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Revision 0

Radioactive Air Emissions Notice of Construction for Sodium Residuals Reaction/Removal and Other Deactivation Work Activities at the Fast Flux Test Facility

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

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United States
Department of Energy
P.O. Box 550
Richland, Washington 99352

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Release Approval Date

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ACRONYMS

1		
2		
3		
4	ALARA	as low as reasonably achievable
5	ALARACT	as low as reasonably achievable control technology
6		
7	CFR	Code of Federal Regulations
8		
9	DHX	dump heat exchangers
10	DOE-RL	U.S. Department of Energy, Richland Operations Office
11		
12	EA	environmental assessment
13	EPA	U.S. Environmental Protection Agency
14	ETF	200 Area Effluent Treatment Facility
15		
16	FFTF	Fast Flux Test Facility
17	FSF	Fuel Storage Facility
18		
19	IDS	Interim Decay Storage
20	IHX	intermediate heat exchangers
21		
22	LDCV	large-diameter cleaning vessel
23	LERF	Liquid Effluent Retention Facility
24		
25	MASF	Maintenance and Storage Facility
26	MEI	maximally exposed individual
27		
28	NOC	notice of construction
29		
30	PCM	periodic confirmatory monitoring
31	PTE	potential-to-emit
32	PTRAEU	portable temporary radionuclide airborne emissions unit
33	RWP	radiation work permit
34		
35	SSP	superheated steam process
36		
37	TEDE	total effective dose equivalent
38		
39	WAC	Washington Administrative Code
40	WDOH	State of Washington Department of Health
41		

METRIC CONVERSION CHART

Into metric units

Out of metric units

If you know	Multiply by	To get	If you know	Multiply by	To get
Length			Length		
inches	25.40	millimeters	millimeters	0.03937	inches
inches	2.54	centimeters	centimeters	0.393701	inches
feet	0.3048	meters	meters	3.28084	feet
yards	0.9144	meters	meters	1.0936	yards
miles (statute)	1.60934	kilometers	kilometers	0.62137	miles (statute)
Area			Area		
square inches	6.4516	square centimeters	square centimeters	0.155	square inches
square feet	0.09290304	square meters	square meters	10.7639	square feet
square yards	0.8361274	square meters	square meters	1.19599	square yards
square miles	2.59	square kilometers	square kilometers	0.386102	square miles
acres	0.404687	hectares	hectares	2.47104	acres
Mass (weight)			Mass (weight)		
ounces (avoir)	28.34952	grams	grams	0.035274	ounces (avoir)
pounds	0.45359237	kilograms	kilograms	2.204623	pounds (avoir)
tons (short)	0.9071847	tons (metric)	tons (metric)	1.1023	tons (short)
Volume			Volume		
ounces (U.S., liquid)	29.57353	milliliters	milliliters	0.033814	ounces (U.S., liquid)
quarts (U.S., liquid)	0.9463529	liters	liters	1.0567	quarts (U.S., liquid)
gallons (U.S., liquid)	3.7854	liters	liters	0.26417	gallons (U.S., liquid)
cubic feet	0.02831685	cubic meters	cubic meters	35.3147	cubic feet
cubic yards	0.7645549	cubic meters	cubic meters	1.308	cubic yards
Temperature			Temperature		
Fahrenheit	subtract 32 then multiply by 5/9ths	Celsius	Celsius	multiply by 9/5ths, then add 32	Fahrenheit
Energy			Energy		
kilowatt hour	3,412	British thermal unit	British thermal unit	0.000293	kilowatt hour
kilowatt	0.94782	British thermal unit per second	British thermal unit per second	1.055	kilowatt
Force/Pressure			Force/Pressure		
pounds (force) per square inch	6.894757	kilopascals	kilopascals	0.14504	pounds per square inch

06/2001

Source: *Engineering Unit Conversions*, M. R. Lindeburg, P.E., Third Ed., 1993, Professional Publications, Inc., Belmont, California.

1 until hydrogen is no longer being generated. The system is then cooled and rinsed and the fluid is drained
2 from the system.

3
4 The following Subsections address sodium residuals reaction/removal at FFTF. Additional details are
5 provided in the aforementioned DOE/EA-1547F, and are incorporated herein by reference.
6
7

8 **6.1 PERFORM IN-PLACE CLEANING OF VESSELS, COMPONENTS, AND** 9 **LARGE-BORE PIPE**

10 A PTRAEU would be used to clean, in-place, large-bore sodium pipe [greater than or equal to
11 ~20-centimeter (8-inch) diameter], components and vessels in the primary and secondary sodium cooling
12 systems. The PTRAEU also would be used to clean the Interim Decay Storage (IDS) and Fuel Storage
13 Facility (FSF) vessels [Note: Select components in the primary sodium system, and large diameter
14 piping and components in the secondary sodium system may be removed and cleaned in FSF or the
15 Maintenance and Storage Facility (MASF), as described in Subsections 6.2 or 6.3].
16

17 Typically, penetrations into the piping/vessels would be made at appropriate locations using a low-speed
18 drill. Existing sodium heating systems would be energized, and piping/vessels heated to liquefy the
19 existing sodium residuals. A PTRAEU would be connected to the penetration points, and used at various
20 locations to inject the superheated steam into plant systems.
21

22 The superheated steam would be injected. Hydrogen generation would be monitored to follow the
23 reaction. Liquid waste (i.e., sodium hydroxide solution) would be collected in an interim staging vessel.
24 The pH of the resultant solution would be reduced to <13 before offloading the solution to tanker
25 transport for overland transfer to Liquid Effluent Treatment Facility (LERF) and subsequent treatment at
26 200 Area Effluent Treatment Facility (ETF). If needed or chosen for use during these activities, the
27 categorical NOC (with associated controls described in Section 6.0) for sitewide use of tanker loading for
28 wastewater could be used.
29
30

31 **6.2 REMOVE SMALL BORE PIPE AND COMPONENTS FOR REACTION IN A** 32 **CLEANING STATION**

33 Small bore piping [<20-centimeter (8-inch) diameter], valves and other components [e.g., core component
34 pots from IDS, fuel storage tubes from FSF, and dump heat exchangers (DHX) tube bundles] may be
35 removed and processed in a proposed stationary cleaning station that would be located in FSF.
36 Mechanical means (e.g., portable saws, pipe cutters) would be used to cut the pipe, valves, and
37 components into manageable size. All heat exchanger tube bundles, which contain multiple parallel flow
38 paths, would be dismantled to ensure effective cleaning.
39

40 The proposed FSF stationary cleaning station would consist of a chamber with removable rack for loading
41 piping and components. The piping would be loaded at an angle, allowing the residual sodium to drain to
42 a catch basin when heated before the injection of inert gas and/or reaction medium. The process in the
43 cleaning station would be consistent with the in-place process (refer to Subsection 6.1) where the resultant
44 waste sodium hydroxide solution is collected, the pH reduced to <13, and transported to the 200 Areas.
45 The FSF is considered an appropriate location due to availability of sufficient floor space, existing
46 overhead crane, available utilities, and proximity to proposed operations. If needed or chosen for use
47 during these activities, the categorical NOC (with associated controls described in Section 6.0) for
48 sitewide use of tanker loading for wastewater could be used.
49

50 Cleaned piping and components would be disposed of in a Hanford Site solid waste management facility.

1 **6.3 REMOVE LARGE COMPONENTS FOR CLEANING**

2 The large-diameter cleaning vessel (LDCV) located in the existing MASF could be used for cleaning
3 large components following removal (e.g., primary sodium pumps, intermediate heat exchanger (IHX)
4 tube bundles, and instrument trees). The LDCV could be retrofitted with a new super-heated steam
5 supply and associated control system for use in cleaning the aforementioned components. The IHX tube
6 bundles, which contain multiple parallel sodium flow paths, may be dismantled to ensure effective
7 cleaning. Small bore pipe and components (refer to Subsection 6.2) also could be cleaned in MASF, if
8 necessary.

9
10 Emissions would be routed through the existing MASF ventilation system; for conservatism no filtration
11 is assumed.

12
13
14 **6.4 OTHER DEACTIVATION ACTIVITIES**

15 Other related routine, continued deactivation activities that could occur as part of the proposed action are:
16 remove/dispose of asbestos; remove/stabilize existing hazards in conjunction with systems and equipment
17 deactivation associated with sodium residuals; remove/recycle/dispose excess deactivated equipment and
18 components; and remove depleted uranium and/or lead shielding. Any diffuse and fugitive emissions
19 resulting from these aforementioned activities would not contribute significantly to releases associated
20 with sodium residual reaction/removal (refer to existing potential-to-emit documentation, Tables 1
21 through 4).

22
23
24 **7.0 ANNUAL POSSESSION QUANTITY AND PHYSICAL FORM**
25 **(REQUIREMENTS 8, 10, AND 11)**

26 With the exception of tritium (gas), the physical forms of the radionuclides in the reaction/removal and/or
27 deactivation activities would be of particulate solid and liquid. For purposes of emissions and offsite dose
28 estimates, the release of the radionuclides in the annual possession quantity, as presented in Section 10.0,
29 is assumed to be in the form of particulates (with the exception of tritium).

30
31 The radionuclides of concern for this activity are hydrogen-3 (tritium), sodium-22, manganese-54,
32 cobalt-60, zinc-65, ruthenium-106, barium-137m, cesium-134, cesium-137, and plutonium-239. As
33 shown in Tables 1 through 4, conservative dose/emission calculations are based on a 1993 radiological
34 analysis of FFTF primary sodium.

35
36
37 **8.0 ABATEMENT TECHNOLOGY AND CONCEPTUAL DRAWING(S)**
38 **(REQUIREMENTS 6 AND 7)**

39 No credit is taken for particulate or aerosol collection by new or existing airborne emissions abatement
40 control equipment associated with the activities described for this NOC application. For example,
41 scrubbers/chillers may be installed to minimize emissions of sodium compounds (oxide or hydroxide) due
42 to the associated toxicological (not radiological) impacts. Many of the emission controls used for the
43 diffuse and fugitive emissions during sodium residual reaction/removal and deactivation operations would
44 be administrative, based on as low as reasonably achievable (ALARA) principles and consist of ALARA
45 techniques as delineated in radiation control procedures.

1 For each unit, the combined effects of purging with inert gas, steam injection, sodium reaction, and drying
2 reacted piping would be no greater than 300 standard cubic feet per minute at less than 149°C (300°F).

3
4 Operations would be performed in accordance with the controls specified in radiation work planning
5 documents and/or operating procedures, available for inspection upon request.

6
7 Further, the FF-01 license describes the required abatement control technology for the minor point
8 sources 437-1-61, 437-MN&ST, FFTF-CB-EX, and FFTF-HT-TR; the associated technology is
9 incorporated herein by reference.

10
11 It is proposed that the controls specified in radiation work planning documents and/or operating
12 procedures in effect at the time of operations satisfy as low as reasonably achievable control technology
13 (ALARACT) for the activities. Such controls, minimizing airborne radioactive emissions resulting from
14 the cleaning operations, include the following.

- 15
16 • All activities would be conducted under the auspices of radiological or health physics control
17 technicians or personnel. Routine field surveys, including swipes/smears, will be conducted.
18 Fixatives, covers, or other standard measures will be used, as necessary, to contain contamination.
19
20 • The maximum radionuclide inventory associated with routine airborne releases would be very small.
21 Appropriate spill prevention procedures would be in place to minimize the probability of an
22 accidental release of radioactive liquid waste to the environment, and to provide immediate cleanup
23 of any liquid spills.
24
25 • Tanker truck transfers of waste water to LERF and ETF would apply the controls as described in the
26 categorical tanker truck transfer NOC (DOE/RL-2002-56).

27
28
29 **9.0 MONITORING SYSTEM (REQUIREMENT 9)**

30 The total unabated potential-to-emit (PTE) for this project is calculated to be less than 0.1 millirem per
31 year TEDE to the MEI, using the conservative approved method specified in WAC 246-247-030(21)(a).

32
33 Radionuclide air emissions from the PTRAEUs will be estimated in lieu of monitoring. Estimates will be
34 based on sample analyses of collected waste water from sodium residuals reaction. The basis for
35 determining the maximum airborne radiological releases would be a 1:1 ratio of dissolved isotopic
36 sodium (i.e., sodium-22; refer to Tables 1 through 4) to the calculated curies released.

37
38 Further, the existing monitoring systems on the affected stacks would continue to operate. Appropriate
39 PCM for these stacks will be conducted using the existing methods as listed in the FF-01 license.
40 Existing sampling for these stacks consists of sampling for 4 weeks per year for total alpha/beta.

41
42 For the diffuse and fugitive emission units, the accepted primary method of monitoring will be used. This
43 method consists of ambient air sampling, with other media samples (e.g., surface soil, vegetation for
44 deposition, radiological surveys and thermoluminescent dosimeters) used as qualitative indicators.

45
46 Additionally, radiological surveys during cleaning operations (e.g., smears, radiation monitoring
47 measurements at FFTF using hand-held field instruments) would be conducted. These methods are not a
48 direct measurement of effluent emissions. The methods are intended to help verify ALARA emissions
49 are being kept under the contamination levels by which work is controlled.

1
2 **10.0 RELEASE RATES (REQUIREMENTS 12 AND 13)**

3 Release rates are based on the conservative assumptions provided in Tables 1 through 4 regarding the
4 isotopic mixture amounts and ratios. Unabated release rates, provided in Tables 1 through 4, were
5 determined by applying the WAC 246-247-030(21)(a) release factor for liquids or particulate solids
6 (1.0 E-03) to the estimated annual possession quantity. A release fraction of 1 was used for tritium.
7

8 A release factor of 1.0 E-03 was used for all constituents except tritium, because for those constituents the
9 radionuclide could be subjected to temperatures at or above its melting point, but below its boiling point.
10 Specifically: Na-22 [as metallic sodium, melts at 97.8°C (208°F)/boils at 882.9°C (1,621°F)], Cs-137 [as
11 the oxide, Cs₂O; melts at 490°C (120°F)/then decomposes rather than boils], and Pu-239 [as the oxide,
12 PuO₂; melts at 2400°C (4,352°F)/boils at 2800°C (5,072°F)]². The bulk of the radioactivity likely would
13 be contained in the aqueous waste stream.
14

15 Because there is no credit taken for air emissions abatement equipment, the abated releases are assumed
16 to be the same as unabated releases; releases are calculation-based.
17

18 The PTRAEU emission units would operate in a batch mode.
19
20

21 **11.0 OFFSITE IMPACT (REQUIREMENTS 14 AND 15)**

22 The PTRAEUs would be used to convert metallic sodium to aqueous sodium hydroxide. The total
23 amount of residual sodium to be reacted would not exceed 15,000 liters (4,000 gallons) per year. The
24 total calculated unabated dose rate to the MEI from airborne emissions is 5.7 E-03 millirem per year. No
25 credit for abatement equipment is assumed; therefore, the abated TEDE also is 5.7 E-03 millirem per
26 year.
27

28 This calculated release value is considered conservative. For example, the calculations assume all the
29 tritium (most of which in actuality has decayed away) would be released to the atmosphere. In reality, the
30 radiological inventory in the airborne discharged concentrations would be less since the majority of any
31 remaining tritium would be contained in the sodium hydroxide solution as tritiated water.
32

33 The reported TEDE to the MEI resulting from all 2004 Hanford Site air emissions (point sources, diffuse,
34 and fugitive sources) was 0.032 millirem (DOE/RL-2005-06). The emissions resulting from the FFTF
35 activities, in conjunction with other operations on the Hanford Site, would not result in a violation of the
36 National Emission Standard of 10 millirem per year (40 CFR 61, Subpart H).
37
38

39 **12.0 COST FACTORS AND FACILITY LIFETIME (REQUIREMENTS 16 AND 17)**

40 There are no additional control technology equipment components or systems for which credit is taken
41 regarding effluent collection; therefore, there are no control technology cost factors associated with the
42 proposed activity. The emission controls used during the residual sodium reaction/removal activities
43 administratively would be defined and consist of ALARA principles and techniques.
44

² CRC, Handbook of Chemistry and Physics, 74th Edition, 1993-1994.

1 Cleaning operations would be conducted on an as-needed basis. Depending on funding constraints, the
2 expected lifetime of operations could range from ~10 years (fully funded) to 40 years.
3
4

5 **13.0 TECHNOLOGY STANDARDS (REQUIREMENT 18)**

6 ASME/ANSI AG-1, ASME/ANSI N509, ASME/ANSI N510, ANSI/ASME NQA-1, 40 CFR 60,
7 Appendix A Methods 1, 1A, 2, 2A, 2C, 2D, 4, 5, and 17, and ANSI N13.1.
8

9 The listed control technology standards have been considered. No changes to existing abatement control
10 technology for affected emission units are anticipated. The FF-01 license describes the required
11 abatement control technology for the minor point sources 437-1-61, 437-MN&ST, FFTF-CB-EX, and
12 FFTF-HT-TR. The aforementioned emission unit control technology, and administratively defined
13 ALARA-based emission controls proposed for FFTF residual sodium reaction/removal and deactivation
14 activities are proposed as adequate to limit and control emissions.
15
16
17

14.0 REFERENCES

- 2 Air Operating Permit, Hanford Site, 00-05-006, State of Washington Department of Ecology.
3
4 AIR 01-407, Letter, A. Conklin, WDOH, to J. Hebdon, RL, no subject, dated April 26, 2001.
5
6 HNF-1974, Revision 1, *Radionuclide National Emission Standards for Hazardous Air Pollutants*
7 *Potential-to-Emit Assessment*, Fluor Hanford, Richland, Washington.
8
9 DOE/EA-1547F, *Environmental Assessment; Sodium Residuals Reaction/Removal and Other*
10 *Deactivation Work Activities, Fast Flux Test Facility (FFTF) Project, Hanford Site, Richland,*
11 *Washington*, March 2006, U.S. Department of Energy, Richland, Washington.
12
13 DOE/RL-2002-56, *Radioactive Air Emissions Notice of Construction for Tanker Truck Loading of*
14 *Radioactively Contaminated Wastewater*, Revision 1, U.S. Department of Energy, Richland,
15 Washington.
16
17 DOE/RL-2005-06, *Radionuclide Air Emissions Report for the Hanford Site, Calendar Year 2004,*
18 *June 2005*, U.S. Department of Energy, Richland, Washington.
19
20 DOE/RL-2006-29, *Calculating Potential to Emit Releases and Doses*, Revision 0, May 2006, U.S.
21 Department of Energy, Richland, Washington.
22
23 HNF-3602, *Revision 1: Calculating Potential to Emit Releases and Doses for FEMPs and NOCs*, Fluor
24 Hanford, Richland, Washington.
25
26 PNNL-13910. Appendix 2, *Hanford Site Near-Facility Environmental Monitoring Data Report for*
27 *Calendar Year 2001*, September 2002, Pacific Northwest National Laboratory, Richland,
28 Washington.

Table 1. Baseline Potential-to-Emit for Existing Emission Units.*

Isotope	FFTF-CB-EX	FFTF-HT-TR	437-1-61	437-MN&ST	Diffuse/Fugitive**
Cs-137 Ci/yr	NA	NA	5.60 E-07	7.69 E-05	NA
Total Beta (Cs-137) Ci/yr	1.03 E-06	3.03 E-07	NA	7.80 E-05	NA
H-3 Ci/yr	3.6 E+00	NA	NA	NA	0.02
Total Alpha (Pu-239) Ci/yr	3.13 E-08	4.93 E-09	NA	2.00 E-05	NA
Co-60 Ci/yr	NA	NA	NA	1.30 E-04	NA
Mn-54 Ci/yr	NA	NA	NA	0.2	NA
Offsite Potential Dose (mrem/yr)	1.23 E-04	1.65 E-07	1.96 E-07	5.14 E-03	6.8 E-07
TOTAL DOSE, baseline (mrem/yr)	5.2 E-03				

*HNF-1974, Revision 1, *Radionuclide National Emission Standards for Hazardous Air Pollutants Potential-to-Emit Assessment*.

**Baseline diffuse and fugitive from release estimates for Sodium Storage Facility; based on Calendar Year 2004 releases of ~20,000 microcuries.

NA = not applicable.

Table 2. Potential Release Rates^a/Doses Resulting from Mechanical Handling; Existing Emission Units.^b

Radionuclides	FFTF-CB-EX (Ci/yr)	FFTF-HT-TR (Ci/yr)	437-1-61 (Ci/yr)	437-MN&ST (Ci/yr)	Diffuse/Fugitive (Ci/yr)
Sodium-22	3.9 E-04	3.9 E-04	3.9 E-04	3.9 E-04	3.9 E-04
Cesium-137	7.5 E-08	7.5 E-08	7.5 E-08	7.5 E-08	7.5 E-08
Plutonium-239	9.0 E-15	9.0 E-15	9.0 E-15	9.0 E-15	9.0 E-15
Hydrogen-3 (tritium)	1.3 E-01	1.3 E-01	1.3 E-01	1.3 E-01	1.3 E-01
Doses (mrem/yr)^c	8.0 E-05	8.0 E-05	8.0 E-05	8.0 E-05	8.0 E-05
TOTAL DOSE, mechanical (mrem/yr)	4.0 E-04				

^a A release fraction of 1 was used for tritium; all other isotopes used a release fraction of 1.0 E-03.

^b No one emission unit would be challenged by more than 50 percent of the 4,000 gallons of residual sodium.

^c Abated = Unabated. Dose conversion factors from HNF-3602, *Revision 1: Calculating Potential to Emit Releases and Doses for FEMPs and NOCs*, and DOE/RL-2006-29, *Calculating Potential to Emit Releases and Doses*.

Table 3. Residual Sodium Reaction/Removal Potential Dose from PTRAEU.

Radionuclides	Annual Possession Quantity (Curie) ^a	Release rates ^b (Ci/yr)	Dose Conversion Factor ^c (millirem per curie)	Unabated Offsite Dose (millirem per year) ^d
Sodium-22	7.8 E-01	7.8 E-04	1.9 E-01	1.5 E-04
Cesium-137	1.5 E-04	1.5 E-07	3.5 E-01	5.3 E-08
Plutonium-239	1.8 E-11	1.8 E-14	1.2 E+01	2.2 E-13
Hydrogen-3 (tritium)	2.5 E-01	2.5 E-01	3.4 E-05	8.5 E-06
TOTAL DOSE, reaction				1.6 E-04

^a Based on 1993 primary sodium inventory; assume all 4,000 gallons of residual sodium released in year, and residual sodium = 3.84 kilograms per gallon, and ~4,000 gallons: = 1.54 E+03 kg = 1.54 E+06 g.

^b WAC 246-247-030(21)(a) release factor for liquids or particulate solids (1.0 E-03) to the estimated annual possession quantity. A release fraction of 1 was used for tritium.

^c HNF-3602, Revision 1: *Calculating Potential to Emit Releases and Doses for FEMPs and NOCs*, and DOE/RL-2006-29, *Calculating Potential to Emit Releases and Doses*.

^d Potential abated release is assumed to be the same as the potential unabated release because no credit is taken for emissions abatement control equipment.

Table 4. Total Dose Consequences from Residual Sodium Reaction/Removal.

Location	mrem/yr
General Diffuse/Fugitive	8.1 E-05
FFTF-CBEX-001	2.0 E-04
FFTF-HTTR-001	8.0 E-05
437-1-61	8.0 E-05
437-MN&ST	5.1 E-03
SUBTOTAL Baseline + Mechanical	5.5 E-03
Plus PTRAEU Releases (Table 3)	1.6 E-04
TOTAL DOSE	5.7 E-03

^a HNF-1974, Revision 1, Radionuclide National Emission Standards for Hazardous Air Pollutants Potential-to-Emit Assessment, Fluor Hanford, Richland, Washington.

ENCLOSURE 2

NOTIFICATION OF OFF-PERMIT CHANGE FOR THE HANFORD SITE AIR OPERATING
PERMIT (NUMBER 00-05-006) FOR RADIOACTIVE AIR EMISSIONS NOTICE OF
CONSTRUCTION, DOE/RL-2006-49, REVISION 0,
*SODIUM RESIDUALS REACTION/REMOVAL AND OTHER DEACTIVATION WORK
ACTIVITIES AT THE FAST FLUX TEST FACILITY*

HANFORD SITE AIR OPERATING PERMIT

Notification of Off-Permit Change

Permit Number: 00-05-006

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

This change is allowed pursuant to WAC 173-401-724(1) as:

1. Change is not specifically addressed or prohibited by the permit terms and conditions
2. Change does not weaken the enforceability of the existing permit conditions
3. Change is not a Title I modification or a change subject to the acid rain requirements under Title IV of the FCAA
4. Change meets all applicable requirements and does not violate an existing permit term or condition
5. Change has complied with applicable preconstruction review requirements established pursuant to RCW 70.94.152.

Provide the following information pursuant to WAC-173-401-724(3):

Description of the change:	
A Radioactive Air Emissions Notice of Construction (NOC), <i>Radioactive Air Emissions Notice of Construction for Sodium Residuals Reaction/Removal and Other Deactivation Work Activities at the Fast Flux Test Facility</i> (DOE/RL-2006-49, Revision 0), is being submitted to the Washington State Department of Health (WDOH) for approval. A change in the Hanford Site Air Operating Permit is required to indicate this source of air emissions.	
Date of Change:	
Effective date will be the date of approval by WDOH of the NOC.	
Describe the emissions resulting from the change:	
Describe the new applicable requirements that will apply as a result of the change:	
Applicable requirements will be identified in approval notifications by WDOH.	
For Hanford Use Only:	
AOP Change Control Number:	Date Submitted: