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

MAR 23 2012

12-EMD-0053

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

Mr. P. M. Gent
Nuclear Waste Program
State of Washington
Department of Ecology
3100 Port of Benton Boulevard
Richland, Washington 99354

Dear Addressees:

**REPORT OF CLOSURE AND DEREGISTRATION OF THE EP-331-02-S EMISSION UNIT
LIFE SCIENCES LABORATORY - I (331 BUILDING), 300 AREA, HANFORD SITE**

This letter provides notification of closure and deregistration of the Washington State Department of Health Emission Unit 1180; it is also known as the EP-331-02-S emission unit, Life Science Laboratory - I (331 Building), 300 Area, Hanford Site (Enclosure). This report of closure is submitted pursuant to the Washington Administrative Code 246-247, "Radiation Protection - Air Emissions" and serves as the basis for removal of the emission unit from the Hanford Site Air Operating Permit 00-05-006 and the Washington State Department of Health License FF-01.

If you have any questions, please contact me, or your staff may contact Stephen R. Weil, Director, Environmental Management Division on, (509) 372-0879.

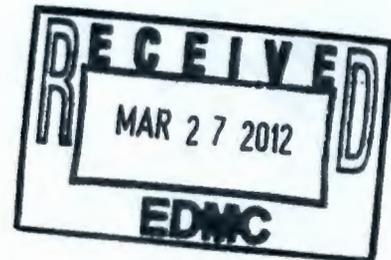
Sincerely,

Ray J. Corey, Assistant Manager
for Safety and Environment

EMD:DEJ

Enclosure

cc w/encl: See Page 2



Addressees
12-EMD-0053

-2-

MAR 23 2012

cc w/encl:

R. H. Anderson, MSA

K. Attebery, WDOH

J. M. Barnett, PNNL

G. Bohnee, NPT

J. H. Brown, PNNL

S. Harris, CTUIR

D. W. Hendrickson, Ecology

R. Jim, YN

D. Powaukee, NPT

J. W. Schmidt, WDOH

M. J. Stephenson, PNNL

J. G. Woolard, WCH

D. Zhen, EPA

Administrative Record (File: 331Building)

Environmental Portal, LMSI, A3-95

Report of Closure/Permit Revision

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

REASON FOR CHANGE

Submittal Date: 03/2012

Submittal Type: Other Submittal

- | | |
|-----------------------------------------------------------|------------------------------------------------------------------|
| <input type="checkbox"/> NOC Application Revision* | <input type="checkbox"/> Condition Change/ Clarification* |
| _____ | WDOH Condition Number: _____ |
| | AOP Condition Number: _____ |
| <input type="checkbox"/> ALARACT Revision* | <input checked="" type="checkbox"/> Report of Closure |
| New ALARACT Rev Number: _____ | |

PROJECT IDENTIFICATION

Project Title: Life Sciences Laboratory – I (331 Building), Revision 0 [EP-331-02-S]
Current NOC Application Number: NA
AEI ID Number (AOP Emission Unit Number(s)): 1180
Current WDOH Approval Letter Number(s): AIR 11-302
WDOH NOC ID Number: 787

Report of Closure

Number of Attachments 3

Report of Closure and Deregistration of the EP-331-02-S Emission Unit, Life Sciences Laboratory – I (331 Building), 300 Area, Hanford Site

In accordance with Washington Administration Code 246-247-080(6) this report of closure documents the cessation of operations with radioactive material with the potential for producing radioactive air emissions from the EP-331-02-S emission unit at the Life Sciences Laboratory – I (331 Building). This report also serves as the basis for removal of this emission unit from the Hanford Site Air Operating Permit #00-05-006, and the Washington State Department of Health (WDOH) FF-01 Radioactive Air Emission License.

The following information is provided wherein:

- Date of closure
- Remaining material
- Assessment of potential continued emissions
- Future plans
- Emissions control and monitoring

Date of Closure: January 25, 2012

Remaining material: All radioactive material has been removed from the emission unit. Radiological contamination surveys indicate there is no dispersible radioactive material (see Attachment 1).

Assessment of potential continued emissions: The potential for emissions from EP-331-02-S have ceased and the emission unit has been demolished and removed (Figure 1).

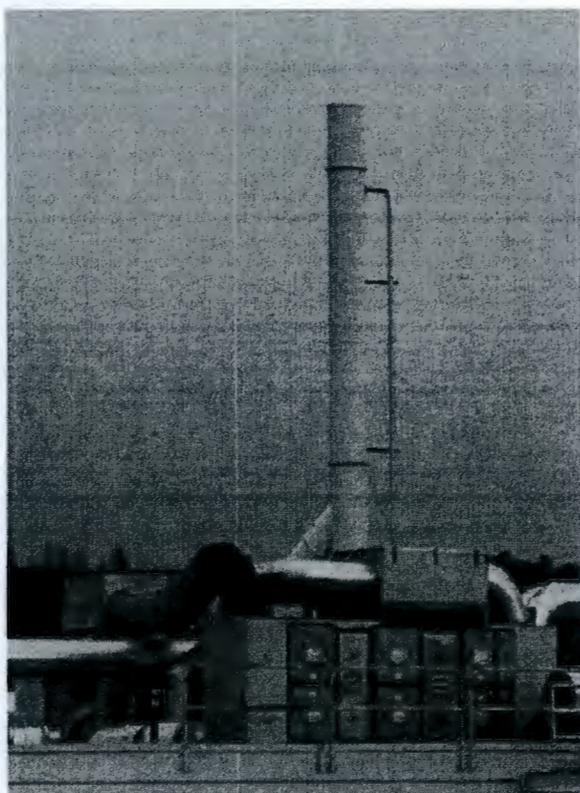
Future plans: There are no future plans for this emission unit. The laboratory spaces that were served by this emission unit are now tied into the EP-331-01-V ventilation system as authorized under NOC 808.

Emission control and monitoring: Monitoring requirements are performed using 40 CFR 61, Appendix D calculations and there are no active control requirements. Activities with the potential for radioactive air emissions have ceased through EP-331-02-S, emission controls and monitoring are no longer needed.

Based on this report of closure it is requested that emission unit EP-331-02-S be deregistered with WDOH and removed from the Hanford Site Air Operating Permit 00-05-006, and the WDOH FF-01 Radioactive Air Emission License.

Figure 1. Before and After Pictures of EP-331-02-S Emission Unit

Before



After



FOR WDOH USE ONLY

Data Entry Completed By: _____ Date: _____



Radiological Control Record
Radiological Survey Report

Survey Report Number
331-12-02-007

Date 2/2/12 Time 1500 Purpose of Survey: Routine Demand RCHP ventilation duct on west road

Room(s) / Item(s) West side of 331 Building 331 TWD(s)# N/A RWP Number N/A

① - ⑤ inside of duct
M1 inside of duct

Dose Rate Measurements

Item Description	Inst. #	Distance	OW	CW	CF _{Beta}	mrem/h β	CF _{Gamma}	mrem/h γ	CF _{Other}	Smear #

Contamination Measurements

#	Location	β-γ	Inst. #	β-γ CF	α	Inst. #	α CF
1-5	Inside of duct	< MDA	2	2.6	< MDA	2	2.9
M1	Inside of duct	< MDA	1	3.15	< MDA	1	6.75

Instruments Used

1. SCLL8-0668 2. SCLL4-0023 3. _____ 4. _____
5. _____ 6. _____ 7. _____ 8. _____ 9. _____

Signature on this survey form indicates that 1) the instruments above have been source checked in accordance with RCP-5.5.06, Portable Radiological Survey Instruments, and 2) RCT actions in the applicable TWDs related to this job have been reviewed in accordance with RCP-3.4.09, Radiological Job Coverage and Emergency Response.

= mrem/h gamma ## β = mrem/h beta ### n = mrem/h whole body neutron * = mrem/h Contact E = mrem/h Extremity
 [D#] = Direct Survey (dpm/100cm²) [M#] = Smear (dpm/smear) △ = Air Sample ⊙ = Technical Smear (dpm/100 cm²) ⊕ = Special Smear (dpm/100 cm²)

<MDA: MDAs for portable survey instruments and field counters (i.e., SAC-4, BC-4, and Ludlum 2929) are found in RCP-5.5.11, Radiological Surveys, Exhibit 10.
 Ludlum 2200 = < _____ dpm/l-γ

RPT Name and Signature: J. Zeilstra Date: February 2, 2012 Reviewed By RPT Support Manager: Holly Black-Kania FEB 02 2012

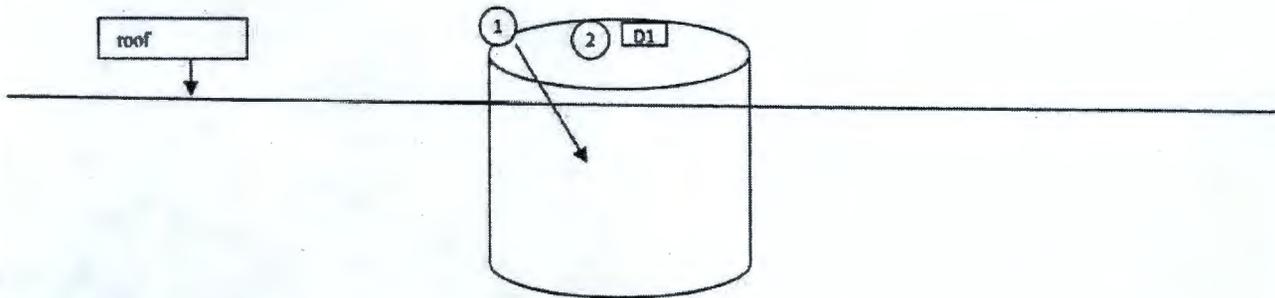


Radiological Control Record
Radiological Survey Report

Survey Report Number
331-12-01-070

Date: 1/30/12 Time: 1400 Purpose of Survey: [] Routine [X] Demand [] RCHP Vent. duct from roof to ceiling Constr.

Room(s) / Item(s): West end roof Building: 331 TWD(s)#: N/A RWP Number: RPT1



Item Description	Inst. #	Distance	OW	CW	CF _{beta}	mrem/h β	CF _{gamma}	mrem/h γ	30cm	Smear #

Contamination Measurements

#	Location	β-γ	Inst. #	β-γ CF	α	Inst. #	α CF
1-2	Inside duct	< MDA	1	2.6	< MDA	1	2.9
D1	Inside duct	< MDA	2	3.15	< MDA	2	6.75

Instruments Used 1. SCLL4-0023 2. SCLL8-0668 3. _____ 4. _____
5. _____ 6. _____ 7. _____ 8. _____ 9. _____

Signature on this survey form indicates that 1) the instruments above have been source checked in accordance with RCP-5.5.06, Portable Radiological Survey Instruments, and 2) RCT actions in the applicable TWDs related to this job have been reviewed in accordance with RCP-3.4.09, Radiological Job Coverage and Emergency Response

= mrem/h gamma ###β = mrem/h beta ###η = mrem/h whole body neutron * = mrem/h Contact E = mrem/h Extremity
D# = Direct Survey (dpm/100cm²) **M#** = Smear (dpm/smear) **AS** = Air Sample **TS** = Technical Smear (dpm/100 cm²) **SS** = Special Smear (dpm/100 cm²)

<MDA: MDAs for portable survey instruments and field counters (i.e., SAC-4, BC-4, and Ludlum 2929) are found in RCP-5.5.11, Radiological Surveys, Exhibit 10.
 Ludlum 2200 = < _____ dpm/β-γ

RPT Name and Signature: J. Zeilstra Date: January 30, 2012 Reviewed By RP Support Manager: H. Black-Kania Date: JAN 30 2012



Radiological Control Record
Radiological Survey Report

Survey Report Number
331-12-01-061

Date: 1/26/2012	Time 1535	Purpose of Survey: [] Routine [X] Demand [] RCHP remove exhaust duct on roof			
Room(s) / Item(s) Roof above room 195	Building 331	TWD(s)# 5.5.11	RWP Number RPT1		

- D1 - D4 on outside of duct where cuts will be made
- 1 - 4 on outside of duct where cuts will be made
- M1 - M2 inside of duct
- 5 - 8 inside of duct

Item Description	Inst. #	Distance	OW	CW	CF _{Beta}	mrem/h β	CF _{Gamma}	mrem/h γ	CF _{Other}	Smear #

Contamination Measurements

#	Location	β-γ	Inst. #	β-γ CF	α	Inst. #	α CF
M1-M2	Inside of duct	< MDA	1	3.15	< MDA	1	6.75
D1-D4	Outside of duct	< MDA	1	3.15	< MDA	1	6.75
1-8	See above	< MDA	2	2.6	< MDA	2	2.9

Instruments Used

1. SCLL8-0668	2. SCLL4-0023	3. _____	4. _____
5. _____	6. _____	7. _____	8. _____

Signature on this survey form indicates that 1) the instruments above have been source checked in accordance with RCP-5.5.06, *Portable Radiological Survey Instruments*, and 2) RCT actions in the applicable TWDs related to this job have been reviewed in accordance with RCP-3.4.09, *Radiological Job Coverage and Emergency Response*.

= mrem/h gamma ### β = mrem/h beta ### η = mrem/h whole body neutron * = mrem/h Contact E = mrem/h Extremity
D# = Direct Survey (dpm/100cm²) M# = Smear (dpm/smear) ** = Air Sample ** = Technical Smear (dpm/100 cm²) ** = Special Smear (dpm/100 cm²)

<MDA: MDAs for portable survey instruments and field counters (i.e., SAC-4, BC-4, and Ludlum 2929) are found in RCP-5.5.11, *Radiological Surveys*, Exhibit 10.
 Ludlum 2200 = < _____ dpm/β-γ

RPT Name and Signature J. Zeilstra	Date January 26, 2012	Reviewed By RP Support Manager H. Black-Kania
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