
<p>Zone or Area : Abatement Technology : Heater Required Units : 1 Add'l Description:</p>	Continuous	<p>CDM: Field interviews and as-built drawing. Comment: H-2-98998. One readiness campaign (campaign OC-CR) occurred in calendar year 2006 (March 22, 2006 through April 5, 2006) and one processing campaign (campaign 06-01) occurred in calendar year 2006 (August 29, 2006 through September 10, 2006).</p>
<p>Zone or Area : Abatement Technology : HEPA Required Units : 2 Add'l Description: In series</p>	Continuous	<p>CDM: Field interviews and as-built drawing. Comment: H-2-98998.</p>
<p>Zone or Area : Abatement Technology : Fan Required Units : 1 Add'l Description: Fan operates during 242-A processing.</p>	Continuous	<p>CDM: Field interviews, CH2M HILL notification procedures, notification logbook, and as-built drawing. Comment: H-2-98998. Exhauster shut down once during the reporting period; reported per the CH2M HILL notification procedure.</p>
<p>Required Sampling: Record Sample Sampling Frequency: One week sample per quarter, and continuous sampling during campaign. Radionuclide Requiring Measurement: Campaign: TOTAL ALPHA, TOTAL BETA, 137Cs, 90Sr, 239Pu, 238Pu, 241Am, I-129 and any other radionuclides which could contribute 10% of the potential TEDE. Non-Campaign: Total Alpha, Total Beta, and Cs-137.</p>	Continuous	<p>CDM: ABCASH program. Comment: ABCASH EDP code number E643. One readiness campaign (campaign OC-CR) occurred in calendar year 2006 (March 22, 2006 through April 5, 2006) and one processing campaign (campaign 06-01) occurred in calendar year 2006 (August 29, 2006 through September 10, 2006).</p>
<p>Federal and State Regulatory Requirement: 40 CFR 61.93(b)(4)(i) & WAC 246-247-075(3) Permit Monitoring and Testing Procedure: During campaigns: Method 2 appendix A Method appendix B 61.93(b)(2)(ii) ANSI N13.1: During non-campaigns Appendix B, Method 114(3).</p>	Continuous	<p>CDM: CH2M HILL NESHAP quality assurance program. Comment:</p>

Requirement	Compliance Status	Compliance Determination Method
<p align="center">Permit: AIR 04-812 Issue Date:08-23-04 Obsolete Date: 07-05-06 NOC: Operation of the 242-A Evaporator Emission Unit 296-A-22 WDOH NOC ID: 284 Date In AOP: 04-11-05 Page in AOP: H-0110</p>		
Requirement	Compliance Status	Compliance Determination Method
<p>The U.S. Department of Energy shall comply with all Conditions and Limitations of this license (WAC 246-247-060(5)).</p>	<p align="center">Continuous</p>	<p>CDM: Field interviews, ABCASH isotopic analysis of record sampler, tracked via ERS and reported in the annual radiological air emissions report, and verified basis for APQ in NOC application. Comment: None</p>
<p>The total abated emission limit for this Notice of Construction is limited to 1.00E-09 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 3.20E-06 mrem/year to the Maximally Exposed Individual (WAC 246-247-030(21)).</p>	<p align="center">Continuous</p>	<p>CDM: Field interviews, ABCASH isotopic analysis of record sampler, tracked via ERS and reported in the annual radiological air emissions report, and verified basis for APQ in NOC application. Comment: None</p>
<p>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. The 242-A Evaporator facility is used to reduce the volume of waste solutions that do not self-boil, and thus reduce the number of underground double-shell tanks required for waste storage. The 242-A Evaporator employs a conventional forced-circulation, vacuum evaporation system to concentrate radioactive waste solutions. Principal process components of the evaporator system are located in the 242-A Building. They include the reboiler, vapor-liquid separator, recirculation pump and pipe loop, slurry product pump, condensers, and vessel ventilation system. The evaporator system receives a mixed blend feed from the feed tank. The feed consists of unprocessed and processed waste and recycled liquid that are removed from storage tanks after solids have settled. The feed is pumped into the recirculation line and blended with the main product slurry stream, which flows to the reboiler via the recirculation pump. The mixture is heated in the reboiler. The vapor liquid separator is maintained at a reduced pressure. Under this reduced pressure, a fraction of the water in the heated slurry flashes to steam and is drawn through two wire mesh deentrainer pads into a vapor line that leads to the primary condenser. As evaporation takes place in the separator vessel, the slurry becomes concentrated. When the process solution has been concentrated to the parameters specified by the campaigns process memo, a fraction is withdrawn from the upper recirculation line, upstream of the feed addition point, and is either gravity drained or pumped by the slurry pump to underground storage tanks. Vapors removed from the vapor-liquid separator via the vapor line are condensed and routed to the condensate collection tank. The process condensate is discharged to the Liquid Effluent Retention Facility (LERF). Steam condensate is continuously monitored for excessive radiation, pH, and conductivity, and then discharged from the building to the 200 Area Treated Effluent Disposal Facility (TEDF). Upon detection of radioactive contamination, the radiation monitor will automatically divert the steam condensate stream to the feed tank. Cooling water from the condensers, which is also continuously monitored for excessive radiation, pH, and conductivity, is also discharged to the 200 Area TEDF. This used cooling water stream cannot be diverted, thus, if contamination is detected, an</p>	<p align="center">Continuous</p>	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p>evaporator shutdown is required. Non-condensable vapors from the evaporator are filtered and discharged to the atmosphere via the vessel vent system. This system consists of a deentrainment pad, prefilter, heater, high-efficiency filter assembly, and vessel vent exhauster.</p>		
<p>The Annual Possession Quantity is limited to the following radionuclides (Curies/year): Am 241 3.50E+04 C 14 1.80E+05 Cm 244 4.50E+02 Co 60 4.20E+04 Cs 134 5.20E+05 Cs 137 5.20E+07 Eu 154 1.70E+05 Eu 155 2.40E+05 I 129 9.10E+01 Nb 94 3.40E+03 Pu 238 4.50E+01 Pu 239/240 5.60E+03 Pu 241 5.20E+05 Ra 226 1.10E+03 Ru 106 1.80E+06 Se 79 2.70E+03 Sr 90 7.70E+06 Tc 99 7.00E+04</p>	<p>Continuous</p>	<p>CDM: Field interviews, ABCASH isotopic analysis of record sampler, tracked via ERS and reported in the annual radiological air emissions report, and verified basis for APQ in NOC application. Comment: None</p>
<p>The monitoring system must be NESHAPs compliant and operating in compliance with NESHAPs and WAC 246-247 designated stack requirements when it is operating.</p>	<p>Continuous</p>	<p>CDM: Field interviews, CH2M HILL work planning/controls/documents, and procedures. Comment: None</p>
<p>Monitoring for I-129 needs to occur only when this isotope exceeds 10% of the PTE.</p>	<p>Continuous</p>	<p>CDM: ABCASH program. Comment: ABCASH EDP code number E643.</p>
<p>If this emission unit is not in compliance with the standards in WAC 246-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-040(5)) and (WAC 246-247-060(5)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that the licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility shall notify the department at least seven calendar days prior to any planned preoperational tests of new or modified emission units that involve emissions control, monitoring, or containment systems of the emission unit(s). The department reserves the right to witness or require preoperational tests involving the emissions control, monitoring, or containment systems of the emissions unit(s) (WAC 246-247-060(4)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that the licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national standards (WAC 246-247-075(6)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL quality assurance program, records, and procedures. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The department may require the owner or operator of an emission unit to make provision, at existing emission unit sampling stations, for the department to take split or collocated samples of the emissions. (WAC 246-247-075 (10)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that the licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility must be able to demonstrate that workers associated with this emission unit are trained in the use and maintenance of control and monitoring systems, and in the performance of associated tests and emergency procedures (WAC 246-247-075(12)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL training program, training records, work controls, and procedures. Comment: None</p>
<p>All facilities must be able to demonstrate the reliability and accuracy of the radioactive air emissions monitoring data (WAC 246-247-075(13)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL quality assurance program, records, and procedures. Comment: None</p>
<p>The department reserves the right to inspect and audit all construction activities, equipment, operations, documents, data and other records related to compliance with the requirements of this chapter (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that the licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility must meet all reporting and record keeping requirements of 40 CFR 61, Subpart H. (WAC 246-247-080(2)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL records management and procedures. Comment: None</p>
<p>The facility shall report all measured or calculated emissions annually (WAC 246-247-080(3)).</p>	<p>Continuous</p>	<p>CDM: The annual "Radionuclide Air Emissions Report" for the Hanford Site. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The facility shall notify the department within twenty-four hours of any shutdown, or of any transient abnormal condition lasting more than four hours or other change in facility operations which, if allowed to persist, would result in emissions of radioactive material in excess of applicable standards or license requirements (WAC 246-247-080(5)).</p>	<p>Continuous</p>	<p>CDM: Field interviews, CH2M HILL notification procedures, and notification logbook. Comment: Exhauster shut down once during the reporting period; reported per the CH2M HILL notification procedure.</p>
<p>The facility shall file a report of closure with the department whenever operations producing emissions of radioactive material are permanently ceased at any emission unit (except temporary emission units) regulated under this chapter. The closure report shall indicate whether, despite cessation of operations, there is still a potential for radioactive air emissions and a need for an active or passive ventilation system with emission control and/or monitoring devices. If decommissioning is planned and will constitute a modification, a NOC is required, as applicable, in accordance with WAC 246-247-060. (WAC 246-247-080(6))</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that the licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility shall maintain readily (promptly) retrievable storage areas (on site) for all records and documents related to, and which may help establish compliance with, the requirements of this chapter. The facility shall keep these records available for department inspection for at least five years (WAC 246-247-080(8)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL records management and procedures. Comment: None</p>
<p>The facility shall ensure all emissions units are fully accessible to department inspectors. In the event the hazards associated with accessibility to a unit require training and/or restriction or requirements for entry, the facility owner or operator shall inform the department, prior to arrival, of those restrictions or requirements. The owner or operator shall be responsible for providing the necessary training, escorts, and support services to allow the department to inspect the facility. At a minimum for unannounced inspections, such requirements or restrictions must be told to inspectors to provide an opportunity for inspectors to meet those requirements prior to the inspection (WAC 246-247-080(9)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that the licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The facility shall make available, in timely manner, all documents requested by the department for review. The facility shall allow the department to review documents in advance of an inspection. The facility shall allow access to classified documents by representatives of the department with the appropriate security clearance and a demonstrable need-to-know (WAC 246-247-080(10)).</p>	<p>Continuous</p>	<p>CDM: CH2M HILL records management and procedures. Comment: None</p>

Requirement	Compliance Status	Compliance Determination Method
<p>All radioactive air emissions licenses issued by the department, except those issued to radioactive materials licensees, shall have an expiration date of five years from date of issuance or as specified in the Air Operating Permit. For radioactive material licensees, the requirements and limitations for the operation of emission units shall be incorporated into their radioactive materials license, and shall expire when the radioactive materials license expires (WAC 246-247-060(6)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that the licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>All facilities with licensed emission units, except for radioactive materials licensees, shall submit a request to the department for renewal of their radioactive air emissions license at least sixty days prior to expiration of the license or as required by the Air Operating Permit. All renewal requests shall include a summary of the operational status of all emission units, the status of facility compliance with the standards of WAC 246-247-040, and the status of any corrective actions necessary to achieve compliance with the requirements of this chapter. Facilities with licensed emission units that also hold a radioactive materials license issued by the department shall submit this information along with their radioactive material license renewal submittal. If the department is unable to renew a radioactive air emissions license before its expiration date, the existing license, with all of its requirements and limitations, remains in force until the department either renews or revokes the license (WAC 246-247-060(9)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that the licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>
<p>The department may conduct an environmental surveillance program to ensure that radiation doses to the public from emission units are in compliance with applicable standards. The department may require the operator of any emission unit to conduct stack sampling, ambient air monitoring, or other testing as necessary to demonstrate compliance with the standards in WAC 246-247-040. (WAC 246-247-075(9))</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined that the licensee need not certify compliance with conditions that convey a right, are a historical summary or fact, that pertain to actions to be completed in the future, or that pertain to actions required of the agency.</p>

Guzzler at WTP
WDOH Emission Unit ID : 476
Page in AOP : H-0394

Requirement	Compliance Status	Compliance Determination Method
<p>Zone or Area : Abatement Technology : Collection Tank and Plate Separator Required Units : 1 Add'l Description:</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
<p>Zone or Area : Abatement Technology : Cyclone Separator Required Units : 2 Add'l Description: Baghouse system with a total of 72 bags.</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
<p>Zone or Area : Abatement Technology : Micro-strainer Device Required Units : 1 Add'l Description:</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
<p>Zone or Area : Abatement Technology : HEPA Required Units : 3 Add'l Description: Three in-place tested HEPA filters in parallel.</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>Required Sampling: Radiation surveys and to include but not limited to NDA testing of the HEPA filters and screening the HEPA filtration system using gamma spectroscopy. Sampling Frequency: When the HEPA filters are replaced and annually screening the HEPA filtration system. Radionuclide Requiring Measurement: All radionuclides which could contribute 10% of the potential EDE.</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
<p>Federal and State Regulatory Requirement: WAC 246-247-075[3] Permit Monitoring and Testing Procedure: Appendix B, Method 114(3)</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>

Requirement	Compliance Status	Compliance Determination Method
<p align="center"> Permit: AIR 02-1014 Issue Date:10-24-02 Obsolete Date: 07-05-06 NOC: Excavation Activities for the Building of the RPP Waste Treatment Plant WDOH NOC ID: 482 Date In AOP: 04-11-05 Page in AOP: H-0394 </p>		
Requirement	Compliance Status	Compliance Determination Method
<p>The U.S. Department of Energy shall comply with all Conditions and Limitations of this license (WAC 246-247-060(5)).</p>	<p align="center">Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
<p>The total abated emission limit for this Notice of Construction is limited to 3.80E-02 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 3.80E-02 mrem/year to the Maximally Exposed Individual (WAC 246-247-030(21)).</p>	<p align="center">Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
<p>This process is limited to: the excavation activities associated with the building of temporary construction facilities and the main facilities for the River Protection Project-Waste Treatment Plant (RPP-WTP). Excavation and general grading will be performed for the WTP site, including excavation for the mat foundations, for the four main process facilities: Pretreatment (PT), high-level waste (HLW), low-activity waste (LAW), and LAW pretreatment plant (LPP) areas, including installation of sheet piles, where applicable. The excavation is limited to the removal of the dune sand, subsurface soil, and excavation to the desired elevation for the founding of structures and slope of the finished site layout. Over excavation is allowed to remove the dune sand if it is found at the exposed subgrade elevation. Excavated soil removed beyond the required footing elevation will be replaced with compacted structural fill, to the required footing elevation. Conventional methods such as the use of large excavators, scrapers, dozers, backhoes, front-end loaders, or manual digging with shovels or the "clean" guzzler will be used.</p>	<p align="center">Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The Annual Possession Quantity is limited to the following radionuclides (Curies/year): Alpha 0 1.24E-03 Beta 0 5.32E-02</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
<p>If this emission unit is not in compliance with the standards in WAC 246-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-060-(2)(d)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
<p>The department retains the right to conduct stack sampling, environmental monitoring or other testing around this unit to assure compliance. If directed by the department, the facility must make provision for such testing (WAC 246-247-075(10) and (11).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
<p>The facility must be able to demonstrate workers associated with this emission unit are trained in the use and maintenance of control and monitoring systems, and in the performance of associated tests and emergency procedures (WAC 246-247-075(12)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The facility must be able to demonstrate the reliability and accuracy of emissions data and other test results from this emission unit (WAC 246-247-075(13)) and (WAC 246-247-075(6)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
<p>Prior to hot start-up, restart or operation of a new or existing emission unit, the owner/operator must notify and provide the department the access to inspect and audit all construction activities, equipment, operations, documents, data, and other records related to compliance with the requirements of WAC 246-247 (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
<p>The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national standards (WAC 246-247-075(6)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
<p>The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
<p>The facility shall maintain and report all records and reports according to 40 CFR 61, Subpart H (WAC 246-247-080(2)).</p>	<p>Continuous</p>	<p>CDM: Records are maintained by projec. document control. Comment:</p>

Requirement	Compliance Status	Compliance Determination Method
<p>All measured or calculated emissions shall be reported annually (WAC 246-247-080(3)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
<p>The USDOE shall report to the department within 24 hours, any unexpected release of radioactivity, shutdown or other condition that, if allowed to persist, or lasts more than four hours, would result in the emission of radionuclides in excess of any standards or limitation in the license. Applicable standards (WAC 246-247-040) include unit specific emission limits (paragraph 5), the offsite dose standard (paragraph 1), BARCT (paragraph 3) or ALARACT (paragraph 4), whichever is applicable, or any limitations included in this approval (paragraph 5) (WAC 246-247-080(5)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: The NOC serves as a contingency approval for implementation in the event that soil contamination is discovered during WTP excavation activities. Full implementation of the NOC Approval has not occurred because the routine soil surveys have not detected contamination.</p>
<p>The facility shall make requested documents available in a timely manner for review (WAC 246-247-080(10)).</p>	<p>Not Applicable</p>	<p>CDM: N/A Comment: Ecology and WDOH have determined the licensee need not certify compliance with conditions conveying a right, are a historical summary or fact, pertaining to actions to be completed in the future, or pertaining to actions required of the agency.</p>
<p>This unit must be fully accessible to Department of Health inspectors. Any specific training requirements, restrictions or special entry requirements must be given to the department when known to allow for unannounced inspections, as required by EPA (WAC 246-247-080(9)). At a minimum for unannounced inspections, such requirements or restrictions must be told to inspectors that morning, to provide an opportunity for inspectors to meet those requirements. For prior announced inspections, such notification must occur far enough in advance for the inspectors to have reasonable time to meet the requirements.</p>	<p>Continuous</p>	<p>CDM: Department of Health inspectors were not denied access to the unit. Comment:</p>