IM# 8,206

Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

14-AMRP-0215

JUN 2 3 2014

Mr. J. Martell, Manager
Radioactive Air Emissions Section
State of Washington
Department of Health
309 Bradley Boulevard, Suite 201
Richland, Washington 99352

Ms. J. A. Hedges, Program Manager
Nuclear Waste Program
State of Washington
Department of Ecology
3100 Port of Benton
Richland, Washington 99354

Addressees:

RADIOACTIVE AIR EMISSIONS LICENSE/ALARACT REVISION REQUEST, TO AMEND RADIOACTIVE AIR EMISSIONS NOTICE OF CONSTRUCTION APPLICATION, DOE/RL-2013-50, REVISION 0

This letter transmits the Radioactive Air Emissions License/ALARACT Revision Request that amends the information contained in the original Notice of Construction Application, DOE/RL-2013-50, to reflect the negotiated agreement on the Trench 94 FF-01 license. The license request form has been prepared in accordance with Washington Administrative Code (WAC) 246-247. The Off-Permit Change Notification documentation has been submitted with the original Notice of Construction Application in accordance with the WAC-173-401-724.

The Radioactive Air Emissions License/ALARACT Revision Request that amends the information contained in the original Notice of Construction Application, DOE/RL-2013-50 with redline/strikeout is provided to the State of Washington Department of Health for approval, consistent with their authority to administer and enforce the State radioactive air emissions regulations, including licensing. A copy of this document is also being provided to the State of Washington Department of Ecology.

The attached redline/strikeout contains all the agreed upon language changes that resulted from the March 24, 2014, meeting between the State of Washington Department of Health and U.S. Department of Energy Richland Operations Office. As agreed upon in that meeting, a portion of the changes have been submitted by the U.S. Department of Energy Richland Operations Office to the State of Washington Department of Health informally via email. The balance of the changes are submitted in the attached License/ALARACT Revision Request. The redline/strikeout contains the changes outlined in the License/ALARACT Revision Request and the changes submitted informally via email.

LINE 591
EU [redacted] 909 NOC917

If you have any questions, please contact me or your staff may contact Ray Corey, Assistant Manager for the River and Plateau on (509) 373-9971.

Sincerely,

Doug S. Shoop
Acting Manager

AMRP:MSC

Attachment

cc w/attach:
G. Bohnee, NPT
G. T. Boothe, WDOH
R. Buck, Wanapum
R. A. Danielson, WDOH
D. A. Faulk, EPA
P. M. Gent, Ecology
S. Harris, CTUIR
R. Jim, YN
S. Hudson, HAB
C. Mathey, WDOH
N. M. Menard, Ecology
K. Niles, ODOE
V. L. Peery, Ecology
D. Rowland, YN
J. W. Schmidt, WDOH
D. G. Singleton, Ecology
Administrative Record
Environmental Portal

cc w/o attach: See Page 3

cc w/o attach:
R. H. Anderson, MSA
J. W. Cammann, MSA
L. M. Dittmer, CHPRC
B. J. Dixon, CHPRC
R. H. Engelmann, CHPRC
R. A. Kaldor, MSA
P. T. Karschnia, CHPRC
R. E. Piippo, MSA
L. R. Strickling, MSA
L. C. Tuott, CHPRC
J. F. Williams, CHPRC

License / ALARACT Revision Request

NOTE: Any increase to abated or unabated PTE requires a full NOC modification.

Submittal Date: 22 May 2014

☒ **License Revision**
WDOH Condition Number: 2 and 5

☐ **ALARACT Revision**
New ALARACT Rev. #: _____

☐ **Report of Closure**

PROJECT IDENTIFICATION

Project Title: Management of Radiological Contamination at Trench 94
Current NOC Application Number: DOE/RL-2013-50, Rev 0
WDOH EU ID Number: 909
Current WDOH Approval Letter Number(s): New application
WDOH NOC ID Number: 917

DESCRIPTION OF CHANGE

Number of Attachments: *1*

WDOH will provide a new approval letter containing any new or modified conditions that result from the following proposed change.

Enter original and proposed wording here:

These changes constitute a revision to the original Notice of Construction Application (NOCA) resulting from negotiations during the licensing process. A redline strikeout is attached for clarity.

Condition 2 was derived from the process description provided in the original NOCA and provided a limited the scope for radiological contamination management to swallows. A broadening of the allowed activities to include vegetation, and other biologic vectors is added to the NOCA so that all forms of radiological contamination can be managed if encountered. Condition 5 is modified to align the license radiological control values with the established radiological control procedures and correct omissions from the NOCA. The increase from 200 dpm/100cm^2 alpha to 10,000 dpm/100cm^2 alpha is made to align the alpha values with the beta-gamma values which are 500,000 dpm/100cm^2. Both of these values are five (5) times the High Contamination Area value and are established values from the radiological control program.

To request updates to this form, please contact Shawna Berven at (509) 946-0192 or airrichland@doh.wa.gov

ORIGINAL LANGUAGE:

Condition 2

This approval applies only to those activities described below. No additional activities or variations on the approved activities that constitute a "modification" to the emission unit, as defined in WAC 246-247-030(16), may be conducted.

The Management of Radiological contamination, including cleanup activities, at Trench 94

Trench 94 is located within the 200 East Area Burial Ground, 218-E-12B. Trench 94 contains submarine and other reactor compartments, as it provides long term disposal of the U.S. Navy defueled reactor compartments.

Nesting swallows were found to be building mud nests on the exterior of the submarine reactor compartments. Due to the potential for conditions involving radioactive contaminated soil, mud, nests and feces, continued management of this area is necessary.

Misting, spraying, or fogging will be used to minimize the spread of contamination and potential for airborne particles. Contaminated debris will be collected and packaged in containers for disposal at the Environmental Restoration Disposal Facility or another approved disposal facility.

Radiological contamination and dose rate monitoring is conducted prior to transporting waste containers or packages. All waste containers or packages will be prepared for transport per established procedures.

Specific controls will be in place during cleanup. The following controls are consistent with the 2012 Personal Communication ("Re: Request for Approval: Trench 94/SRC ALARACT Demonstration") and were developed in accordance with the latest revision of the CH2M HILL Plateau Remediation Company (CHPRC) Radiological Control Manual, CHPRC Radiological Control procedures, as provided with the application. ALARA principles shall be utilized.

PROPOSED LANGUAGE

Condition 2

This approval applies only to those activities described below. No additional activities or variations on the approved activities that constitute a "modification" to the emission unit, as defined in WAC 246-247-030(16), may be conducted.

The Management of Radiological contamination, including cleanup activities, at Trench 94

Trench 94 is located within the 200 East Area Burial Ground, 218-E-12B. Trench 94 contains submarine and other reactor compartments, as it provides long term disposal of the U.S. Navy defueled reactor compartments.

The design of the trench allows for a wide variety of naturally transferred contamination to be potentially found within the trench due to a lack of physical barriers. Forms of naturally transferred contamination include but are not limited to: vegetation (rooted or windblown), animal feces, bird nests, scent marks, burrows, and animals. Due to the potential for conditions involving radioactive vegetation, contaminated soil, mud, nests and feces, continued management of this area is necessary.

Misting, spraying, or fogging will be used to minimize the spread of contamination and potential for airborne particles. Contaminated debris will be collected and packaged in containers for disposal at the Environmental Restoration Disposal Facility or another approved disposal facility.

Radiological contamination and dose rate monitoring is conducted prior to transporting waste containers or packages. All waste containers or packages will be prepared for transport per established procedures.

Specific controls will be in place during cleanup. The following controls are consistent with the 2012 Personal Communication ("Re: Request for Approval: Trench 94/SRC ALARACT Demonstration") and were developed in accordance with the latest revision of the CH2M HILL Plateau Remediation Company (CHPRC) Radiological Control Manual, CHPRC Radiological Control procedures, as provided with the application. ALARA principles shall be utilized.

ORIGINAL LANGUAGE

Condition 5
WDOH NOTIFICATION-Abatement of Removable & Direct Contamination Levels-Cleanup
Exceeding the following contamination limits requires WDOH notification and implementation of additional controls before work may resume.

-Removable contamination will be maintained less than a maximum level of 2,200,000 dpm/100cm^2 alpha and/or less than 4 rad/hr/100cm^2 beta gamma.
-Direct contamination levels of 20,00dpm/100cm^2 alpha, and or 1,000,000dpm/100cm^2 beta-gamma
The following additional controls, as described below, shall be implemented before work resumes.
-Soil shall be wetted prior to removal if not already damp
-General work place air monitoring shall be performed during removal activities
-Dislodged vegetation not already in containers shall have fixative applied at the end of each shift, or the material shall be covered, as necessary to prevent airborne contamination.
-Removed soil and vegetation containing >500,000dpm/100cm^2 or >200dpm/100cm^2 alpha will be containerized if it is to be left for greater than 48 hours.
(WAC 246-247-040(5))

PROPOSED LANGUAGE

Condition 5
WDOH NOTIFICATION-Abatement of Removable & Direct Contamination Levels-Cleanup
Exceeding the following contamination limits requires WDOH notification and implementation of additional controls before work may resume.

-Removable contamination will be maintained less than a maximum level of 2,200,000 dpm/100cm^2 alpha and/or less than 4 rad/hr/100cm^2 beta gamma.
-Direct contamination levels of 20,00dpm/100cm^2 alpha, and or 1,000,000dpm/100cm^2 beta-gamma
The following additional controls, as described below, shall be implemented before work resumes.
-Soil shall be wetted prior to removal if not already damp
-General work place air monitoring shall be performed during removal activities
-Removed soil and vegetation containing >500,000dpm/100cm^2 beta-gamma or >10,000dpm/100cm^2 alpha will be containerized or fixative applied if it is to be left for greater than 48 hours.
(WAC 246-247-040(5))

SIGNATURES

Reviewed by Contractor	*Reviewed by RL/ORP*
JEFFREY A. CONLEY	
Date: 5/20/2014	Date: 6/23/14

To request updates to this form, please contact Shawna Berven at (509) 946-0192 or airrichland@doh.wa.gov

Emission Unit ID: 909

200 218-E-12B

218-E-12B

This is a MINOR, FUGITIVE, non-point source emission unit.

200 diffuse/fugitive emissions

Abatement Technology ALARACT WAC 246-247-040(4)

state only enforceable: WAC 246-247-010(4), 040(5), 060(5)

Zone or Area	Abatement Technology	Required # of Units	Additional Description

Monitoring Requirements

state enforceable: WAC 246-247-040(5), 060(5), and federally enforceable: 40 CFR 61 subpart H

Federal and State Regulatory	Monitoring and Testing Requirements	Radionuclides Requiring Measurement	Sampling Frequency
40 CFR 61.93[b][4][i] & WAC 246-247-075[3]	Hanford Site Near-Facility Environmental Monitoring Ambient Monitoring program		

Sampling Requirements Per the sitewide ambient monitoring program samples will be collected from the existing near-facility monitoring stations

Additional Requirements

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

Operational Status Alias: 218-E-12B, 200 East Dry Waste No. 12B, 218-E-12B Burial Ground - Trench 94 Site: Burial Grounds
Waste: Equipment, Mixed, Solid, chemicals, mixed, Solid Area, m2: 171,091.1

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

Project Title	Approval #	Date Approved	NOC_ID
Management of Radiological Contamination at Trench 94		Not Approved	917

Conditions (state only enforceable: WAC 246-247-040(5), 060(5) if not specified)

1) The total abated emission limit for this Notice of Construction is limited to 2.21E-05 mrem/year to the Maximally Exposed Individual (WAC 246-247-040(5)).

2) This approval applies only to those activities described below. No additional activities or variations on the approved activities that constitute a "modification" to the emission unit, as defined in WAC 246-247-030(16), may be conducted.
The Management of Radiological contamination, including cleanup activities, at Trench 94
Trench 94 is located within the 200 East Area Burial Ground, 218-E-12B. Trench 94 contains submarine and other reactor compartments, as it provides long term disposal of the U.S. Navy defueled reactor compartments.
~~Nesting swallows were found to be building mud nests on the exterior of the submarine reactor compartments. Due to the potential for conditions involving radioactive contaminated soil, mud, nests and feces, continued management of this area is necessary.~~
Misting, spraying, or fogging will be used to minimize the spread of contamination and potential for airborne particles. Contaminated debris will be collected and packaged in containers for disposal at the Environmental Restoration Disposal Facility or another approved disposal facility.
Radiological contamination and dose rate monitoring is conducted prior to transporting waste containers or packages. All waste containers or packages will be prepared for transport per established procedures.
Specific controls will be in place during cleanup. The following controls are consistent with the 2012 Personal Communication ("Re: Request for Approval: Trench 94/SRC ALARACT Demonstration") and were developed in accordance with the latest revision of the CH2M HILL Plateau Remediation Company (CHPRC) Radiological Control Manual, CHPRC Radiological Control procedures, as provided with the application. ALARA principles shall be utilized.

See addendum sheet, #1 for changes

3) The PTE for this project as determined under WAC 246-247-030(21)(a-e) [as specified in the application] is 2.21E-05 mrem/year. Approved are the associated potential release rates (Curies/year) of:

Alpha - 0	1.77E-08	Liquid/Particulate Solid	WAC 246-247-030(21)(a)

Alpha release rate is assumed to be Pu-239. Other radionuclides may be encountered and are approved so long as they are conservatively represented by the total alpha and total beta-gamma constituents.

Am - 241		Liquid/Particulate Solid	WAC 246-247-030(21)(a)

Contributes less than 0.1 mrem/yr to the MEI, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose.

B/G - 0	1.17E-04	Liquid/Particulate Solid	WAC 246-247-030(21)(a)

Beta/Gamma release rate is assumed to be Sr-90. Other radionuclides may be encountered and are approved so long as they are conservatively represented by the total alpha and total beta-gamma constituents.

C - 14		Liquid/Particulate Solid	WAC 246-247-030(21)(a)

Contributes less than 0.1 mrem/yr to the MEI, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose.

Ce - 144		Liquid/Particulate Solid	WAC 246-247-030(21)(a)

Contributes less than 0.1 mrem/yr to the MEI, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose.

Cm - 244		Liquid/Particulate Solid	WAC 246-247-030(21)(a)

Contributes less than 0.1 mrem/yr to the MEI, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose.

Co - 60		Liquid/Particulate Solid	WAC 246-247-030(21)(a)

Contributes less than 0.1 mrem/yr to the MEI, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose.

Cs - 134		Liquid/Particulate Solid	WAC 246-247-030(21)(a)

Contributes less than 0.1 mrem/yr to the MEI, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose.

Cs - 137		Liquid/Particulate Solid	WAC 246-247-030(21)(a)

Contributes less than 0.1 mrem/yr to the MEI, and represents less than 10% of the unabated PTE and represents less than 25% of the abated dose.

Eu - 154		Liquid/Particulate Solid	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 - 155		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.

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.

I - 129		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.

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.

Na - 22		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.

Nb - 94		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.

Np - 237		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.

Pu - 238		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.

Pu - 240		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.

Pu - 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.

Ra - 226	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.

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.

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.

Tc - 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.

U - 233	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.

U - 234	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.

U - 235	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.

U - 236	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.

U - 238	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.

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.

The radioactive isotopes identified for this emission unit are (no quantities specified):

Am - 241	C - 14	Ce - 144	Cm - 244	Co - 60
Cs - 134	Cs - 137	Eu - 154	Eu - 155	H - 3
I - 129	K - 40	Mn - 54	Na - 22	Nb - 94
Np - 237	Pu - 238	Pu - 240	Pu - 241	Ra - 226
Ru - 106	Sb - 125	Se - 79	Sr - 90	Tc - 99
U - 233	U - 234	U - 235	U - 236	U - 238
Zn - 65	Zr - 95			

The potential release rates described in this 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.

4) WDOH NOTIFICATIONS-Contamination Levels
WDOH will be notified when the following contamination levels are found:
-Direct contamination readings are detected greater than 500,000 disintegrations per minute (dpm)/100 cm^2 alpha and/or 1 rad/hr/100cm^2 beta-gamma are encountered.
-Removable contamination levels above 2,000 dpm/100cm^2 alpha or above 100,000 dpm/100cm^2 beta-gamma are encountered.
For activities that also include cleanup activities
(WAC 246-247-040(5)),(WAC 246-247-040(6)

5) WDOH NOTIFICATION-Abatement of Removable & Direct Contamination Levels-Cleanup
Exceeding the following contamination limits requires WDOH notification and implementation of additional controls before work may resume.
-Removable contamination will be maintained less than a maximum level of 2,200,000 dpm/100cm^2 alpha and/or less than 4 rad/hr/100cm^2 beta gamma.
-Direct contamination levels of 20,00dpm/100cm^2 alpha, and or 1,000,000dpm/100cm^2 beta-gamma
The following additional controls, as described below, shall be implemented before work resumes.
-Soil shall be wetted prior to removal if not already damp
-General work place air monitoring shall be performed during removal activities
-~~Dislodged vegetation not already in containers shall have fixative applied at the end of each shift, or the material shall be covered, as necessary to prevent airborne contamination.~~
-Removed soil and vegetation containing >500,000dpm/100cm^2 or >~~200~~dpm/100cm^2 alpha will be containerized if it is to be left for greater than 48 hours.
(WAC 246-247-040(5))

6) WDOH NOTIFICATION-Submarine and Other Reactor Compartments
WDOH will be notified (under the environmental notification protocol) if the following levels are found in the area from the submarine and other reactor compartments to an area 1,000 ft from the submarine and other reactor compartments:
-Removable contamination levels >2,000 disintegrations per minute per 100cm^2 alpha or >100,000 disintegrations per minute per 100 cm^2 beta-gamma
-Direct contamination readings of >500,000 disintegrations per minute per 100 cm^2 alpha and/or 1 rad per hour per 100 cm^2 beta-gamma
If detection is made within overlap with LERF Basin Area, only one notification is required. If the detection is made in an area not managed by Trench 94 or LERF, but within the 1,000 ft area, the party responsible for management of the area where the detection occurred shall make the notification.
(WAC 246-247-040(5)), (WAC 246-247-040(6)

7) ABATMENT DURING CLEANUP ACTIVITIES-Dispersable Contaminated Material Monitoring
-Contamination monitoring, workplace air monitoring, and dose rate monitoring will be conducted during cleanup activities. Routine contamination surveys of contaminated areas will occur.
-During work activities, continuous radiological control technician coverage will be provided.
-Alpha and beta-gamma contamination surveys shall be performed prior to and during activities that have the potential to disturb radioactive contamination, such as removal of nesting material or soil disturbance.
-Annual Apha and beta-gamma contamination surveys shall be performed to confirm the dose rates within the boundaries of each posted radiation area. Records of the annual surveys shall be available for audits.
-In any Contamination Area or Airborne Radioactivity Area, cleanup activities involving dispersible contaminated material shall stop if average wind speeds exceed 10 miles per hour (mph) for elevated work or 20 mph for ground level work, as measured at the work site .
-Suppressants such as water, fixatives, and covers shall be used, as necessary, to control contamination spread.

Handheld and/or overhead atomized misting will be performed during work activities where a potential exists to generate airborne radioactivity.
-Atomized misters and fixative sprayers shall be function-checked at the work site prior to commencing work activities. (WAC 246-247-040(5))

8) ABATEMENT TECHNOLOGY-Related Approvals
If a truck-mounted vacuum (i.e., GuzzlerTM) Portable/Temporary Radioactive Air Emission Units (PTRAEU), or high-efficiency particulate air (HEPA) filtered vacuum radioactive air emission unit is used, controls described in the Hanford Site Radioactive Air Emissions License #FF-01, for the Sitewide GuzzlerTM Notice of Construction (NOC) (Emission Unit ID: 476), the PTRAEU NOC (Emission Unit ID: 447), and the Hanford Sitewide W-PORTEX 007 [HEPA vacuums] NOC (Emission Unit ID: 455), respectively, would be followed. (WAC 246-247-040(5))

9) EFFLUENT CONTINOUS MONITORING- Ambient Air Monitoring Network
The 200 Area near-facility ambient air monitoring network shall be used for continuous monitoring. The stations (N967, N973, N948, N972) will also provide indication of potential elevated airborne radioactivity using the frequency and protocol of the Hanford Site Near-Facility Environmental Monitoring Program.
(WAC 246-247-040(5))

10) EFFLUENT CONTINUOUS MONITORING- Chain of Custody
Air sample data shall be analyzed by MSA and ABCASH data shall available to WDOH. The chain of custody shall follow standard protocol for the for the 200 Area near-facility ambient air monitoring network.
(WAC 246-247-040(5))

11) EFFLUENT MONITORING- Periodic Confirmatory Measurements-Air Monitors
Periodic confirmatory measurements (PCMs) will be made to verify the low emissions. The existing 200 Area network system for near-field monitoring (DOE/RL-91-50, Environmental Monitoring Plan United States Department of Energy Richland Operations Office, as amended) will continue to be used for the PCM mechanism to verify low emissions during Trench 94 radiologically-contaminated material cleanup activities. The 200 Area general fugitive/diffuse emission unit is already approved in WDOH, 2012b for related continuous monitoring). Specific ambient air monitors N-967, N-973, N-948, and N-972 (as identified in WDOH, 2012a, and shown in Figure 2) are in close proximity to Trench 94 and will provide indication of potential elevated airborne radioactivity. (WAC 246-247-040(5))

12) MONITORING REQUIREMENTS-Sampling Frequency-Soil Deposition
Annual soil deposition sampling shall be performed in three prominent downwind locations, as determined by the previous year's wind rose data. (WAC 246-247-040(5))

13) MONITORING-Diffuse and Fugitive-Soil Monitoring Activities
Additional monitoring for diffuse and fugitive emissions will consist of radiological surveys when soil excavation activities are being performed. The survey methods for monitoring are not a direct measurement of effluent emissions. The methods are intended to demonstrate compliance by showing that by being under the contamination levels for which work is controlled, the actual emissions would be inherently below the estimated emissions, which are based on (calculated from) the same contamination levels. (WAC 246-247-040(5))

14) CONTAMINATION CONTROL- Diffuse and Fugitive Activities
The Diffuse/Fugitive Activities Unit at Trench 94 are limited to the following:
-Soil excavation activities
-Fauna transport activities
-Cleanup of bird nesting/droppings
-Work in preparation for reactor compartment placement
-Work during reactor compartmnet placement
During these activities radiological surveys shall be performed. (WAC 246-247-040(5))

15) CONTAMINATION CONTROL DOCUMENTATION- Submarine and Other Reactor Compartments
A record of rad con reports that were performed during the month (routine, pre-job and during-job surveys). Each instance of anomalous data will be evaluated by a supervisor and entered into a corrective action database for tracking and trending purposes (as required) and shall be available for the audit. (WAC 246-247-040(5))

16) CONTAMINIATION CONTROL-Soil Removal
After removal of radiologically contaminated soil, the soil surface radiological contamination levels would be verified . If contamination is present above identified levels, additional soil may be removed and containerized for disposal or covered or fixed to provide control of the contamination. (WAC 246-247-040(5))

Redline/Strikeout Addendum Sheet for Emission Unit ID: 909, NOCA DOE/RL-2013-50, Rev 0, NOC 917 Trench 94 Negotiated Revisions

1) Insert the following text in place of the stuck out language into Condition 2

The design of the trench allows for a wide variety of naturally transferred contamination to be potentially found within the trench due to a lack of physical barriers. Forms of naturally transferred contamination include but are not limited to: vegetation (rooted or windblown), animal feces, bird nests, scent marks, burrows, and animals. Due to the potential for conditions involving radioactive vegetation, contaminated soil, mud, nests and feces, continued management of this area is necessary.