

## AR TARGET SHEET

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

EDMC#: 0073854

SECTION: 4 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

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 1.72E-05 mrem/year. Approved are the associated potential release rates (Curies/year) of: Alpha-0 1.70E-06 Liquid/Particulate Solid WAC 246-247-030(21)(a) Alpha release rate based on Am-241/Pu-239. B/G-0 4.50E-07 Liquid/Particulate Solid WAC 246-247-030(21)(a) Beta/gamma release rate based on Cs-137/Sr-90. The radioactive isotopes identified for this emission unit are (no quantities specified): Am-241 Ba-133 Co-57 Co-60 Cs-137 Eu-154 Eu-155 H-3 Hg-203 Kr-85 Mn-54 Na-22 Pu-239 Ra-226 Rn-220 Rn-222 Sb-125 Sr-90 Th-228 U(Nat)-0 Y-88 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><b>CDM:</b> Records Review <b>Comment:</b> NESHAPS Inventory of radioactive materials is conducted for PNNL facilities on an annual basis in accordance with PNL-10855 Rev. 3, "Assessment of Unabated Facility Emission Potentials for Evaluating Airborne Radionuclide Monitoring Requirements at PNNL-2003". This report was reviewed to verify that emissions were below the NOC limits.</p>
<p>The radionuclides in the Annual Possession Quantity are limited to the following physical forms: Gas: H-3, Kr-85, Rn-220, Rn-222. Solid: Am-241, Ba-133, Co-57, Co-60, Cs-137, Eu-154, Eu-155, Hg-203, Mn-54, Na-22, Pu-239, Sb-125, Sr-90, U(Nat), Y-88. Particulates: Ra-226, Th-228.</p>	<p>Continuous</p>	<p><b>CDM:</b> Records Review <b>Comment:</b> NESHAPS Inventory of radioactive materials is conducted for PNNL facilities on an annual basis in accordance with PNL-10855 Rev 3, "Assessment of Unabated Facility Emission Potentials for Evaluating Airborne Radionuclide Monitoring Requirements at PNNL-2003". This report was reviewed to verify the APQ.</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 (W AC 246-247-040(5) and WAC 246-247-060(5)).</p>	<p>Not Applicable</p>	<p><b>CDM:</b> N/A <b>Comment:</b> Ecology and Health have determined that the licensee need not certify compliance with conditions that convey a right, are 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 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><b>CDM:</b> N/A <b>Comment:</b> There were no planned preoperational tests performed during CY2006.</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><b>CDM:</b> Records Review <b>Comment:</b> PNNL's Rad Air monitoring program is conducted under the Effluent Management Quality Assurance Plan, EM-QA-01. This plan is based on the requirements of 40 CFR 61, Appendix B, Method 114.</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><b>CDM:</b> N/A <b>Comment:</b> Ecology and Health have determined that the licensee need not certify compliance with conditions that convey a right, are 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 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><b>CDM:</b> Records Review / Personnel Interview  <b>Comment:</b> Use and Maintenance: RCTs are responsible for the collection of samples and operating monitoring equipment. These personnel are trained to procedures (located on the Effluent Management web page for these activities. Evidence of training to these procedures is maintained with the Laboratory Training group. Air Balance personnel are responsible for the efficiency testing and replacement of HEPA filters. This testing is performed in accordance with Air Balance procedures located on the F&amp;O web page. Evidence of training to these procedures is maintained with the Laboratory Training group.            Emergency Response: The Emergency Preparedness group trains the building emergency directors (BEDs) via PNNL courses 402, 403, and 404. Under each BED is a response organization (BERO), these personnel are trained under course 405. Training records are maintained with Laboratory Training. Emergency preparedness exercises are conducted on a scheduled basis to evaluate performance. Evaluations are maintained with the EP group.</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><b>CDM:</b> Records Review  <b>Comment:</b> Data collected through support organizations is coordinated through statements of work (SOWs) that outline project expectations for collection and reporting of data: • Airborne Radionuclide Emission Sample Analysis Statement of Work (Sample analysis) • Airborne Radionuclide Emission Sampler and Monitor Operations Statement of Work (Collection of samples, daily inspections, and delivery to laboratory) • Effluent Sampling and Monitoring Support-Memorandum of Agreement (performance of stack flow measurements and maintenance of equipment) b. Memorandum of Agreement for Calibration Services (Calibration of rotameters and vacuum gauges)            Note: All of these documents are maintained on the EM web page.</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><b>CDM:</b> N/A <b>Comment:</b> Ecology and Health have determined that the licensee need not certify compliance with conditions that convey a right, are 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><b>CDM:</b> N/A <b>Comment:</b> Ecology and Health have determined that the licensee need not certify compliance with conditions that convey a right, are 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><b>CDM:</b> Records Review <b>Comment:</b> Retention period for Rad Air records is specified as part of the Effluent Management Quality Assurance Plan, EM-QA-01. Retention periods are further documented in the EM project files under the Records Inventory and Disposal Schedule (RIDS).</p>
<p>The facility shall report all measured or calculated emissions annually (WAC 246-247-080(3)).</p>	<p>Continuous</p>	<p><b>CDM:</b> Records Review <b>Comment:</b> Emissions are included in the Radionuclide Air Emissions Report for the Hanford Site</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><b>CDM:</b> Records Review <b>Comment:</b> No reports were required. Reviewed the Hanford Site Air Operating Permit Semiannual Reports for Periods January 1, 2006 through June 30, 2006 and July 1, 2006 through December 31, 2006.</p>

Requirement	Compliance Status	Compliance Determination Method
<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><b>CDM:</b> N/A <b>Comment:</b> Ecology and Health have determined that the licensee need not certify compliance with conditions that convey a right, are 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><b>CDM:</b> Records Review <b>Comment:</b> Retention period for Rad Air records is specified as part of the Effluent Management Quality Assurance Plan, EM-QA-01. Retention periods are further documented in the EM project files under the Records Inventory and Disposal Schedule (RIDS).</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>Continuous</p>	<p><b>CDM:</b> Records Review <b>Comment:</b> Implementation of the "Memorandum of Understanding for Initial Point-of-Contact Activities Supporting Regulatory Agency Environmental Inspection," dated July 2001". The MOU defines, at a site-wide level, the roles and responsibilities for regulator access to the Hanford Site. SBMS subject area for Audits and Inspections by Regulatory and Oversight Agencies, ES&amp;H Regulatory Inspections further defines the roles and responsibilities at a contractor level for hosting, conducting, and documenting external regulatory inspections.</p>

Requirement	Compliance Status	Compliance Determination Method
<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><b>CDM:</b> Records Review <b>Comment:</b> WDOH did not request any records during the reporting period for this project.</p>
<p>This condition was obsoleted on 9/12/2003. These Conditions and Limitations must be documented in an established procedure(s) 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><b>CDM:</b> N/A <b>Comment:</b> This condition was obsoleted on 9/12/03.</p>
<p>HEPA filters 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><b>CDM:</b> Records Review <b>Comment:</b> Abatement Control Technology maintained in accordance with Section 2.1, Tier 3. Air Balance personnel are responsible for the efficiency testing and replacement of HEPA filters. This testing is performed in accordance with Air Balance procedures located on the F&amp;O web page. Data collected through support organizations is coordinated through statements of work (SOWs) that outline project expectations for collection and reporting of data: a. Effluent Sampling and Monitoring Support-Memorandum of Agreement (performance of stack flow measurements and maintenance of equipment) Note: All of these documents are maintained on the EM web page.</p>
<p>The emission unit monitoring system shall have the following activities performed: a. The USDOE shall provide to DOH for review copies of the procedures used to perform the functional calibration checks and visual inspection activities; and b. A functional calibration check of monitoring system instrumentation shall be performed annually. Within two years of this approval: c. A visual check of nozzle position and orientation; d. A check to ensure the tightness of all fittings and connections; e. A visual check of the sample line, around the area of the sample filter, for corrosion and line losses. This requirement is limited to the sample filter area only.</p>	<p>Continuous</p>	<p><b>CDM:</b> Records Review <b>Comment:</b> Monitoring system checks are completed during sampling events. Conditions c, d, and e were due by Feb 2006 and were completed on 8/26/2004.</p>

EP-320-01-S  
WDOH Emission Unit ID : 358  
Page in AOP : 2-165

Requirement	Compliance Status	Compliance Determination Method
<b>Zone or Area :</b> <b>Abatement Technology :</b> Fan <b>Required Units :</b> 2 <b>Add'l Description:</b> 5/21/02 and later: 1 operational, 1 backup	Continuous	<b>CDM:</b> Personnel interview <b>Comment:</b> The Building Engineer confirmed the radiological exhaust system is configured with 2 fans, one operational, one backup.
<b>Zone or Area :</b> <b>Abatement Technology :</b> HEPA <b>Required Units :</b> 2 <b>Add'l Description:</b> In series	Continuous	<b>CDM:</b> Personnel interview / records review. <b>Comment:</b> Reviewed the HEPA Filter PM results (PM-55110) and verified configuration with Building Engineer.
<b>Required Sampling:</b> Record Sample <b>Sampling Frequency:</b> 2 week sample/year <b>Radionuclide Requiring Measurement:</b> TOTAL ALPHA TOTAL BETA	Continuous	<b>CDM:</b> Records review <b>Comment:</b> Emission data is maintained in the Gaseous Emission Database (GED). A query of the database confirmed that all required samples were collected during the reporting period, including the start and end dates of sample periods.
<b>Federal and State Regulatory Requirement:</b> 40 CFR 61.93(b)(4)(i) & WAC 246-247-075(3) <b>Permit Monitoring and Testing Procedure:</b> 40 CFR 61, Appendix B, Method 114(3)	Continuous	<b>CDM:</b> Records review <b>Comment:</b> The "Pacific Northwest National Laboratory Effluent Management Quality Assurance" (EM-QA-01) specifies quality assurance requirements.
No active NOC approvals in the AOP for this certification period.		

EP-320-02-S  
WDOH Emission Unit ID : 355  
Page in AOP : 2-166

Requirement	Compliance Status	Compliance Determination Method
<b>Zone or Area :</b> <b>Abatement Technology :</b> Fan <b>Required Units :</b> 1 <b>Add'l Description:</b>	Continuous	<b>CDM:</b> Records Review / Personnel Interview <b>Comment:</b> Reviewed the Exhaust Fan PM Results (PM-42525) & verified configuration with Building Engineer.
<b>Zone or Area :</b> <b>Abatement Technology :</b> HEPA <b>Required Units :</b> 2 <b>Add'l Description:</b> In series	Continuous	<b>CDM:</b> Personnel interview / records review <b>Comment:</b> Reviewed the HEPA Filter PM results (PM-55110) and confirmed with Building Engineer.
<b>Required Sampling:</b> Record Sample <b>Sampling Frequency:</b> 2 week sample/year <b>Radionuclide Requiring Measurement:</b> TOTAL ALPHA TOTAL BETA	Continuous	<b>CDM:</b> Records review <b>Comment:</b> Emission data is maintained in the Gaseous Emission Database (GED). A query of the database confirmed that all required samples were collected during the reporting period, including the start and end dates of sample periods.
<b>Federal and State Regulatory Requirement:</b> 40 CFR 61.93(b)(4)(i) & WAC 246-247-075(3) <b>Permit Monitoring and Testing Procedure:</b> 40 CFR 61, Appendix B, Method 114(3)	Continuous	<b>CDM:</b> Records review <b>Comment:</b> The "Pacific Northwest National Laboratory Effluent Management Quality Assurance Plan" (EM-QA-01) specifies quality assurance requirements.
No active NOC approvals in the AOP for this certification period.		

EP-320-04-S  
WDOH Emission Unit ID : 357  
Page in AOP : 2-168

Requirement	Compliance Status	Compliance Determination Method
<b>Zone or Area :</b> <b>Abatement Technology :</b> Fan <b>Required Units :</b> 1 <b>Add'l Description:</b>	Continuous	<b>CDM:</b> Personnel interview <b>Comment:</b> Confirmed with the Building Engineer.
<b>Zone or Area :</b> <b>Abatement Technology :</b> HEPA <b>Required Units :</b> 1 <b>Add'l Description:</b>	Continuous	<b>CDM:</b> Personnel interview / records review <b>Comment:</b> Reviewed HEPA Filter PM results (PM-55110). Confirmed with the Building Engineer.
<b>Required Sampling:</b> Record Sample <b>Sampling Frequency:</b> 2 week sample/year <b>Radionuclide Requiring Measurement:</b> TOTAL ALPHA TOTAL BETA	Continuous	<b>CDM:</b> Records review <b>Comment:</b> Emission data is maintained in the Gaseous Emission Database (GED). A query of the database confirms that all required samples were collected during the reporting period, including the start and end dates of sample periods.
<b>Federal and State Regulatory Requirement:</b> 40 CFR 61.93(b)(4)(i) & WAC 246-247-075(3) <b>Permit Monitoring and Testing Procedure:</b> 40 CFR 61, Appendix B, Method 114(3)	Continuous	<b>CDM:</b> Records review <b>Comment:</b> The "Pacific Northwest National Laboratory Effluent Management Quality Assurance" (EM-QA-01) specifies quality assurance requirements.
No active NOC approvals in the AOP for this certification period.		

EP-323-01-S  
WDOH Emission Unit ID : 359  
Page in AOP : 2-169

Requirement	Compliance Status	Compliance Determination Method
<b>Zone or Area :</b> Equipment Room <b>Abatement Technology :</b> HEPA <b>Required Units :</b> 1 <b>Add'l Description:</b>	Continuous	<b>CDM:</b> Records review / Personnel interview <b>Comment:</b> Reviewed the 2006 HEPA Filter PM results (PM-55550). Confirmed with the Building Engineer.
<b>Zone or Area :</b> Hot Cell <b>Abatement Technology :</b> HEPA <b>Required Units :</b> 2 <b>Add'l Description:</b> In series	Continuous	<b>CDM:</b> Personnel interview / Records review <b>Comment:</b> Reviewed the 2006 HEPA Filter PM results (PM-55550). Confirmed with the Building Engineer.
<b>Zone or Area :</b> <b>Abatement Technology :</b> Fan <b>Required Units :</b> 1 <b>Add'l Description:</b> Common to both areas	Continuous	<b>CDM:</b> Records Review / Personnel Interview <b>Comment:</b> Reviewed the Exhaust Fan PM Results (PM-43810) & confirmed with the Building Engineer.
<b>Required Sampling:</b> Record Sample <b>Sampling Frequency:</b> 2 week sample/year <b>Radionuclide Requiring Measurement:</b> TOTAL ALPHA TOTAL BETA	Continuous	<b>CDM:</b> Records review <b>Comment:</b> Emission data is maintained in the Gaseous Emission Database (GED). A query of the database confirmed that all required samples were collected during the reporting period, including the start and end dates of sample periods.
<b>Federal and State Regulatory Requirement:</b> 40 CFR 61.93(b)(4)(i) & WAC 246-247-075(3) <b>Permit Monitoring and Testing Procedure:</b> 40 CFR 61, Appendix B, Method 114(3)	Continuous	<b>CDM:</b> Records review <b>Comment:</b> The "Pacific Northwest National Laboratory Effluent Management Quality Assurance Plan" (EM-QA-01) specifies quality assurance requirements.
No active NOC approvals in the AOP for this certification period.		

EP-324-01-S  
WDOH Emission Unit ID : 360  
Page in AOP : H-0452

Requirement	Compliance Status	Compliance Determination Method
<p><b>Zone or Area :</b> Zone 1 Cells  <b>Abatement Technology :</b> Prefilter  <b>Required Units :</b> 2  <b>Add'l Description:</b> 1 for Zone 1 cell, 1 for POG V/V</p>	<p>Continuous</p>	<p><b>CDM:</b> Review of specified procedure HNF-3444, "324/327 Facilities Environmental Effluent Specifications" prior to April 2006, and then WCH-HNF-3444, "324/327 Facilities Environmental Effluent Specifications" for the remainder of the certification period; and inquiry with the cognizant engineer.  <b>Comment:</b> No substantive changes were made with the revision of the document. This condition became obsolete on September 28,2006.</p>
<p><b>Zone or Area :</b> Zone 1 Cells  <b>Abatement Technology :</b> HEPA  <b>Required Units :</b> 1  <b>Add'l Description:</b> Last stage shared with B Cell</p>	<p>Continuous</p>	<p><b>CDM:</b> Review of specified procedure HNF-3444, "324/327 Facilities Environmental Effluent Specifications" through April 2006, and then WCH-HNF-3444, "324/327 Facilities Environmental Effluent Specifications" for the remainder of the certification period; and inquiry with the cognizant engineer.  <b>Comment:</b> No substantive changes were made with the revision of the document. This condition became obsolete on September 28, 2006.</p>
<p><b>Zone or Area :</b> Zone 1 Cells  <b>Abatement Technology :</b> Fan  <b>Required Units :</b> 1  <b>Add'l Description:</b> 3 in parallel, Serves B Cell, Zone 1 Cells.</p>	<p>Continuous</p>	<p><b>CDM:</b> Review of specified procedure HNF-3444, "324/327 Facilities Environmental Effluent Specifications" through April 2006, and then WCH-HNF-3444, "324/327 Facilities Environmental Effluent Specifications" for the remainder of the certification period, and inquiry with the cognizant engineer.  <b>Comment:</b> No substantive changes were made with the revision of the document. This condition became obsolete on September 28, 2006.</p>

Requirement	Compliance Status	Compliance Determination Method
<p><b>Zone or Area :</b> B Cell  <b>Abatement Technology :</b> Prefilter  <b>Required Units :</b> 2  <b>Add'l Description:</b></p>	<p>Continuous</p>	<p><b>CDM:</b> Review of specified procedure HNF-3444, "324/327 Facilities Environmental Effluent Specifications" through April 2006, and then WCH-HNF-3444, "324/327 Facilities Environmental Effluent Specifications" for the remainder of the certification period; and inquiry with the cognizant engineer.  <b>Comment:</b> No substantive changes were made with the revision of the document. This condition became obsolete on September 28, 2006.</p>
<p><b>Zone or Area :</b> B Cell  <b>Abatement Technology :</b> Electro Static Precipitator  <b>Required Units :</b> 1  <b>Add'l Description:</b></p>	<p>Continuous</p>	<p><b>CDM:</b> Review of specified procedure HNF-3444, "324/327 Facilities Environmental Effluent Specifications" through April 2006, and then WCH-HNF-3444, "324/327 Facilities Environmental Effluent Specifications" for the remainder of the certification period; and inquiry with the cognizant engineer.  <b>Comment:</b> No substantive changes were made with the revision of the document. This condition became obsolete on September 28, 2006.</p>
<p><b>Zone or Area :</b> Zone 2  <b>Abatement Technology :</b> Fan  <b>Required Units :</b> 1  <b>Add'l Description:</b> 2 in parallel. Serves both Storage Vault/Rms &amp; Zone 2</p>	<p>Continuous</p>	<p><b>CDM:</b> Review of specified procedure HNF-3444, "324/327 Facilities Environmental Effluent Specifications" through April 2006, and then WCH-HNF-3444, "324/327 Facilities Environmental Effluent Specifications" for the remainder of the certification period; and inquiry with the cognizant engineer.  <b>Comment:</b> No substantive changes were made with the revision of the document. This condition became obsolete on September 28, 2006.</p>

Requirement	Compliance Status	Compliance Determination Method
<p><b>Zone or Area :</b> Zone 2  <b>Abatement Technology :</b> Prefilter  <b>Required Units :</b> 1  <b>Add'l Description:</b></p>	<p>Continuous</p>	<p><b>CDM:</b> Review of specified procedure HNF-3444, "324/327 Facilities Environmental Effluent Specifications" through April 2006, and then WCH-HNF-3444, "324/327 Facilities Environmental Effluent Specifications" for the remainder of the certification period; and inquiry with the cognizant engineer.  <b>Comment:</b> No substantive changes were made with the revision of the document. This condition became obsolete on September 28, 2006.</p>
<p><b>Zone or Area :</b> Zone 2  <b>Abatement Technology :</b> HEPA  <b>Required Units :</b> 1  <b>Add'l Description:</b> Stage is control for Zone 2</p>	<p>Continuous</p>	<p><b>CDM:</b> Review of specified procedure HNF-3444, "324/327 Facilities Environmental Effluent Specifications" through April 2006, and then WCH-HNF-3444, "324/327 Facilities Environmental Effluent Specifications" for the remainder of the certification period; and inquiry with the cognizant engineer.  <b>Comment:</b> No substantive changes were made with the revision of the document. This condition became obsolete on September 28, 2006.</p>

Requirement	Compliance Status	Compliance Determination Method
<p><b>Required Sampling:</b> Continuous  <b>Sampling Frequency:</b> Continuous  <b>Radionuclide Requiring Measurement:</b> All radionuclides which could contribute 10% of the potential EDE.</p>	<p>Continuous</p>	<p><b>CDM:</b> Confirmed by the cognizant engineer through review of facility surveillance records/logs and specified procedure HNF-3444, "324/327 Facilities Environmental Effluent Specifications" through April 2006, and then WCH-HNF-3444, "324/327 Facilities Environmental Effluent Specifications" for the remainder of the certification period; and verification of data. "Services Provided by the Waste Sampling and Characterization Facility for the Effluent and Environmental Monitoring Program during Calendar Year 2006" (HNF-EP-0835-12) defines what analyses are performed and the frequency.  <b>Comment:</b> "Continuous compliance" means collection of all monitoring data required by the permit under the data collection frequency specified in the permit, with no deviations, and no other information that indicates deviations, except for planned shutdowns, upsets, or malfunctions during which compliance is not required. This condition became obsolete on September 28, 2006.</p>
<p><b>Federal and State Regulatory Requirement:</b> 40 CFR 61.93(b)(4) WAC 246-247-75(2)  <b>Permit Monitoring and Testing Procedure:</b> Method 2 appendix A Method 114 appendix B 61.93(b)(2)(ii) ANSI N13.1</p>	<p>Continuous</p>	<p><b>CDM:</b> WAC 246-247-075(2): See preceding condition for required sampling. 61.93(b)(2)(ii) ANSI N13.1: In compliance as documented in the completed, and closed, Federal Facility Compliance Agreement. 40 CFR 61.93(b)(4): See preceding condition for required sampling. Method 2 Appendix A: Compliance with facility procedure HNF-3444, "324/327 Facilities Environmental Effluent Specifications" through April 2006, and then WCH-HNF-3444, "324/327 Facilities Environmental Effluent Specifications" for the remainder of the certification period. Method 114, Appendix B: The "Quality Assurance Project Plan for</p>

Requirement	Compliance Status	Compliance Determination Method
		<p>Radiological Air Emissions Monitoring" (ENV-1-1.15) and "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions" (HNF-EP-0528) specifies the quality assurance requirements. The cognizant engineer reviews work packages that are used to perform maintenance, calibration, and field check activities on the system.</p> <p><b>Comment:</b> This condition became obsolete on September 28, 2006.</p>
<p align="center"><b>Permit:</b> AIR 03-106 <b>Issue Date:</b>01-10-03 <b>Obsolete Date:</b> 09-28-06  <b>NOC:</b> 324 Building Cleanout and Deactivation Activities  <b>WDOH NOC ID:</b> 502 <b>Date In AOP:</b> 04-11-05 <b>Page in AOP:</b> H-0452</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><b>CDM:</b> For this approval order, in compliance with all approval conditions.  <b>Comment:</b> This condition became obsolete on September 28, 2006.</p>
<p>The total abated emission limit for this Notice of Construction is limited to 4.20E-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 8.20E+02 mrem/year to the Maximally Exposed Individual (WAC 246-247-030(21)).</p>	<p>Continuous</p>	<p><b>CDM:</b> Abated emissions are reported in DOE/RL-2007-01, Rev. 0, "Radionuclide Air Emissions Report for the Hanford Site, Calendar Year 2006." The Potential-To-Emit (PTE) identified in the Notice of Construction (NOC) application has not increased and has effectively decreased as deactivation activities remove material from the facility, as confirmed through inquiry with the cognizant engineer.  <b>Comment:</b> The annual report is scheduled for submittal by June 30, 2007. This condition became obsolete on September 28, 2006.</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 that will result in placing the entire building in a stabilized and secure configuration for long-term surveillance and maintenance and/or decommissioning and demolition. Stabilization involves solid waste removal and activities using various decontamination methods on radiologically contaminated areas within the 324 Building. The 324 Building areas that will undergo deactivation include the following: - REC activities - A-Cell -B-Cell -C-Cell -D-Cell -Airlock. - B-Cell sample room - High-level</p>	<p>Continuous</p>	<p><b>CDM:</b> Facility activities/operations were in compliance with facility NOC implementing procedure HNF-3444, "324/327 Environmental Effluent Specifications" through April 2006, and then WCH-</p>

Requirement	Compliance Status	Compliance Determination Method
<p>vault (HLV) and tanks - Low-level vault (LLV) and tanks - REC pipe trenches - Cask handling area (CHA) - Truck lock and loadout station - Laboratories/rooms and associated piping/utilities - Shielded Materials Facility (SMF) - East cell - South cell - Airlock cell - Engineering Development Laboratory (EDL) Room 101 - EDL-102 - EDL-145 - EDL-146 - EDL-147 - High Bay Engineering Laboratory (HBEL) - Tank pit (in basement) - Wastewater diverter tank. Large items (equipment and waste materials) will be size-reduced and packaged for transport to compliant storage/disposal facilities as appropriate. The remaining loose material will be collected and packaged for storage/disposal. Various decontamination methods will be employed to reduce/remove contamination. As the decontamination work is completed, the associated ventilation ductwork will be remediated (decontamination, isolation, or removal). Once decontamination has been achieved to acceptable levels for the areas served by the high-efficiency particulate air (HEPA) filters and similar particulate emission control devices, those control devices will be removed and/or isolated. The ventilation system for the 324 Building stack (EP-324-01-S) will operate at a reduced flow, shutting down in stages over an extended period, culminating in eventual closure of the stack. The chemical and physical processes associated with decontamination of the 324 Building and associated ancillary facilities will consist of the following: - Large equipment will be size-reduced, as needed, using processes such as mechanical shearing, cutting torches, laser cutters, and/or physical sawing activities. - Size-reduced items and loose material will be collected and packaged to meet acceptance criteria for transfer to other suitable storage and disposal facilities. - Cleaning/collection processes might include various methods or combinations of mechanical cleaning methods, e.g., blast nozzle cleaning; ultra high-pressure water scarification; media blast cleaning (with either vacuum recovered recycled or one shot media, where blast air, media, and radiologically contaminated material are vacuum recovered to prevent dispersion); scabbling (aggressive surface removal of metal and concrete); grinding; and vacuuming. - Liquid decontamination could be employed to reduce contamination levels. This process would consist of spraying radiologically contaminated surfaces with pressurized liquids and collecting the resultant solutions. - Processing of decontamination solutions will be accomplished predominantly by evaporation (using evaporators and dryers, packaging the solids, adding stabilizers as needed to form a solid mass), with direct release of the water vapor to the R-EC ventilation system. The release of water vapor will be controlled to protect the HEPA filter media by maintaining relative humidity and temperature conditions such that the system will not experience moisture collection on the filters. Relative humidity and temperature conditions will be controlled by heating the air passing through the REC, by limiting the boil off rate, by controlling wattage applied to the evaporator heater unit(s), and/or by distributing the moisture to a larger airflow. Similar methods could be employed for the SMF. - Spent decontamination solutions that are not evaporated will be staged in suitably designed tanks, if staging is needed. Treated liquids (filters, ion exchange, etc.) might be staged in suitably designed and located tanks and transferred to other facilities on the Hanford Site by tanker truck through the loadout stall (LOS). Smaller volumes might be containerized (e.g., packaged in absorbents in drums or placed in drums or carboys). If tanker trucks are used, displaced air from the tanker trucks would be routed back to the LOS. - After deactivation efforts have been completed for a particular area of the 324 Building, ventilation ductwork for that area will be decontaminated, removed, and/or isolated. After sufficient decontamination has been achieved upstream of the associated HEPA filter or emissions/abatement control devices, the control devices will be removed or isolated. - Containment and portable exhausters will be used as needed for personnel protection in local ventilated spaces for shutting down the existing ventilation system and for ventilating radiologically contaminated areas (piping, ancillary buildings, etc.) outside of areas that are served by the ventilation system for the 324 Building stack (EP-324-01-S). Annual maintenance inspections of the 324 Building wastewater diverter tank and final disposition of rainwater infiltration (such as by using a tanker truck or pumping into drums) may be performed without use of containment or portable exhausters.</p>		<p>HNF-3444, "324/327 Facilities Environmental Effluent Specifications" for the remainder of the certification period, as confirmed through inquiry with the cognizant engineer and approval of work packages by the environmental project lead. <b>Comment:</b> This condition became obsolete on September 28, 2006.</p>

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<p>The Annual Possession Quantity is limited to the following radionuclides (Curies/year): Am-241 2.30 E+04 Co-60 2.80 E+05 Cs-137 5.90 E+05 Sr-90 3.00 E+05</p>	<p>Continuous</p>	<p><b>CDM:</b> The Annual Possession Quantities (APQs) in the NOC application have not increased, and are effectively decreasing as deactivation activities remove material from the facility, as confirmed through inquiry with the cognizant engineer. <b>Comment:</b> This condition became obsolete on September 28, 2006.</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><b>CDM:</b> N/A <b>Comment:</b> 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. This condition became obsolete on September 28, 2006.</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><b>CDM:</b> N/A <b>Comment:</b> There were no preoperational tests during the compliance period. Facility operations were normal during the compliance period. This condition became obsolete on September 28, 2006.</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><b>CDM:</b> N/A <b>Comment:</b> 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. This condition became obsolete on September 28, 2006.</p>
<p>The facility must be able to demonstrate workers associated with this emission unit are trained in the use and maintenance of emission control and monitoring systems, and in the performance of associated tests and emergency response procedures (WAC 246-247-075(12)).</p>	<p>Continuous</p>	<p><b>CDM:</b> Training records and inquiry with the cognizant engineer. <b>Comment:</b> This condition became obsolete on September 28, 2006.</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)).</p>	<p>Continuous</p>	<p><b>CDM:</b> ENV-1-1.15, "Quality Assurance Project Plan for Radionuclide Air Emissions Monitoring" and HNF-EP-0528, "NESHAP Quality Assurance Project Plan for Radionuclide Air Emissions". <b>Comment:</b> This condition became obsolete on September 28, 2006.</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><b>CDM:</b> N/A <b>Comment:</b> 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. This condition became obsolete on September 28, 2006.</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><b>CDM:</b> ENV-1-1.15, "Quality Assurance Project Plan for Radionuclide Air Emissions Monitoring" and HNF-EP-0528, "NESHAP Quality Assurance Project Plan for Radionuclide Air Emissions". <b>Comment:</b> This condition became obsolete on September 28, 2006.</p>
<p>The department may require in ALARACT demonstration at any time (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p><b>CDM:</b> N/A <b>Comment:</b> 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. This condition became obsolete on September 28, 2006.</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><b>CDM:</b> The Environmental Release Summary electronic system maintains record data from stack and ambient air monitors. Annual reporting is provided in DOE/RL 2007-01, Rev. 0, "Radionuclide Air Emissions Report for the Hanford Site, Calendar Year 2006." <b>Comment:</b> The annual report is scheduled for submittal by June 30, 2007. This condition became obsolete on September 28, 2006.</p>
<p>The facility shall report all measured or calculated emissions annually (WAC 246-247-080(3)).</p>	<p>Continuous</p>	<p><b>CDM:</b> Input to DOE/RL-2007-01, Rev. 0, "Radionuclide Air Emissions Report for the Hanford Site, Calendar Year 2006." <b>Comment:</b> This condition became obsolete on September 28, 2006.</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>Not Applicable</p>	<p><b>CDM:</b> N/A <b>Comment:</b> No reports were required. This condition became obsolete on September 28, 2006.</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><b>CDM:</b> Recordkeeping was maintained in compliance with HNF-3444, "324/327 Facilities Environmental Effluent Specifications" through April 2006, and then WCH- HNF-3444, "324/327 Facilities Environmental Effluent Specifications" for the remainder of the certification period. Documents were provided as required during inspections. <b>Comment:</b> This condition became obsolete on September 28, 2006.</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><b>CDM:</b> Access was provided as required for inspections. <b>Comment:</b> This condition became obsolete on September 28, 2006.</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><b>CDM:</b> Recordkeeping was maintained compliance with HNF 3444, "324/327 Facilities Environmental Effluent Specifications" through April 2006, and then WCH- HNF-3444, "324/327 Facilities Environmental Effluent Specifications" for the remainder of the certification period. Records were provided as required during inspections. <b>Comment:</b> This condition became obsolete on September 28, 2006.</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><b>CDM:</b> N/A <b>Comment:</b> 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. This condition became obsolete on September 28, 2006.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>During operation of evaporation equipment, relative humidity and temperature of Zone 1 air will be monitored to ensure conditions are maintained to protect all Zone 1 HEPA filters from experiencing moisture collection. If relative humidity and temperature conditions are not maintained and can not be restored/adjusted within four hours, notification will be made to the Department within 24 hours.</p>	<p>Not Applicable</p>	<p><b>CDM:</b> N/A <b>Comment:</b> There were no evaporation equipment operations during the compliance period, as confirmed through inquiry with the cognizant engineer. This condition became obsolete on September 28, 2006.</p>
<p>Maintain the temperature of the exhaust air stream below 250 degrees Fahrenheit prior to HEPA filtration.</p>	<p>Not Applicable</p>	<p><b>CDM:</b> N/A <b>Comment:</b> There were no evaporation equipment operations during the compliance period, as confirmed through inquiry with the cognizant engineer. This condition became obsolete on September 28, 2006.</p>
<p>When a tanker truck is used to load out spent decontamination solutions, displaced air from the tanker shall be routed into the load out shall and vent through the Zone 1 exhaust system.</p>	<p>Not Applicable</p>	<p><b>CDM:</b> N/A <b>Comment:</b> There were no tanker truck operations during the compliance period, as confirmed through inquiry with the cognizant engineer. This condition became obsolete on September 28, 2006.</p>
<p>After decontamination work is completed in a given area, the duct work for that area must be decontaminated, removed or isolated. After sufficient decontamination work has been done upstream of the associated HEPA filters or control devices, the control devices may be removed or isolated following approval by the Department.</p>	<p>Not Applicable</p>	<p><b>CDM:</b> N/A <b>Comment:</b> This activity was not performed during the compliance period, as confirmed through inquiry with the cognizant engineer. This condition became obsolete on September 28, 2006.</p>
<p>During operation of evaporation equipment, relative humidity and temperature of Zone 1 air will be controlled using the following methods to ensure conditions are maintained to protect all Zone 1 HEPA filters from experiencing moisture collection: a. Heating the air as it passes through the Zone I and/or Zone II spaces. b. Limiting the boil-off rate to less than 15 gallons per hour. c. Controlling wattage applied to the evaporator heater unit(s), and/or d. Distributing the moisture to a larger airflow.</p>	<p>Not Applicable</p>	<p><b>CDM:</b> N/A <b>Comment:</b> There were no evaporation equipment operations during the compliance period, as confirmed through inquiry with the cognizant engineer.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The facility must notify the department to downgrade the EP-324-01-S to a minor stack and obsolete any approval conditions, as appropriate.</p>	<p>Not Applicable</p>	<p><b>CDM:</b> N/A <b>Comment:</b> There was no change in stack status during the compliance period, as confirmed through inquiry with the cognizant engineer. This condition became obsolete on September 28, 2006.</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><b>CDM:</b> Conditions and limitations are documented in implementing procedure HNF-3444, "324/327 Facilities Environmental Effluent Specifications" through April 2006, and then WCH- HNF-3444, "324/327 Facilities Environmental Effluent Specifications" for the remainder of the certification period. <b>Comment:</b> This condition became obsolete on September 28, 2006.</p>
<p>The emission unit monitoring system shall have the following activities performed: Within two years of this approval: a. A visual check of nozzle position and orientation as well as measurements of nozzle openings; b. Checks to ensure the tightness of all fittings and connections as well as a leak test of the entire sampling system; and c. Visual inspections for corrosion, physical damage, or dust loading of the probe, sample lines, and monitoring system equipment. Annually starting within one year of this approval: d. A functional/calibration check of monitoring system instrumentation shall be performed; e. The USDOE shall provide to WDOH for review copies of the procedures used to perform the above activities.</p>	<p>Continuous</p>	<p><b>CDM:</b> Required checks/inspections documented in work packages as confirmed through inquiry with the cognizant engineer. Applicable procedures/work packages were provided for WDOH review during annual WDOH inspection of EP 324-01-S. <b>Comment:</b> This condition became obsolete on September 28, 2006.</p>
<p>Before final removal of the in-cell filters and electrostatic precipitators (ESPs) located in B-Cell, WDOH will be notified.</p>	<p>Not Applicable</p>	<p><b>CDM:</b> N/A <b>Comment:</b> This activity was not performed during the compliance period, as confirmed through inquiry with the cognizant engineer. This condition became obsolete on September 28, 2006.</p>

Requirement	Compliance Status	Compliance Determination Method
The APQ for Am-241 shall conservatively represent all alpha emitting isotopes.	Continuous	<b>CDM:</b> The isotopes of concern have not changed, and Am-241 still conservatively represents all alpha-emitting isotopes, as confirmed through inquiry with the cognizant engineer. <b>Comment:</b> This condition became obsolete on September 28, 2006.
The APQs for C-137, Sr-90, and Co-60 shall conservatively represent all beta/gamma emitting isotopes.	Continuous	<b>CDM:</b> The isotopes of concern have not changed, and Cs-137, Sr 90, and Co-60 still conservatively represent all beta/gamma-emitting isotopes, as confirmed through inquiry with the cognizant engineer. <b>Comment:</b> This condition became obsolete on September 28, 2006.

EP-325-01-S Hazardous Waste Treatment Unit  
WDOH Emission Unit ID : 361  
Page in AOP : H-0793

Requirement	Compliance Status	Compliance Determination Method
<b>Zone or Area :</b> <b>Abatement Technology :</b> Fan <b>Required Units :</b> 3 <b>Add'l Description:</b> 4 in parallel (3 operational, 1 backup)	Continuous	<b>CDM:</b> Records Review / Personnel Interview <b>Comment:</b> Reviewed the 2006 Exhaust Fan PM results (PM-41120, 41130, 41140, 41150). Confirmed with the Building Engineer.
<b>Zone or Area :</b> <b>Abatement Technology :</b> HEPA <b>Required Units :</b> 2 <b>Add'l Description:</b> 2 in series	Continuous	<b>CDM:</b> Records Review / Personnel Interview <b>Comment:</b> Reviewed 2006 HEPA Filter PM results (55480, 55490, 55500, 55510, 55440). Confirmed with the Building Engineer.
<b>Required Sampling:</b> Continuous particulate using filter and tritium silica gel. <b>Sampling Frequency:</b> Particulates are continuously sampled and analyzed every two-weeks for gross alpha and beta, composited on a semi-annual basis and analyzed isotopically. Tritium samples are analyzed on a monthly basis. <b>Radionuclide Requiring Measurement:</b> All radionuclides which could contribute 10% of the potential EDE.	Continuous	<b>CDM:</b> Records review <b>Comment:</b> Emission data is maintained in the Gaseous Emission Database (GED). A query of the database confirmed all required samples were collected during the reporting period, including the start and end dates of sample periods. Radionuclides contributing greater than 10% of the EDE are evaluated

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		during the annual NESHAPS inventory assessment. These isotopes are then analyzed isotopically on semi-annual composites. Semi-annual composite data was included as part of the emission data review.
<b>Federal and State Regulatory Requirement:</b> 40 CFR 61.93(b)(4) WAC 246-247-75(2) <b>Permit Monitoring and Testing Procedure:</b> Method 2 Appendix A; Appendix B, Method 114.	Continuous	<b>CDM:</b> Records review  <b>Comment:</b> The "Pacific Northwest National Laboratory Effluent Management Quality Assurance Plan" (EM-QA-01) specifies QA requirements.
<b>Permit:</b> AIR 04-209 <b>Issue Date:</b> 02-20-04 <b>Effective Date:</b> 03-16-04 <b>Obsolete Date:</b> 07-05-06 <b>NOC:</b> Conducting General Laboratory Processes Research Activities in the 325 Building <b>WDOH NOC ID:</b> 552 <b>Date In AOP:</b> 04-11-05 <b>Page in AOP:</b> H-0793		
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	<b>CDM:</b> Review of compliance status for each approval condition listed for this approval order. <b>Comment:</b> For this approval order, in compliance with all applicable conditions.
The total abated emission limit for this Notice of Construction is limited to 3.19E+00 mrem/year to the Maximally Exposed Individual (WAC 246-247-040(5)).	Continuous	<b>CDM:</b> Records Review <b>Comment:</b> Reviewed the radionuclide air emissions data for the calendar year 2006 to verify total abated emissions are below the NOC limit.
<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 are the following laboratory activities conducted in the RPL: Characterizing chemical, radiochemical, and physical properties of samples (e.g., tank wastes, spent fuel, contaminated soils and water), as well as other gaseous materials, glass, ceramic, carbonaceous, or metallic waste forms. Performing research using high level and low level mixed tank wastes and their stimulants to test radiochemical process systems such as leaching, solvent extraction, ion exchange, vitrification, fuel dissolution, decontamination, evaporation, grouting, solid waste packaging/shipment, and high level liquid waste shipping/receiving/transportation. Performing research and development for processing and immobilization support including waste separation, ion exchange, sludge washing/leaching, ultrafiltration, and oxidation/precipitation. Separated species are then immobilized into vitreous and other waste forms, which are subsequently characterized for product acceptability. Using a full suite of analytical capabilities for radiochemical and inorganic chemical analyses in support of process development, specializing in the analysis of highly radioactive materials and very complex sample matrices. Pretreatment of materials in preparation for analytical</p>	Continuous	<b>CDM:</b> Records Review <b>Comment:</b> Under the PNNL Standards Based Management System (SBMS) each new research project is required to be reviewed via the Electronic Prep & Risk assessment process. The reviews are recorded in the EPR database. Facility changes are required to be reviewed via the SBMS Subject Area for Engineering Calculations, Drawings and Specifications creating and Modifying. Projects with potential air emissions are reviewed by Effluent Management (EM)

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<p>processing, waste treatment, and characterization. Developing methods for the separation of radioisotopes. Developing and testing radioisotope generators. Conducting Non destructive assay (NDA). Characterizing and testing equipment for determining chemical and physical properties of spent nuclear fuels and associated materials to support processing and disposal pathways. Performing reactor dosimetry and hydrogen and helium measurements to characterize radiation damage in materials. Using instrumentation to conduct physical property measurement for rheological and chemical characterization of radiological and hazardous materials in support of process development. Measuring material particle size and density, zeta potential and rheology in support of general research as well as process development. Providing chemical and physical separations in support of radiological and hazardous material processing and disposal requirements. These technologies include: removal and concentration of hazardous and/or radioactive components for environmental remediation; separation of hazardous and/or radioactive materials, including solid/liquid phase separations; and, recovery of specific components for recycle and reuse. Characterizing complex reactor environments, including neutron fluence and spectral measurements, hydrogen and helium gas measurements, and extensive computer simulations of radiation damage effects. Developing thermal and vitrification processes to immobilize hazardous and radioactive materials into acceptable waste forms. Waste processing technology development includes design, process development, remote operations, and numerical and computational modeling. Performing nuclear magnetic resonance methods designed for investigation of radioactive materials in the environment, radioactive tank waste, plutonium bearing materials, and other DOE mission active areas as well as fundamental studies of actinide metal salts. Designing, installing, and testing radiochemical process systems (leaching, solvent extraction, ion exchange, vitrification, fuel dissolution, decontamination, evaporation, grouting, solid waste packaging and shipment, and high level liquid waste shipping, receiving, and transportation). Using thermoanalytical instrumentation to measure reaction enthalpies, reaction kinetics and mass changes resulting from reactions, and determining the thermal sensitivity of the reaction. Perform analysis of reaction off gases on a real time or end of reaction basis to identify and quantify the gaseous reaction products, and investigate the thermal stabilities of candidate radioisotope waste forms, volatile radioisotope trapping materials and the potentially hazardous reactions between radioactive waste constituents. Separations and analyses of radionuclides for environmental measurements. Performing research with supercritical fluids to understand chemistry mechanisms and processes. Conducting wet chemistry techniques and the operation of specialized analytical instrumentation such as mass spectrometers, organic mass spectrometers, and the Inductively Coupled Plasma Spectrometers. Studies to decontaminate radioactive materials where metals may be hydrided or tritiated and decontaminated in small electric furnaces in gloveboxes or fumchoods resulting in products (c.g., oxide materials) submitted for disposal. Research and development in processing and method to harden radioactive sources. Development of standards and testing methodologies for hardened radioactive sources. Analysis of samples for impurities and analysis of samples for purity. The RPL also is approved to maintain two hot cell complexes for conducting work with highly radioactive materials. The High Level Radiochemistry Facility (HLRF) and Shielded Analytical Laboratory (SAL) hot cell complexes, and the stand alone mini cells, provide unique, complimentary capabilities for conducting bench scale to pilot scale work with wide varieties and forms of radioactive materials. These capabilities include: radiochemical separation and purification; irradiated fuel/target sectioning and processing; metallography and ceramography; activated metals physical properties testing; thermal processing; materials physical properties testing (solid/liquid separation, centrifugation, settling behavior); radioanalytical and preparatory chemistry operations (acid dissolution, aqueous/solvent extraction or leaching, distillation, ion exchange, caustic fusion). Additional approval of the process for this activity is contained in the following Conditions/Limitations.</p>		<p>under the SBMS Airborne Emission Subject Area, and the records retained by EM.</p>
<p>The PTE for this project as determined under WAC 246-247-030(21)(a-e) [as specified in the application] is 2.09E+04</p>	<p>Continuous</p>	<p>CDM: Records Review Comment: NESHAPS</p>

Requirement	Compliance Status	Compliance Determination Method
<p>mrem/year. Approved are the associated potential release rates (Curies/year) of: Ac-225 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. Ac-227 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. Ac-228 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. Ag-108 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. Ag-108 m 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. Ag-109 m 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. Ag-110 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. Ag-110 m 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. Ag-111 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. Al-26 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. Al-28 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. Am-241 3.50E+00 Liquid/Particulate Solid WAC 246-247-030(21)(a) Am-242 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. Am-242 m 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. Am-243 5.40E-03 Liquid/Particulate Solid WAC 246-247-030(21)(a) Am-245 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. Ar-37 Gas WAC 246-247-</p>		<p>inventory of radioactive materials is conducted for PNNL facilities on an annual basis in accordance with PNL-10855 Rev. 3, "Assessment of Unabated Facility Emission Potentials for Evaluating Airborne Radionuclide Monitoring Requirements at PNNL-2003". This report was reviewed.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>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. Ar-39 Gas 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. Ar-41 Gas 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. Ar-42 Gas 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. As-74 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. As-76 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. At-217 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. Au-195 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. Au-198 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. Ba-131 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. Ba-133 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. Ba-133 m 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. Ba-137 m 4.60E+04 Liquid/Particulate Solid WAC 246-247-030(21)(a) Ba-139 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. Ba-140 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. Ba-141 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. Ba-142 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr</p>		

Requirement	Compliance Status	Compliance Determination Method
<p>to the MEI, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. Be-10 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. Be-7 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. Bi-207 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. Bi-210 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. Bi-211 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. Bi-212 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. Bi-213 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. Bi-214 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. Bk-249 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. Bk-250 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. Br-82 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. Br-83 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. Br-84 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. Br-85 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. C-11 Gas 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</p>		

Requirement	Compliance Status	Compliance Determination Method
<p>represents less than 25% of the abated dose. C-14 Gas 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. 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. C-15 Gas 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. Ca-41 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. Ca-45 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. Ca-47 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. Cd-109 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. Cd-113 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. Cd-113 m 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. Cd-115 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. Cd-115 m 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-139 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-141 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-142 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-143 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</p>		

Requirement	Compliance Status	Compliance Determination Method
<p>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. Cf-249 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. Cf-250 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. Cf-251 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. Cf-252 1.20E-01 Liquid/Particulate Solid WAC 246-247-030(21)(a) Cl-36 Gas 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-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. Cm-242 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-243 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 1.00E+00 Liquid/Particulate Solid WAC 246-247-030(21)(a) Cm-245 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-246 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-247 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-248 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-56 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-57 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-58 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</p>		

Requirement	Compliance Status	Compliance Determination Method
<p>represents less than 25% of the abated dose. Co-60 1.60E+02 Liquid/Particulate Solid WAC 246-247-030(21)(a) Cr-51 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. Cr-55 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-131 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. Cs-134 m 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-135 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-136 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-137 1.70E+02 Liquid/Particulate Solid WAC 246-247-030(21)(a) Cs-138 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-139 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. Cu-64 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. Es-254 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-150 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-152 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-152 m 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 2.00E+02 Liquid/Particulate</p>		

Requirement	Compliance Status	Compliance Determination Method
<p>Solid WAC 246-247-030(21)(a) Eu-155 4.90E+03 Liquid/Particulate Solid WAC 246-247-030(21)(a) Eu-156 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-157 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. F-18 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. Fe-55 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. Fe-59 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. Fr-221 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. Fr-223 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. Ga-67 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. Ga-72 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. Gd-148 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. Gd-149 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. Gd-151 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. Gd-152 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. Gd-153 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. Ge-68 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEI, and represents</p>		

Requirement	Compliance Status	Compliance Determination Method
<p>less than 10% of the unabated PTE and represents less than 25% of the abated dose. H-3 3.00E+03 Gas WAC 246-247-030(21)(a) H-3 1.30E+05 Gas WAC 246-247-030(21)(a) H-3 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. Hf-175 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. Hf-178 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. Hf-178 m 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. Hf-181 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. Hf-182 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. Hg-203 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. Ho-166 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. Ho-166 m 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. I-122 Gas 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. I-123 Gas 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. I-125 Gas 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. I-129 Gas 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. I-130 Gas 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. I-131 Gas 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. I-132 Gas WAC 246-247-030(21)(a)</p>		

Requirement	Compliance Status	Compliance Determination Method
<p>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. I-133 Gas WAC 246-247-030(21)(a)</p> <p>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. I-134 Gas WAC 246-247-030(21)(a)</p> <p>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. I-135 Gas WAC 246-247-030(21)(a)</p> <p>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. In-106 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. In-113 m 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. In-114 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. In-114 m 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. In-115 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. In-115 m 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. Ir-192 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. K-40 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. K-42 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. Kr-81 Gas 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. Kr-83 m Gas 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. Kr-85 Gas 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. Kr-85 m Gas WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEI, and</p>		

Requirement	Compliance Status	Compliance Determination Method
<p>represents less than 10% of the unabated PTE and represents less than 25% of the abated dose. Kr-87 Gas 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. Kr-88 Gas 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. Kr-89 Gas 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. Kr-90 Gas 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. La-138 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. La-140 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. La-141 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. La-142 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. Lu-177 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. Mg-27 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. Mn-52 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. Mn-54 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. Mn-56 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. Mo-93 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. Mo-99 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. N-13 Liquid/Particulate Solid WAC 246-247-</p>		

Requirement	Compliance Status	Compliance Determination Method
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. Na-22 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes le		
<p>Condition 4 continued: Rh-105 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. Rh-105 m 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. Rh-106 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. Rn-219 Gas 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. Rn-220 Gas 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. Rn-222 Gas 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. Ru-103 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. Ru-105 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. Ru-106 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. Ru-97 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. S-35 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. Sb-124 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. Sb-125 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. Sb-126 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. Sb-126 m 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. Sb-127 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. Sc-46 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. Sc-47 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. Sc-75 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. Se-79 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. Si-31 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. Sm-145 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. Sm-146 Liquid/Particulate Solid WAC 246-247-030(21)(a) Contributes less than 0.1 mrem/yr to the MEI, and represents less</p>	Continuous	<p><b>CDM: Records Review</b> <b>Comment: NESHAPS</b> inventory of radioactive materials is conducted for PNNL facilities on an annual basis in accordance with PNL-10855 Rev. 3, "Assessment of Unabated Facility Emission Potentials for Evaluating Airborne Radionuclide Monitoring Requirements at PNNL-2003". This report was reviewed.</p>







Requirement	Compliance Status	Compliance Determination Method
<p>of the abated dose. Xe-137 Gas 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. Xe-138 Gas 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. Y-88 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. Y-90 1.20E+05 Liquid/Particulate Solid WAC 246-247-030(21)(a) Y-90 m 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. Y-91 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. Y-91 m 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. Y-92 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. Y-93 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. Yb-164 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. Yb-175 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. Yb-177 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. Zn-65 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. Zn-69 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. Zn-69 m 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. Zr-88 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. Zr-89 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. Zr-93 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. Zr-95 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.</p>		
<p>Condition 4 continued: The radioactive isotopes identified for this emission unit are (no quantities specified): Ac-225 Ac-227 Ac-228 Ag-108 m Ag-108 Ag-109 m Ag-110 m Ag-110 Ag-111 Al-26 Al-28 Am-241 Am-242 m Am-242 Am-243 Am-245 Ar-37 Ar-39 Ar-41 Ar-42 As-74 As-76 At-217 Au-195 Au-198 Ba-131 Ba-133 Ba-133 m Ba-137 m Ba-139 Ba-140 Ba-141 Ba-142 Be-10 Be-7 Bi-207 Bi-210 Bi-211 Bi-212 Bi-213 Bi-214 Bk-249 Bk-250 Br-82 Br-83 Br-84 Br-85 C-11 C-14 C-15 Ca-41 Ca-45 Ca-47 Cd-109 Cd-113 m Cd-113 Cd-115 m Cd-115 Ce-139 Ce-141 Ce-142 Ce-143 Ce-144 Cf-249 Cf-250 Cf-251 Cf-252 Cl-36 Cm-241 Cm-242 Cm-243 Cm-244 Cm-245 Cm-246 Cm-247 Cm-248 Co-56 Co-57 Co-58 Co-60 Cr-51 Cr-55 Cs-131 Cs-134 Cs-134 m Cs-135 Cs-136 Cs-137 Cs-138 Cs-139 Cu-64 Es-254 Eu-150 Eu-152 Eu-152 m Eu-154 Eu-155 Eu-156 Eu-157 F-18 Fe-55 Fe-59 Fr-221 Fr-223 Ga-67 Ga-72 Gd-148 Gd-149 Gd-151 Gd-152 Gd-153 Ge-68 H-3 Hf-175 Hf-178 Hf-178 m Hf-181 Hf-182 Hg-203 Ho-166 Ho-166 m I-122 I-123 I-125 I-129 I-130 I-131 I-132 I-133 I-134 I-135 In-106 In-113 m In-114 m In-114 In-115 In-115 m Ir-192 K-40 K-42 Kr-81 Kr-83 Kr-85 Kr-85</p>	<p>Continuous</p>	<p><b>CDM: Records Review</b> <b>Comment: NESHAPS</b> inventory of radioactive materials is conducted for PNNL facilities on an annual basis in accordance with PNL-10855 Rev. 3, "Assessment of Unabated Facility Emission Potentials for Evaluating Airborne Radionuclide Monitoring Requirements at PNNL-2003". This report was reviewed.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>m Kr-87 Kr-88 Kr-89 Kr-90 La-138 La-140 La-141 La-142 Lu-177 Mg-27 Mn-52 Mn-54 Mn-56 Mo-93 Mo-99 N-13 Na-22 Na-24 Nb-91 Nb-91 m Nb-92 Nb-93 m Nb-94 Nb-95 Nb-95 m Nb-97 Nb-97 m Nd-144 Nd-147 Ni-56 Ni-59 Ni-63 Ni-65 Np-235 Np-236 Np-237 Np-238 Np-239 Np-240 Np-240 m O-15 P-32 P-33 Pa-231 Pa-233 Pa-234 Pa-234 m Pb-209 Pb-210 Pb-211 Pb-212 Pb-214 Pd-107 Pd-109 Pm-145 Pm-146 Pm-147 Pm-148 m Pm-148 Pm-149 Pm-151 Po-208 Po-209 Po-210 Po-211 Po-212 Po-213 Po-214 Po-215 Po-216 Po-218 Pr-143 Pr-144 Pr-144 m Pu-234 Pu-236 Pu-237 Pu-238 Pu-239 Pu-240 Pu-241 Pu-242 Pu-243 Pu-244 Ra-223 Ra-224 Ra-225 Ra-226 Ra-228 Rb-86 Rb-87 Rb-88 Rb-89 Rb-90 Rb-90 m Re-186 Re-187 Rc-188 Rh-102 Rh-103 m Rh-105 Rh-105 m Rh-106 Rn-219 Rn-220 Rn-222 Ru-103 Ru-105 Ru-106 Ru-97 S-35 Sb-124 Sb-125 Sb-126 Sb-126 m Sb-127 Sc-46 Sc-47 Se-75 Se-79 Si-31 Sm-145 Sm-146 Sm-147 Sm-151 Sm-153 Sm-157 Sn-113 Sn-117 m Sn-119 m Sn-121 m Sn-123 Sn-125 Sn-126 Sr-85 Sr-89 Sr-90 Sr-91 Sr-92 Ta-179 Ta-182 Ta-183 Tb-160 Tc-101 Tc-95 Tc-97 Tc-97 m Tc-98 Tc-99 Tc-99 m Te-121 m Te-121 Te-123 Te-123 m Te-125 m Te-127 m Te-127 Te-129 m Te-129 Te-131 Te-131 m Te-132 Te-133 Te-133 m Te-134 Th-227 Th-228 Th-229 Th-230 Th-231 Th-232 Th-233 Th-234 Ti-44 Ti-51 Tl-204 Tl-207 Tl-208 Tl-209 Tm-170 Tm-171 U-232 U-233 U-234 U-235 U-236 U-237 U-238 U-239 U-240 V-48 V-49 W-181 W-185 W-187 W-188 Xe-122 Xe-123 Xe-125 Xe-127 Xe-131 m Xe-133 Xe-133 m Xe-135 Xe-135 m Xe-137 Xe-138 Y-88 Y-90 Y-90 m Y-91 Y-91 m Y-92 Y-93 Yb-164 Yb-175 Yb-177 Zn-65 Zn-69 Zn-69 m Zr-88 Zr-89 Zr-93 Zr-95</p> <p>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>For the Th-232 Medical Isotope: The Rn-220 gas that is generated during the process will be routed through a recovery system that is located inside of a hood in Room 510. As the Rn-220 (gaseous form) decays (55 second half life), the resulting daughter products shall be collected in the recovery system. The recovery system shall be capable of collecting in excess of 80% of the Rn-220 that is generated.</p>	<p>Not Applicable</p>	<p><b>CDM: Personnel Interview</b> <b>Comment:</b> This project did not operate during CY2006.</p>
<p>For the Th-232 medical isotope project: Before initiation of processing, the Rn-220 monitor shall be operational. The exhaust sample will be measured by a Rn-220 monitor collected using the same isokinetic probe that is used to collect the record particulate sample. The radon monitor shall be installed downstream of the record particulate sample, measuring the sample stream that has already been pre filtered by the record particulate sample.</p>	<p>Not Applicable</p>	<p><b>CDM: Personnel Interview</b> <b>Comment:</b> This project did not operate during CY2006</p>
<p>For the Th-232 Medical Isotope Project: Procedures for Rn-220 monitoring shall be forwarded to the department for review.</p>	<p>Not Applicable</p>	<p><b>CDM: Personnel Interview</b> <b>Comment:</b> This project did not operate during CY2006.</p>

Requirement	Compliance Status	Compliance Determination Method
For the I-131 Medical Isotope Project: Iodine samples shall be collected using a two stage sample collection system. The sampling system shall consist of a 47mm in line filter holder that contains either a removable activated carbon canister or filter paper coated with activated carbon. Two samplers shall be placed in series to evaluate potential breakthrough of the first sampling stage. The iodine samplers shall be installed on the current stack sampling system for RPL, downstream of the record particulate sampler. The iodine samples shall be analyzed using EPA Method G-1 (40 CFR 61, Appendix B).	Not Applicable	<b>CDM: Personnel Interview</b> <b>Comment:</b> This project did not operate during CY2006.
For the I-131 Medical Isotope Project: The iodine sampling system shall be in continuous operation when the I-131 material for this project enters the RPL facility through completion of the project (when all iodine has been processed and shipped for offsite use).	Not Applicable	<b>CDM: Personnel Interview</b> <b>Comment:</b> This project did not operate during CY2006.
For the I-131 Medical Isotope Project: The exhaust from the hot cell shall be routed through an activated charcoal bed. A charcoal bed shall be procured and installed upstream of the HEPA filters. The filter assembly shall be a two stage filter, containing a charcoal bed and a post filter inside of the same outer housing. The post filter shall be a particulate filter designed to remove any carbon particles that may dislodge from the bed from normal use, preventing these particles from reaching the primary and secondary stages of HEPA filtration downstream.	Not Applicable	<b>CDM: Personnel Interview</b> <b>Comment:</b> This project did not operate during CY2006.
For the I-131 Medical Isotope Project: The removal efficiency for radio iodine of the charcoal bed filter unit shall be a minimum of 90% and shall be installed and tested per ANSI 510. These procedures shall be developed in accordance with the guidance provided in ANSI N510. These procedures shall be provided to the department for review prior to starting the I-131 project.	Not Applicable	<b>CDM: Personnel Interview</b> <b>Comment:</b> This project did not operate during CY2006.
For the I-131 Medical Isotope Project The charcoal bed shall be rated at a minimum of 1,000 cubic feet per minute (cfm) and be 2" thick.	Not Applicable	<b>CDM: Personnel Interview</b> <b>Comment:</b> This project did not operate during CY2006.
For the Tritium Target Qualification Project (TTQP) Sectioning of the TPBAR rods shall be performed in the hot cells in HLRF. Sectioning must be done inside Plexiglas containment.	Continuous	<b>CDM: Personnel Interview</b> <b>Comment:</b> TTQP ceased activity in 2004; similar tritium activities follow this condition.
For the Tritium Target Qualification Project (TTQP): The tritium permeation testing shall be conducted in Room 48 of the basement in the laboratory hood or glovebox.	Continuous	<b>CDM: Personnel Interview</b> <b>Comment:</b> TTQP ceased activity in 2004; similar tritium activities follow this condition.

Requirement	Compliance Status	Compliance Determination Method
<p>For the Tritium Target Qualification Project (TTQP): The "Mandatory Use Procedures" require that each step be read prior to performing the activity. These procedures are those that involve the following: • Operation of the furnace and gas clean up system used to extract tritium from the Tritium Producing Burnable Absorber Rods and; • The transfer of the extracted tritium to hydride transport vessels.</p>	<p>Continuous</p>	<p><b>CDM:</b> Personnel Interview <b>Comment:</b> TTQP ceased activity in 2004; similar tritium activities follow this condition.</p>
<p>TTQP Project Specific Emission Control Systems Molecular Sieve A molecular sieve will be used to control emissions during the full rod tritium extraction process to be performed in the HRLF. The molecular sieve will be used until the exhaust gas concentration, as measured with an ion chamber, indicates that the sieve is approaching the point of breakthrough. At this point, a fresh molecular sieve bed will replace the spent bed. Two Stage Bubbler Trap The tritium emission control system for the small scale extraction activities in Laboratory 416 consists of a two stage bubbler type trapping system. The bubbler type trapping system includes a glass tube that contains either water or oil. An inert sweep gas carries the tritium from the heated tritium target rod components to the bubbler where tritium is removed from the gas stream. Uranium Getter Cladding material permeability measurements during Activity 3 will use a uranium getter material as a part of the commercial tritium storage system.</p>	<p>Continuous</p>	<p><b>CDM:</b> Records Review / Personnel Interview <b>Comment:</b> There is a final bank of HEPA filters located in the equipment room off the northwest corner of the RPL. Individual laboratory processes (Laboratory) are also filtered by a "primary" stage of HEPA filtration, these filters are located in the basement area of RPL. (Drawing H-3-70230). (TTQP ceased activity in 2004; similar tritium activities follow this condition).</p>
<p>For the Tritium Target Qualification Project (TTQP): Project activities are limited to High Level Radiochemical Facility (HLRF), Shielded Analytical Laboratory (SAL), and Rooms 420, 418, and Room 48 in the basement.</p>	<p>Continuous</p>	<p><b>CDM:</b> Personnel Interview <b>Comment:</b> TTQP ceased activity in 2004; similar tritium activities follow this condition. NOTE: Room location 418 should be identified as room 416 as indicated in the NOC application.</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)), maybe conducted. Tritium Target Qualification Project (TTQP) Tritium Target Qualification Project (TTQP) it is approved to perform the analysis of ten tritium-producing, burnable absorber rods (target rods) that were shipped to the RPL from the Idaho National Engineering Laboratory and eight additional target rods shipped from the Argonne National Laboratory West (ANL W) to the RPL. The processes approved under this activity includes the following: Target Rod Sectioning (Activity 1) Sections are cut from the tritium target rods for quantitative analysis using a diamond saw within a Plexiglas containment. Each section is disassembled, and the components are analyzed to determine gas species concentrations. Selected sections are further analyzed for lithium burn up, as well as tritium and helium content. The rods are then subjected to protium, metallography, and microprobe studies. During the sectioning of the rods, emissions from the hot cells of the High Level Radiochemistry Facility (HLRF) are vented to the existing radiological exhaust system and eventually to the main exhaust stack. Tritium Extraction and Analysis (Activity 2) Tritium is extracted by heating either a 4 foot target rod, or components from the target rod sections. Following tritium extraction, the 4 foot target rod is sectioned and analyzed as described in Activity 1. Tritium extraction and analysis is performed at two separate locations within the Radiochemical Processing Laboratory</p>	<p>Continuous</p>	<p><b>CDM:</b> Records Review <b>Comment:</b> Under the PNNL Standards Based Management System (SBMS) each new research project is required to be reviewed via the Electronic Prep &amp; Risk assessment process. The reviews are recorded in the EPR database. Facility changes are required to be reviewed via the SBMS Subject Area for Engineering Calculations, Drawings and Specifications creating and Modifying. Projects with potential air emissions are reviewed by Effluent Management (EM) under the SBMS Airborne</p>

Requirement	Compliance Status	Compliance Determination Method
<p>(RPL). Small scale tritium extraction tests are performed in Room 416, while full tritium rod extraction tests are conducted in the hot cells of the HLRF. Radionuclide emissions not captured during the tritium extraction tests pass through a laboratory hood or glovebox to the existing ventilation system, and eventually through the main exhaust stack. Ex reactor Tritium Permeation Tests (Activity 3) Measurements are taken to determine the cladding material permeability used in the target rods. The test is conducted in an enclosed test loop, of which a section is constructed from TARGET ROD cladding material. Tritium absorption/release kinetics validation, correlation development and hydrogen ingress characterization, safety testing, and mechanical testing are then conducted. The tritium permeation tests are performed in Laboratory 48 in the RPL basement. Preparation of lithium aluminate (LiAlO<sub>2</sub>) samples for lithium isotopic ratio analysis is conducted in Laboratory 419. Radionuclide emissions not captured during the permeation tests are allowed to pass through a laboratory hood or glovebox, to the existing ventilation system, and eventually through the main exhaust stack. Other activities that will continue with the "ramp down" of the TTQP include clean up of the furnace and other portions of the extraction system and subsequent waste disposal. During these activities, minor tritium releases are expected from hold up within the system.</p>		<p>Emission Subject Area, and the records retained by EM.</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. MEDICAL ISOTOPE RESEARCH (Th-232 Project) Th-232 parent material is approved to be present in the facility as either an oxide [ThO<sub>2</sub>] or a nitrate [Th(NO<sub>3</sub>)<sub>4</sub>]. The parent material shall be maintained in shipping containers, with sub samples being periodically removed for performing laboratory testing. During the tests, the parent material may be subjected to processes (e.g., grinding or suspension in solution) to maximize the recovery of the desired isotopes. The preparation of the parent material and the capture process shall be performed in Room 510. The amount of parent material allowed to be processed annually under this NOC is estimated to be 30,000 kilograms. Parent material may be transported to RPL from off site suppliers in multiple shipments throughout the year. The parent material shall be in the form of a granular oxide or nitrate (powder) that will be stored inside shipping containers at RPL until it is to be used. The shipping containers will be opened periodically to retrieve parent material for processing. The prepared materials will then be loaded into a containment vessel and the vessel sealed. A transport line has been tapped into the lid of the containment vessel. The Rn-220 gas that is generated during batch processing exits the vessel through this transport line to a radon recovery system that is located inside of a laboratory hood in Room 510. The daughter products that result from the decay of Rn 220 are captured by the recovery system, and this system exhausts to a laboratory fume hood that is part of the RPL radiological exhaust system. The exhaust exits the facility through the RPL main stack (EP 325-01-S). The radionuclides associated with this project are the Th-232 in the parent material, and the daughter products resulting from the decay of Th-232 (in order): Ra-228, Ac-228, Th-228, Ra-224, Rn-220, Po-216, Pb-212, Bi-212, Po-212, Tl-208, and Pb-208 (stable isotope).</p>	<p>Continuous</p>	<p>CDM: Records Review <b>Comment:</b> Under the PNNL Standards Based Management System (SBMS) each new research project is required to be reviewed via the Electronic Prep &amp; Risk assessment process. The reviews are recorded in the EPR database. Facility changes are required to be reviewed via the SBMS Subject Area for Engineering Calculations, Drawings and Specifications creating and Modifying. Projects with potential air emissions are reviewed by Effluent Management (EM) under the SBMS Airborne Emission Subject Area, and the records retained by EM.</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. MEDICAL ISOTOPE RESEARCH (I-131 Project) I-131 solution will be procured from an offsite vendor and shipped to the Pacific Northwest National Laboratory (PNNL). It is expected that multiple shipments of I-131 will be required throughout the project, due to storage concerns that are the result of the short half life of I-131 (approximately eight days). The objective of these experiments is to combine the I-131 solution with an antibody solution (supplied by the customer). The test apparatus is a closed system that shall be set up inside of a hot cell located in Room 203 of the RPL. One containment vessel (medical grade intravenous type bag) shall be used for the I-131 solution, and the second vessel shall be used to contain the vendor supplied antibody solution. Both solutions shall be transported to the mixing vessel by means of a peristaltic pump. The mixed solution will then be routed through an in line purification system and dispensed into a medical grade product bag. Once processing is complete, the I-131 antibody shall be transferred from the product bag into small glass vials (inside the hot cell). The final product can then be shipped to the customer or a destination designated by the customer. Shipment from RPL must occur fairly quickly, due to the short half life of I-131. Processing will be performed using variable amounts of I-131 and will be conducted as separate batches. Current project is allowed to conduct multiple processing runs, with each run using from four to 100 curies (Ci) of I-131. The processing of the material will not alter the physical form of the I-131 liquid. No more than 300 Ci of I-131 per year is allowed.</p>	<p>Continuous</p>	<p><b>CDM: Records Review</b> <b>Comment:</b> Under the PNNL Standards Based Management System (SBMS) each new research project is required to be reviewed via the Electronic Prep &amp; Risk assessment process. The reviews are recorded in the EPR database. Facility changes are required to be reviewed via the SBMS Subject Area for Engineering Calculations, Drawings and Specifications creating and Modifying. Projects with potential air emissions are reviewed by Effluent Management (EM) under the SBMS Airborne Emission Subject Area, and the records retained by EM.</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. WASTE OPERATIONS The approved activities in the Radiochemical Processing Laboratory (RPL) include waste treatment operations that occur in various areas of the facility. In the HWTU, hazardous materials and radioactive mixed waste shall be stored, dispensed, used, handled, packaged in drums, and treated using various small bench scale treatment processes. Treatment processes used at the HWTU is limited to include pH adjustment, ion exchange, venting of gas cylinders, carbon absorption using polymer beads or mineral absorbents such as clays, chemical oxidation, chemical precipitation, chemical reduction, waste concentration by evaporation, neutralization, filtration, solvent extraction, solids washing, catalytic destruction, and grout encapsulation (cementation). The compaction unit is allowed to reduce volumes of low level radioactive and radioactive mixed dry materials (such as gloves, wipes, and step off pad waste). During each compaction event, radiological smear samples shall be collected to verify containment of radiological contamination. Radioactive waste boxes and drums are allowed to be stored in a controlled, fenced area (outside of the RPL) at the northeast corner of the facility. If any intrusive work (i.e., sampling, etc.) is required that may have the potential to emit radionuclides, the container shall be moved inside the facility.</p>	<p>Continuous</p>	<p><b>CDM: Records Review</b> <b>Comment:</b> Under the PNNL Standards Based Management System (SBMS) each new research project is required to be reviewed via the Electronic Prep &amp; Risk assessment process. The reviews are recorded in the EPR database. Facility changes are required to be reviewed via the SBMS Subject Area for Engineering Calculations, Drawings and Specifications creating and Modifying. Projects with potential air emissions are reviewed by Effluent Management (EM) under the SBMS Airborne Emission Subject Area, and the records retained by EM.</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><b>CDM:</b> N/A <b>Comment:</b> Ecology and Health have determined that the licensee need not certify compliance with conditions that convey a right, are 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><b>CDM:</b> N/A <b>Comment:</b> Ecology and Health have determined that the licensee need not certify compliance with conditions that convey a right, are 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><b>CDM:</b> Records Review <b>Comment:</b> PNNL's Rad Air monitoring program is conducted under the Effluent Management Quality Assurance Plan, EM-QA-01. This plan is based on the requirements of 40 CFR 61, Appendix B, Method 114.</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><b>CDM:</b> Records Review <b>Comment:</b> Use and Maintenance: RCTs are responsible for the collection of samples and operating monitoring equipment. These personnel are trained to procedures (located on the Effluent Management web page for these activities. Evidence of training to these procedures is maintained with the Laboratory Training group. Air Balance personnel are responsible for the efficiency testing and replacement of HEPA filters. This testing is performed in accordance with Air Balance procedures located on the F&amp;O web page. Evidence of training to these procedures is maintained with the Laboratory</p>

Requirement	Compliance Status	Compliance Determination Method
		<p>Training group. Emergency Response: The Emergency Preparedness group trains the building emergency directors (BEDs) via PNNL courses 402, 403, and 404. Under each BED is a response organization (BERO), these personnel are trained under course 405, &amp; 407. Training records are maintained with Laboratory Training. Emergency preparedness exercises are conducted on a scheduled basis to evaluate performance. Evaluations are maintained with the EP group.</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><b>CDM: Records Review</b>  <b>Comment:</b> Data collected through support organizations is coordinated through statements of work (SOWs) that outline project expectations for collection and reporting of data:  <ul style="list-style-type: none"> <li>• Airborne Radionuclide Emission Sample Analysis Statement of Work (Sample analysis)</li> <li>• Airborne Radionuclide Emission Sampler and Monitor Operations Statement of Work (Collection of samples, daily inspections, and delivery to laboratory)</li> <li>• Effluent Sampling and Monitoring Support-Memorandum of Agreement (performance of stack flow measurements and maintenance of equipment)</li> <li>d. Memorandum of Agreement for Calibration Services (Calibration of rotameters and vacuum gauges)</li> </ul>           Note: All of these documents are maintained on the EM web page.</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><b>CDM:</b> N/A <b>Comment:</b> Ecology and Health have determined that the licensee need not certify compliance with conditions that convey a right, are 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><b>CDM:</b> N/A <b>Comment:</b> Ecology and Health have determined that the licensee need not certify compliance with conditions that convey a right, are 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><b>CDM:</b> Records Review <b>Comment:</b> Retention period for Rad Air records is specified as part of the Effluent Management Quality Assurance Plan, EM-QA-01. Retention periods are further documented in the EM project files under the Records Inventory and Disposal Schedule (RIDS).</p>
<p>The facility shall report all measured or calculated emissions annually (WAC 246-247-080(3)).</p>	<p>Continuous</p>	<p><b>CDM:</b> Records Review <b>Comment:</b> Emissions are included in the Radionuclide Air Emissions Report for the Hanford Site</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><b>CDM:</b> Records Review <b>Comment:</b> No reports were required. Reviewed the Hanford Site Air Operating Permit Semiannual Reports for Periods January 1, 2006 through June 30, 2006 and July 1, 2006 through December 31, 2006.</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><b>CDM:</b> N/A <b>Comment:</b> Ecology and Health have determined that the licensee need not certify compliance with conditions that convey a right, are 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><b>CDM:</b> Operational Procedure <b>Comment:</b> Retention period is specified in the Effluent Management Quality Assurance Plan (EM-QA-01) and also identified in the EM Records Inventory and Disposal Schedule (RIDS).</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>Continuous</p>	<p><b>CDM:</b> Records Review <b>Comment:</b> Implementation of the "Memorandum of Understanding for Initial Point-of-Contact Activities Supporting Regulatory Agency Environmental Inspection", dated July 2001. The MOU defines, at a site-wide level, the roles and responsibilities for regulator access to the Hanford Site. SBMS subject area for Audits and Inspections by Regulatory and Oversight Agencies, ES&amp;H Regulatory Inspections further defines the roles and responsibilities at a contractor level for hosting, conducting, and documenting external regulatory inspections.</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><b>CDM:</b> Records Review <b>Comment:</b> Provided documents as requested during a WDOH Level II Inspection held on April 6, 2006 and June 20, 2006.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>Accidental releases with a probability of occurrence during the expected life of the emission unit of greater than one percent must be addressed. All such probable accidental releases shall be documented and supplied to the department upon request.</p>	<p>Not Applicable</p>	<p><b>CDM:</b> N/A <b>Comment:</b> Ecology and Health have determined that the licensee need not certify compliance with conditions that convey a right, are 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>In addition to the isotopes approved under this NOC other radionuclides may be encountered. If a radionuclide not on this list is encountered, the department shall be notified and dose impacts shall be calculated.</p>	<p>Continuous</p>	<p><b>CDM:</b> Records Review <b>Comment:</b> Reviewed the Facility Effluent Monitoring Plan (FEMP). For 2006, short lived MFP/MAP identified as Cs-137 in the permit application includes Cs-132, Os-191, Sb-122, and As-73.</p>
<p>For the Waste Sludge Solidification Demonstration: The objective is to demonstrate methods of solidification of waste sludge from the 105 K East Basin. The purpose for rendering the sludge as a solid is to allow for permanent storage at the Waste Isolation Pilot Plant (WIPP). Core samples are taken from sludge found in the K East Basin (up to 4 liters of solids) and transported to the 325 Building (RPL) for initial study. The samples are collected in 4 liter poly bottles and shipped to RPL in PAS 1 containers accompanied by a chain of custody. All containers shall be visually inspected upon receipt and dose measurements taken. After receipt, the sample bottles are placed into a glove box or hot cell and combined into one composite. The sludge is allowed to settle from the mixture, and the water is decanted. The decanted water and a sample of the settle sludge are characterized for major constituents (e.g. nucleotides, organics). The remaining sludge is split into different test samples and each processed with a different solidification method (grout, absorbent, drying, etc). Characterization of each test sample will occur at RPL, with the exception of one long term grout solidified monolith prepared for long term and WIPP specific testing at the Central Waste Center (CWC). Once testing is completed, a recommendation is made for the most effective solidification process. Once the initial study is complete, large scale testing begins and will nominally include up to 6.3 m<sup>3</sup> (the Spent Nuclear Fuel (SNF) project bounding volume is 7.5 m<sup>3</sup>) of sludge material. Material from the K East Basin is to be transported to the 325 Building using a Sludge Transport Systems (STS). The STS consists of: Large Diameter Container (LDC). A vertical stainless steel cylindrical tank designed to contain material from K East Basin. The container is approximately 5 feet in diameter and 10 feet high. Sludge transportation cask. The LDC is placed into a cylindrical stainless steel and lead shell which is to provide shielding and to seal the LDC from the outside. Transportation trailer. The sludge transportation cask is anchored onto a trailer. The sludge transportation trailer complies with federal regulations and state standards. Note: The following information is for completeness. Radioactive air emissions from these activities are covered by other permits/processes. The STS is staged in the north transfer bay near the K East North Loading Operation Pit (NLOP). The LDC is connected to the K East Basin's Sludge Retrieval System (SRS), and is filled with material. Once a sufficient volume of sludge is contained in the LDC, the excess water cover level is lowered so the tank holds approximately 2.5 m<sup>3</sup> of material. An inert gas (e.g., helium or argon) blanket is placed over the material inside the LDC and the tank's outlet and inlet ports are closed. A NucFil HEPA type filter and rupture disk are placed on the tank's vent ports. The cask lid is then installed, sealing the LDC inside. Once the cask is sealed and secured, the STS is transported to the 325 Building loading dock by the High Level</p>	<p>Not Applicable</p>	<p><b>CDM:</b> Personnel Interview <b>Comment:</b> This project did not operate during CY2006.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>Radiochemistry Facility (HLRF). Once the STS is staged in the desired location, the transportation cask is unsealed in an approved area. Note: The following activities describe actions to be taken within the RPL. Inside the building, the LDC inlet and outlet are opened and the material is sampled for analysis. After determining the acceptability of the material, it is pumped from the LDC into several shielded vessels. The materials in the vessels are then processed with the solidification method designated from the initial testing. Each vessel is covered with a lid vented with a NucFil HEPA type filter. Each shield vessel is placed in an overpack container and stored inside the RPL until the material is ready for shipped to CWC. Once the LDC is emptied, it is rinsed. It is then placed back onto the STS in preparation for resealing in the transportation cask and for transport back to K Basin. Overall, three shipments of K East Basin sludge in the STS are planned at this time.</p>		
<p>The dose impacts from the source term from all activities being performed at the 325 Building shall be assessed annually and shall be made available for review by the department upon request.</p>	<p>Continuous</p>	<p><b>CDM:</b> Records Review <b>Comment:</b> NESHAPS inventory of radioactive materials is conducted for PNNL facilities on an annual basis in accordance with PNL-10855 Rev. 3, "Assessment of Unabated Facility Emission Potentials for Evaluating Airborne Radionuclide Monitoring Requirements at PNNL-2003". This report is available upon request for review.</p>
<p>The sampling system shall be commensurate with the Environmental Protection Agency requirements for monitoring.</p>	<p>Continuous</p>	<p><b>CDM:</b> Records Review <b>Comment:</b> The tritium and record particulate sampling system for emission point EP-325-01-S is operated in conformance with 40 CFR 61, Subpart H and American National Standards Institute (ANSI) N13.1 (1969) requirements.</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><b>CDM:</b> N/A <b>Comment:</b> Ecology and Health 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>

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><b>CDM:</b> N/A <b>Comment:</b> Ecology and Health 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><b>CDM:</b> N/A <b>Comment:</b> Ecology and Health 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 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><b>CDM:</b> N/A <b>Comment:</b> Ecology and Health 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>

EP-326-01-S  
WDOH Emission Unit ID : 362  
Page in AOP : H-0427

Requirement	Compliance Status	Compliance Determination Method
<b>Zone or Area :</b> Hot cells and hoods <b>Abatement Technology :</b> HEPA <b>Required Units :</b> 1 <b>Add'l Description:</b>	Continuous	<b>CDM:</b> Personnel interview / records review. <b>Comment:</b> Reviewed 2006 HEPA Filter PM results (PM-55460) & confirmed with Building Engineer.
<b>Zone or Area :</b> Hoods, SEM <b>Abatement Technology :</b> HEPA <b>Required Units :</b> 2 <b>Add'l Description:</b> In series	Continuous	<b>CDM:</b> Personnel interview / records review. <b>Comment:</b> Reviewed 2006 HEPA Filter PM results (PM-55460) & confirmed with Building Engineer.
<b>Zone or Area :</b> <b>Abatement Technology :</b> Fan <b>Required Units :</b> 3 <b>Add'l Description:</b> In parallel, common to both areas	Continuous	<b>CDM:</b> Records review / personnel interview. <b>Comment:</b> Reviewed 2006 Exhaust Fan PM results (PM-43720, 43730, 43740) & confirmed with Building Engineer.
<b>Required Sampling:</b> Record Sample <b>Sampling Frequency:</b> 2 week sample/year <b>Radionuclide Requiring Measurement:</b> TOTAL ALPHA TOTAL BETA	Continuous	<b>CDM:</b> Records review. <b>Comment:</b> Emission data is maintained in the Gaseous Emission Database (GED). A query of the database confirmed all required samples were collected during the reporting period, including the start and end dates of sample periods.
<b>Federal and State Regulatory Requirement:</b> 40 CFR 61.93(b)(4)(i) & WAC 246-247-075(3) <b>Permit Monitoring and Testing Procedure:</b> 40 CFR 61, Appendix B, Method 114(3)	Continuous	<b>CDM:</b> Records review. <b>Comment:</b> The "Pacific Northwest National Laboratory Effluent Management Quality Assurance Plan" (EM-QA-01) specifies quality assurance requirements.

Requirement	Compliance Status	Compliance Determination Method
<p align="center"><b>Permit:</b> AIR 01-607 <b>Issue Date:</b>06-22-01 <b>Obsolete Date:</b> 07-05-06  <b>NOC:</b> Research at the 326 Facility  <b>WDOH NOC ID:</b> 495 <b>Date In AOP:</b> 04-11-05 <b>Page in AOP:</b> H-0427</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>	Intermittent	<p><b>CDM:</b> Review of compliance status for each approval condition listed for this approval order.  <b>Comment:</b> Intermittent compliance for this approval order, since one condition of this license is reported as intermittent.</p>
<p>The total abated emission limit for this Notice of Construction is limited to 8.52E-05 mrem/year to the Maximally Exposed Individual. The total unabated emission limit for this Notice of Construction is limited to 8.15E-03 mrem/year to the Maximally Exposed Individual.</p>	Continuous	<p><b>CDM:</b> Records Review  <b>Comment:</b> Reviewed the radionuclide air emissions data for the calendar year 2006 to verify total abated emissions are below the NOC limit. The NESHAPS inventory of radioactive materials is conducted for PNNL facilities on an annual basis in accordance with PNL-10855 Rev. 3, "Assessment of Unabated Facility Emission Potentials for Evaluating Airborne Radionuclide Monitoring Requirements at PNNL-2003". A review of this document indicates the unabated emissions were below the NOC limits.</p>
<p>This process is limited to: the following type of research activities within the 326 Facility. Development and calibration of fiber optic chemical sensors, electrical and mechanical engineering support for nuclear instrumentation development and fabrication, design and engineering of special purpose radiation detectors and sampling systems, and operation of a continuous glass fiber draw capability to produce neutron sensitive scintillating glass fiber which is a new class of solid state radiation detectors.</p>	Continuous	<p><b>CDM:</b> Records Review  <b>Comment:</b> Under the PNNL Standards Based Management System (SBMS) each new research project is required to be reviewed via the Electronic Proposal &amp; Risk assessment process. The reviews are recorded in the EPR database. Facility changes are required to be reviewed via the SBMS Subject Area for Engineering Calculations, Drawings and Specifications, creating and Modifying. Projects with potential air emissions are further reviewed by Effluent Management (EM) under the SBMS Airborne Emission Subject Area, and the records retained by EM.</p>
<p>The Annual Possession Quantity is limited to the following radionuclides (Curies/year): Ag 110 m 2.00E-02 Am 241 2.00E-04 Ar 37 6.00E-07 Ar 39 6.00E-07 Ar 41 6.00E-07 Ba 133 2.00E-02 C- 14 2.00E-03 Ca 45 6.00E-01 Cd 109 6.00E-04 Ce 144 2.00E-01 Cf 252 7.00E-05 Cm 244 1.00E-05 Co 56 3.00E+00 Co 57 6.00E-01 Co 58 1.50E+00 Co 60 4.50E+00 Cr 51 6.00E+00 Cs 134 1.00E-02 Cs 137 1.00E-05 Cu 64 6.00E+01 Eu 152 4.00E-03 Eu 154 3.00E-03 Eu 155 2.00E-01 Fe 55 1.00E+02 Gd 149 6.00E-01 Gd 151 6.00E-01 H- 3 6.00E-01 I- 125 5.70E-07 I- 129 5.00E-11 I- 131 1.00E-08 Mn 54 7.00E+00 Mo 93 6.00E-01 Nb 93 m 9.00E-01 Nb 94 6.00E-01 Ni 59</p>	Intermittent	<p><b>CDM:</b> Records Review  <b>Comment:</b> Reviewed the 2006 NESHAPS Radionuclide Inventory. Radionuclides in inventory but not listed in the NOC include: Cl-36, Pb-210, Pm-147, Pu-241, Ra-228, Tl-204, and Y-88.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>6.00E+00 Ni 63 1.50E+00 Pu 238 5.00E-07 Pu 239 8.00E-07 Ra 226 1.22E-04 Ru 106 2.00E-01 Sb 124 1.00E-01 Sb 125 3.00E-02 Sc 46 6.00E-01 Sn 113 6.00E-03 Sn 119 m 2.00E-02 Sn 123 1.00E-01 Sr 85 6.00E-04 Sr 89 2.00E-03 Sr 90 1.00E-05 Ta 179 2.00E-03 Ta 182 7.00E-01 Tc 99 7.00E-01 Tc 123 1.00E-04 Th 230 2.00E-05 U- 235 1.00E-01 U- 238 9.00E-07 V- 49 6.00E-01 W- 181 1.00E+00 W- 185 6.00E+00 Xe 131 m 3.00E-04 Xe 133 2.00E-05 Xe 133 2.00E-05 Xe 135 1.00E-05 Zn 65 6.00E-01 Zr 95 1.00E-02</p>		
<p>These Conditions and Limitations must be proceduralized prior to starting the activities described in the Notice of Construction.</p>	Continuous	<p><b>CDM:</b> Records Review  <b>Comment:</b> Compliance to this condition is demonstrated through the implementation of PNNL's Laboratory Policies and Standards (<a href="http://sbms.pnl.gov/common/cl00d010.htm">http://sbms.pnl.gov/common/cl00d010.htm</a>) and the documents referenced in the Annual Air Operating Permit Compliance self assessment maintained in the Effluent Management Project Record file</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><b>CDM:</b> N/A  <b>Comment:</b> Ecology and Health 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>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><b>CDM:</b> N/A  <b>Comment:</b> Ecology and Health 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 reserves 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>	Not Applicable	<p><b>CDM:</b> N/A  <b>Comment:</b> Ecology and Health 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 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><b>CDM:</b> Personnel Interview/ Records Review  <b>Comment:</b> Use and Maintenance: RCTs are responsible for the collection of samples and operating monitoring equipment. These personnel are trained to procedures (located on the Effluent Management web page) for these activities. Evidence of training to these procedures is maintained with the Laboratory Training group. Air Balance personnel are responsible for the efficiency testing and replacement of HEPA</p>

Requirement	Compliance Status	Compliance Determination Method
		<p>filters. This testing is performed in accordance with Air Balance procedures located on the F&amp;O web page. Evidence of training to these procedures is maintained with the Laboratory Training group. Emergency Response: The Emergency Preparedness group trains the building emergency directors (BEDs) via PNNL courses 402, 403, and 404. Under each BED is a response organization (BERO), these personnel are trained under course 405. Training records are maintained with Laboratory Training. Emergency preparedness exercises are conducted on a scheduled basis to evaluate performance. Evaluations are maintained with the EP group.</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><b>CDM:</b> Records Review  <b>Comment:</b> Data collected through support organizations is coordinated through statements of work (SOWs) that outline project expectations for collection and reporting of data: • Airborne Radionuclide Emission Sample Analysis Statement of Work (Sample analysis) • Airborne Radionuclide Emission Sampler and Monitor Operations Statement of Work (Collection of samples, daily inspections, and delivery to laboratory) • Effluent Sampling and Monitoring Support-Memorandum of Agreement (performance of stack flow measurements and maintenance of equipment) Memorandum of Agreement for Calibration Services (Calibration of rotameters and vacuum gauges) Note: All of these documents are maintained on the EM web page.</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><b>CDM:</b> N/A  <b>Comment:</b> Ecology and Health 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.</p>	<p>Continuous</p>	<p><b>CDM:</b> Records Review  <b>Comment:</b> PNNL's Rad Air monitoring program is conducted under the Effluent Management Quality Assurance Plan, EM-QA-01. This plan is based on the requirements of 40 CFR 61, Appendix B, Method 114.</p>

Requirement	Compliance Status	Compliance Determination Method
The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).	Not Applicable	<b>CDM:</b> N/A <b>Comment:</b> Ecology and Health 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.
All reports and records must be kept and reported according to 40 CFR 61, Subpart H (WAC 246-247-080(2)).	Continuous	<b>CDM:</b> Records Review <b>Comment:</b> Retention period for Rad Air records is specified as part of the Effluent Management Quality Assurance Plan, EM-QA-01. Retention periods are further documented in the EM project files under the Records Inventory and Disposal Schedule (RIDS).
All measured or calculated emissions must be reported annually (WAC 246-247-080(3)).	Continuous	<b>CDM:</b> Records Review <b>Comment:</b> Emissions are included in the Radionuclide Air Emissions Report for the Hanford Site
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)).	Not Applicable	<b>CDM:</b> N/A <b>Comment:</b> Ecology and Health 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.
The facility shall make requested documents available in a timely manner for review (WAC 246-247-080(10)).	Continuous	<b>CDM:</b> Records Review <b>Comment:</b> WDOH did not request any records during the reporting period for this project.
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 (WAC 246-247-080(9)).	Continuous	<b>CDM:</b> Records Review <b>Comment:</b> Implementation of the "Memorandum of Understanding for Initial Point-of-Contact Activities Supporting Regulatory Agency Environmental Inspection", dated July 2001. The MOU defines, at a site-wide level, the roles and responsibilities for regulator access to the Hanford Site. SBMS subject area for Audits and Inspections by Regulatory and Oversight Agencies further defines the roles and responsibilities at a contractor level for hosting, conducting, and documenting external regulatory inspections.

Requirement	Compliance Status	Compliance Determination Method
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	<b>CDM:</b> Operational Procedure <b>Comment:</b> Retention period is specified in the Effluent Management Quality Assurance Plan (EM-QA-01) and also identified in the EM Records Inventory and Disposal Schedule (RIDS).

EP-327-01-S  
WDOH Emission Unit ID : 407  
Page in AOP : H-0467

Requirement	Compliance Status	Compliance Determination Method
<p><b>Zone or Area :</b> Remaining areas of Building 327  <b>Abatement Technology :</b> Fan  <b>Required Units :</b> 1  <b>Add'l Description:</b> 2 in parallel (machine shop is power ventilated with a single fan to the main flowpath of the remaining areas of building 327.)</p>	Continuous	<p><b>CDM:</b> Review of specified procedure HNF-3444, "324/327 Facilities Environmental Effluent Specifications", prior to April 2006, and then WCH-HNF-3444, "324/327 Facilities Environmental Effluent Specifications" for the remainder of the certification period; and inquiry with the cognizant engineer.  <b>Comment:</b> No substantive changes were made with the revision of the document. This condition became obsolete on September 28, 2006.</p>
<p><b>Zone or Area :</b> Remaining areas of Building 327  <b>Abatement Technology :</b> HEPA  <b>Required Units :</b> 1  <b>Add'l Description:</b> Single stage</p>	Continuous	<p><b>CDM:</b> Review of specified procedure HNF-3444, "324/327 Facilities Environmental Effluent Specifications", prior to April 2006, and then WCH-HNF-3444, "324/327 Facilities Environmental Effluent Specifications" for the remainder of the certification period; review of status logs; and inquiry with the cognizant engineer.  <b>Comment:</b> No substantive changes were made with the revision of the document. This condition became obsolete on September 28, 2006.</p>

Requirement	Compliance Status	Compliance Determination Method
<p><b>Zone or Area :</b> Rm. 15 Hood and Cells  <b>Abatement Technology :</b> Fan  <b>Required Units :</b> 1  <b>Add'l Description:</b> 2 in parallel, one standby. Serves Rm. 15 and Cells</p>	<p>Continuous</p>	<p><b>CDM:</b> Review of specified procedure HNF-3444, "324/327 Facilities Environmental Effluent Specifications", prior to April 2006, and then WCH-HNF-3444, "324/327 Facilities Environmental Effluent Specifications" for the remainder of the certification period; and inquiry with the cognizant engineer.  <b>Comment:</b> No substantive changes were made with the revision of the document. This condition became obsolete on September 28, 2006.</p>
<p><b>Zone or Area :</b> Rm. 15 Hood and Cells  <b>Abatement Technology :</b> Prefilter  <b>Required Units :</b> 1  <b>Add'l Description:</b> Cells only</p>	<p>Continuous</p>	<p><b>CDM:</b> No substantive changes were made with the revision of the document. This condition became obsolete on September 28, 2006.  <b>Comment:</b> No substantive changes were made with the revision of the document. This condition became obsolete on September 28, 2006.</p>
<p><b>Zone or Area :</b> Rm. 15 Hood and Cells  <b>Abatement Technology :</b> HEPA  <b>Required Units :</b> 1  <b>Add'l Description:</b></p>	<p>Continuous</p>	<p><b>CDM:</b> Review of specified procedure HNF-3444, "324/327 Facilities Environmental Effluent Specifications", prior to April 2006, and then WCH-HNF-3444, "324/327 Facilities Environmental Effluent Specifications" for the remainder of the certification period; review of annual testing; and inquiry with the cognizant engineer.  <b>Comment:</b> No substantive changes were made with the revision of the document. This condition became obsolete on September 28, 2006.</p>

Requirement	Compliance Status	Compliance Determination Method
<p><b>Required Sampling:</b> Continuous  <b>Sampling Frequency:</b> Continuous  <b>Radionuclide Requiring Measurement:</b> All radionuclides which could contribute 10% of the potential EDE.</p>	<p>Continuous</p>	<p><b>CDM:</b> Confirmed by cognizant engineer through review of facility surveillance records/logs and specified procedure HNF-3444, "324/327 Facilities Environmental Effluent Specifications" through April 2006, and then WCH- HNF-3444, "324/327 Facilities Environmental Effluent Specifications" for the remainder of the certification period; and verification of data. "Services Provided by the Waste Sampling and Characterization Facility for the Effluent and Environmental Monitoring Program during Calendar Year 2006" (HNF-EP-0835-12) defines what analyses are performed and the frequency.  <b>Comment:</b> "Continuous compliance" means collection of all monitoring data required by the permit under the data collection frequency specified in the permit, with no deviations, and no other information indicating deviations, except for planned shutdowns, upsets, or malfunctions during which compliance is not required. This condition became obsolete on September 28, 2006.</p>
<p><b>Federal and State Regulatory Requirement:</b> 40 CFR 61.93(b)(4), WAC 246-247-75(2)  <b>Permit Monitoring and Testing Procedure:</b> Method 2 appendix A Method 114 appendix B 61.93(b)(2)(ii) ANSI N13.1</p>	<p>Continuous</p>	<p><b>CDM:</b> WAC 246-247-075(2): See preceding condition for required sampling.  61.93(b)(2)(ii)ANSI N13.1: In compliance as documented in the completed, and closed, Federal Facility Compliance Agreement. 40 CFR 61.93(b)(4): See preceding condition for required sampling.  Method 2 Appendix A: Compliance with facility procedure HNF-3444, "324/327 Facilities Environmental Effluent Specifications" through April 2006, , and then WCH- HNF-3444, "324/327 Facilities Environmental Effluent</p>

Requirement	Compliance Status	Compliance Determination Method
		<p>Specifications” for the remainder of the certification period. Method 114, Appendix B: "Quality Assurance Project Plan for Radiological Air Emissions Monitoring" (ENV-1-1.15, Rev. 0) specifies the quality assurance requirements. Work packages are reviewed by the cognizant engineer to provide documentation of maintenance, calibration, and field check requirements.</p> <p><b>Comment:</b> This condition became obsolete on September 28, 2006.</p>
<p align="center"><b>Permit:</b> AIR 03-107    <b>Issue Date:</b> 01-10-03    <b>Obsolete Date:</b> 09-28-06  <b>NOC:</b> Deactivation of the 327 Building  <b>WDOH NOC ID:</b> 505    <b>Date In AOP:</b> 04-11-05    <b>Page in AOP:</b> H-0467</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><b>CDM:</b> For this approval order, in compliance with all approval conditions.  <b>Comment:</b> The condition became obsolete on September 28, 2006.</p>
<p>The total abated emission limit for this Notice of Construction is limited to 1.20E-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 2.50E+02 mrem/year to the Maximally Exposed Individual (WAC 246-247-030(21)).</p>	<p align="center">Continuous</p>	<p><b>CDM:</b> Abated emissions are reported in DOE/RL-2007-01, Rev. 0, "Radionuclide Air Emissions Report for the Hanford Site, Calendar Year 2006." The Potential-To-Emit (PTE) identified in the Notice of Construction (NOC) application has not increased, and has effectively decreased as deactivation activities remove material from the facility, as confirmed through inquiry with the cognizant engineer.  <b>Comment:</b> The abated emission limit and PTE listed in the WDOH Condition is the sum of the values for EP-327-01-S, and excavation activities (i.e., diffuse/fugitive emissions). No excavation activities were conducting during the reporting period. The annual report is scheduled for submittal by June 30, 2007. This condition became obsolete on September 28, 2006.</p>

Requirement	Compliance Status	Compliance Determination Method
<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 deactivation of the 327 Building. General Deactivation Activities The general chemical and physical processes associated with deactivation of the 327 Building and associated ancillary facilities shall consist of the following: Large equipment shall be removed and/or size-reduced, as needed, using processes such as mechanical shearing, cutting torches, laser cutters, and/or physical sawing activities. Size-reduced items and loose material shall be collected and packaged to meet waste acceptance criteria for transfer to suitable storage and disposal facilities.</p> <p>Cleaning/collection processes are limited to the following various methods or combinations of mechanical cleaning methods, e.g., blast nozzle cleaning, ultra high-pressure water scarification, media blast cleaning (with either vacuum recovered recycled or one shot media, where blast air, media, and radiologically contaminated material are vacuum recovered to prevent dispersion); scabbling (aggressive surface removal of metal and concrete); grinding, and vacuuming. Liquid decontamination can be employed to reduce contamination levels. This process shall consist of spraying radiologically contaminated surfaces with pressurized liquids and collecting the resultant solutions. In the final stages of deactivation, after removal of materials in storage in the 327 Building basin, the basin water shall be removed. Appropriate basin surface decontamination/ stabilization shall be conducted. Spent decontamination solutions and basin water shall be staged in suitably designed tanks, if staging is needed. Treated liquids (filters, ion exchange, basin water, etc.) can be staged in suitably designed and located tanks and transferred to other facilities on the Hanford Site by tanker truck. Smaller volumes might be containerized (e.g., packaged in absorbents in drums or placed in drums or carboys). If tanker trucks are used, displaced air from the tanker trucks shall be routed back to the Zone I or Zone II exhaust systems. After deactivation efforts have been completed for a particular area of the 327 Building, ventilation ductwork for that area shall be decontaminated, removed, and/or isolated. After sufficient decontamination has been achieved upstream of the associated HEPA filter or control devices, the control devices shall be removed or isolated. Containment and portable exhausters shall be used as needed for personnel protection in local ventilated spaces for shutting down the existing ventilation system and for ventilating radiologically contaminated areas (piping, ancillary buildings, etc.) outside of areas that are served by the existing 327 Building ventilation system. Annual maintenance inspections of the 327 Building shall be performed without use of containment or portable exhausters. Science and Technology Activities The 327 Building has been proposed as the host for several hot demonstrations and deployments involving remote characterization, dry decontamination, and handling and size reduction beginning in fiscal year 2002 as part of this effort. The following provides examples of potential areas for science and technology development: One project involves the demonstration and deployment of remote (in-cell) characterization and dry decontamination. This task shall support several onsite needs including monolithic disposal of the large, cast iron hot cells as non-transuranic (TRU) waste. Another project will involve the remote-handled TRU (RH-TRU) removal and size reduction of a highly contaminated ion exchange column that presently is stored in a water basin in the 327 Building and decontamination of the pool cell. Opportunities exist to expand this effort to include demonstration of removal of contaminated subsystems, such as the pool cell, heating, ventilation, and air conditioning ducting, and the nitrogen recirculation system. The primary baseline approach for deactivation of the 327 Building hot cells is decontamination using various physical and mechanical means, with some liquid decontamination employed where determined to be appropriate. Based on ALARA, cost, schedule, and regulatory perspectives, it can be advantageous to avoid liquid decontamination (and resultant waste handling) and remove the cells from the building for disposal, with minimal or no decontamination. Hence, the proposed physical/chemical processes include cell removal. The contaminated ion exchange column shall be removed and size reduced as part of deactivation. The ion exchange column is located under water in the large storage basin, which is 3.0 m (10 ft) wide by 4.6 m (15 ft) long by 5.2 m (17 ft) deep. The column contains an unknown ion exchange media that, based on recent surveys and estimates, contains ~120 curies of cesium. The</p>	<p>Continuous</p>	<p><b>CDM:</b> Facility activities/operations were in compliance with facility NOC implementing procedure HNF-3444, "324/327 Environmental Effluent Specifications," through April 2006, and then WCH- HNF-3444, "324/327 Facilities Environmental Effluent Specifications" for the remainder of the certification period; as confirmed through inquiry with the cognizant engineer and approval of work packages by the environmental project lead.</p> <p><b>Comment:</b> No substantive changes were made to the document. This condition became obsolete on September 28, 2006.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>327 Building hot cells duct work and HEPA filters have inventories that are variable depending on what type of development work was performed in the associated hot cell. Large sources of semi-mobile material cannot be left in the building following closure or transition. Hence, the proposed physical/chemical processes shall include removal/disposition of some HVAC system radiological contamination. The specific need is for the decontamination of highly contaminated (wet) storage basins in the 327 Building. The aforementioned large basin and a small basin (1.8 m (6 ft) by 2.4 m (8 ft) by 3.1 m (10 ft)) are connected by a 0.5 m (1.6 ft) wide by 3.1 m (10 ft) deep canal. The small water basin interfaces with hot cell number "A" to provide the capability for transfer of irradiated material from water storage to hot cell "A." The basins are coated concrete. The storage basins are contaminated with cesium, strontium, uranium, and transuranic components. There is a concentration of contaminants in a 'bathtub ring' located near the surface of the water. In addition to the 'bathtub ring', radioactive contamination has penetrated to varying depths into the concrete wall and floor surfaces. Current decontamination technology consists of physical removal of the concrete surface (i.e., scabbling, sand blasting, etc.). None of these have been demonstrated underwater. Some contaminated concrete surfaces also have been painted and/or coated with a fixative. Project requirements might include removal of such coatings before decontamination of the concrete. The Special Environment Radiometallurgy Facility (SERF) nitrogen recirculation system is located in the 327 Building. This system was used in the past to filter and cool the nitrogen atmosphere that was maintained in the SERF cell. The SERF cell was used for cutting and examination of irradiated fuel. Inventory and dose data are not complete, but gram quantities of plutonium are present. This system is approximately 2.4 m (8 ft) by 2.4 m (8 ft) by 4.6 m (15 ft) and consists of stainless steel ductwork of various sizes (mainly 6 and 8 inch diameter), two in-line fans, two filtration enclosures, two cooling coils, and two externally mounted compressor/condenser units. The proposed methods of deactivation, removal, and disposal of the SERF cell nitrogen recirculation system shall include those activities as previously described in the process description section titled "General Deactivation Activities". Excavation: Excavation shall take place in the vicinity of the 327 Building to support site stabilization and removing/isolating/blanking utilities. Access to underground piping and cable can be gained by use of an excavator. Manual digging methods with shovels, picks, and rakes also could be used. Up to approximately 5 m<sup>3</sup> (160 ft<sup>3</sup>) of soil could be disturbed per activity. Contaminated soil removed during excavation activities shall be covered until replaced into the hole or otherwise dispositioned. If needed or chosen for use during these activities, the sitewide guzzler, a portable temporary radioactive air emissions unit (PTRAEU) exhauster, or HEPA filtered vacuum radioactive air emission unit shall be used in accordance with the latest revisions of the NOCs ["Categorical Notice of Construction for use of the Guzzler Vacuum Excavation System for Radiologically Limited Activities on the Hanford Site" (approved by WDOH on December 18, 1998) or guzzler NOC, DOE/RL-96-75 and DOE/RL-97-50 respectively]. Excavation activities shall be monitored and evaluated as described below: Many of the emission controls used during the excavation activities will be administrative, based on ALARA principles and consist of ALARA techniques. It is proposed that these controls be approved as low as reasonably achievable control technology (A-LARACT) for excavation in the vicinity of the 327 Building.</p> <ol style="list-style-type: none"> <li>1. Health physics technician (HPT) coverage will be provided during all demolition and excavation activities.</li> <li>2. Appropriate controls such as water, fixatives, covers, containment tents, or windscreens shall be applied, if needed, as determined by the Health Physics organization. Contaminated soil removed during excavation activities shall be covered until replaced into the hole or otherwise dispositioned.</li> <li>3. After leveling, the soil surface radiological contamination levels shall be verified less than 5,000 disintegrations per minute (dpm)/100 square centimeters (cm<sup>2</sup>) beta/gamma and less than 100 dpm/ 100 cm<sup>2</sup> alpha. If contamination is present above these levels, soil shall be removed and containerized for disposal or covered or fixed to provide containment of the contamination.</li> <li>4. If a guzzler, PTRAEU, or HEPA filtered vacuum radioactive air emission unit is used, controls as described in the guzzler NOC, DOE/RL-96-75 or DOE/RL-97-50 shall be followed.</li> <li>5. If field surveys during excavation identify localized</li> </ol>		

Requirement	Compliance Status	Compliance Determination Method
<p>areas of contamination greater than the gross levels described below (i.e., 500,000 dpm/100 cm<sup>2</sup> beta/gamma and 3,000 dpm/100 cm<sup>2</sup> alpha), additional surveys shall be conducted on the perimeter of the 'hot spot' to verify the localized nature, ensuring that the overall assumed contamination level is not exceeded. Although no radiological contamination is anticipated, for conservatism it is assumed that the soil surface of a 10 meter perimeter surrounding the 327 Building footprint is contaminated (equating to approximately 2,400 square meters [2.4 x 10<sup>7</sup> square centimeters]) and that the gross contamination level for beta/gamma (as strontium-90) is limited to 500,000 dpm (per square centimeter). * (2.4 x 10<sup>7</sup> cm<sup>2</sup> of soil) x (500,000 dpm/cm<sup>2</sup>) = 1.2 x 10<sup>13</sup> dpm * For cesium-137: 1.9 x 10<sup>14</sup> dpm per gram and 86.5 curies per gram * For strontium-90: 3.1 x 10<sup>14</sup> dpm per gram and 139 curies per gram * At a 2:1 ratio of cesium-137 to strontium-90, 1.2 x 10<sup>13</sup> dpm: (0.67) [(1.2 x 10<sup>13</sup>)/1.9 x 10<sup>14</sup>] 87 = 3.7 curies of cesium-137 (0.33) [(1.2 x 10<sup>13</sup>)/3.1 x 10<sup>14</sup>] 139 = 1.8 curies of strontium-90. It is recognized that because of historical activities in the 300 Area, isotopes of uranium might be encountered during excavation and decontamination activities. For conservatism, it is assumed that the 10 meter perimeter surrounding the 327 Building footprint is contaminated, and that the gross contamination level is the limit identified on the previous page for alpha [as uranium-234 (consistent with calculations bases in the guzzler NOC)] of 3,000 dpm. * (2.4 x 10<sup>7</sup> cm<sup>2</sup> of soil) x (3,000 dpm/cm<sup>2</sup>) = 7.2 x 10<sup>10</sup> dpm * For uranium-234: 1.4 x 10<sup>10</sup> dpm per gram and 6.3 x 10<sup>-3</sup> curies per gram * 7.2 x 10<sup>10</sup> dpm represents 5.1 grams of uranium-234 = 3.2 x 10<sup>-2</sup> curies of uranium-234. The sitewide guzzler could be used when evidence of low levels of soil contamination is provided. Backfill shall be made with the original material removed or brought in 'clean' soil.</p>		
<p>The Annual Possession Quantity is limited to the following radionuclides (Curies/year): Am-241 3.25 E+02 Co-60 6.80 E+02 Cs-137 3.50 E+02 Sr-90 1.74 E+02</p>	Continuous	<p><b>CDM:</b> The Annual Possession Quantities (APQs) in the NOC application have not increased, and are effectively decreasing as deactivation activities remove material from the facility, as confirmed through inquiry with the cognizant engineer. <b>Comment:</b> This condition became obsolete on September 28, 2006.</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><b>CDM:</b> The Conditions and Limitations are documented in implementing procedure HNF-3444, "324/327 Facilities Environmental Effluent Specifications" through April 2006, and then WCH- HNF-3444, "324/327 Facilities Environmental Effluent Specifications" for the remainder of the certification period. <b>Comment:</b> This condition became obsolete on September 28, 2006.</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>Not Applicable</p>	<p><b>CDM:</b> N/A. <b>Comment:</b> None were necessary during the applicable reporting period. This condition became obsolete on September 28, 2006.</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><b>CDM:</b> Recordkeeping was maintained in compliance with HNF 3444, "324/327 Facilities Environmental Effluent Specifications" through April 2006, and then WCH- HNF-3444, "324/327 Facilities Environmental Effluent Specifications" for the remainder of the certification period. Documents were provided as required during inspections. <b>Comment:</b> This condition became obsolete on September 28, 2006.</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><b>CDM:</b> N/A. <b>Comment:</b> There were no preoperational tests during the compliance period. Facility operations were normal during the compliance period. This condition became obsolete on September 28, 2006.</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><b>CDM:</b> ENV-1-1.15, "Quality Assurance Project Plan for Radiological Air Emissions Monitoring" and HNF-EP-0528, "NESHAP Quality Assurance Project Plan for Radionuclide Air Emissions." <b>Comment:</b> This condition became obsolete on September 28, 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><b>CDM:</b> N/A <b>Comment:</b> 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. This condition became obsolete on September 28, 2006.</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><b>CDM:</b> Training records and inquiry with the cognizant engineer. <b>Comment:</b> This condition became obsolete on September 28, 2006.</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><b>CDM:</b> ENV-1-1.15, "Quality Assurance Project Plan for Radionuclide Air Emissions Monitoring" and HNF-EP-0528, "NESHAP Quality Assurance Project Plan for Radionuclide Air Emissions." <b>Comment:</b> This condition became obsolete on September 28, 2006.</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><b>CDM:</b> N/A <b>Comment:</b> 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. This condition became obsolete on September 28, 2006.</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><b>CDM:</b> N/A <b>Comment:</b> 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. This condition became obsolete on September 28, 2006.</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><b>CDM:</b> The Environmental Release Summary electronic system maintains record data from stack and ambient air monitors. Annual reporting is provided in DOE/RL-2007-01, Rev. 0, "Radionuclide Air Emissions Report for the Hanford Site, Calendar Year 2006." <b>Comment:</b> The annual report is scheduled for submittal by June 30, 2007. This condition became obsolete September 28, 2006.</p>
<p>The facility shall report all measured or calculated emissions annually (WAC 246-247-080(3)).</p>	<p>Continuous</p>	<p><b>CDM:</b> Input to DOE/RL-2007-01, Rev. 0, "Radionuclide Air Emissions Report for the Hanford Site, Calendar Year 2006." <b>Comment:</b> This condition became obsolete September 28, 2006.</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><b>CDM:</b> N/A <b>Comment:</b> 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. This condition became obsolete September 28, 2006.</p>

Requirement	Compliance Status	Compliance Determination Method
<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><b>CDM:</b> Recordkeeping was maintained in compliance with HNF-3444, "324/327 Facilities Environmental Effluent Specifications" through April 2006, and then WCH- HNF-3444, "324/327 Facilities Environmental Effluent Specifications" for the remainder of the certification period. Records were provided as required during inspections. <b>Comment:</b> This condition became obsolete September 28, 2006.</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>Continuous</p>	<p><b>CDM:</b> Access was provided as required for inspections. <b>Comment:</b> This condition became obsolete September 28, 2006.</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><b>CDM:</b> N/A <b>Comment:</b> 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. This condition became obsolete September 28, 2006.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The emission unit monitoring system shall have the following activities performed: Within two years of this approval: a. A visual check of nozzle position and orientation as well as measurements of nozzle openings; b. Checks to ensure the tightness of all fittings and connections as well as a leak test of the entire sampling system; and c. Visual inspections for corrosion, physical damage, or dust loading of the probe, sample lines, and monitoring system equipment. Annually starting within one year of this approval: d. A functional/calibration check of monitoring system instrumentation shall be performed; e. The USDOE shall provide to WDOH for review copies of the procedures used to perform the above activities.</p>	<p>Continuous</p>	<p><b>CDM:</b> Required checks/inspections documented in work packages as confirmed through inquiry with the cognizant engineer. Applicable procedures/work packages were provided for WDOH review during annual WDOH inspection of EP 327 01-S. <b>Comment:</b> This condition became obsolete September 28, 2006.</p>
<p>The facility must notify the department to downgrade the EP-327-01-S to a minor stack and obsolete any approval conditions, as appropriate.</p>	<p>Not Applicable</p>	<p><b>CDM:</b> N/A <b>Comment:</b> There was no change in stack status during the compliance period, as confirmed through inquiry with the cognizant engineer. This condition became obsolete September 28, 2006.</p>
<p>When a tanker truck is used to load out spent decontamination solutions, displaced air from the tanker trucks would be routed back to the Zone I or Zone II exhaust systems.</p>	<p>Not Applicable</p>	<p><b>CDM:</b> N/A <b>Comment:</b> This activity was not performed during the compliance period, as confirmed through inquiry with the cognizant engineer. This condition became obsolete on September 28, 2006.</p>
<p>After decontamination work is completed in a given area, the duct work for that area must be decontaminated, removed or isolated. After sufficient decontamination work has been done upstream of the associated HEPA filters or control devices, the control devices may be removed or isolated following approval by the department.</p>	<p>Not Applicable</p>	<p><b>CDM:</b> N/A <b>Comment:</b> This activity not performed during the compliance period, as confirmed through inquiry with the cognizant engineer. This condition became obsolete on September 28, 2006.</p>
<p>The APQ for Am-241 conservatively represents all alpha emitting isotopes.</p>	<p>Continuous</p>	<p><b>CDM:</b> The isotopes of concern have not changed, and Am-241 still conservatively represents all alpha-emitting isotopes, as confirmed through inquiry with the cognizant engineer. <b>Comment:</b> This condition became obsolete on September 28, 2006.</p>

Requirement	Compliance Status	Compliance Determination Method
The APQs for Cs-137, Sr-90, and Co-60 shall conservatively represent all beta/gamma emitting isotopes.	Continuous	<b>CDM:</b> The isotopes of concern have not changed, and Cs-137, Sr-90, and Co-60 still conservatively represent all beta/gamma-emitting isotopes, as confirmed through inquiry with the cognizant engineer. <b>Comment:</b> This condition became obsolete on September 28, 2006.
Total emissions from the EP-327-01-S shall not exceed 2.5e+2 mrem/yr unabated and 8.6E-2 mrem/year abated.	Continuous	<b>CDM:</b> Abated emissions are reported in DOE/RL-2007-01, Rev. 0, "Radionuclide Air Emissions Report for the Hanford Site, Calendar Year 2006." Release information for unabated emissions has not increased, and has effectively decreased as deactivation activities remove material from the facility, as confirmed through inquiry with the cognizant engineer. <b>Comment:</b> The annual report is scheduled for submittal by June 30, 2007. This condition became obsolete on September 28, 2006.

EP-329-01-S Chemical Sciences Laboratory  
WDOH Emission Unit ID : 366  
Page in AOP : H-1026

Requirement	Compliance Status	Compliance Determination Method
<b>Zone or Area :</b> <b>Abatement Technology :</b> Fan <b>Required Units :</b> 2 <b>Add'l Description:</b> 2 in parallel, 1 Standby (3 total)	Continuous	<b>CDM:</b> Records review / Personnel interview <b>Comment:</b> Reviewed 2006 Exhaust Fan PM Results (PM-41021, 41022, & 43710) and confirmed with Building Engineer.
<b>Zone or Area :</b> <b>Abatement Technology :</b> HEPA <b>Required Units :</b> 2 <b>Add'l Description:</b> In series, (System includes up to 5 banks of 2 stages of HEPA filters in series, minimum of 1 bank of 2 testable filters in use)	Continuous	<b>CDM:</b> Records review / Personnel interview <b>Comment:</b> Reviewed 2006 HEPA Filter PM results (PM-55120) & confirmed with Building Engineer.

Requirement	Compliance Status	Compliance Determination Method
<p><b>Required Sampling:</b> Record Sample  <b>Sampling Frequency:</b> 2 week sample/year  <b>Radionuclide Requiring Measurement:</b> TOTAL ALPHA  TOTAL BETA</p>	Continuous	<p><b>CDM:</b> Records review.  <b>Comment:</b> Emission data is maintained in the Gaseous Emission Database (GED). A query of the database confirms all required samples were collected during the reporting period, including the start and end dates of sample periods.</p>
<p><b>Federal and State Regulatory Requirement:</b> 40 CFR 61.93(b)(4)(i) &amp; WAC 246-247-075(3)  <b>Permit Monitoring and Testing Procedure:</b> 40 CFR 61, Appendix B, Method 114(3) [see AIR 05-303 for clarification details]</p>	Continuous	<p><b>CDM:</b> Records review.  <b>Comment:</b> The "Pacific Northwest National Laboratory Effluent Management Quality Assurance Plan" (EM-QA-01) specifies quality assurance requirements.</p>
<p align="center"><b>Permit:</b> AIR 04-407 <b>Issue Date:</b>04-20-04 <b>Effective Date:</b>05-18-04 <b>Obsolete Date:</b> 07-05-06  <b>NOC:</b> Operation of Research Activities Conducted in the Chemical Sciences Laboratory (329 Building)  <b>WDOH NOC ID:</b> 584 <b>Date In AOP:</b> 04-11-05 <b>Page in AOP:</b> H-1026</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><b>CDM:</b> Compliance Review of Approval Conditions  <b>Comment:</b> For this reporting period, in compliance with all approval conditions.</p>
<p>The total abated emission limit for this Notice of Construction is limited to 9.35E-03 mrem/year to the Maximally Exposed Individual (WAC 246-247-040(5)).</p>	Continuous	<p><b>CDM:</b> Records Review  <b>Comment:</b> The radionuclide air emissions data for calendar year 2006 was reviewed to verify the abated emissions for the 329 Building were below the NOC limits.</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. Research activities conducted in the 329 Building support the Hanford environmental mission and other key DOE missions of national and international importance. Research activities are performed on both radioactive and non-radioactive samples. The following processes are allowed to be performed in the 329 Building: - Development of special purpose radiation detection and sampling/analysis systems. - Development of electronics and software to enhance radiation detector performance. - Radiation detection equipment used for radioisotope quantification that may involve chemical separations. - Solid, liquid, and gas sample (both radioactive and non-radioactive) analysis in specialized laboratories. - Wet chemistry techniques and the operation of specialized analytical instrumentation such as mass spectrometers, organic mass spectrometers, and inductively coupled plasma spectrometers. - Separations and analyses of radionuclides and samples containing radionuclides. - Preparation of radioactive standards (solid, liquid, and gas). - Characterizing chemical,</p>	Continuous	<p><b>CDM:</b> Records Review  <b>Comment:</b> Under the PNNL Standards Based Management System (SBMS) each new research project is required to be reviewed via the Electronic Prep &amp; Risk assessment process. The reviews are recorded in the EPR database. Facility changes are required to be reviewed via the SBMS Subject Area for Engineering Calculations, Drawings and Specifications, Creating and Modifying.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>radiochemical, and physical properties of samples (e.g., tank wastes, spent fuel, contaminated soils and water), as well as other gaseous materials, glass, ceramic, carbonaceous, or metallic waste forms. - Performing research using high-level and low-level mixed tank wastes and their simulants to test radiochemical process systems such as leaching, solvent extraction, ion exchange, vitrification, fuel dissolution, decontamination, evaporation, grouting, solid waste packaging/shipment, and high-level liquid waste shipping/receiving/transportation. - Performing research and development for processing and immobilization support including waste separation, ion exchange, sludge washing/leaching, ultra filtration, oxidation/precipitation, species separation, immobilization, and characterization. - Using a full suite of analytical capabilities for radiochemical and inorganic chemical analyses in support of process development, specializing in the analysis of highly radioactive materials and very complex sample matrices. - Developing methods for the separation of radioisotopes. - Glove box work and storage of higher activity materials in shielded storage areas. - Developing and testing radioisotope generators. - Conducting Non-Destructive Analysis (NDA). - Processes involving the creation of mixed activation products (MAP) and mixed fission products (MFP), separation, analysis and research. - Developing thermal and vitrification processes to immobilize hazardous and radioactive materials into acceptable waste forms. Waste processing technology development includes design, process development, remote operations, and numerical and computational modeling. - Providing chemical and physical separations in support of radiological and hazardous material processing and disposal requirements. These technologies include: removal and concentration of hazardous and/or radioactive components for environmental remediation; separation of hazardous and/or radioactive materials, including solid/liquid phase separations; and, recovery of specific components for recycle and reuse. - Separations and analyses of radionuclides for environmental measurements. - Sampling and analysis of environmental samples including soils, vegetation and water/liquids; decommissioning materials; and tank wastes. - Performing research with supercritical fluids to understand chemistry mechanisms and processes. - Lab setup projects involving fume hood removals/upgrades and ductwork tie-in.</p>		<p>Projects with potential air emissions are reviewed by Effluent Management (EM) under the SBMS Airborne Emission Subject Area, and the records retained by EM.</p>
<p>The PTE for this project as determined under WAC 246-247-030(21)(a-e) [as specified in the application] is 4.34E-02 mrem/year. Approved are the associated potential release rates (Curies/year) of: Alpha 0 5.60E-06 Liquid/Particulate Solid WAC 246-247-030(21)(a) Alpha release rate based on Am-241. B/G 0 9.20E-03 Liquid/Particulate Solid WAC 246-247-030(21)(a) Beta/Gamma release rate based on Sr-90 and Cs-137. The radioactive isotopes identified for this emission unit are (no quantities specified): Ac 225 Ac 227 Ac 228 Ag 108 m Ag 108 Ag 109 m Ag 110 m Ag 110 Ag 111 Al 26 Am 241 Am 242 m Am 242 Am 243 Am 245 Ar 37 Ar 39 Ar 41 Ar 42 As 74 As 76 At 217 Au 195 Au 198 Ba 131 Ba 133 Ba 133 m Ba 137 m Ba 139 Ba 140 Ba 141 Ba 142 Be 10 Be 7 Bi 207 Bi 210 Bi 211 Bi 212 Bi 213 Bi 214 Bk 249 Bk 250 Br 82 Br 83 Br 84 Br 85 C 11 C 14 C 15 Ca 41 Ca 45 Ca 47 Cd 109 Cd 113 m Cd 113 Cd 115 m Cd 115 Ce 139 Ce 141 Ce 142 Ce 143 Ce 144 Cf 249 Cf 250 Cf 251 Cf 252 Cl 36 Cm 241 Cm 242 Cm 243 Cm 244 Cm 245 Cm 246 Cm 247 Cm 248 Co 56 Co 57 Co 58 Co 60 Cr 51 Cs 131 Cs 134 Cs 134 m Cs 135 Cs 136 Cs 137 Cs 138 Cs 139 Cu 64 Es 254 Eu 150 Eu 152 Eu 152 m Eu 154 Eu 155 Eu 156 Eu 157 F 18 Fe 55 Fe 59 Fr 221 Fr 223 Ga 67 Ga 72 Gd 148 Gd 149 Gd 151 Gd 152 Gd 153 Ge 68 H 3 Hf 175 Hf 178 Hf 178 m Hf 181 Hf 182 Hg 203 Ho 166 Ho 166 m I 122 I 123 I 125 I 129 I 130 I 131 I 132 I 133 I 134 I 135 In 106 In 113 m In 114 m In 114 In 115 In 115 m Ir 192 K 40 K 42 Kr 81 Kr 83 m Kr 85 Kr 85 m Kr 87 Kr 88 Kr 89 Kr 90 La 138 La 140 La 141 La 142 Lu 177 Mn 52 Mn 54 Mn 56 Mo 93 Mo 99 N 13 Na 22 Na 24 Nb 91 Nb 91 m Nb 92 Nb 93 m Nb 94 Nb 95 Nb 95 m Nb 97 Nb 97 m Nd 144 Nd 147 Ni 56 Ni 59 Ni 63 Ni 65 Np 235 Np 236 Np 237 Np 238 Np 239 Np 240 Np 240 m O 15 P 32 P 33 Pa 231 Pa 233 Pa 234 Pa 234 m Pb 209 Pb 210 Pb 211 Pb 212 Pb 214 Pd 107 Pd 109 Pm 145 Pm 146 Pm 147 Pm 148 m Pm 148 Pm 149 Pm 151 Po 208 Po 209 Po 210 Po 211 Po 212 Po 213 Po 214 Po 215 Po 216 Po 218 Pr 143 Pr 144 Pr 144 m Pu 234 Pu 236 Pu 237 Pu 238 Pu 239 Pu 240 Pu 241 Pu 242 Pu 243 Pu 244 Ra 223 Ra 224 Ra 225 Ra 226 Ra 228 Rb 86 Rb 87 Rb 88 Rb 89 Rb 90 Rb 90 m Re 186 Re 187 Re 188 Rh 102 Rh 103 m Rh 105 Rh 105 m Rh 106 Rn 219 Rn 220 Rn 222 Ru 103 Ru 105 Ru</p>	<p>Continuous</p>	<p><b>CDM: Records Review</b> <b>Comment:</b> Reviewed the 2006 NESHAPs radionuclide inventory and emission data. For 2006, short lived MFP/MAP identified as Cs-137 in the permit application includes Cs-132, Dy-165, Er-169, Er-171, Sb-129, Sn-177m, Sn-121, Sr-87m, Tb-161, and Zr-97.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>106 Ru 97 S 35 Sb 124 Sb 125 Sb 126 Sb 126 m Sb 127 Sc 46 Sc 47 Se 75 Se 79 Sm 145 Sm 146 Sm 147 Sm 151 Sm 153 Sm 157 Sn 113 Sn 119 m Sn 121 m Sn 123 Sn 125 Sn 126 Sr 85 Sr 89 Sr 90 Sr 91 Sr 92 Ta 179 Ta 182 Ta 183 Tb 160 Tc 101 Tc 95 m Tc 97 Tc 97 m Tc 98 Tc 99 Tc 99 m Tc 121 m Tc 121 Te 123 Te 123 m Te 125 m Te 127 m Te 127 Te 129 m Te 129 Te 131 Te 131 m Te 132 Te 133 Te 133 m Te 134 Th 227 Th 228 Th 229 Th 230 Th 231 Th 232 Th 233 Th 234 Ti 44 Tl 204 Tl 207 Tl 208 Tl 209 Tm 170 Tm 171 U 232 U 233 U 234 U 235 U 236 U 237 U 238 U 239 U 240 V 48 V 49 W 181 W 185 W 187 W 188 Xe 122 Xe 123 Xe 125 Xe 127 Xe 131 m Xe 133 Xe 133 m Xe 135 Xe 135 m Xe 137 Xe 138 Y 88 Y 90 Y 90 m Y 91 Y 91 m Y 92 Y 93 Yb 164 Yb 175 Yb 177 Zn 65 Zn 69 Zn 69 m Zr 88 Zr 89 Zr 93 Zr 95</p> <p>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>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><b>CDM:</b> N/A <b>Comment:</b> Ecology and Health 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><b>CDM:</b> N/A <b>Comment:</b> 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><b>CDM:</b> Records Review <b>Comment:</b> PNNL's Rad Air monitoring program is conducted under the Effluent Management Quality Assurance Plan, EM-QA-01. This plan is based on the requirements of 40 CFR 61, Appendix B, Method 114.</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><b>CDM:</b> N/A <b>Comment:</b> Ecology and Health 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><b>CDM:</b> Records Review <b>Comment:</b> Use and Maintenance: RCTs are responsible for the collection of samples and operating monitoring equipment. These personnel are trained to procedures (located on the Effluent Management web page) for these activities. Evidence of training to these procedures is maintained with the Laboratory Training group. Air Balance personnel are responsible for the efficiency testing and replacement of HEPA filters. This testing is performed in accordance with Air Balance procedures located on the F&amp;O web page. Evidence of training to these procedures is maintained with the Laboratory Training group. Emergency Response: The Emergency Preparedness group trains the building emergency directors (BEDs) via PNNL courses 402, 403, and 404. Under each BED is a response organization (BERO), these personnel are trained under course 405. Training records are maintained with Laboratory Training. Emergency preparedness exercises are conducted on a scheduled basis to evaluate performance. Evaluations are maintained with the EP group.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>The facility must be able to demonstrate the reliability and accuracy of radioactive air emissions monitoring data (WAC 246-247-075(13)).</p>	<p>Continuous</p>	<p><b>CDM:</b> Records Review  <b>Comment:</b> Data collected through support organizations is coordinated through statements of work (SOWs) that outline project expectations for collection and reporting of data:            • Airborne Radionuclide Emission Sample Analysis Statement of Work (Sample analysis) • Airborne Radionuclide Emission Sampler and Monitor Operations Statement of Work (Collection of samples, daily inspections, and delivery to laboratory) • Effluent Sampling and Monitoring Support-Memorandum of Agreement (performance of stack flow measurements and maintenance of equipment) Memorandum of Agreement for Calibration Services (Calibration of rotameters and vacuum gauges)            Note: All of these documents are maintained on the EM web page.</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><b>CDM:</b> N/A  <b>Comment:</b> Ecology and Health 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 in ALARACT demonstration at any time (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p><b>CDM:</b> N/A  <b>Comment:</b> Ecology and Health 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>

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><b>CDM:</b> Records Review <b>Comment:</b> Retention period for Rad Air records is specified as part of the Effluent Management Quality Assurance Plan, EM-QA-01. Retention periods are further documented in the EM project files under the Records Inventory and Disposal Schedule (RIDS).</p>
<p>The facility shall report all measured or calculated emissions annually (WAC 246-247-080(3)).</p>	<p>Continuous</p>	<p><b>CDM:</b> Records Review <b>Comment:</b> Emissions are included in the Radionuclide Air Emissions Report for the Hanford Site</p>
<p>The facility shall report to 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 license requirements. (WAC 246-247-080(5)).</p>	<p>Continuous</p>	<p><b>CDM:</b> Records Review <b>Comment:</b> No such reports were necessary. Reviewed the Hanford Site Air Operating Permit Semiannual Reports for Periods January 1, 2006 through June 30, 2006, and July 1, 2006 through December 31, 2006.</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(8)).</p>	<p>Not Applicable</p>	<p><b>CDM:</b> N/A <b>Comment:</b> Ecology and Health 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><b>CDM:</b> Operational Procedure <b>Comment:</b> Retention period is specified in the Effluent Management Quality Assurance Plan (EM-QA-01) and also identified in the EM Records Inventory and Disposal Schedule (RIDS).</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><b>CDM:</b> Records Review <b>Comment:</b> Implementation of the "Memorandum of Understanding for Initial Point-of-Contact Activities Supporting Regulatory Agency Environmental Inspection", dated July 2001. The MOU defines, at a site-wide level, the roles and responsibilities for regulator access to the Hanford Site. SBMS subject area for Audits and Inspections by Regulatory and Oversight Agencies further defines the roles and responsibilities at a contractor level for hosting, conducting, and documenting external regulatory inspections.</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><b>CDM:</b> Records Review <b>Comment:</b> WDOH did not request any records during the reporting period for this project.</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(9)).</p>	<p>Not Applicable</p>	<p><b>CDM:</b> N/A <b>Comment:</b> Ecology and Health 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>

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><b>CDM:</b> N/A <b>Comment:</b> Ecology and Health 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><b>CDM:</b> N/A <b>Comment:</b> Ecology and Health 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 emission unit monitoring system shall have the following activities performed: a. The USDOE shall make available to DOH for review copies of the procedures used to perform the functional/calibration checks and visual inspection activities; and b. A functional/calibration check of monitoring system instrumentation shall be performed annually. Within two years of this approval, AIR 04-407, dated April 20, 2004: c. A visual check of nozzle position and orientation d. A check to ensure the tightness of all fittings and connections; e. A visual check of the sample line, around the area of the sample filter, for corrosion and line losses. This requirement is limited to the sample filter area only.</p>	<p>Continuous</p>	<p><b>CDM:</b> Records Review <b>Comment:</b> Monitoring system checks are completed during sampling events. Conditions c, d, and e were due by April 20, 2006 and were completed on 9/1/2004.</p>

EP-3730-01-S  
WDOH Emission Unit ID : 417  
Page in AOP : 2-179

Requirement	Compliance Status	Compliance Determination Method
<b>Zone or Area :</b> <b>Abatement Technology :</b> Fan <b>Required Units :</b> 1 <b>Add'l Description:</b>	Continuous	<b>CDM:</b> Personnel interview/records review <b>Comment:</b> Reviewed 2006 Exhaust Fan PM results (PM-41471) & confirmed with Building Manager.
<b>Zone or Area :</b> <b>Abatement Technology :</b> HEPA <b>Required Units :</b> 2 <b>Add'l Description:</b> In series	Continuous	<b>CDM:</b> Personnel interview/records review <b>Comment:</b> Reviewed 2006 HEPA Filter PM Results (PM-55190) & confirmed with Building Manager.
<b>Required Sampling:</b> Record Sample <b>Sampling Frequency:</b> 2 week sample/year <b>Radionuclide Requiring Measurement:</b> TOTAL ALPHA TOTAL BETA	Continuous	<b>CDM:</b> Records review <b>Comment:</b> Emission data is maintained in the Gaseous Emission Database (GED). A query of the database confirmed all required samples were collected during the reporting period, including the start and end dates of sample periods.
<b>Federal and State Regulatory Requirement:</b> 40 CFR 61.93(b)(4)(i) WAC 246-247-075(3) <b>Permit Monitoring and Testing Procedure:</b> 40 CFR 61, Appendix B, Method 114(3)	Continuous	<b>CDM:</b> Records review <b>Comment:</b> The "Pacific Northwest National Laboratory Effluent Management Quality Assurance Plan" (EM-QA-01) specifies quality assurance requirements.
No active NOC approvals in the AOP for this certification period.		

P-340DECON-001  
WDOH Emission Unit ID : 422  
Page in AOP : 2-177

Requirement	Compliance Status	Compliance Determination Method
<b>Zone or Area :</b> <b>Abatement Technology :</b> Moisture separator <b>Required Units :</b> 1 <b>Add'l Description:</b> Serves the decon sump	Continuous	<b>CDM:</b> As-built drawings. <b>Comment:</b> H-3-34188.
<b>Zone or Area :</b> <b>Abatement Technology :</b> Fan <b>Required Units :</b> 1 <b>Add'l Description:</b>	Continuous	<b>CDM:</b> As-built drawings. <b>Comment:</b> H-3-34188.

Requirement	Compliance Status	Compliance Determination Method
<b>Zone or Area :</b> <b>Abatement Technology :</b> HEPA <b>Required Units :</b> 2 <b>Add'l Description:</b> In series, both HEPA filters are tested as a single unit	Continuous	<b>CDM:</b> As-built drawings. <b>Comment:</b> H-3-34188.
<b>Zone or Area :</b> <b>Abatement Technology :</b> Prefilter <b>Required Units :</b> 1 <b>Add'l Description:</b> 3 in parallel, Change Room doesn't pass through prefilter	Continuous	<b>CDM:</b> As-built drawings. <b>Comment:</b> H-3-34188.
<b>Required Sampling:</b> Record Sample <b>Sampling Frequency:</b> 4 weeks/year <b>Radionuclide Requiring Measurement:</b> TOTAL ALPHA TOTAL BETA	Continuous	<b>CDM:</b> Sampling is verified by information in ABCASH. 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. The "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions" (HNF-EP-0528) specifies the QA requirements. <b>Comment:</b>
<b>Federal and State Regulatory Requirement:</b> 40 CFR 61.93[b][4][i] WAC 246-247-075[3] <b>Permit Monitoring and Testing Procedure:</b> Appendix B, Method 114(3)	Continuous	<b>CDM:</b> 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. <b>Comment:</b>
No active NOC approvals in the AOP for this certification period.		

P-437-002  
WDOH Emission Unit ID : 399  
Page in AOP : 2-183

Requirement	Compliance Status	Compliance Determination Method
<b>Zone or Area :</b> <b>Abatement Technology :</b> Fan <b>Required Units :</b> 1 <b>Add'l Description:</b> Intermittent operation	Continuous	<b>CDM:</b> Verified by visual inspection and discussions with the Cognizant Engineer that the system has not been changed and is the same as the As-Built drawing. <b>Comment:</b>
<b>Zone or Area :</b> <b>Abatement Technology :</b> HEPA <b>Required Units :</b> 1 <b>Add'l Description:</b> 16 Parallel flow paths, each path provides 1 prefilter minimum of 1 in operation; intermittent operation	Continuous	<b>CDM:</b> Verified by visual inspection and discussions with the Cognizant Engineer that the system has not been changed and is the same as the As-Built drawing. <b>Comment:</b>
<b>Zone or Area :</b> <b>Abatement Technology :</b> Prefilter <b>Required Units :</b> 1 <b>Add'l Description:</b> 16 Parallel flow paths, each path provides 1 prefilter minimum of 1 in operation intermittent operation	Continuous	<b>CDM:</b> Verified by visual inspection and discussions with the Cognizant Engineer that the system has not been changed and is the same as the As-Built drawing. <b>Comment:</b>
<b>Required Sampling:</b> Record Sample <b>Sampling Frequency:</b> 4 week sample/ year <b>Radionuclide Requiring Measurement:</b> TOTAL ALPHA TOTAL BETA	Continuous	<b>CDM:</b> Sampling is verified by information in ABCASH. 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. The "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions" (HNF-EP-0528) specifies the quality assurance requirements. <b>Comment:</b>
<b>Federal and State Regulatory Requirement:</b> 40 CFR 61.93 (b)(4)(i) & WAC 246-247-075(3) <b>Permit Monitoring and Testing Procedure:</b> 40 CFR 61, Appendix B, Method 114(3)	Continuous	<b>CDM:</b> 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. <b>Comment:</b>
No active NOC approvals in the AOP for this certification period.		

P-437MN&ST-001  
WDOH Emission Unit ID : 385  
Page in AOP : 2-184

Requirement	Compliance Status	Compliance Determination Method
<b>Zone or Area :</b> Contaminated Equipment Repair Area <b>Abatement Technology :</b> HEPA <b>Required Units :</b> 1 <b>Add'l Description:</b> 2 in parallel	Continuous	<b>CDM:</b> Verified by visual inspection and discussions with the Cognizant Engineer that the system has not been changed and is the same as the As-Built drawing. <b>Comment:</b>
<b>Zone or Area :</b> Contaminated Equipment Repair Area <b>Abatement Technology :</b> Prefilter <b>Required Units :</b> 1 <b>Add'l Description:</b>	Continuous	<b>CDM:</b> Verified by visual inspection and discussions with the Cognizant Engineer that the system has not been changed and is the same as the As-Built drawing. <b>Comment:</b>
<b>Zone or Area :</b> Waste Tank 1 & 2 Vents <b>Abatement Technology :</b> HEPA <b>Required Units :</b> 1 <b>Add'l Description:</b> 1 stage with 2 parallel flowpaths	Continuous	<b>CDM:</b> Verified by visual inspection and discussions with the Cognizant Engineer that the system has not been changed and is the same as the As-Built drawing. <b>Comment:</b>
<b>Zone or Area :</b> Radiological Waste Tank Room Ventilation <b>Abatement Technology :</b> HEPA <b>Required Units :</b> 1 <b>Add'l Description:</b>	Continuous	<b>CDM:</b> Verified by visual inspection and discussions with the Cognizant Engineer that the system has not been changed and is the same as the As-Built drawing. <b>Comment:</b>
<b>Zone or Area :</b> Radiological Waste Tank Room Ventilation <b>Abatement Technology :</b> Prefilter <b>Required Units :</b> 1 <b>Add'l Description:</b>	Continuous	<b>CDM:</b> Verified by visual inspection and discussions with the Cognizant Engineer that the system has not been changed and is the same as the As-Built drawing. <b>Comment:</b>
<b>Zone or Area :</b> Liquid Radioactive Waste Loadout Facility Ventilation <b>Abatement Technology :</b> HEPA <b>Required Units :</b> 1 <b>Add'l Description:</b>	Continuous	<b>CDM:</b> Verified by visual inspection and discussions with the Cognizant Engineer that the system has not been changed and is the same as the As-Built drawing. <b>Comment:</b>
<b>Zone or Area :</b> Liquid Radioactive Waste Loadout Facility Ventilation <b>Abatement Technology :</b> Prefilter <b>Required Units :</b> 1 <b>Add'l Description:</b>	Continuous	<b>CDM:</b> Verified by visual inspection and discussions with the Cognizant Engineer that the system has not been changed and is the same as the As-Built drawing. <b>Comment:</b>
<b>Zone or Area :</b> Decon 1 & 2 <b>Abatement Technology :</b> HEPA	Continuous	<b>CDM:</b> Verified by visual inspection and discussions with the Cognizant

Requirement	Compliance Status	Compliance Determination Method
<b>Required Units : 1</b> <b>Add'l Description:</b> 2 parallel flow paths, minimum of one HEPA operational		Engineer that the system has not been changed and is the same as the As-Built drawing. <b>Comment:</b>
<b>Zone or Area :</b> Shipping Cask Maintenance and Decon Glove Box <b>Abatement Technology :</b> HEPA <b>Required Units : 1</b> <b>Add'l Description:</b> 2 parallel flow paths, minimum of one HEPA operational	Continuous	<b>CDM:</b> Verified by visual inspection and discussions with the Cognizant Engineer that the system has not been changed and is the same as the As-Built drawing. <b>Comment:</b>
<b>Zone or Area :</b> Shipping Cask Maintenance and Decon Glove Box <b>Abatement Technology :</b> Prefilter <b>Required Units : 1</b> <b>Add'l Description:</b>	Continuous	<b>CDM:</b> Verified by visual inspection and discussions with the Cognizant Engineer that the system has not been changed and is the same as the As-Built drawing. <b>Comment:</b>
<b>Zone or Area :</b> <b>Abatement Technology :</b> Fan <b>Required Units : 2</b> <b>Add'l Description:</b> In parallel, serves all MN&ST, intermittent use	Continuous	<b>CDM:</b> Verified by visual inspection and discussions with the Cognizant Engineer that the system has not been changed and is the same as the As-Built drawing. <b>Comment:</b>
<b>Required Sampling:</b> Record Sample <b>Sampling Frequency:</b> 4 week sample/ year <b>Radionuclide Requiring Measurement:</b> TOTAL ALPHA TOTAL BETA	Continuous	<b>CDM:</b> Sampling is verified by information in ABCASH. 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. The "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions" (HNF-EP-0528) specifies the quality assurance requirements. <b>Comment:</b>
<b>Federal and State Regulatory Requirement:</b> 40 CFR 61.93 (b)(4)(i) & WAC 246-247-075(3) <b>Permit Monitoring and Testing Procedure:</b> 40 CFR 61, Appendix B, Method 114(3)	Continuous	<b>CDM:</b> 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. <b>Comment:</b>
No active NOC approvals in the AOP for this certification period.		

P-FFTFCEBEX-001  
WDOH Emission Unit ID : 397  
Page in AOP : 2-187

Requirement	Compliance Status	Compliance Determination Method
<b>Zone or Area :</b> Access Control Area Process <b>Abatement Technology :</b> Fan <b>Required Units :</b> 2 <b>Add'l Description:</b> 2 in parallel, one leg has 2 in series, intermittent use	Continuous	<b>CDM:</b> Verified by visual inspection and discussions with the Cognizant Engineer that the system has not been changed and is the same as the As-Built drawing. <b>Comment:</b>
<b>Zone or Area :</b> Access Control Area Process <b>Abatement Technology :</b> HEPA <b>Required Units :</b> 1 <b>Add'l Description:</b> Backup	Continuous	<b>CDM:</b> Verified by visual inspection and discussions with the Cognizant Engineer that the system has not been changed and is the same as the As-Built drawing. <b>Comment:</b>
<b>Zone or Area :</b> Access Control Area Process Operations <b>Abatement Technology :</b> Prefilter <b>Required Units :</b> 1 <b>Add'l Description:</b> Backup	Continuous	<b>CDM:</b> Verified by visual inspection and discussions with the Cognizant Engineer that the system has not been changed and is the same as the As-Built drawing. <b>Comment:</b>
<b>Zone or Area :</b> Bldg 405 Process Operations <b>Abatement Technology :</b> Fan <b>Required Units :</b> 2 <b>Add'l Description:</b> In parallel (intermittent use)	Continuous	<b>CDM:</b> Verified by visual inspection and discussions with the Cognizant Engineer that the system has not been changed and is the same as the As-Built drawing. <b>Comment:</b>
<b>Zone or Area :</b> Bldg 405 Process Operations <b>Abatement Technology :</b> HEPA <b>Required Units :</b> 1 <b>Add'l Description:</b> Backup	Continuous	<b>CDM:</b> Verified by visual inspection and discussions with the Cognizant Engineer that the system has not been changed and is the same as the As-Built drawing. <b>Comment:</b>
<b>Zone or Area :</b> Bldg 405 Process Operations <b>Abatement Technology :</b> Prefilter <b>Required Units :</b> 1 <b>Add'l Description:</b> Backup	Continuous	<b>CDM:</b> Verified by visual inspection and discussions with the Cognizant Engineer that the system has not been changed and is the same as the As-Built drawing. <b>Comment:</b>

Requirement	Compliance Status	Compliance Determination Method
<p><b>Required Sampling:</b> Record Sample  <b>Sampling Frequency:</b> 4 week sample/ year  <b>Radionuclide Requiring Measurement:</b> TOTAL ALPHA  TOTAL BETA Tritium</p>	Continuous	<p><b>CDM:</b> Sampling is verified by information in ABCASH. 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. The "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions" (HNF-EP-0528) specifies the quality assurance requirements.  <b>Comment:</b></p>
<p><b>Federal and State Regulatory Requirement:</b> 40 CFR 61.93 (b)(4)(i) &amp; WAC 246-247-075(3)  <b>Permit Monitoring and Testing Procedure:</b> 40 CFR 61, Appendix B, Method 114(3)</p>	Continuous	<p><b>CDM:</b> 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.  <b>Comment:</b></p>
No active NOC approvals in the AOP for this certification period.		

P-FFTFHTTR-001  
WDOH Emission Unit ID : 396  
Page in AOP : 2-188

Requirement	Compliance Status	Compliance Determination Method
<p><b>Zone or Area :</b>  <b>Abatement Technology :</b> Fan  <b>Required Units :</b> 2  <b>Add'l Description:</b> In parallel, intermittent use</p>	Continuous	<p><b>CDM:</b> Verified by visual inspection and discussions with the Cognizant Engineer that the system has not been changed and is the same as the As-Built drawing.  <b>Comment:</b></p>
<p><b>Zone or Area :</b>  <b>Abatement Technology :</b> Fan (Booster)  <b>Required Units :</b> 1  <b>Add'l Description:</b> Backup</p>	Continuous	<p><b>CDM:</b> Verified by visual inspection and discussions with the Cognizant Engineer that the system has not been changed and is the same as the As-Built drawing.  <b>Comment:</b></p>

Requirement	Compliance Status	Compliance Determination Method
<p><b>Zone or Area :</b>  <b>Abatement Technology :</b> HEPA  <b>Required Units :</b> 1  <b>Add'l Description:</b> Backup</p>	<p>Continuous</p>	<p><b>CDM:</b> Verified by visual inspection and discussions with the Cognizant Engineer that the system has not been changed and is the same as the As-Built drawing.  <b>Comment:</b></p>
<p><b>Zone or Area :</b>  <b>Abatement Technology :</b> Prefilter  <b>Required Units :</b> 1  <b>Add'l Description:</b> Backup</p>	<p>Continuous</p>	<p><b>CDM:</b> Verified by visual inspection and discussions with the Cognizant Engineer that the system has not been changed and is the same as the As-Built drawing.  <b>Comment:</b></p>
<p><b>Required Sampling:</b> Record Sample  <b>Sampling Frequency:</b> 4 week sample/ year  <b>Radionuclide Requiring Measurement:</b> TOTAL ALPHA  TOTAL BETA</p>	<p>Continuous</p>	<p><b>CDM:</b> Sampling is verified by information in ABCASH. 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. The "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions" (HNF-EP-0528) specifies the quality assurance requirements.  <b>Comment:</b></p>
<p><b>Federal and State Regulatory Requirement:</b> 40 CFR 61.93 (b)(4)(i) &amp; WAC 246-247-075(3)  <b>Permit Monitoring and Testing Procedure:</b> 40 CFR 61, Appendix B, Method 114(3)</p>	<p>Continuous</p>	<p><b>CDM:</b> 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.  <b>Comment:</b></p>
<p>No active NOC approvals in the AOP for this certification period.</p>		

P-FFTFRESB-001  
WDOH Emission Unit ID : 395  
Page in AOP : 2-189

Requirement	Compliance Status	Compliance Determination Method
<p><b>Zone or Area :</b> <b>Abatement Technology :</b> Fan <b>Required Units :</b> 1 <b>Add'l Description:</b> Intermittent use. No other controls.</p>	Continuous	<p><b>CDM:</b> Verified by visual inspection and discussions with the Cognizant Engineer that the system has not been changed and is the same as the As-Built drawing. <b>Comment:</b></p>
<p><b>Required Sampling:</b> Record Sample <b>Sampling Frequency:</b> 4 week sample/ year <b>Radionuclide Requiring Measurement:</b> TOTAL ALPHA TOTAL BETA</p>	Continuous	<p><b>CDM:</b> Sampling is verified by information in ABCASH. 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. The "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions" (HNF-EP-0528) specifies the quality assurance requirements. <b>Comment:</b></p>
<p><b>Federal and State Regulatory Requirement:</b> 40 CFR 61.93 (b)(4)(i) &amp; WAC 246-247-075(3) <b>Permit Monitoring and Testing Procedure:</b> 40 CFR 61, Appendix B, Method 114(3)</p>	Continuous	<p><b>CDM:</b> 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. <b>Comment:</b></p>
<p>No active NOC approvals in the AOP for this certification period.</p>		

Sodium Storage Facility  
WDOH Emission Unit ID : 398  
Page in AOP : H-0046

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.		
<b>Permit: AIR 02-1101 Issue Date: 11-26-02 Obsolete Date: 07-05-06</b> <b>NOC: Construction and Operation of Sodium Storage Facility</b> <b>WDOH NOC ID: 65 Date In AOP: 04-11-05 Page in AOP: H-0046</b>		
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	<b>CDM:</b> For this approval order, in compliance with all approval conditions. <b>Comment:</b>
The total abated emission limit for this Notice of Construction is limited to 1.60E-06 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 1.60E-06 mrem/year to the Maximally Exposed Individual (WAC 246-247-030(21)).	Continuous	<b>CDM:</b> The 1.6E-6 mrem/year number is based on the total FFTF sodium inventory. This number cannot be exceeded because there is no other source of sodium that can be added to the Sodium Storage Facility. <b>Comment:</b>
No activities, other than those explicitly described within this approval, shall be conducted without prior written approval. The approved activities are limited to: offloading approximately 984,100 liters of sodium from the FFTF to tank storage in the Sodium Storage Facility (SSF). Unused, carbon steel sodium tanks (three 302,800-liter tanks and one 196,800-liter tank) originally built for the Clinch River Breeder Reactor Plant shall be transported from their current location in the 300 Area and installed adjacent to the FFTF complex. Once the storage tanks are in place, a concrete building will be constructed around and over them to provide shielding and weather protection for the tanks and associated equipment. The sodium will be stored in a solid state, under an inert nitrogen or argon gas blanket. Sodium shall be transferred to the SSF in batches from several different sodium storage/drain vessels within the FFTF. Following the transfer, the sodium shall be allowed to solidify. Sodium transfers shall be accomplished in the following manner: 1. The receiving tank and interconnecting piping shall be preheated to between 150°C and 200°C by electric heaters. 2. When the proper temperatures have been established, the sodium shall be transferred from the supply tank to the receiving tank by establishing a differential pressure between the supply tank and receiving tank as needed to facilitate the	Continuous	<b>CDM:</b> The drain procedure is approved and complies with these conditions. Any changes that affect the method of sodium transfer will be approved by the FFTF ECO who is the responsible person for compliance with conditions and limitations of this NOC. A note has been placed in the work package to contact the FFTF ECO for approval of changes that may impact this NOC. <b>Comment:</b>

Requirement	Compliance Status	Compliance Determination Method
<p>transfer of sodium between the tanks. The supply tank shall be pressurized using the existing FFTF argon piping. The receiving tank in the SSF will be evacuated using a vacuum pump and a high-efficiency particulate air (HEPA) type process filter connected to the tanks at the tank vent line. 3. The gas system valves shall be operated as needed to maintain the covergas differential pressure and the sodium valves opened, allowing the sodium to flow from one tank to the other. The transfers will occur in batches, with more than one cycle needed to completely fill one SSF storage tank. The inert gas displaced from the tanks during the filling evolution shall be directed out the HEPA or HEPA type filtered exhaust paths. 4. After all the transfers for a tank are complete, the inert gas system shall be used to establish the desired cover gas pressure and the tank shall be allowed to cool to ambient temperature, allowing the sodium to solidify.</p>		
<p>The Annual Possession Quantity is limited to the following radionuclides (Curies/year): Cs 137 6.10E-02 H 3 9.60E+01 Na 22 1.20E+02 Pu 239 8.00E-04</p>	Continuous	<p><b>CDM:</b> These numbers are based on the activity of all the sodium that is at FFTF. Since no more activity can be added these numbers can not be exceeded. <b>Comment:</b></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><b>CDM:</b> These activities have been documented in FFTF Administrative Procedure A-7, "Environmental Specification Administration". <b>Comment:</b></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><b>CDM:</b> N/A <b>Comment:</b> 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 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>	Not Applicable	<p><b>CDM:</b> N/A <b>Comment:</b> No action required, this facility has no emission unit's controls, monitoring or containment systems.</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><b>CDM:</b> HNF-EP-0528 "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions". <b>Comment:</b></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><b>CDM:</b> N/A <b>Comment:</b> 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 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><b>CDM:</b> Training records are maintained in the (ITEM) system and is maintained current. <b>Comment:</b></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><b>CDM:</b> HNF-EP-0528 "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions". <b>Comment:</b></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><b>CDM:</b> N/A <b>Comment:</b> 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><b>CDM:</b> N/A <b>Comment:</b> 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><b>CDM:</b> Records are maintained in the FFTF Regulatory Compliance log book for the Sodium Storage Facility NOC. <b>Comment:</b></p>

Requirement	Compliance Status	Compliance Determination Method
<p>The facility shall report all measured or calculated emissions annually (WAC 246-247-080(3)).</p>	<p>Continuous</p>	<p><b>CDM:</b> Measured emissions are reported in the DOE/RL-2007-01 document, RADIONUCLIDE AIR EMISSIONS REPORT FOR THE HANFORD SITE, CALENDAR YEAR 2006. <b>Comment:</b></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>Not Applicable</p>	<p><b>CDM:</b> N/A <b>Comment:</b> No reports were required.</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><b>CDM:</b> N/A <b>Comment:</b> 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 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><b>CDM:</b> These records are maintained by FFTF Regulatory Compliance in the 4710 Building. <b>Comment:</b></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 this reporting period.</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>
<p>During the storage periods when no new sources are added to the SSF, the sodium shall be in a solid form after cooling. Radiological smear surveys of the facility and the near field monitoring program samplers, operated the Pacific Northwest National Laboratory shall provide periodic confirmatory measurement. This program has four samplers located around the 400 Area. Individual analytical results from each sampler 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: All required samples and smears have been taken as required. No changes have been made to the near-field ambient monitoring program. Comment:</p>
<p>During the periods when sodium transfers are performed, the estimated emissions from the SSF shall be calculated using the following method. Assumptions: The equivalent of one tank volume at standard temperature and pressure is evacuated after the initial contamination-free pump down. If the uncontaminated receiving tank is initially evacuated, it may provide a sufficient pressure drop to complete the sodium transfer with no release of contaminated gas; however, for purposes of providing a conservative estimate of potential emissions it is assumed an entire tank volume of contaminated cover gas is released to the atmosphere. The concentration of tritium in the primary sodium, conservatively assumed to fill three of the 302,800-liter tanks, is the same as historical concentrations of tritium in the reactor cover gas in 1992 (about <math>5 \times 10^{-5}</math> uCi/ml). The concentration of tritium in the secondary sodium (assumed to fill the 196,800 liter tank) is equal to the historical concentration of the secondary sodium cover gas in 1992 (about <math>4E-6</math> uCi/ml). The remaining 52,996 liters of secondary sodium will go to a 302,800 liter tank. The amount of tritium released during the fill of one tank with primary sodium would be: (Volume of sodium transferred in liters) (103 ml/liter) ( <math>5 E-5</math> uCi/ml) = Amount in uCi This shall be tracked via an approved log.</p>	<p>Continuous</p>	<p>CDM: Logs are maintained by FFTF Regulatory Compliance of all transfers of sodium to the Sodium Storage Facility. Comment:</p>

600 Area Diffuse/Fugitive  
WDOH Emission Unit ID : 504  
Page in AOP : H-0369

Requirement	Compliance Status	Compliance Determination Method
No active Abatement Controls in the AOP for this certification period.		
<p><b>Required Sampling:</b> Existing near-facility monitoring stations.</p> <p><b>Sampling Frequency:</b> As listed in the following Conditions and Limitations.</p> <p><b>Radionuclide Requiring Measurement:</b> All radionuclides which could contribute 10% of the potential EDE.</p>	Continuous	<p><b>CDM:</b> Required near-facility monitoring conducted as reported in DOE/RL-2007-01, "Radionuclide Air Emissions Report for the Hanford Site, Calendar Year 2006"</p> <p><b>Comment:</b></p>
<p><b>Federal and State Regulatory Requirement:</b> WAC 246-247-075(3)</p> <p><b>Permit Monitoring and Testing Procedure:</b> Appendix B, Method 114</p>	Continuous	<p><b>CDM:</b> Radiological surveys of waste containers and surrounding areas.</p> <p><b>Comment:</b> no detectable radiological contamination has been found</p>
<p><b>Permit:</b> AIR 02-1102    <b>Issue Date:</b> 11-26-02    <b>Obsolete Date:</b> 07-05-06  <b>NOC:</b> Use of Portable Tanks and Revised Source Term Description at WSCF  <b>WDOH NOC ID:</b> 451    <b>Date In AOP:</b> 04-11-05    <b>Page in AOP:</b> H-0369</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	<p><b>CDM:</b> The Facility uses FH procedures and facility specific procedures to comply with the requirements of the NOC.</p> <p><b>Comment:</b></p>
The total abated emission limit for this Notice of Construction is limited to 2.80E-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 1.40E-02 mrem/year to the Maximally Exposed Individual (WAC 246-247-030(21)).	Continuous	<p><b>CDM:</b> Radiological surveys of waste containers and surrounding areas</p> <p><b>Comment:</b> no detectable radiological contamination has been found</p>
No activities, other than those explicitly described within this approval, shall be conducted without prior written approval. The approved activities are limited to: * Analytical Laboratory Building (696-W-1) - Solid, liquid, and vapor samples contaminated with low levels of radioactive material are processed, on a bench-scale basis, in flume hoods or other controlled air spaces in the building. Evaporation and wet chemistry also are used to prepare samples for analysis. Low-level waste drums are filled inside the laboratory building and transferred either to the Solid Waste Storage Building (described as follows) or other approved facilities on the Hanford Site, or the low-level waste drums are moved to various locations with WSCF. * Radiochemistry Laboratory (696-W-2) - This is a below grade counting room in the Analytical Laboratory Building with a separately controlled airspace within the building. * Environmental Data/Computer Center (6270) - This is a non-radiological building and will not be addressed	Continuous	<p><b>CDM:</b> The mission of the WSCF laboratory has not changed since the NOC was issued</p> <p><b>Comment:</b></p>

Requirement	Compliance Status	Compliance Determination Method
<p>further. * Environmental Sample Archive Building (6267) - This building provides for controlled storage, indexing, categorizing and retrieval of low-level contaminated samples. Storage is provided for up to 2,500 samples requiring refrigerated storage and up to 11,500 samples requiring ambient storage. This building also provides for temporary storage of unvented drums or other low-level waste, packaged in accordance with applicable laboratory procedures. Less than 100 low-level waste packages are stored at any one time. * Mobile Laboratory Storage Facility (6269) - This structure houses up to five mobile laboratories and provides protection from adverse weather conditions for the instrumentation and computers inside the mobile laboratories. This area contains calibration laboratory instrumentation used in the mobile laboratories, and a sample preparation area for adding chemical buffers and preservatives to sample containers. This building provides temporary storage of drums, or other waste packages contained with low-levels of radioactive material. Less than 100 low-level waste packages are stored at any one time. * Solid Waste Storage Building (6265A) - This open-sided building shall provide for temporary storage of drums or other low-level waste packages. Less than 100 low-level waste packages are stored at any one time and will not be addressed further in this license, as these are unvented drums. * Contaminated Liquid Waste Retention Vault (6266A) - Consists of two 3,785 liter polyethylene tanks contained in a common concrete vault. The tanks are designed to receive low-level inorganic and radiologically contaminated liquid waste or sample excess from the analytical laboratory. The liquid routinely is transferred to an approved disposal facility on the Hanford Site using the portable tanker described as follows. This building also provides temporary storage of drums, or other waste packages contaminated with low-levels of radioactive material. Less than 100 low-level waste packages are stored at any one time. * Sample Equipment Cleaning Facility - This is a non-radiological building and will not be addressed further. * Portable Tanker(s) used for Wastewater Transport - Wastewater drums containing liquid waste contaminated with low-levels of radioactive material are stored temporarily at various locations within WSCF. In some cases, the contents of these drums are pumped into a portable tanker at the various locations for transport to other facilities. To accomplish the pumping, a small pump has its drop leg inserted into each drum through the bungbole or other opening, and flexible hose transfers the liquid to the tanker.</p>		
<p>The Annual Possession Quantity is limited to the following radionuclides (Curies/year): Alpha - 0 1.02 E+00 B/G - 0 2.11 E+01</p>	<p>Continuous</p>	<p><b>CDM:</b> WSCF keeps a running inventory of samples/radionuclides brought into the laboratory. <b>Comment:</b> The NOC was based on the sample volume in the laboratory. A running inventory is kept of samples coming into and leaving the laboratory to ensure radionuclide limits are met.</p>
<p>These Conditions and Limitations must be proceduralized and these procedures maintained for the lifetime of the facility.</p>	<p>Continuous</p>	<p><b>CDM:</b> Facility Specific procedures contain the NOC requirements. <b>Comment:</b></p>

Requirement	Compliance Status	Compliance Determination Method
<p>If the department finds that the emission unit described in this NOC is not in compliance with the standards in WAC 246-247-040 during operation (as described in the NOC) it reserves the right to require modifications to bring it into compliance (WAC 246-247-060(2)(d)).</p>	<p>Not Applicable</p>	<p><b>CDM:</b> N/A <b>Comment:</b> 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>Continuous</p>	<p><b>CDM:</b> HNF procedures <b>Comment:</b></p>
<p>The U.S. DOE shall monitor this emission unit as follows: Periodic radiological surveys of swipes or surfaces associated with 6265A, 6269, 6267, and 6266A must be conducted to verify compliance.</p>	<p>Continuous</p>	<p><b>CDM:</b> radiological surveys of swipes or surfaces are done when radioactive materials are present <b>Comment:</b></p>
<p>The department reserves the right to conduct its own 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(10)).</p>	<p>Not Applicable</p>	<p><b>CDM:</b> <b>Comment:</b> 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 be able to demonstrate that the workers associated with these emission units 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><b>CDM:</b> Facility Procedures and periodic assessments <b>Comment:</b></p>
<p>The facility must be able to demonstrate the reliability and accuracy of emission data and other test results from these units (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 the above-cited regulation.</p>	<p>Continuous</p>	<p><b>CDM:</b> HNF-EP-0528 NESHAP Quality Assurance Project Plan for Radioactive Air Emissions, <b>Comment:</b></p>

Requirement	Compliance Status	Compliance Determination Method
<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)). Periodic inspections will occur.</p>	<p>Not Applicable</p>	<p><b>CDM:</b> <b>Comment:</b> 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><b>CDM:</b> <b>Comment:</b> 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>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><b>CDM:</b> 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. <b>Comment:</b></p>
<p>All measured or calculated emissions must be reported annually (WAC 246-247-080(3)).</p>	<p>Continuous</p>	<p><b>CDM:</b> DOE/RL-2007-01 "Radionuclide Air Emissions Report for the Hanford Site Calendar Year 2006" <b>Comment:</b></p>
<p>If there is an unexpected release of radioactivity or if there is a shutdown or other condition that, if it were allowed to persist, would result in emissions of radionuclides in excess of any standards or limitations in the license or that lasts more than four hours, it must be reported to the department within 24 hours. 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).</p>	<p>Continuous</p>	<p><b>CDM:</b> HNF procedures/facility specific procedures <b>Comment:</b></p>

Requirement	Compliance Status	Compliance Determination Method
The facility must maintain a log, in a format approved by the department, for the surveys and smears.	Continuous	<b>CDM:</b> Log is maintained and has been approved by WDOH, approval kept on file at facility <b>Comment:</b>
Records must be readily (promptly) available for these units. These records must be maintained onsite, and must be retained for at least five years (WAC 246-247-080(8)).	Continuous	<b>CDM:</b> HNF procedures/facility specific procedures indicate recordkeeping requirements <b>Comment:</b>
This unit must be fully accessible to Department of Health inspectors. If there are any specific training requirements or 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.	Continuous	<b>CDM:</b> Facility is maintained accessible to WDOH inspectors. <b>Comment:</b>
The facility shall make requested documents available in a timely manner for review (WAC 246-247-080(10)).	Continuous	<b>CDM:</b> Documents will be provided in a timely manner to WDOH inspectors <b>Comment:</b>
The radiological control technology requirements are as follows: * 6267 will control emissions by the structure itself, with no containment efficiency provided by the ventilation system. Packaging of the archived samples and monitored storage of closed (unvented) drums and approved low-level waste packages, combined with minimization of any indoor contamination in accordance with established radiation control procedures, provides for effective control of potential fugitive emissions. * 6269 will control emissions based on the design of the mobile laboratories, combined with minimization of any indoor contamination, in accordance with established radiation control procedures. * 6265A will control emissions by controlling the waste packages. Minimize the external contamination in accordance with established radiation control procedures. * 6266A will control emissions by having a passive vent HEPA type high efficiency filter on each tank. * Portable tanker used for wastewater transport will control emissions by passively venting.	Continuous	<b>CDM:</b> Facility specific procedures/facility drawings <b>Comment:</b>

Requirement	Compliance Status	Compliance Determination Method
<p>The Annual Possession Quantity (APQ) shall not exceed the following limits for the associated facilities: * Environmental sample archive building (6267) APQ is limited to 0.33 Ci/yr total Alpha and 6.8 Ci/yr total Beta/Gamma. * Mobile Laboratory Storage Facility (6269) APQ is limited to 0.03 Ci/yr total Alpha and 0.68 Ci/yr total Beta/Gamma. * Contaminated liquid waste retention vault (6266A) APQ is limited to 0.33 Ci/yr total Alpha and 6.8 Ci/yr total Beta/Gamma. * Portable tanker used for wastewater transport APQ is limited to 0.33 Ci/yr total Alpha and 6.8 Ci/yr total Beta/Gamma.</p>	<p>Continuous</p>	<p><b>CDM:</b> In the case of a positive survey result for contamination in these areas a calculation has been developed and approved by WDOH to determine compliance with these limits. <b>Comment:</b></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>Continuous</p>	<p><b>CDM:</b> 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. <b>Comment:</b></p>

696-W-1  
WDOH Emission Unit ID : 62  
Page in AOP : H-0359

Requirement	Compliance Status	Compliance Determination Method
<p><b>Zone or Area :</b> <b>Abatement Technology :</b> Fan <b>Required Units :</b> 2 <b>Add'l Description:</b> In parallel</p>	<p>Continuous</p>	<p><b>CDM:</b> As-built drawing. <b>Comment:</b> H-6-13325.</p>
<p><b>Zone or Area :</b> <b>Abatement Technology :</b> HEPA <b>Required Units :</b> 2 <b>Add'l Description:</b> In parallel</p>	<p>Continuous</p>	<p><b>CDM:</b> As-built drawing. <b>Comment:</b> H-6-13325.</p>

Requirement	Compliance Status	Compliance Determination Method
<b>Zone or Area :</b> <b>Abatement Technology :</b> Prefilter <b>Required Units :</b> 2 <b>Add'l Description:</b> In parallel	Continuous	<b>CDM:</b> As-built drawing. <b>Comment:</b> H-6-13325.
<b>Required Sampling:</b> Record Sample <b>Sampling Frequency:</b> 2 week sample/ quarter <b>Radionuclide Requiring Measurement:</b> TOTAL ALPHA TOTAL BETA	Continuous	<b>CDM:</b> DOE/RL-2007-01, "Radionuclide Air Emissions Report for the Hanford Site, Calendar Year 2006" <b>Comment:</b>
<b>Federal and State Regulatory Requirement:</b> 40 CFR 61.93[b][4][i] WAC 246-247-075[3] <b>Permit Monitoring and Testing Procedure:</b> Appendix B, Method 114(3) [see AIR 05-303 for clarification details]	Continuous	<b>CDM:</b> The "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions" (HNF-EP-0528 current rev.) specifies both the hardware and method used to sample and the analytical methods used in the laboratory.  <b>Comment:</b>
<b>Permit:</b> AIR 02-1102 <b>Issue Date:</b> 11-26-02 <b>Obsolete Date:</b> 07-05-06 <b>NOC:</b> Use of Portable Tanks and Revised Source Term Description at WSCF <b>WDOH NOC ID:</b> 451 <b>Date In AOP:</b> 04-11-05 <b>Page in AOP:</b> H-0359		
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	<b>CDM:</b> The facility uses FH procedures and facility specific procedures to comply with the requirements of the NOC <b>Comment:</b>
The total abated emission limit for this Notice of Construction is limited to 2.80E-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 1.40E-02 mrem/year to the Maximally Exposed Individual (WAC 246-247-030(21)).	Continuous	<b>CDM:</b> Stack sampling and DOE/RL-2007-01 "Radionuclide Air Emissions Report for the Hanford Site Calendar Year 2006". <b>Comment:</b>
No activities, other than those explicitly described within this approval, shall be conducted without prior written approval. The approved activities are limited to: * Analytical Laboratory Building (696-W-1) - Solid, liquid, and vapor samples contaminated with low levels of radioactive material are processed, on a bench-scale basis, in fume hoods or other controlled air spaces in the building. Evaporation and wet chemistry also are used to prepare samples for analysis. Low-level waste drums are filled inside the laboratory building and transferred either to the Solid Waste Storage Building (described as follows) or other approved facilities on the Hanford Site, or the low-level waste drums are moved to various locations with WSCF. * Radiochemistry Laboratory (696-W-2) - This is a below grade counting room in the Analytical Laboratory Building with a separately controlled airspace within the building. * Environmental Data/Computer Center (6270) - This is a non-radiological building and will not be addressed further. * Environmental Sample Archive Building (6267) - This building provides for controlled storage, indexing, categorizing and retrieval of low-	Continuous	<b>CDM:</b> The mission of the WSCF laboratory has not changed since the NOC was issued <b>Comment:</b>

Requirement	Compliance Status	Compliance Determination Method
<p>level contaminated samples. Storage is provided for up to 2,500 samples requiring refrigerated storage and up to 11,500 samples requiring ambient storage. This building also provides for temporary storage of unvented drums or other low-level waste, packaged in accordance with applicable laboratory procedures. Less than 100 low-level waste packages are stored at any one time. * Mobile Laboratory Storage Facility (6269) - This structure houses up to five mobile laboratories and provides protection from adverse weather conditions for the instrumentation and computers inside the mobile laboratories. This area contains calibration laboratory instrumentation used in the mobile laboratories, and a sample preparation area for adding chemical buffers and preservatives to sample containers. This building provides temporary storage of drums, or other waste packages contained with low-levels of radioactive material. Less than 100 low-level waste packages are stored at any one time. * Solid Waste Storage Building (6265A) - This open-sided building shall provide for temporary storage of drums or other low-level waste packages. Less than 100 low-level waste packages are stored at any one time and will not be addressed further in this license, as these are unvented drums. * Contaminated Liquid Waste Retention Vault (6266A) - Consists of two 3,785 liter polyethylene tanks contained in a common concrete vault. The tanks are designed to receive low-level inorganic and radiologically contaminated liquid waste or sample excess from the analytical laboratory. The liquid routinely is transferred to an approved disposal facility on the Hanford Site using the portable tanker described as follows. This building also provides temporary storage of drums, or other waste packages contaminated with low-levels of radioactive material. Less than 100 low-level waste packages are stored at any one time. * Sample Equipment Cleaning Facility - This is a non-radiological building and will not be addressed further. * Portable Tanker(s) used for Wastewater Transport - Wastewater drums containing liquid waste contaminated with low-levels of radioactive material are stored temporarily at various locations within WSCF. In some cases, the contents of these drums are pumped into a portable tanker at the various locations for transport to other facilities. To accomplish the pumping, a small pump has its drop leg inserted into each drum through the bungbole or other opening, and flexible hose transfers the liquid to the tanker.</p>		
<p>The Annual Possession Quantity is limited to the following radionuclides (Curies/year): Alpha - 0 3.30 E-01 B/G - 0 6.80 E+00</p>	<p>Continuous</p>	<p><b>CDM:</b> WSCF keeps a running inventory of samples/radionuclides brought into the laboratory. <b>Comment:</b> The NOC was based on the sample volume in the laboratory. A running inventory is kept of samples coming into and leaving the laboratory to ensure radionuclide limits are met.</p>
<p>These Conditions and Limitations must be proceduralized and these procedures maintained for the lifetime of the facility.</p>	<p>Continuous</p>	<p><b>CDM:</b> Facility Specific procedures contain the NOC requirements. <b>Comment:</b></p>

Requirement	Compliance Status	Compliance Determination Method
<p>If the department finds that the emission unit described in this NOC is not in compliance with the standards in WAC 246-247-040 during operation (as described in the NOC) it reserves the right to require modifications to bring it into compliance (WAC 246-247-060(2)(d)).</p>	<p>Not Applicable</p>	<p><b>CDM:</b> <b>Comment:</b> 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>Continuous</p>	<p><b>CDM:</b> HNF procedures/facility specific procedures <b>Comment:</b></p>
<p>The U.S. DOE shall monitor this emission unit as follows: 696-W-1 emission units shall be monitored periodically. The periodic sampling shall consist of a sample of stack effluent being withdrawn a minimum of two weeks per quarter.</p>	<p>Not Applicable</p>	<p><b>CDM:</b> <b>Comment:</b> 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 reserves the right to conduct its own 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(10)).</p>	<p>Not Applicable</p>	<p><b>CDM:</b> <b>Comment:</b> 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 be able to demonstrate that the workers associated with these emission units 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><b>CDM:</b> HNF procedure/facility procedures/training records <b>Comment:</b></p>
<p>The facility must be able to demonstrate the reliability and accuracy of emission data and other test results from these units (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 the above-cited regulation.</p>	<p>Continuous</p>	<p><b>CDM:</b> HNF-EP-0528 NESHAP Quality Assurance Project Plan for Radioactive Air Emissions, <b>Comment:</b></p>

Requirement	Compliance Status	Compliance Determination Method
<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)). Periodic inspections will occur.</p>	<p>Not Applicable</p>	<p><b>CDM:</b> <b>Comment:</b> 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><b>CDM:</b> <b>Comment:</b> 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>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><b>CDM:</b> 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. <b>Comment:</b></p>
<p>All measured or calculated emissions must be reported annually (WAC 246-247-080(3)).</p>	<p>Continuous</p>	<p><b>CDM:</b> DOE/RL-2007-01 "Radionuclide Air Emissions Report for the Hanford Site Calendar Year 2006". <b>Comment:</b></p>
<p>If there is an unexpected release of radioactivity or if there is a shutdown or other condition that, if it were allowed to persist, would result in emissions of radionuclides in excess of any standards or limitations in the license or that lasts more than four hours, it must be reported to the department within 24 hours. 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).</p>	<p>Continuous</p>	<p><b>CDM:</b> HNF procedures/facility procedures <b>Comment:</b></p>

Requirement	Compliance Status	Compliance Determination Method
Records must be readily (promptly) available for these units. These records must be maintained onsite, and must be retained for at least five years (WAC 246-247-080(8)).	Continuous	<b>CDM:</b> HNF procedures/facility procedures provide guidance for recordkeeping <b>Comment:</b>
This unit must be fully accessible to Department of Health inspectors. If there are any specific training requirements or 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.	Continuous	<b>CDM:</b> Facility is maintained accessible to WDOH inspectors <b>Comment:</b>
The facility shall make requested documents available in a timely manner for review (WAC 246-247-080(10)).	Continuous	<b>CDM:</b> Documents will be provided in a timely manner to WDOH inspectors <b>Comment:</b>
The annual possession quantity of plutonium and strontium are considered conservative and noted that these radionuclides representative types of alpha and beta radiation that this facility expects to handle. The facility needs to verify annually that plutonium and strontium are the most conservative radionuclides this facility handles.	Continuous	<b>CDM:</b> Annual certification by Facility Manager, based on inventory control procedures <b>Comment:</b>
The radiological control technology requirements are as follows: * 696-W-1 stack operates a pre-filter and a HEPA filter before entering the exhaust stack. When the ventilation system exits the Analytical Laboratory Building and divides into two legs, each leg shall consist of a damper, a pre-filter, a HEPA filter bank (4x3), a damper, and a fan. The pre-filter housing is designed for ease of filter change without increased dust loading on the HEPA filters. Two exhaust fans are installed and operate in parallel under normal power.	Continuous	<b>CDM:</b> Facility drawings <b>Comment:</b>

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><b>CDM:</b> <b>Comment:</b> 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>

696-W-2  
WDOH Emission Unit ID : 63  
Page in AOP : H-0364

Requirement	Compliance Status	Compliance Determination Method
<p><b>Zone or Area :</b> <b>Abatement Technology :</b> Fan <b>Required Units :</b> 1 <b>Add'l Description:</b> An additional standby fan recirculates the air flow back to Bldg. 6266 or can vent it to the atmosphere.</p>	<p>Continuous</p>	<p><b>CDM:</b> As-built drawing. <b>Comment:</b> H-6-13331.</p>
<p><b>Zone or Area :</b> <b>Abatement Technology :</b> HEPA <b>Required Units :</b> 2 <b>Add'l Description:</b> In parallel</p>	<p>Continuous</p>	<p><b>CDM:</b> As-built drawing. <b>Comment:</b> H-6-13331.</p>
<p><b>Zone or Area :</b> <b>Abatement Technology :</b> Prefilter <b>Required Units :</b> 2 <b>Add'l Description:</b> In parallel</p>	<p>Continuous</p>	<p><b>CDM:</b> As-built drawing. <b>Comment:</b> H-6-13331.</p>
<p><b>Required Sampling:</b> Record Sample <b>Sampling Frequency:</b> 2 week sample/ quarter <b>Radionuclide Requiring Measurement:</b> TOTAL ALPHA TOTAL BETA</p>	<p>Continuous</p>	<p><b>CDM:</b> DOE/RL-2007-01, "Radionuclide Air Emissions Report for the Hanford Site, Calendar Year 2006" <b>Comment:</b></p>

Requirement	Compliance Status	Compliance Determination Method
<p><b>Federal and State Regulatory Requirement:</b> 40 CFR 61.93[b][4][i] WAC 246-247-075[3]  <b>Permit Monitoring and Testing Procedure:</b> Appendix B, Method 114(3) [see AIR 05-303 for clarification details]</p>	Continuous	<p><b>CDM:</b> The "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions" (HNF-EP-0528 current rev.) specifies both the hardware and method used to sample and the analytical methods used in the laboratory.</p> <p><b>Comment:</b></p>
<p align="center"><b>Permit:</b> AIR 02-1102    <b>Issue Date:</b> 11-26-02    <b>Obsolete Date:</b> 07-05-06  <b>NOC:</b> Use of Portable Tanks and Revised Source Term Description at WSCF  <b>WDOH NOC ID:</b> 451    <b>Date in AOP:</b> 04-11-05    <b>Page in AOP:</b> H-0364</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><b>CDM:</b> The Facility uses FH procedures and facility specific procedures to comply with the requirements of the NOC.</p> <p><b>Comment:</b></p>
<p>The total abated emission limit for this Notice of Construction is limited to 2.80E-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 1.40E-02 mrem/year to the Maximally Exposed Individual (WAC 246-247-030(21)).</p>	Continuous	<p><b>CDM:</b> Stack sampling and DOE/RL-2007-01 "Radionuclide Air Emissions Report for the Hanford Site Calendar Year 2006".</p> <p><b>Comment:</b></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: * Analytical Laboratory Building (696-W-1) - Solid, liquid, and vapor samples contaminated with low levels of radioactive material are processed, on a bench-scale basis, in flume hoods or other controlled air spaces in the building. Evaporation and wet chemistry also are used to prepare samples for analysis. Low-level waste drums are filled inside the laboratory building and transferred either to the Solid Waste Storage Building (described as follows) or other approved facilities on the Hanford Site, or the low-level waste drums are moved to various locations with WSCF. * Radiochemistry Laboratory (696-W-2) - This is a below grade counting room in the Analytical Laboratory Building with a separately controlled airspace within the building. * Environmental Data/Computer Center (6270) - This is a non-radiological building and will not be addressed further. * Environmental Sample Archive Building (6267) - This building provides for controlled storage, indexing, categorizing and retrieval of low-level contaminated samples. Storage is provided for up to 2,500 samples requiring refrigerated storage and up to 11,500 samples requiring ambient storage. This building also provides for temporary storage of unvented drums or other low-level waste, packaged in accordance with applicable laboratory procedures. Less than 100 low-level waste packages are stored at any one time. * Mobile Laboratory Storage Facility (6269) - This structure houses up to five mobile laboratories and provides protection from adverse weather conditions for the instrumentation and computers inside the mobile laboratories. This area contains calibration laboratory instrumentation used in the mobile laboratories, and a sample preparation area for adding chemical buffers and preservatives to sample containers. This building provides temporary storage of drums, or other waste packages contained with low-levels of radioactive material. Less than 100 low-level waste packages are</p>	Continuous	<p><b>CDM:</b> The mission of the WSCF laboratory has not changed since the NOC was issued</p> <p><b>Comment:</b></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. I 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><b>CDM:</b> <b>Comment:</b> 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>All facilities must be able to demonstrate the reliability and accuracy of radioactive air emissions monitoring data (WAC 246-247-075(13)).</p>	<p>Continuous</p>	<p><b>CDM:</b> HNF-EP-0528 "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions". <b>Comment:</b></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><b>CDM:</b> <b>Comment:</b> 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 in ALARACT demonstration at any time (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p><b>CDM:</b> <b>Comment:</b> 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 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 operation, 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 246-147-080(6)).</p>	<p>Not Applicable</p>	<p><b>CDM:</b> <b>Comment:</b> 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>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><b>CDM:</b> <b>Comment:</b> 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 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><b>CDM:</b> Records and documents related to the 600 PSTF are maintained for prompt retrieval for at least the required duration. <b>Comment:</b></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>Continuous</p>	<p><b>CDM:</b> The 600 PSTF is accessible to department inspectors upon request. <b>Comment:</b></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><b>CDM:</b> Requested documents shall be made available in a timely manner. <b>Comment:</b></p>
<p>Purgewater tank controls will be implemented to minimize wind suspension of radioactive solids that may settle to the bottom of the storage tank. They include the use of aerodynamic covers and/or maintenance of a minimum liquid level in each unit. Solids that have settled to the bottom will be wetted to minimize wind suspension. This meets the minimum liquid level requirement.</p>	<p>Continuous</p>	<p><b>CDM:</b> Water levels are maintained above the highest level of accumulated sediments at all times. <b>Comment:</b></p>
<p>The maximum impact for the six evaporation units shall be 1.5E-04 millirem per year.</p>	<p>Continuous</p>	<p><b>CDM:</b> DOE/RL-2007-01 "Radionuclide Air Emissions Report for the Hanford Site Calendar Year 2006". <b>Comment:</b></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	<b>CDM:</b> 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. <b>Comment:</b>
The facility shall report all measured or calculated emissions annually (WAC 246-247-080(3)).	Continuous	<b>CDM:</b> Input to the most recent radionuclide report DOE/RL-2007-01 "Radionuclide Air Emissions Report for the Hanford Site Calendar Year 2006". <b>Comment:</b>
The facility must be able to demonstrate that the 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	<b>CDM:</b> Training Records. <b>Comment:</b>
The facility shall report to 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 the emission of radioactive material in excess of applicable standards or license requirements. (WAC 246-247-080(5)).	Not Applicable	<b>CDM:</b> <b>Comment:</b> No reports required.
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	<b>CDM:</b> DOE/RL-2007-01 "Radionuclide Air Emissions Report for the Hanford Site Calendar Year 2006". <b>Comment:</b>
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	<b>CDM:</b> HNF-EP-0528 "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions". <b>Comment:</b>

Sitewide Guzzler  
WDOH Emission Unit ID : 476  
Page in AOP : H-0212

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.		
<b>Permit: AIR 02-302 Issue Date:03-06-02 Obsolete Date: 07-05-06</b> <b>NOC: Use of the Guzzler Vacuum Excavation System for Radiologically Limited Activities, Rev.0A</b> <b>WDOH NOC ID: 328 Date In AOP: 12-31-02 Page in AOP: H-0212</b>		
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	<b>CDM:</b> <b>Comment:</b> The Guzzler did not operate in 2006.
The total abated emission limit for this Notice of Construction is limited to 5.00E-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 5.00E-02 mrem/year to the Maximally Exposed Individual (WAC 246-247-030(21)).	Not Applicable	<b>CDM:</b> <b>Comment:</b> The Guzzler did not operate in 2006.
<p>This process is limited to: the utilization of the Guzzler Vacuum Excavation System (Guzzler) for potholing to support utility locations, soil removal/general excavations, and radiologically limited activities (i.e., less than 50,000 dpm beta-gamma and less than 140 dpm alpha contamination) involving roof or pit cleaning. For purposes of this notice of construction, "soil" will be defined as sand, dirt, gravel, gravel and tar mixtures and rock, or any combination of these items. In most cases, for excavations, the soil will be used for backfilling of the excavated areas. The backfilling activities will be completed manually, using shovels, or using backhoes, loaders, or compactors. For cleaning activities and some excavations, the soil will either be containerized for disposal or transported to the burial grounds within the Guzzler collection tank for noncontainerized disposal. Only radiologically contaminated or potentially contaminated soil will be removed or excavated using the regulated Guzzler system. All soil removed from the system will be handled as potentially contaminated, unless otherwise surveyed or analyzed. The regulated Guzzler will not be used for the decontamination of valve pits within the tank farms. The regulated Guzzler is also excluded from areas containing regulated chemical contamination and/or radiological contamination above 50,000 dpm/probe size beta-gamma and/or 140 dpm/probe size alpha. Soil can be slowly dumped from the collection tank by controlling the raising and lowering speed of the tank. Soil from contaminated areas enters the unit through adjustable length, flexible hose connected to an eight inch porthole with an overhead boom located at the rear of the equipment. An air lance attachment may also be connected to the end of the flexible hose to aid in the loosening of soil. The various cleaning and excavation activities will be completed using the Guzzler along with shovels, picks and/or the air lance attachment to loosen the soil, and backfilling activities will be completed using backhoes, loaders, compactors with plates, and picks and shovels, as appropriate. In some cases, however, an area may be physically inaccessible for the regulated Guzzler. In those instances, the cleaning or excavation, as well as any backfilling activities will be completed using backhoes, loaders, compactors with plates, and/or picks and shovels, as appropriate.</p>	Not Applicable	<b>CDM:</b> <b>Comment:</b> The Guzzler did not operate in 2006.

Requirement	Compliance Status	Compliance Determination Method
The Annual Possession Quantity is limited to the following radionuclides (Curies/year): Alpha 0 4.44E-03 Beta 0 1.49E-01	Not Applicable	<b>CDM:</b> <b>Comment:</b> The Guzzler did not operate in 2006.
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)).	Not Applicable	<b>CDM:</b> <b>Comment:</b> The Guzzler did not operate in 2006.
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	<b>CDM:</b> <b>Comment:</b> The Guzzler did not operate in 2006.
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	<b>CDM:</b> <b>Comment:</b> The Guzzler did not operate in 2006.
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	<b>CDM:</b> <b>Comment:</b> The Guzzler did not operate in 2006.
U.S. DOE shall monitor this project or emission unit as follows: In addition to the surveys described in this NOC periodic confirmatory measurements are required. This may include but is not limited to NDA testing of the HEPA filters when the HEPA filters are replaced and annually screening the HEPA filtration system using gamma spectroscopy (WAC 246-247-075(8)).	Not Applicable	<b>CDM:</b> <b>Comment:</b> The Guzzler did not operate in 2006.
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	<b>CDM:</b> <b>Comment:</b> The Guzzler did not operate in 2006.
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)).	Not Applicable	<b>CDM:</b> <b>Comment:</b> The Guzzler did not operate in 2006.
The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national standards (WAC 246-247-075(6)).	Not Applicable	<b>CDM:</b> <b>Comment:</b> The Guzzler did not operate in 2006.
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	<b>CDM:</b> <b>Comment:</b> The Guzzler did not operate in 2006.
The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).	Not Applicable	<b>CDM:</b> <b>Comment:</b> The Guzzler did not operate in 2006.

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	<b>CDM:</b> <b>Comment:</b> The Guzzler did not operate in 2006.
The facility shall report all measured or calculated emissions annually (WAC 246-247-080(3)).	Not Applicable	<b>CDM:</b> <b>Comment:</b> The Guzzler did not operate in 2006.
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)).	Not Applicable	<b>CDM:</b> <b>Comment:</b> The Guzzler did not operate in 2006.
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	<b>CDM:</b> <b>Comment:</b> The Guzzler did not operate in 2006.
The facility must maintain a log in an approved format for this activity or emission unit (WAC 246-247-080(7)).	Continuous	<b>CDM:</b> <b>Comment:</b> The Guzzler did not operate in 2006.
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	<b>CDM:</b> <b>Comment:</b> The Guzzler did not operate in 2006.

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><b>CDM:</b> <b>Comment:</b> The Guzzler did not operate in 2006.</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><b>CDM:</b> <b>Comment:</b> The Guzzler did not operate in 2006.</p>
<p>The following are the allowable radionuclides: Co-60, Sr-90, Cs-137, Cs-134, Th-232, U-234, U-235, U-238, Eu-152, Eu-154, Eu-155, Ru-106, Sn-113, Sb-125, Am-241, Pu-238, Pu-239, Pu-240, and Pu-241. If any other radionuclides are suspected or verified through soil analysis the department must be notified.</p>	<p>Not Applicable</p>	<p><b>CDM:</b> <b>Comment:</b> The Guzzler did not operate in 2006.</p>
<p>The following are the annual emission limits for the NOC: 100 AREA: For Guzzler Cleaning/Excavation: 2.88E-3 mrem Sr-90, 3.4E-2 mrem Am-241 For Backfilling: 2.88E-6 mrem Sr-90, 3.45E-5 mrem Am-241 200 AREA: For Guzzler Cleaning/Excavation: 1.96E-3 mrem Sr-90, 2.34E-2 mrem Am-241 For Backfilling: 1.96E-6 mrem Sr-90, 2.34E-5 mrem Am-241 300 AREA: For Guzzler Cleaning/Excavation: 3.9E-2 mrem Sr-90, 8.3E-3 mrem U-234 For Backfilling: 3.9E-5 mrem Sr-90, 8.3E-6 mrem U-234 400 AREA: For Guzzler Cleaning/Excavation: 8.5E-4 mrem Sr-90, 8.34E-3 mrem Pu-239 For Backfilling: 8.5E-7 mrem Sr-90, 8.34E-6 mrem Pu-239.</p>	<p>Not Applicable</p>	<p><b>CDM:</b> <b>Comment:</b> The Guzzler did not operate in 2006.</p>
<p>All soil excavation activities operating under this NOC must cease operations when sustained wind conditions reach or exceed 20 miles per hour.</p>	<p>Not Applicable</p>	<p><b>CDM:</b> <b>Comment:</b> The Guzzler did not operate in 2006.</p>

Vented Containers  
WDOH Emission Unit ID : 448  
Page in AOP : H-0057

Requirement	Compliance Status	Compliance Determination Method
No active Abatement Controls in the AOP for this certification period.		
<b>Required Sampling:</b> Environment Sampling <b>Sampling Frequency:</b> Air-every 2 weeks continuous/deposition - annually <b>Radionuclide Requiring Measurement:</b> TOTAL ALPHA TOTAL BETA	Continuous	<b>CDM:</b> Required near-facility monitoring conducted as reported in DOE/RL-2007-01 "Radionuclide air Emissions Report for the Hanford Site Calendar Year 2006". <b>Comment:</b>
<b>Federal and State Regulatory Requirement:</b> 40 CFR 61.93(b)(4)(i) & WAC 246-247-075(3) <b>Permit Monitoring and Testing Procedure:</b> 40 CFR 61, Appendix B, Method 114(3)	Continuous	<b>CDM:</b> Required near-facility monitoring conducted as reported in DOE/RL-2007-01 "Radionuclide air Emissions Report for the Hanford Site Calendar Year 2006". QA requirements documented in HNF-EP-0538 "Near Facility Environmental Monitoring Quality Assurance Project Plan". Analytical requirements specified in HNF-EP-0835 "SOW for Services Provided by WSCF during CY2006" <b>Comment:</b>
<p align="center"> <b>Permit:</b> AIR 02-1215    <b>Issue Date:</b> 12-13-02    <b>Obsolete Date:</b> 07-05-06  <b>NOC:</b> Sitewide Vented Container Storage  <b>WDOH NOC ID:</b> 188    <b>Date In AOP:</b> 04-11-05    <b>Page in AOP:</b> H-0057                     </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	<b>CDM:</b> For this approval order, in compliance with all approval conditions. <b>Comment:</b>
The total abated emission limit for this Notice of Construction is limited to 5.10E-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 1.50E-05 mrem/year to the Maximally Exposed Individual (WAC 246-247-030(21)).	Continuous	<b>CDM:</b> DOE/RL-2007-01 "Radionuclide Air Emissions Report for the Hanford Site Calendar Year 2006". <b>Comment:</b>

<p>No activities, other than those explicitly described within this approval, shall be conducted without prior written approval. The approved activities are limited to: containers are used to store mixed and/or radioactive waste generated on and off the Hanford Site. Venting devices are installed when there is the potential for non-radioactive gases (I.e., hydrogen) to be generated as a result of radiolysis.</p>	<p>Continuous</p>	<p><b>CDM:</b> HNF-EP-0063, Hanford Site Solid Waste Acceptance Criteria <b>Comment:</b></p>
<p>This NOC does not have "Annual Possession Quantity" limits.</p>	<p>Not Applicable</p>	<p><b>CDM:</b> N/A <b>Comment:</b> Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are historical summary or fact, that pertain to actions to be complete in the future or that pertain to actions required of the agency.</p>
<p>Containers other than drums are also approved if they meet the conditions of this NOC.</p>	<p>Continuous</p>	<p><b>CDM:</b> HNF-EP-0063, Hanford Site Solid Waste Acceptance Criteria <b>Comment:</b></p>
<p>Establishes a categorical As Low As Reasonably Achievable Control Technology (ALARACT) demonstration for existing Hanford Site vented containers.</p>	<p>Not Applicable</p>	<p><b>CDM:</b> N/A <b>Comment:</b> Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are historical summary or fact, that pertain to actions to be complete in the future or that pertain to actions required of the agency.</p>
<p>NucFil™ filter or an equivalent filter shall be BARCT and ALARACT. Vent clips are accepted as ALARACT for existing systems to date, however, when conditions require repackaging vent clips shall be replaced by NucFil™ or equivalent filters.</p>	<p>Continuous</p>	<p><b>CDM:</b> HNF-EP-0063, Hanford Site Solid Waste Acceptance Criteria; facility specific safety basis documentation. <b>Comment:</b></p>
<p>The vented container Latitude and Longitude coordinates (46 degrees 22' 13.8", 119 degrees 16' 12.3") refer to the location resulting in the highest impact to the MEI.</p>	<p>Not Applicable</p>	<p><b>CDM:</b> N/A <b>Comment:</b> Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are historical summary or fact, that pertain to actions to be complete in the future or that pertain to actions required of the agency.</p>

<p>Establishes a categorical Best Available Radionuclide Control Technology (BARCT) demonstration for all future Hanford Site vented containers ( i.e., up to 10,000 vented container units (UVC) based on total unabated emissions and 27,000,000 UVC based on total abated emissions offering less than 0.1mrem/year to the MEI).</p>	<p>Not Applicable</p>	<p><b>CDM:</b> N/A <b>Comment:</b> Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are historical summary or fact, that pertain to actions to be complete in the future or that pertain to actions required of the agency.</p>
<p>These containers are used for storing mixed and or radioactive waste generated on or off Hanford Site.</p>	<p>Not Applicable</p>	<p><b>CDM:</b> N/A <b>Comment:</b> Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are historical summary or fact, that pertain to actions to be complete in the future or that pertain to actions required of the agency.</p>
<p>WDOH accepts vent clips as ALARACT since they are no longer installed.</p>	<p>Not Applicable</p>	<p><b>CDM:</b> N/A <b>Comment:</b> Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are historical summary or fact, that pertain to actions to be complete in the future or that pertain to actions required of the agency.</p>
<p>Pu239/240 equivalent curies (PE-Ci) represents the radionuclide of concern as discussed in the Hanford Site Solid Waste Acceptance Criteria, WHC-EP-0063, 1994, Westinghouse Hanford Company, Richland Washington.</p>	<p>Not Applicable</p>	<p><b>CDM:</b> N/A <b>Comment:</b> Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are historical summary or fact, that pertain to actions to be complete in the future or that pertain to actions required of the agency.</p>
<p>The annual possession quantity for each vented container varies. The maximum quantity per container is based on preventing nuclear criticality, which is managed by: (I) controlling the amount of fissionable material in each container, (ii) container spacing requirements, (iii) container segregation. The annual possession quantity for this categorical approval is accepted due to the variability of waste types.</p>	<p>Continuous</p>	<p><b>CDM:</b> HNF-EP-0063, Hanford Site Solid Waste Acceptance Criteria; facility specific safety basis documentation. <b>Comment:</b></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><b>CDM:</b> Facility specific documentation; HNF-EP-0063, Hanford Site Solid Waste Acceptance Criteria <b>Comment:</b></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><b>CDM:</b> N/A <b>Comment:</b> Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are historical summary or fact, that pertain to actions to be complete 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><b>CDM:</b> N/A <b>Comment:</b> Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are historical summary or fact, that pertain to actions to be complete 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><b>CDM:</b> QA requirements documented in HNF-EP-0528 "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions". <b>Comment:</b></p>
<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><b>CDM:</b> N/A <b>Comment:</b> Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are historical summary or fact, that pertain to actions to be complete 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><b>CDM:</b> Facility training workers. <b>Comment:</b></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><b>CDM:</b> HNF-EP-0528 "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions". <b>Comment:</b></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><b>CDM:</b> N/A <b>Comment:</b> Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are historical summary or fact, that pertain to actions to be complete in the future or that pertain to actions required of the agency.</p>
<p>The department may require in ALARACT demonstration at any time (WAC 246-247-080(1)).</p>	<p>Not Applicable</p>	<p><b>CDM:</b> N/A <b>Comment:</b> Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are historical summary or fact, that pertain to actions to be complete 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><b>CDM:</b> Information 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. <b>Comment:</b></p>
<p>The facility shall report all measured or calculated emissions annually (WAC 246-247-080(3)).</p>	<p>Continuous</p>	<p><b>CDM:</b> DOE/RL-2007-01 "Radionuclide Air Emissions Report for the Hanford Site Calendar Year 2006". <b>Comment:</b></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><b>CDM:</b> Required notifications documented in DOE/RL-2006-04 and DOE/RL-2007-03 AOP Semiannual reports for CY2006. <b>Comment:</b></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)).</p>	<p>Not Applicable</p>	<p><b>CDM:</b> N/A <b>Comment:</b> Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are historical summary or fact, that pertain to actions to be complete 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><b>CDM:</b> WDOH has requested information and records during past inspections and records were promptly made available. Records are maintained per HNF-RD-210. <b>Comment:</b></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><b>CDM:</b> N/A <b>Comment:</b> Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are historical summary or fact, that pertain to actions to be complete 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><b>CDM:</b> The FH EP Project Services group facilitates regulatory inspections and provides inspection point-of-contact to the Washington State Department of Health (WDOH) inspectors for the Hanford Site. Services provided include coordination of records clearance and transmittal. <b>Comment:</b></p>

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

Requirement		Compliance Status	Compliance Demonstration Method		
<p><b>Required Sampling:</b> Perform Periodic Confirmatory Measurements (PCM) annually by verifying the levels of smearable contamination 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, should one exist. Use a confirmation level below 10,000 dpm/100 cmsq beta gamma and 200 dpm/100 cmsq alpha to verify low emissions. Detective levels above these thresholds would result in further investigation and reporting if it is determined that the cause was due to an airborne emission. The radiological survey reports will become the record for the PCM. [WAC 173-401-615(2)] <b>Sampling Frequency:</b> Annually</p>		Continuous	Annual Radiological Surveillance Task, Radiological Survey Reports, and field interviews.		
Emission Unit	EU ID	Emission Unit	EU ID	Emission Unit	EU ID
P-241A101-001	92	P-241BY106001	285	P-241T202-001	77
P-241A102-001	90	P-241BY107-001	294	P-241T203-001	74
P-241A103-001	87	P-241BY108-001	291	P-241T204-001	75
P-241A104-001	88	P-241BY109-001	290	P-241TX101-001	127
P-241A105-001	91	P-241BY110-001	293	P-241TX102-001	124
P-241A106-001	94	P-241BY111-001	292	P-241TX103-001	120
P-241AX101-001	305	P-241BY112-001	287	P-241TX104-001	118
P-241AX102-001	303	P-241C102-001	237	P-241TX105-001	116
P-241AX103-001	304	P-241C108-001	231	P-241TX106-001	126
P-241AX104-001	302	P-241C109-001	245	P-241TX107-001	114
P-241B101-001	269	P-241C110-001	244	P-241TX108-001	123
P-241B102-001	270	P-241C111-001	1	P-241TX109-001	128
P-241B103-001	279	P-241C112-001	232	P-241TX110-001	121
P-241B104-001	272	P-241C201-001	233	P-241TX111-001	130
P-241B105-001	266	P-241C202-001	246	P-241TX112-001	115
P-241B106-001	281	P-241C203-001	242	P-241TX113-001	117
P-241B107-001	275	P-241C204-001	235	P-241TX114-001	119
P-241B108-001	268	P-241S101-001	132	P-241TX115-001	125
P-241B109-001	277	P-241S103-001	133	P-241TX117-001	113
P-241B110-001	278	P-241S104-001	131	P-241TX118-001	129
P-241B111-001	276	P-241S105-001	137	P-241TY102-001	82
P-241B112-001	274	P-241S106-001	139	P-241TY103-001	85
P-241B201-001	267	P-241S107-001	140	P-241TY104-001	84
P-241B202-001	280	P-241S108-001	135	P-241TY105-001	83
P-241B203-001	282	P-241S109-001	136	P-241U101-001	103
P-241B204-001	271	P-241S110-001	138	P-241U102-001	101
P-241BX101-001	259	P-241S111-001	202	P-241U103-001	97
P-241BX102-001	262	P-241S112-001	203	P-241U104-001	109
P-241BX103001	257	P-241SX113-001	201	P-241U105-001	112
P-241BX105-001	273	P-241SX115-001	200	P-241U106-001	111
P-241BX106-001	261	P-241T101-001	79	P-241U107-001	99
P-241BX107-001	258	P-241T102-001	68	P-241U108-001	98
P-241BX108-001	265	P-241T103-001	78	P-241U109-001	105
P-241BX109-001	263	P-241T105-001	65	P-241U110-001	110
P-241BX110-001	256	P-241T106-001	66	P-241U112-001	108
P-241BX111-001	264	P-241T107-001	69	P-241U202-001	106

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

Requirement	Compliance Status	Compliance Demonstration Method			
<p><b>Required Sampling:</b> Perform Periodic Confirmatory Measurements (PCM) annually by verifying the levels of smearable contamination 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, should one exist. Use a confirmation level below 10,000 dpm/100 cmsq beta gamma and 200 dpm/100 cmsq alpha to verify low emissions. Detective levels above these thresholds would result in further investigation and reporting if it is determined that the cause was due to an airborne emission. The radiological survey reports will become the record for the PCM. [WAC 173-401-615(2)] <b>Sampling Frequency:</b> Annually</p>	Continuous	Annual Radiological Surveillance Task, Radiological Survey Reports, and field interviews.			
Emission Unit	EU ID	Emission Unit	EU ID	Emission Unit	EU ID
P-241BX112-001	260	P-241T108-001	73	P-241U204-001	104
P-241BY101-001	283	P-241T109-001	67		
P-241BY102-001	286	P-241T110-001	76		
P-241BY103-001	288	P-241T111-001	70		
P-241BY104-001	289	P-241T112-001	72		
P-241BY105-001	284	P-241T201-001	80		

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

Requirement		Compliance Status	Compliance Demonstration Method
<p><b>Required Sampling:</b> Perform Periodic Confirmatory Measurements (PCM) annually by verifying the levels of smearable contamination 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, should one exist. Use a confirmation level below 10,000 dpm/100 cmsq beta gamma and 200 dpm/100 cmsq alpha to verify low emissions. Detective levels above these thresholds would result in further investigation and reporting if it is determined that the cause was due to an airborne emission. The radiological survey reports will become the record for the PCM. [WAC 173-401-615(2)] <b>Sampling Frequency:</b> Annually</p>		Continuous	Annual Radiological Surveillance Task, Radiological Survey Reports, field interviews, CH2M HILL notification procedure, and notification logbook.
Emission Unit	EU ID	Comment	
P-241BX104-001	255	Breather filter failed aerosol test two times during the reporting period; reported per the CH2M HILL notification procedure.	
P-241C101-001	247	Breather filter failed aerosol test once during the reporting period; reported per the CH2M HILL notification procedure.	
P-241C103-001	737	Breather filter failed aerosol test once during the reporting period; reported per the CH2M HILL notification procedure.	
P-241C107-001	230	Breather filter failed aerosol test once during the reporting period; reported per the CH2M HILL notification procedure.	
P-241T104-001	71	Breather filter failed aerosol test once during the reporting period; reported per the CH2M HILL notification procedure.	
P-241TX116-001	122	Breather filter failed aerosol test once during the reporting period; reported per the CH2M HILL notification procedure.	
P-241TY101-001	86	Breather filter failed aerosol test during the reporting period; reported per the CH2M HILL notification procedure.	
P-241TY106-001	81	Breather filter failed aerosol test during the reporting period; reported per the CH2M HILL notification procedure.	
P-241U111-001	107	Breather filter isolation valve found 90 degrees out of position one time during the reporting period, valves appeared open but were actually closed; reported per the CH2M HILL notification procedure. Occurrence Report Number EM-RP-CHG-TANKFARM-2006-0015.	
P-241U201-001	102	Breather filter isolation valve found 90 degrees out of position one time during the reporting period, valves appeared open but were actually closed; reported per the CH2M HILL notification procedure.	
P-241U203-001	100	Breather filter isolation valve found 90 degrees out of position one time during the reporting period, valves appeared open but were actually closed; reported per the CH2M HILL notification procedure.	

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

Requirement	Compliance Status	Compliance Demonstration Method (CDM)	
<b>Required Sampling:</b> The sitewide ambient monitoring program fulfills the periodic confirmatory measurement requirement for these passively ventilated sources of emissions. The annual Radionuclide Air Emissions Report for the Hanford Site satisfies the reporting requirements.	Continuous	DOE/RL-2007-01 "Radionuclide Air Emissions Report for the Hanford Site Calendar Year 2006"	
Emission Unit	EU ID	Emission Unit	EU ID
100K 183 K West Chlorine Vault	837	200W D-6 Vent (PFP)	836
200E 203A Acid Tank P13	807	200W UNI#1 Caisson	804
200E 203A Acid Tank P3	805	291-B-1	841
200E 203A Acid Tank P4	806	400 P-4 Oil Bubbler	815
200E 216A-2-2	809	400 P-5 Oil Bubbler	816
200E 291-AE Building	840	400 P-6 Oil Bubbler	817
200E V10-11-1	808	403/4717 Building Ventilation Ducts	831
200W #1 Caisson	798	State Approved Land Disposal Structure Pipeline 10	827
200W #2 Caisson	799	State Approved Land Disposal Structure Pipeline 11	828
200W #3 Caisson	800	State Approved Land Disposal Structure Pipeline 12	829
200W #4 Caisson	801	State Approved Land Disposal Structure Pipeline 13	830
200W #5 Caisson	802	State Approved Land Disposal Structure Pipeline 2	819
200W #6 Caisson	803	State Approved Land Disposal Structure Pipeline 3	820
200W 2706 TB (Northwest)	838	State Approved Land Disposal Structure Pipeline 4	821
200W 2706 TB (Southeast)	839	State Approved Land Disposal Structure Pipeline 5	822
200W Alpha 1 Caisson	793	State Approved Land Disposal Structure Pipeline 6	823
200W Alpha 2 Caisson	794	State Approved Land Disposal Structure Pipeline 7	824
200W Alpha 3 Caisson	795	State Approved Land Disposal Structure Pipeline 8	825
200W Alpha 4 Caisson	796	State Approved Land Disposal Structure Pipeline 9	826
200W Alpha 5 Caisson	797	State Approved Land Disposal Structure Pipeline 1	818
200W D-5&6 Vent (PFP)	834	WESF LLW Floor Drain Vent (Central)	832
200W D-5, 6, 7, & 8 Vent (PFP)	835	WESF LLW Floor Drain Vent (Southeast)	833

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

Page in AOP	Emission Unit	WDOH EU ID	CDM
2-016	P-296P032-001	145	Field interviews. This emission unit did not operate during the reporting period.
2-023	C-106 Sluicing	236	Field interviews. This emission unit did not operate during the reporting period.
2-075	W-PORTEX 028	492	No active requirements in the AOP for this certification period.
2-078	W-PORTEX 032	497	No active requirements in the AOP for this certification period.
2-084	W-PORTEX 026	490	No active requirements in the AOP for this certification period.
2-087	W-PORTEX 029	493	No active requirements in the AOP for this certification period.
2-090	P-204AR-001	96	Field interviews. This emission unit did not operate during the reporting period.
2-132	P-296P028-001	54	Field interviews. This emission unit did not operate during the reporting period.
2-133	W-PORTEX 020	57	No active requirements in the AOP for this certification period.
2-135	W-PORTEX 024	58	No active requirements in the AOP for this certification period.
2-137	W-PORTEX 025	50	No active requirements in the AOP for this certification period.
2-140	W-PORTEX 027	344	No active requirements in the AOP for this certification period.
2-145	P-242T-001	162	Field interviews. This emission unit did not operate during the reporting period.
2-159	P-213W-001	308	This unit is inactive and will require an NOC to resume operation or a report of closure to deregister.
2-178	P-340BBldg-001	424	The stack did not operate during the reporting period.
2-215	J-NONPOINT 025	487	No active requirements in the AOP for this certification period.
2-220	P-241AR151-001	319	No active requirements in the AOP for this certification period.
2-221	P-241AX155-001	330	No active requirements in the AOP for this certification period.
2-227	P-241ER151-001	171	No active requirements in the AOP for this certification period.
2-228	P-241ER152-001	170	No active requirements in the AOP for this certification period.
2-228	P-241ER153-001	169	No active requirements in the AOP for this certification period.
2-230	J-NONPOINT 003	456	No active requirements in the AOP for this certification period.
H-0009	AIR ROTARY DRILLING	539	Field interviews. This emission unit did not operate during the reporting period.
H-0016	AIR HAMMER DRILLING	541	Field interviews. This emission unit did not operate during the reporting period.

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

Page in AOP	Emission Unit	WDOH EU ID	CDM
H-0031	P-296Z015-001	387	No active NOC approvals in the AOP for this certification period.
H-0050	P-291Z001-001	393	No active NOC approvals in the AOP during this certification period.
H-0066	P-340NTEX-001	423	No active NOC approvals in the AOP for this certification period.
H-0087 H-0296	296-S-15	64	Field interviews. This emission unit did not operate during the reporting period.
H-0093 H-0144 H-0212 H-0719 H-0845 H-1039	Guzzler	476	There was no Guzzler used on the Hanford Site in 2006.
H-0096	EP-331-01-V Life Sciences Laboratory I	412	No active NOC approvals in the AOP during this certification period.
H-0133	Permacon Unit	461	Emission unit did not operate during the reporting period.
H-0138	P-296A042-001	93	No active requirements in the AOP for this certification period.
H-0161	296-P-45	50	No active requirements in the AOP for this certification period.
H-0170 H-0776 H-0920	296-P-43	57	Field interviews. The emission unit was only used at 241-S-112.
H-0179	296-P-44	58	No active requirements in the AOP for this certification period.
H-0188 H-1071	296-P-33	144	This emission unit did not operate during the reporting period and was closed by letter AIR 06-505, dated May 23, 2006.
H-0196 H-1076	296-P-34	253	This emission unit did not operate during the reporting period and was closed by letter AIR 06-505, dated May 23, 2006.
H-0216	296-S-22	165	Field interviews and review of ABCASH. This emission unit did not operate during the reporting period and was closed by letter AIR 06-1201, dated December 7, 2006.
H-0224	296-B-28	208	Field interviews and review of ABCASH. This emission unit did not operate during the reporting period and was closed by letter AIR 06-1201, dated December 7, 2006.
H-0228	296-C-5	213	Field interviews and review of ABCASH. This emission unit did not operate during the reporting period and was closed by letter AIR 06-1201, dated December 7, 2006.
H-0232 H-0240	296-A-25	222	This emission unit was closed by letter AIR 04-807, dated August 6, 2004.

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

Page in AOP	Emission Unit	WDOH EU ID	CDM
H-0236	296-P-16	234	Field interviews and review of ABCASH. This emission unit did not operate during the reporting period and was closed by letter AIR 06-1201, dated December 7, 2006.
H-0258	P-Trench31-001	472	Bulk waste disposal has not commenced.
H-0277	296-A-10	384	Emission unit did not operate during reporting period.
H-0309	P-291-T001-001	314	No active NOC approvals in the AOP for this certification period.
H-0332	P-296Z005-001	389	No active NOC approvals in the AOP for this certification period.
H-0332	P-296Z007-001	503	No active NOC approvals in the AOP for this certification period.
H-0339	296-Z-6	390	No active NOC approvals in the AOP for this certification period.
H-0374	TYPE-1, TYPE-2, TYPE-3 Roof Replacement	447	No activities were conducted requiring the use of the NOC during the year.
H-0378	HEPA Vacuums – Roof Replacement	-	No activities were conducted requiring the use of the NOC during the year.
H-0382	Guzzler Roof Replacement	476	No activities were conducted requiring the use of the NOC during the year.
H-0387	200 Area Diffuse/Fugitive - Roof Replacement	486	No activities were conducted requiring the use of the NOC during the year.
H-0404 H-0840	TYPE-1, TYPE-2, TYPE 3	447	Field interviews. No activities were conducted requiring the use of the NOC during the reporting period. Type-1 PTRAEU units were used under the sitewide NOC within CH2M HILL Hanford Group, Inc.
H-0422	S-RCF-EX 002	184	No active NOC approvals in the AOP for this certification period.
H-0442	TYPE-2, TYPE-2, TYPE-3 at 224-T	447	No active NOC approvals in the AOP for this certification period.
H-0447	200 Area Diffuse/Fugitive - 224 T	486	No activities were conducted requiring the use of the NOC during the year.
H-0463	200 Area Diffuse/Fugitive – T Plant	486	No active NOC approvals in the AOP for this certification period.
H-0670	200 Area Diffuse/Fugitive – PFP	486	No active NOC approvals in the AOP for this certification period.
H-0676	100 Area Diffuse/Fugitive	689	No active NOC approvals in the AOP for this certification period.
H-0709	296-P-47	498	Field interviews. No activities were conducted requiring the use of the 244-CR vault isolation and the C-106 enhanced sluicing NOC during the reporting period. This emission unit was used by the Categorical Tank Farm Facility Waste Retrieval and Closure: Phase II Waste Retrieval Operations NOC.

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

<b>Page in AOP</b>	<b>Emission Unit</b>	<b>WDOH EU ID</b>	<b>CDM</b>
H-0765	244-CR Vault Passive Filter B	714	Field interviews. This emission unit did not operate during the reporting period. The emission unit was never installed.
H-0886	P-296Z003-001	386	No active NOC approvals in the AOP for this certification period.
H-0902	241-Z PTRAEUs	747	No active NOC approvals in the AOP for this certification period.
H-0979	200W P-244TX-002	744	Field interviews. This emission unit did not operate during the reporting period. The emission unit has to be removed/installed under the NOC. Removal/installation has not been completed during the reporting period.
H-1055	Concrete Containers	874	No active NOC approvals in the AOP for this certification Period.
H-1059	296-Z-14	391	No active NOC approvals in the AOP for this certification Period.

**Table 4. Attachment 2 NOCs with all Requirements and Conditions  
Irrelevant and Not Applicable During this Certification Period**

Page in AOP	Approval Number	NOC ID	Compliance Status	CDM
H-0009	AIR 02-1232	5	Not applicable	Field interviews. No activities were conducted requiring the use of the NOC during the reporting period.
H-0016	AIR 02-1232	5	Not applicable	Field interviews. No activities were conducted requiring the use of the NOC during the reporting period.
H-0087	AIR 02-1237	242	Not applicable	No active requirements in the AOP for this certification period. This NOC was reported to be closed by 05-ED-071, dated September 16, 2005.
H-0093	AIR 02-1238	250	Not applicable	There was no Guzzler used on the Hanford Site in 2006. No activities were conducted requiring the use of the NOC during the reporting period.
H-0133	AIR 02-710	295	Not applicable	Unit did not operate during the reporting period.
H-0138	AIR 02-503	296	Not applicable	No active requirements in the AOP for this certification period. The NOC license was obsolete on the effective date of the new license AIR 05-708, dated July 26, 2005.
H-0144	AIR 02-503	296	Not applicable	No active requirements in the AOP for this certification period. The NOC license was obsolete on the effective date of the new license AIR 05-708, dated July 26, 2005.
H-0150	AIR 02-503	296	Not applicable	No active requirements in the AOP for this certification period. The NOC license was obsolete on the effective date of the new license AIR 05-708, dated July 26, 2005.
H-0161	AIR 02-1020	327	Not applicable	No active requirements in the AOP for this certification period. This NOC was reported to be closed by 05-ED-071, dated September 16, 2005.
H-0170	AIR 02-1020	327	Not applicable	No active requirements in the AOP for this certification period. This NOC was reported to be closed by 05-ED-071, dated September 16, 2005.
H-0179	AIR 02-1020	327	Not applicable	No active requirements in the AOP for this certification period. This NOC was reported to be closed by 05-ED-071, dated September 16, 2005.
H-0188	AIR 02-1020	327	Not applicable	No active requirements in the AOP for this certification period. This NOC was reported to be closed by 05-ED-071, dated September 16, 2005.
H-0196	AIR 02-1020	327	Not applicable	No active requirements in the AOP for this certification period. This NOC was reported to be closed by 05-ED-071, dated September 16, 2005.
H-0204	AIR 02-1020	327	Not applicable	No active requirements in the AOP for this certification period. This NOC was reported to be closed by 05-ED-071, dated September 16, 2005.
H-0216	AIR 02-1235	339	Not applicable	No active requirements in the AOP for this certification period. This NOC was reported to be closed by 05-ED-071, dated September 16, 2005.
H-0220	AIR 02-1235	339	Not applicable	No active requirements in the AOP for this certification period. This NOC was reported to be closed by 05-ED-071, dated September 16, 2005.

**Table 4. Attachment 2 NOCs with all Requirements and Conditions  
Irrelevant and Not Applicable During this Certification Period**

Page in AOP	Approval Number	NOC ID	Compliance Status	CDM
H-0224	AIR 02-1235	339	Not applicable	No active requirements in the AOP for this certification period. This NOC was reported to be closed by 05-ED-071, dated September 16, 2005.
H-0228	AIR 02-1235	339	Not applicable	No active requirements in the AOP for this certification period. This NOC was reported to be closed by 05-ED-071, dated September 16, 2005.
H-0232	AIR 02-1235	339	Not applicable	No active requirements in the AOP for this certification period. This NOC was reported to be closed by 05-ED-071, dated September 16, 2005.
H-0236	AIR 02-1235	339	Not applicable	No active requirements in the AOP for this certification period. This NOC was reported to be closed by 05-ED-071, dated September 16, 2005.
H-0240	AIR 03-1104	340	Not applicable	No active requirements in the AOP for this certification period. The NOC license was obsolete on the effective date of the new license AIR 05-403, dated April 12, 2005.
H-0246	AIR 03-1104	340	Not applicable	No active requirements in the AOP for this certification period. The NOC license was obsolete on the effective date of the new license AIR 05-403, dated April 12, 2005.
H-0277	AIR 02-1221	417	Not applicable	No activities were conducted requiring the use of the NOC during the year.
H-0283	AIR 03-1105	421	Not applicable	Field interviews. No activities were conducted requiring the use of the NOC during the year.
H-0296	AIR 02-1248	423	Not applicable	Field interviews. No activities were conducted requiring the use of the NOC during the year.
H-0319	AIR 04-206	449	Not applicable	Field interviews. No activities were conducted requiring the use of the NOC during the reporting period.
H-0387	AIR 02-514	461	Not applicable	No activities were conducted requiring the use of the NOC during the reporting period.
H-0391	AIR 01-805	468	Not applicable	Field interviews. No activities were conducted requiring the use of the NOC during the reporting period.
H-0404	AIR 02-1251	486	Not applicable	Field interviews. No activities were conducted requiring the use of the NOC during the reporting period.
H-0409	AIR 02-1251	486	Not applicable	Field interviews. No activities were conducted requiring the use of the NOC portion of diffuse/fugitive emissions during the certification period.
H-0415	AIR 02-1252	489	Not applicable	Field interviews. No activities were conducted requiring the use of the NOC portion of diffuse/fugitive emissions during the certification period.

**Table 4. Attachment 2 NOCs with all Requirements and Conditions  
Irrelevant and Not Applicable During this Certification Period**

Page in AOP	Approval Number	NOC ID	Compliance Status	CDM
H-0676	AIR 02-810	526	Not applicable	Work completed prior to 2006. NOC closed 3/15/06.
H-0687	AIR 03-203	539	Not applicable	Field interviews. No activities were conducted requiring the use of the NOC portion of diffuse/fugitive emissions during the certification period.
H-0691	AIR 03-203	539	Not applicable	Field interviews. No activities were conducted requiring the use of the NOC during the reporting period.
H-0695	AIR 03-203	539	Not applicable	Field interviews. No activities were conducted requiring the use of the NOC during the reporting period.
H-0699	AIR 03-203	539	Not applicable	Field interviews. No activities were conducted requiring the use of the NOC during the reporting period.
H-0703	AIR 03-1102	540	Not applicable	Field interviews. No activities were conducted requiring the use of the NOC portion of diffuse/fugitive emissions during the certification period.
H-0709	AIR 03-1102	540	Not applicable	Field interviews. No activities were conducted requiring the use of the NOC during the reporting period.
H-0715	AIR 02-1225	546	Not applicable	Inactive during the reporting period.
H-0719	AIR 02-1255	548	Not applicable	There was no Guzzler used on the Hanford Site in 2006. No activities were conducted requiring the use of the NOC during the reporting period.
H-0742	AIR 02-1255	548	Not applicable	Field interviews. No activities were conducted requiring the use of the NOC during the reporting period.
H-0765	AIR 02-1255	548	Not applicable	Field interviews. No activities were conducted requiring the use of the NOC during the reporting period.
H-0776	AIR 04-406	550	Not applicable	No active requirements in the AOP for this certification period. The NOC license was obsolete on the effective date of the new license AIR 05-914, dated September 29, 2005.
H-0782	AIR 04-406	550	Not applicable	No active requirements in the AOP for this certification period. The NOC license was obsolete on the effective date of the new license AIR 05-914, dated September 29, 2005.
H-0788	AIR 04-406	550	Not applicable	No active requirements in the AOP for this certification period. The NOC license was obsolete on the effective date of the new license AIR 05-914, dated September 29, 2005.
H-0828	AIR 04-213	555	Not applicable	No active requirements in the AOP for this certification period. The NOC license was obsolete on the effective date of the new license AIR 04-1208, dated December 23, 2004.

**Table 4. Attachment 2 NOCs with all Requirements and Conditions  
Irrelevant and Not Applicable During this Certification Period**

Page in AOP	Approval Number	NOC ID	Compliance Status	CDM
H-0834	AIR 04-213	555	Not applicable	No active requirements in the AOP for this certification period. The NOC license was obsolete on the effective date of the new license AIR 04-1208, dated December 23, 2004.
H-0840	AIR 03-1101	561	Not applicable	Field interviews. No activities were conducted requiring the use of the NOC during the reporting period. Type-1 PTRAEU units were used under the sitewide NOC within CH2M HILL Hanford Group, Inc.
H-0845	AIR 03-1101	561	Not applicable	There was no Guzzler used on the Hanford Site in 2006. No activities were conducted requiring the use of the NOC during the reporting period.
H-0850	AIR 03-1101	561	Not applicable	Field interviews. No activities were conducted requiring the use of the NOC portion of diffuse/fugitive emissions during the certification period.
H-0910	AIR 03-602	565	Not applicable	Field interviews. No activities were conducted requiring the use of the NOC portion of diffuse/fugitive emissions during the certification period.
H-0915	AIR 03-712	566	Not applicable	Field interviews. No activities were conducted requiring the use of the NOC portion of diffuse/fugitive emissions during the certification period.
H-0920	AIR 04-503	567	Not applicable	Field interviews. No activities were conducted requiring the use of the NOC during the reporting period.
H-0979	AIR 03-611	578	Not applicable	Field interviews. No activities were conducted requiring the use of the NOC during the reporting period.
H-1039	AIR 04-306	586	Not applicable	No active requirements in the AOP for this certification period. The NOC license was obsolete on the effective date of the new license AIR 05-406, dated April 21, 2005.
H-1045	AIR 04-306	586	Not applicable	No active requirements in the AOP for this certification period. The NOC license was obsolete on the effective date of the new license AIR 05-406, dated April 21, 2005.
H-1071	AIR 04-904	607	Not applicable	No active requirements in the AOP for this certification period. This NOC was reported to be closed by 05-ED-071, dated September 16, 2005.
H-1076	AIR 04-904	607	Not applicable	No active requirements in the AOP for this certification period. This NOC was reported to be closed by 05-ED-071, dated September 16, 2005.

**APPENDIX C**

**ATTACHMENT 3 REQUIREMENTS**

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**CONTENTS**

(Sitewide) Asbestos Compliance ..... 1  
(Sitewide) Open Burn Compliance..... 2

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(Sitewide) Asbestos Compliance

Page in AOP: 3-001

Permit: AOP 00-05-006 Issue Date: 07-02-01 Date In AOP: 07-02-01

NOC: General Asbestos Requirement

Condition	Compliance Status	Compliance Determination Method
<p><b>Condition:</b> The permittee shall comply with the National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 Code of Federal Regulations (CFR) Part 61, Subpart M. "National Emission Standard for Asbestos," and the Benton Clean Air Authority (BCAA) Regulation 1, Article 8, Asbestos.</p> <p><b>Model ID:</b> Not applicable.</p> <p><b>EPA Test Method:</b> Not specified.</p> <p><b>EPA Test Method Frequency:</b> Not applicable.</p> <p><b>Periodic Monitoring:</b> Not specified.</p> <p><b>Required Records:</b> Not applicable.</p>	<p>Continuous</p>	<p><b>CDM:</b> Reasonable inquiry</p> <p><b>Comment:</b></p> <ul style="list-style-type: none"> <li>• Projects are reviewed for asbestos requirements. Persons responsible for performing activities are qualified and certified as appropriate.</li> <li>• Some asbestos abatement work performed by Hanford Contractors was located in areas being remediated pursuant to the Comprehensive Environmental Restoration Compensation and Liability Act (CERCLA). Actions taken pursuant to CERCLA are exempt from permitting and other administrative requirements.</li> <li>• The WTP is a new facility under construction. Asbestos containing products were not used and no demolition or renovation activities subject to 40 CFR 61 Subpart M or BCAA, Regulation 1, Article 8, occurred during the reporting period.</li> </ul>

**(Sitewide) Open Burn Compliance**

Page in AOP: 3-001

Permit: 00-05-006 Issue Date: 07-02-01 Date In AOP: 07-02-01

NOC: Open Burn Compliance

Condition	Compliance Status	Compliance Determination Method
<p><b>Condition:</b> The permittee shall comply with WAC 173-425 and BCAA Regulation 1, Article 5, "Open Burning". The Department of Energy, or contractors, shall request a special opening burning permit and obtain BCAA approval for open burning activities subject to the underlying applicable requirement.  <b>Model ID:</b> Not applicable.  <b>EPA Test Method:</b> Not specified.  <b>EPA Test Method Frequency:</b> Not applicable.  <b>Periodic Monitoring:</b> Not specified.  <b>Required Records:</b> Not specified.</p>	<p>Continuous</p>	<p><b>CDM:</b> Review of records and inquiry of persons responsible for the activity.  <b>Comment:</b> Complied with Special Burning Permit No. 20060007. Also burned wind blown tumble weeds.</p>

**APPENDIX D**

**CY2005 AOP ANNUAL REPORT ADDENDUM**

**DOE/RL-2006-03 *Hanford Site Air Operating Permit Annual Compliance Certification  
Report for the Period January 1, 2005 through December 31, 2005***

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**CONTENTS**

(Sitewide) Vented Containers ..... 1  
(100K) N-1724K 001 ..... 9

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The Air Operating Permit annual compliance certification report information for the Sitewide Vented Container Notice of Construction (NOC) was unintentionally excluded from the scope of the CY2005 report. The following entry provides the missing information.

**(Sitewide) Vented Containers**

WDOH Emission Unit ID : 448

Page in AOP : H-0057

Requirement	Compliance Status	Compliance Determination Method
No active Abatement Controls in the AOP for this certification period.		
<b>Required Sampling:</b> Environment Sampling <b>Sampling Frequency:</b> Air-every 2 weeks continuous/deposition - annually <b>Radionuclide Requiring Measurement:</b> TOTAL ALPHA TOTAL BETA	Continuous	<b>CDM:</b> Required near-facility monitoring conducted as reported in DOE/RL-2006-01 "Radionuclide air Emissions Report for the Hanford Site Calendar Year 2005". <b>Comment:</b>
<b>Federal and State Regulatory Requirement:</b> 40 CFR 61.93(b)(4)(i) & WAC 246-247-075(3) <b>Permit Monitoring and Testing Procedure:</b> 40 CFR 61, Appendix B, Method 114(3)	Continuous	<b>CDM:</b> Required near-facility monitoring conducted as reported in DOE/RL-2006-01 "Radionuclide air Emissions Report for the Hanford Site Calendar Year 2005". QA requirements documented in HNF-EP-0538 "Near Facility Environmental Monitoring Quality Assurance Project Plan". Analytical requirements specified in HNF-EP-0835 "SOW for Services Provided by WSCF during CY2005" <b>Comment:</b>
<b>Permit:</b> AIR 02-1215 <b>Issue Date:</b> 12-13-02 <b>NOC:</b> Sitewide Vented Container Storage <b>WDOH NOC ID:</b> 188 <b>Date In AOP:</b> 04-11-05 <b>Page in AOP:</b> H-0057		
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	<b>CDM:</b> For this approval order, in compliance with all approval conditions. <b>Comment:</b>

Requirement	Compliance Status	Compliance Determination Method
The total abated emission limit for this Notice of Construction is limited to 5.10E-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 1.50E-05 mrem/year to the Maximally Exposed Individual (WAC 246-247-030(21)).	Continuous	<b>CDM:</b> DOE/RL-2006-01 "Radionuclide Air Emissions Report for the Hanford Site Calendar Year 2005". <b>Comment:</b>
No activities, other than those explicitly described within this approval, shall be conducted without prior written approval. The approved activities are limited to: containers are used to store mixed and/or radioactive waste generated on and off the Hanford Site. Venting devices are installed when there is the potential for non-radioactive gases (I.e., hydrogen) to be generated as a result of radiolysis.	Continuous	<b>CDM:</b> HNF-EP-0063, Hanford Site Solid Waste Acceptance Criteria <b>Comment:</b>
This NOC does not have "Annual Possession Quantity" limits.	Not Applicable	<b>CDM:</b> N/A <b>Comment:</b> Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are historical summary or fact, that pertain to actions to be complete in the future or that pertain to actions required of the agency.
Containers other than drums are also approved if they meet the conditions of this NOC.	Continuous	<b>CDM:</b> HNF-EP-0063, Hanford Site Solid Waste Acceptance Criteria <b>Comment:</b>
Establishes a categorical As Low As Reasonably Achievable Control Technology (ALARACT) demonstration for existing Hanford Site vented containers.	Not Applicable	<b>CDM:</b> N/A <b>Comment:</b> Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are historical summary or fact, that pertain to actions to be complete in the future or that pertain to actions required of the agency.
NucFil™ filter or an equivalent filter shall be BARCT and ALARACT. Vent clips are accepted as ALARACT for existing systems to date, however, when conditions require repackaging vent clips shall be replaced by NucFil™ or equivalent filters.	Continuous	<b>CDM:</b> HNF-EP-0063, Hanford Site Solid Waste Acceptance Criteria; facility specific safety basis documentation. <b>Comment:</b>

Requirement	Compliance Status	Compliance Determination Method
The vented container Latitude and Longitude coordinates (46 degrees 22' 13.8", 119 degrees 16' 12.3") refer to the location resulting in the highest impact to the MEI.	Not Applicable	<p><b>CDM:</b> N/A  <b>Comment:</b> Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are historical summary or fact, that pertain to actions to be complete in the future or that pertain to actions required of the agency.</p>
Establishes a categorical Best Available Radionuclide Control Technology (BARCT) demonstration for all future Hanford Site vented containers ( i.e., up to 10,000 vented container units (UVC) based on total unabated emissions and 27,000,000 UVC based on total abated emissions offering less than 0.1mrem/year to the MEI).	Not Applicable	<p><b>CDM:</b> N/A  <b>Comment:</b> Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are historical summary or fact, that pertain to actions to be complete in the future or that pertain to actions required of the agency.</p>
These containers are used for storing mixed and or radioactive waste generated on or off Hanford Site.	Not Applicable	<p><b>CDM:</b> N/A  <b>Comment:</b> Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are historical summary or fact, that pertain to actions to be complete in the future or that pertain to actions required of the agency.</p>
WDOH accepts vent clips as ALARACT since they are no longer installed.	Not Applicable	<p><b>CDM:</b> N/A  <b>Comment:</b> Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are historical summary or fact, that pertain to actions to be complete in the future or that pertain to actions required of the agency.</p>

Requirement	Compliance Status	Compliance Determination Method
<p>Pu239/240 equivalent curies (PE-Ci) represents the radionuclide of concern as discussed in the Hanford Site Solid Waste Acceptance Criteria, WHC-EP-0063, 1994, Westinghouse Hanford Company, Richland Washington.</p>	<p>Not Applicable</p>	<p><b>CDM:</b> N/A <b>Comment:</b> Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are historical summary or fact, that pertain to actions to be complete in the future or that pertain to actions required of the agency.</p>
<p>The annual possession quantity for each vented container varies. The maximum quantity per container is based on preventing nuclear criticality, which is managed by: (I) controlling the amount of fissionable material in each container, (ii) container spacing requirements, (iii) container segregation. The annual possession quantity for this categorical approval is accepted due to the variability of waste types.</p>	<p>Continuous</p>	<p><b>CDM:</b> HNF-EP-0063, Hanford Site Solid Waste Acceptance Criteria; facility specific safety basis documentation. <b>Comment:</b></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><b>CDM:</b> Facility specific documentation; HNF-EP-0063, Hanford Site Solid Waste Acceptance Criteria <b>Comment:</b></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><b>CDM:</b> N/A <b>Comment:</b> Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are historical summary or fact, that pertain to actions to be complete 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><b>CDM:</b> N/A <b>Comment:</b> Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are historical summary or fact, that pertain to actions to be complete 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	<b>CDM:</b> QA requirements documented in HNF-EP-0528 "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions". <b>Comment:</b>
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)).	Not Applicable	<b>CDM:</b> N/A <b>Comment:</b> Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are historical summary or fact, that pertain to actions to be complete in the future or that pertain to actions required of the agency.
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)).	Continuous	<b>CDM:</b> Facility training workers. <b>Comment:</b>
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	<b>CDM:</b> HNF-EP-0528 "NESHAP Quality Assurance Project Plan for Radioactive Air Emissions". <b>Comment:</b>
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	<b>CDM:</b> N/A <b>Comment:</b> Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are historical summary or fact, that pertain to actions to be complete in the future or that pertain to actions required of the agency.
The department may require in ALARACT demonstration at any time (WAC 246-247-080(1)).	Not Applicable	<b>CDM:</b> N/A <b>Comment:</b> Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are historical summary or fact, that pertain to actions to be complete in the future or that pertain to actions required of the agency.

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><b>CDM:</b> Information resides at the individual facility. For annual reporting DOE/RL-2006-01 "Radionuclide Air Emissions Report for the Hanford Site Calendar Year 2005" satisfies the requirement. <b>Comment:</b></p>
<p>The facility shall report all measured or calculated emissions annually (WAC 246-247-080(3)).</p>	<p>Continuous</p>	<p><b>CDM:</b> DOE/RL-2006-01 "Radionuclide Air Emissions Report for the Hanford Site Calendar Year 2005". <b>Comment:</b></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><b>CDM:</b> Required notifications documented in AOP Semiannual reports for CY2005. <b>Comment:</b></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)).</p>	<p>Not Applicable</p>	<p><b>CDM:</b> N/A <b>Comment:</b> Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are historical summary or fact, that pertain to actions to be complete 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><b>CDM:</b> WDOH has requested information and records during past inspections and records were promptly made available. Records are maintained per HNF-RD-210. <b>Comment:</b></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><b>CDM:</b> N/A <b>Comment:</b> Ecology and WDOH have determined that licensee need not certify compliance with conditions that convey a right, are historical summary or fact, that pertain to actions to be complete 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><b>CDM:</b> The FH EP Project Services group facilitates regulatory inspections and provides and inspection point-of-contact to the Washington State Department of Health (WDOH) inspectors for the Hanford Site. Services provided include coordination of records clearance and transmittal. <b>Comment:</b></p>

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In past AOP Certification Reports, it has been incorrectly reported that a system walk down verified that the portable fume exhauster was in compliance to NOC Conditions. This was part of a group of equipment being verified in the same paragraph. The portable fume exhauster was never installed nor welding performed in the 1724 K Building. All other verifications in past AOP reports for the N-1724K 001 NOC have been correct

**(100K) N-1724K 001**

Page in AOP: 1-053

Permit: 97NM-551 Issue Date: 01-29-98 Date In AOP: 07-02-01

NOC: Maintenance Shop Operation

Requirement	Compliance Status	Compliance Determination Method
<p><b>Condition:</b> Particulate Matter (PM): For welding, use of a commercially available portable fume exhauster is required containing a two stage electrostatic precipitator (filter) that removes 98 percent of the particulates. For abrasive blasting, use of a commercially available ventilation system containing a cloth bag filtration system. For sawdust, use of a cyclone separator and bag filter prior to discharge to the atmosphere.</p> <p><b>Model ID:</b> Not applicable.</p> <p><b>EPA Test Method:</b> Not specified.</p> <p><b>EPA Test Method Frequency:</b> Not applicable.</p> <p><b>Periodic Monitoring:</b> Startup inspection.</p> <p><b>Required Records:</b> 1. Inspection records. 2. Work procedures.</p>	<p>Continuous</p>	<p><b>CDM:</b> System walkdown verified equipment is in place, except that the arc welding equipment was never installed.</p> <p><b>Comment:</b> The portable fume exhauster was never installed. Previous reports incorrectly cited compliance with this requirement. Welding has never been performed. Compliance to other requirements has been continuous.</p>
<p><b>Condition:</b> Volatile Organic Compounds: Use of an activated charcoal filter is required. The filter shall be examined and replaced when it becomes loaded.</p> <p><b>Model ID:</b> Not applicable.</p> <p><b>EPA Test Method:</b> Not specified.</p> <p><b>EPA Test Method Frequency:</b> Not applicable.</p> <p><b>Periodic Monitoring:</b> Filter maintenance inspections.</p> <p><b>Required Records:</b> Maintenance records and schedules.</p>	<p>Not Applicable</p>	<p><b>CDM:</b> Visual observation, paint booth no longer exists and was never used.</p> <p><b>Comment:</b> Construction of the paint booth was not completed, including addition of an activated charcoal filter in the exhaust stream. The paint booth never operated.</p>

Permit: 00-05-006 Issue Date: 07-02-01 Date In AOP: 07-02-01  
NOC: Non-combustion Unit with HEPA

Requirement	Compliance Status	Compliance Determination Method
<p><b>Condition:</b> Fugitive Emissions: The permittee shall take reasonable precautions to prevent the release of air contaminants from any emissions unit engaging in materials handling, construction, demolition, or any other operation that is a source of fugitive emissions. <b>Model ID:</b> Not applicable. <b>EPA Test Method:</b> Not specified. <b>EPA Test Method Frequency:</b> Not applicable. <b>Periodic Monitoring:</b> Pre-job planning to determine reasonable control measures. <b>Required Records:</b></p>	Continuous	<p><b>CDM:</b> Sources of fugitive emissions are: (1) abrasive blasting, (2) woodworking equipment, (3) benchtop grinding and sanding, and (4) benchtop soldering and brazing. Precautions (i.e., engineering controls) as described in the NOC are in place. <b>Comment:</b> The portable fume exhauster was never installed. Previous reports incorrectly cited compliance with this requirement. Welding has never been performed. Compliance to other requirements has been continuous.</p>
<p><b>Condition:</b> Fugitive Dust: Requires reasonable precautions be taken to prevent fugitive dust from becoming airborne and to minimize dust generation. <b>Model ID:</b> Not applicable. <b>EPA Test Method:</b> Not specified. <b>EPA Test Method Frequency:</b> Not applicable. <b>Periodic Monitoring:</b> Pre-job planning to determine reasonable control measures. <b>Required Records:</b></p>	Not Applicable	<p><b>CDM:</b> N/A. <b>Comment:</b> There are no sources of 'fugitive dust', e.g., unpaved roads, construction sites, and tilled land, associated with this facility.</p>
<p><b>Condition:</b> Reasonably available control technology (RACT). <b>Model ID:</b> Not applicable. <b>EPA Test Method:</b> Not specified. <b>EPA Test Method Frequency:</b> Not applicable. <b>Periodic Monitoring:</b> Permit terms considered RACT. <b>Required Records:</b></p>	Continuous	<p><b>CDM:</b> Permit terms are considered RACT. Complied with all NOC approval conditions for this emission point <b>Comment:</b> Note, paint booth construction never was completed to the extent required to allow operation, nor was the portable fume exhauster.</p>
<p><b>Condition:</b> 20% Opacity: Prohibits visible emissions exceeding 20% opacity for more than 3 minutes in any 1 hour of an air contaminant from any emissions unit or within a reasonable distance of the emission unit except for scheduled soot blowing/grate cleaning or due to documented water. <b>Model ID:</b> Not applicable. <b>EPA Test Method:</b> EPA Method 9. <b>EPA Test Method Frequency:</b> Not applicable. <b>Periodic Monitoring:</b> Section 2.1, Tier 3: Maintain abatement control technology as required in Attachment 2, Tables 1.1, 1.2, and 2.1. <b>Required Records:</b></p>	Continuous	<p><b>CDM:</b> Process knowledge. There are no processes within the facility generating emissions measured by opacity. <b>Comment:</b></p>

Requirement	Compliance Status	Compliance Determination Method
<p><b>Condition:</b> 1000 ppm SO<sub>2</sub> @ 7% O<sub>2</sub> on a dry basis: Prohibits emission of a gas containing sulfur dioxide from any emissions unit in excess of 1000 ppm of a dry basis, corrected to 7% oxygen for combustion sources, and based on the average of any period of 60 consecutive minutes.</p> <p><b>Model ID:</b> Not applicable.</p> <p><b>EPA Test Method:</b> EPA Method 6 or 6C of 40 CFR 60, App. A.</p> <p><b>EPA Test Method Frequency:</b> Not applicable.</p> <p><b>Periodic Monitoring:</b> Section 2.7, Tier 2: Annually certify the process has not been modified to increase SO<sub>2</sub> emissions and no SO<sub>2</sub> monitoring is required.</p> <p><b>Required Records:</b></p>	<p>Continuous</p>	<p><b>CDM:</b> Ecology determined this emission unit does not emit significant levels of SO<sub>2</sub>. Process has not been modified to increase SO<sub>2</sub> emissions.</p> <p><b>Comment:</b></p>

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