IM# 7,737

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

JUL 1 2013

13-ESQ-0047

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Wa Dept of Health - Office of Radiation Protection

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 Benton Boulevard
Richland, Washington 99354

Dear Addressees:

RADIOACTIVE AIR POLLUTANTS NOTICE OF CONSTRUCTION (NOC) APPLICATION FOR THE LIFE SCIENCES LABORATORY-1 (331 BUILDING), EP-331-09-S EMISSION UNIT, 300 AREA, HANFORD SITE, RICHLAND, WASHINGTON

Enclosed is the new NOC Application for the Life Sciences Laboratory-I (331 Building), EP-331-09-S emission unit (Enclosure 1). The application is for minor potential emissions from the north wing of the 331 Building.

Also enclosed is the Hanford Site Air Operating Permit Off-Permit Change form (Enclosure 2). This form is required to update the annual operating plan.

If you have any questions, please contact me, or your staff may contact Ray J. Corey, Assistant Manager for Safety and Environment, on (509) 376-0108.

Sincerely,

Matt McCormick
Manager

ESQ:DEJ

Enclosures

cc w/encls: See page 2

EU 1370

cc w/encls:
R. H. Anderson, MSA
J. M. Barnett, PNNL
G. Bohnee, NPT
S. Harris, CTUIR
R. Jim, YN
K. M. McDonald, PNNL
D. Powaukee, NPT
J. W. Schmidt, WDOH
M. B. Skorska, Ecology
M. J. Stephenson, PNNL
R. J. Utley, WDOH
D. Zhen, EPA
Administrative Record (file: 325 Building)
Environmental Portal, LMSI, A3-9

Pacific Northwest National Laboratory

Radioactive Air Pollutants
Notice of Construction Application

for the Minor Emission Unit

EP-331-09-S

Life Science Laboratory – I (331 Building), Revision 0
300 Area, Hanford Site
Richland, Washington

June 2013

Contents

The "Response to Item" parenthetical expression after each of the following section headings identifies the corresponding Appendix A Notice of Construction application information item listed under Washington Administrative Code 246-247-110.

Figures

1. Introduction

This document serves as a new Notice of Construction (NOC) application pursuant to the requirements of Washington Administrative Code (WAC) 246-247, "Radiation Protection Air Emissions" (WAC 2011) and Title 40 Code of Federal Regulations (CFR), Part 61, "National Emission Standards for Hazardous Air Pollutants" (EPA 2002) for conducting research activities in the Life Science Laboratory - I (referred to as the 331 Building) minor emission unit EP-331-09-S. The 331 Building is located in the 300 Area of the Hanford Site, and it is a part of the Pacific Northwest National Laboratory (PNNL), which Battelle operates for the U.S. Department of Energy (DOE) under Contract DE-AC05-76RL01830.

2. Facility Location (Response to Item 1)

U.S. Department of Energy, Richland Operations Office
Life Sciences Laboratory – I (331 Building)
Hanford Site, 300 Area
Richland, Washington 99352

Washington Geological Survey 84 Coordinates:
Latitude: 46 degrees, 21 minutes, 53.9 seconds
Longitude: 119 degrees, 16 minutes, 17.2 seconds

The 331 Building is located in the 300 Area within DOE's Hanford Site as shown in Figure 1. It is approximately 4 km (2.2 miles) north of Richland, Washington, and 0.1 km (0.06 miles) west of the Columbia River. The layout of the facility is shown in Figure 2, 3 and 4.

3. Responsible Manager (Response to Item 2)

Matt McCormick, Manager
Richland Operations Office
U.S. Department of Energy
P.O. Box 550, MSIN A7-50
Richland, Washington 99352
509-376-7395

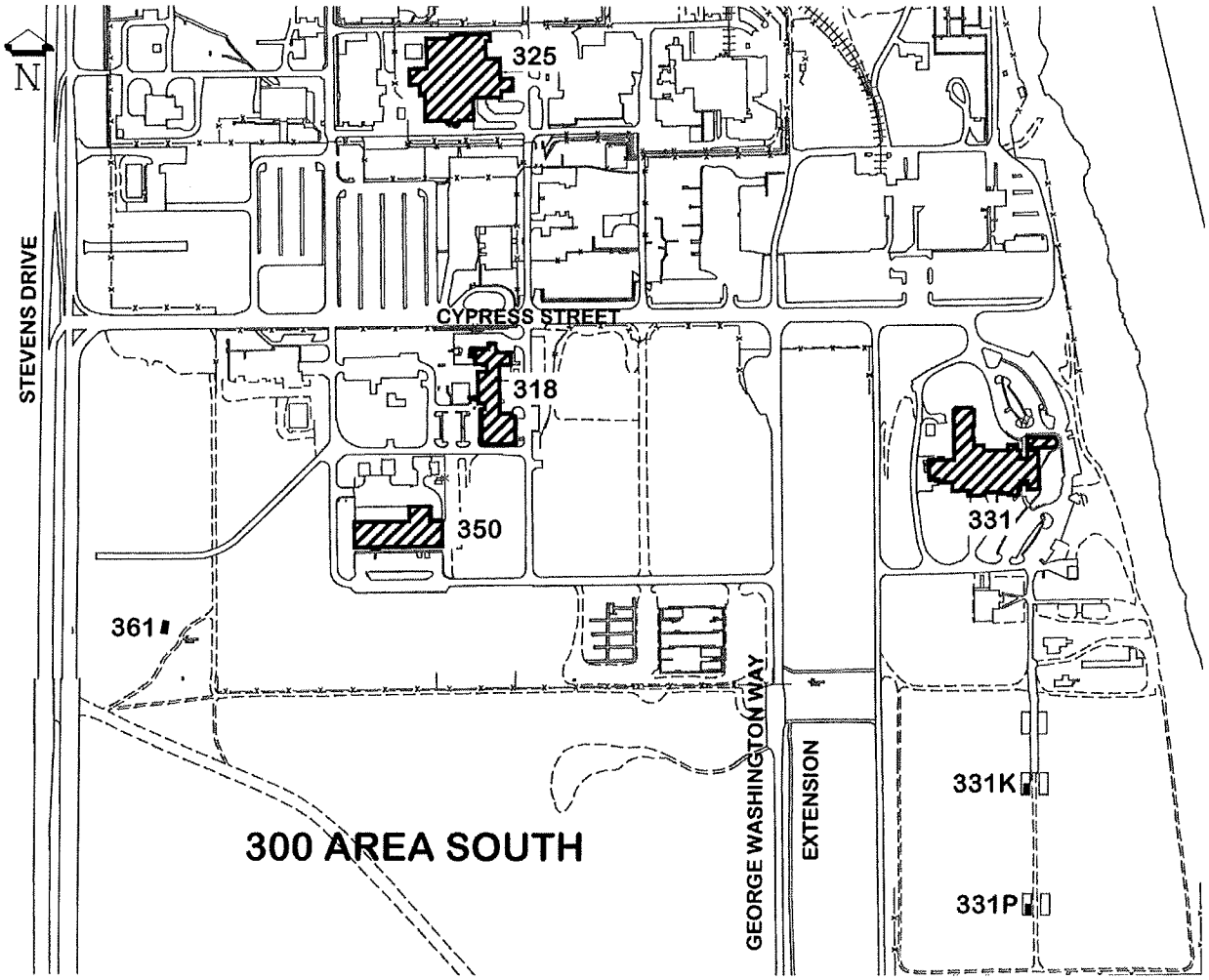

Figure 1. Location of the 331 Building (LSL-I) – Hanford Site 300 Area

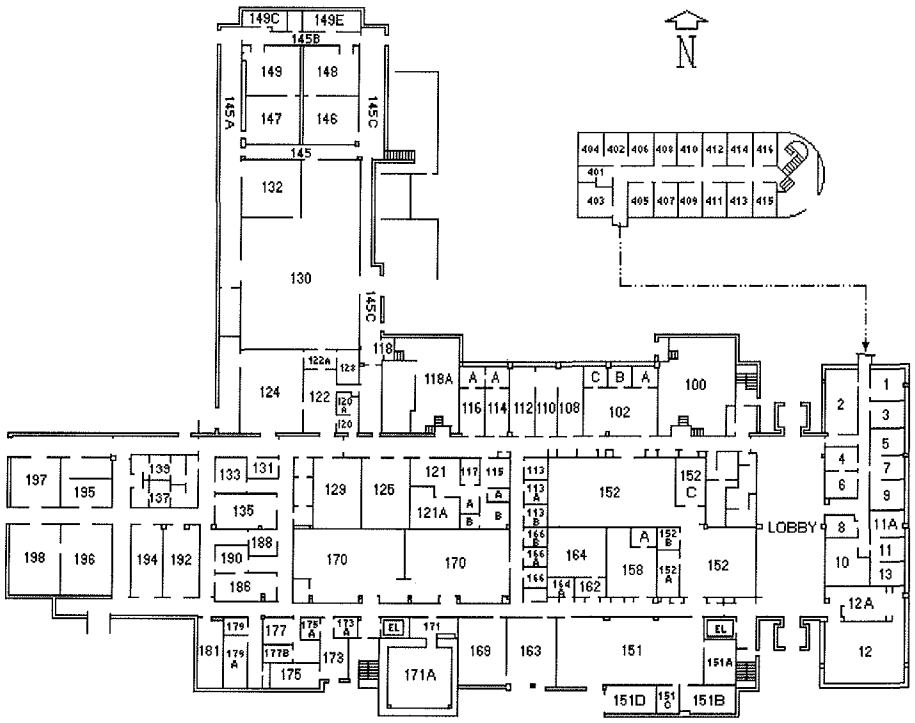

Figure 2. 331 Building (LSL-I) First Floor

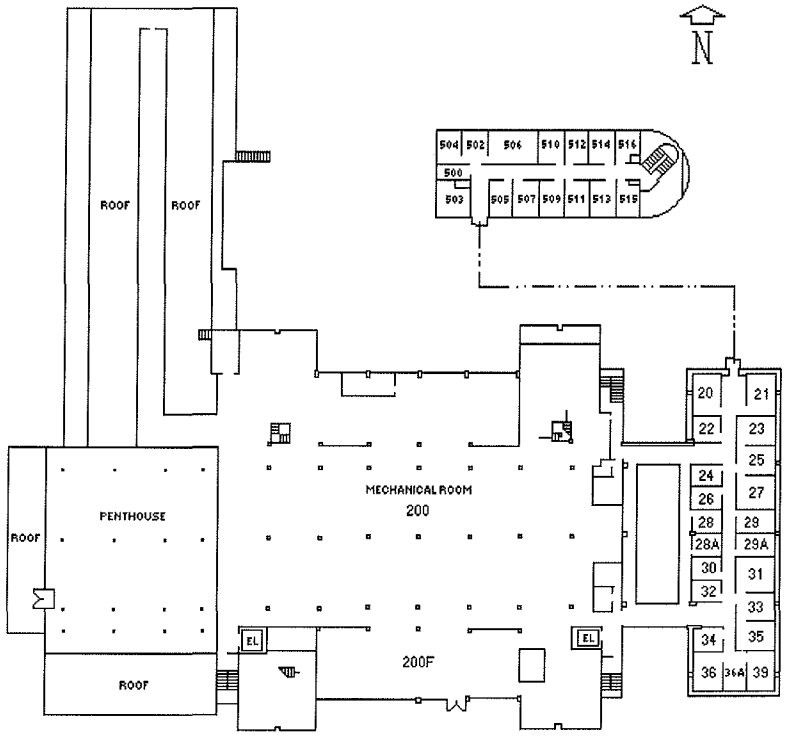

Figure 3. 331 Building (LSL-I) Second Floor

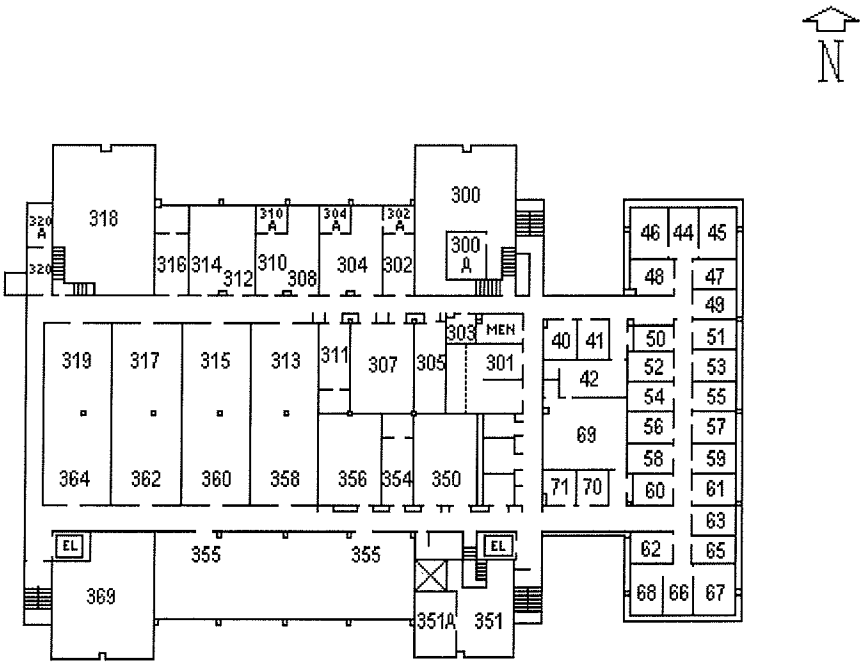

Figure 4. 331 Building (LSL-I) Third Floor

4. Type of Proposed Action (Response to Item 3)

This NOC application is being submitted as a new minor emission unit (EP-331-09-S). Included in the application are the estimated emissions and the potential-to-emit (PTE) total effective dose equivalent (TEDE) to the maximally exposed individual (MEI). The primary proposed action is to use nuclear magnetic resonance (NMR) instruments in the 331 Building EP-331-09-S ventilated air spaces for analysis of non-volatile solid and liquid samples containing radioisotopes. The emission point, as identified below, will be registered as a new 'minor' emission unit (stack) with the Washington State Department of Health (WDOH) and the Environmental Protection Agency (EPA – Region 10).

- EP-331-09-S

5. State Environmental Policy Act (Response to Item 4)

The proposed activities under this NOC are categorically exempt (WAC 197-11-845) from the State Environmental Policy Act (WAC 2003).

6. Process Description (Response to Item 5)

The mission of the 331 Building is to conduct fundamental science and develop environmental technology. Research activities conducted in the 331 Building support the Hanford Site environmental mission and other key DOE missions of national and international importance. Research activities performed within the 331 Building include the use of radioactive materials. Laboratory processes are conducted "continuously" (i.e., year-round, during normal business, swing-shift, night-shift, and weekend hours). The 331 Building provides research capabilities to study the interactions of chemicals and radionuclides with plants, animals, and microorganisms and the fate of chemicals and radionuclides in the environment. The building also has research capabilities for NMR and actinide chemistry.

The research activities conducted in the 331 Building, emission unit EP-331-09-S include:

- Actinide chemistry involving liquids and solids.
- Examining the uptake and transformation effects of radionuclides in soils, plants, animals, and microorganisms.
- Experimental studies with molecular and cellular processes.
- Laboratory setup projects involving fume hood removals/upgrades and ductwork tie-in.
- Measurements of exposures to physical, radiological, and chemical agents.
- Non-dispersible radioactive material used in research programs.
- Nuclear Magnetic Resonance (NMR) spectroscopic experiments with radioactive and non-radioactive materials.
- Processes in which temperatures may exceed 100 °C.
- Research activities involving various types of radioactive material, including mixed activation products (MAPs), mixed fission products (MFPs), and naturally-occurring radioactive material, actinides, and a wide range of standards and tracer radionuclides.
- Studies with radioactive materials in biological and non-biological systems.

7. Annual Possession Quantity and Physical Form (Response to Items 10, 11, and 12)

The Table 1, below, shows the gross alpha and gross beta/gamma annual possession quantity proposed for this emission unit. These values are developed, in part, based on the radionuclides proposed and anticipated to be used in research activities in the 331 Building Emission Unit EP-331-09-S (see Appendix A for the list of contributing isotopes and associated forms). Because of the nature of the work conducted inside the 331 Building (e.g., research and development, basic science with radioactive material), any radionuclide potentially may be present in the facility including the possibility of some trace isotopic contaminants in purified materials and solutions.

The release form in Appendix A is conservatively listed as either a gas or a liquid for the purpose of establishing the gross alpha and gross beta/gamma values in Table 1. The physical form of solid was not used in the table to provide a conservative estimate of the potential radionuclide emissions. The physical form of liquid/particulate solid was used instead of solid and is commensurate with the

process descriptions of Section 6. However, since material recovery is a primary aspect of the research activities, proposed emissions are conservatively estimated in Appendix A.

The list of radioisotopes proposed for this emission unit is included in Appendix B. This list is consistent with PNNL operations; however, many of these radioisotopes will not be present in the emission unit. The actual release form is expected to be particulate solids and liquids, and in some cases a gas. While it is recognized that the building may have processes in which the temperature may be equal to or exceed 100 °C, there is no intent to make the radioactive material an airborne radioactive gas.

Table 1: Summarized Annual Possession Quantity and Potential Emissions for Gross Alpha and Gross Beta/Gamma*

Radioisotope	Annual Possession Quantity (Ci/yr)	Unabated Release (Ci/yr)
Gross Alpha	1.83E-02	1.93E-05
Gross Beta	5.00E-02	5.10E-05

*See Appendix A for contributing isotopes and associated forms.

8. Emission Control System (Response to Item 6 and 7)

The 331 Building was constructed in 1970 to accommodate a wide variety of biological and ecological research studies. The three-story building has over 10,000 m^2 (343,147 ft^2) of space with over 100 offices, more than 70 individual laboratories, and specialized areas such as nuclear magnetic resonance laboratories and glove boxes.

The building consists primarily of two laboratory floors with a mechanical-electrical service floor sandwiched in-between. Blending into the building to the west and north is an additional single-story laboratory space. The administrative office area is a three-story building with a two-story addition on the northeast side of the building.

EP-331-09-S exhausts unfiltered air from the north wing of the 331 Building. The emission point (EP-331-09-S) is located atop the north wing of the building and is approximately 14.0 m (46 ft) above grade level and 10.7 m (35 ft) from the top of the roof to the point of discharge. Figure 5 shows the EP-331-09-S emission unit. No emission controls are proposed for this emission unit because of the low quantities of radionuclides proposed for use resulting in a potential to emit (PTE) <0.1 mrem/yr to the maximally exposed individual (MEI). Since no control devices are proposed, the control technology efficiency has been set to 1.0 (see Appendix A) and the abated emissions and doses are the same as the unabated emissions and doses. Inventory controls will be used to maintain low emissions.

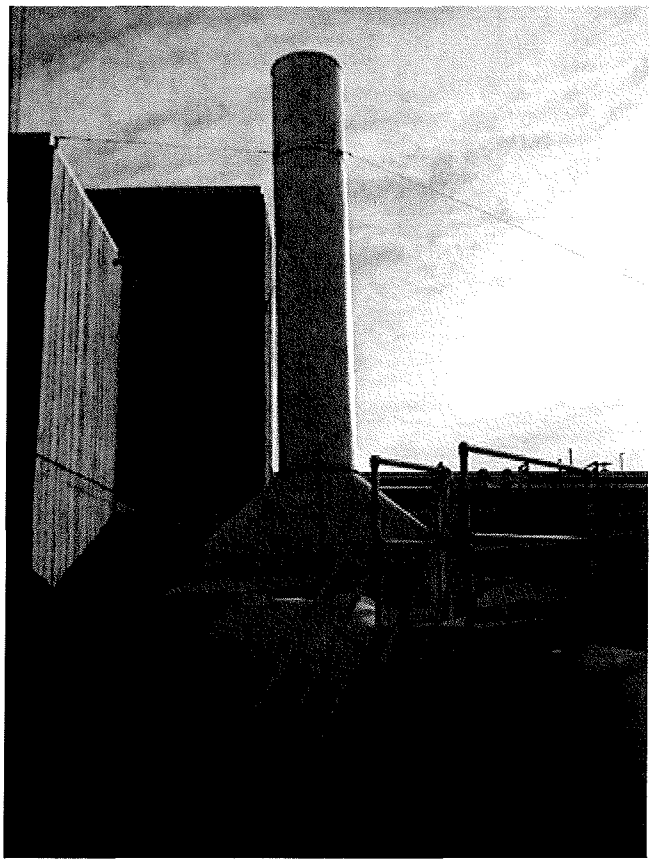

Figure 5. 331 Building EP-331-09-S

8.1 High-Efficiency Particulate Air Filters

N/A – There is no control technology (HEPA filters) proposed for EP-331-09-S.

8.2 Emission Unit Specifics

The emission unit specifications below are provided for informational purposes only and demonstrate unit dose factors for an effective stack height of < 40 m (< 131 ft) are appropriate.

Approximate Stack Height: 14 m (46 ft)
Approximate Stack Diameter: 1 m (40 in.)
Estimated Volumetric Flow Rate: 9.8 m^3/ s (20,700 cfm)
Estimated Exhaust Velocity: 12.1 m/s (39.6 ft/s)
Nominal Stack Temperature: 24 °C (75°F)
Approximate Effective Stack Height: 37.3 m (122 ft)

9. Monitoring System (Response to Item 9)

This emission unit is identified as PNNL Potential Impact Category 4 (PNNL 2012b). Because the total unabated PTE for this emission unit is < 0.1 mrem/yr total effective dose equivalent (TEDE) to

the MEI, the radionuclide emissions will be determined using 40 CFR 61, Appendix D calculations in lieu of monitoring (EPA 1989).

10. Potential Radionuclide Emissions (Response to Items 8 and 13)

The annual unabated and abated emissions proposed under this application as determined under WAC 246-247-030(21)(a) are 7.03E-05 Ci/yr (see Appendix A). These emissions are calculated based on conservative inventory estimates, and the actual possession quantity of specific radionuclides may be greater than estimated in Appendix A and may include radioisotopes identified in Appendix B. The unabated PTE for this emission point is calculated annually and is used to verify compliance with the NOC.

There are no radioisotopes that could contribute > 0.1 mrem/yr to the MEI. Annual possession quantities have been summarized as gross alpha and gross beta/gamma in Table 1. Laboratory processes will be conducted "continuously" (i.e., year-round, during normal business, swing-shift, night-shift, and weekend hours).

The total radioactive air emissions from the 331 Building (EP-331-01-V) during calendar year 2011 were reported as 6.2 E-6 mrem. Total emissions from the Hanford Site were reported as 0.042 mrem for calendar year 2011, the most recent year with data available (DOE/RL 2012).

11. Potential Offsite Impact (Response to Items 14 and 15)

The 2011 MEI is located approximately 1.1 km (0.7 mi) to the northeast on a farm near Sagemoor Road in Franklin County, Washington. Dose conversion factors for the MEI were calculated using the EPA-approved dose-modeling program CAP88-PC. The CAP88-PC program-derived dose conversion factors from *Calculating Potential to Emit Radiological Releases and Doses, DOE/RL-2006-29, Rev. 1* were used in determining the potential offsite impact. The unabated and abated doses were calculated by multiplying the potential unabated and abated release quantities by the CAP88-PC derived dose conversion factor. The dose conversion factors used in Appendix A for the 331 Building EP-331-09-S are location based: east emission zone of the 300 Area with an effective release height of < 40 m (< 131 ft). The unit dose factors used are provided in Appendix A (Chaki 2000 and DOE/RL 2010). The physical forms of the radioactive materials listed are considered liquid in form unless designated as a gas; this verifies that the most conservative release rates are used.

The total emission unit annual unabated and abated TEDE to the MEI proposed for this activity as determined under WAC 246-247-030(21)(a) is 9.93 E-04 mrem/yr (WAC 2011) (see Appendix A).

12. Cost Factors (Response to Item 16)

No control technologies are proposed therefore cost factors are not discussed here.

13. Facility Lifetime (Response to Item 17)

The estimated lifetime of the 331 Building is approximately 15 years.

14. Technology Standards (Response to Item 18)

There is no proposed control technology for-this emission unit; therefore, the standards identified are shown as not applicable.

14.1 American Society of Mechanical Engineers/American National Standards Institute (ASME/ANSI) AG-1

N/A

14.2 ASME/ANSI N509

N/A

14.3 ASME/ANSI N510

N/A

14.4 ANSI/ASME NQA-1

N/A – for Technology Standards

The quality assurance requirements for tracking radiological material are outlined in EM-QA-01, *Effluent Management Quality Assurance Plan* (PNNL 2012a). This plan outlines the Radioactive Material Tracking System (RMT) and the annual NESHAPs assessment that is conducted in PNNL facilities containing radioactive materials. This QA plan is compatible with EPA QA/R-5, *EPA Requirements for Quality Assurance Project Plans* (EPA 2001).

14.5 40 CFR 60, Appendix A

N/A

14.6 ANSI N13.1

N/A

15. References

Chaki S, and B Parks. 2000. *CAP88-PC Version 2.0, Updated User's Guide.* EPA 402-R-00-004. Office of Radiation Programs, U.S. Environmental Protection Agency: Las Vegas, NV.

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U.S. Environmental Protection Agency (EPA). 1989. *National Emission Standards for Hazardous Air Pollutants – Estimating Radionuclides Emissions*. 40 CFR 61, Appendix D. US Government Printing Office: Washington, DC.

U.S. Environmental Protection Agency (EPA). 2001. *EPA Requirements for Quality Assurance Project Plans*. EPA QA/R-5. Office of Environmental Information: Washington, DC.

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Washington Administrative Code (WAC). 2011. *Radiation Protection - Air Emissions*. WAC 246-247. Statute Law Committee: Olympia, WA.

Washington State Department of Health (WDOH). 2004. Letter to Mr. Joel B. Hebdon and Mr. James E. Rasmussen, US DOE, from Allen W. Conklin, WDOH, dated May 25, 2004. AIR 04-504. Olympia, WA.

Appendix A. Annual Possession Quantities and Potential Emissions for Emission Unit EP-331-09-S

Nuclide	Form[a]	Emission Type[b]	Inventory (Ci y^{-1})	Release Fraction	Potential Unabated Emissions (Ci y^{-1})	Unit Dose Factor (mrem Ci $^{-1}$)[c]	Potential Unabated Dose (mrem y^{-1})	Control Technology Efficiency (1.0-Eff.)	Potential Abated Emissions (Ci y^{-1})	Potential Abated Dose (mrem y^{-1})
Am-241[d]	G	**a**	1.0E-06	1.0E+00	1.0E-06	7.76E+01	7.8E-05	1.0E+00	1.0E-06	7.8E-05
Cs-137[e]	G	**b**	1.0E-06	1.0E+00	1.0E-06	2.33E+00	2.3E-06	1.0E+00	1.0E-06	2.3E-06
Np-237	L	**a**	1.1E-03	1.0E-03	1.1E-06	4.27E+01	4.7E-05	1.0E+00	1.1E-06	4.7E-05
Pu-238	L	**a**	1.1E-03	1.0E-03	1.1E-06	8.60E+01	9.5E-05	1.0E+00	1.1E-06	9.5E-05
Pu-239	L	**a**	5.0E-03	1.0E-03	5.0E-06	9.33E+01	4.7E-04	1.0E+00	5.0E-06	4.7E-04
Pu-240	L	**a**	1.1E-03	1.0E-03	1.1E-06	9.33E+01	1.0E-04	1.0E+00	1.1E-06	1.0E-04
Tc-99	L	**b**	5.0E-02	1.0E-03	5.0E-05	7.64E-01	3.8E-05	1.0E+00	5.0E-05	3.8E-05
Th-232	L	**a**	2.5E-03	1.0E-03	2.5E-06	4.73E+01	1.2E-04	1.0E+00	2.5E-06	1.2E-04
U-232	L	**a**	1.0E-06	1.0E-03	1.0E-09	1.71E+01	1.7E-08	1.0E+00	1.0E-09	1.7E-08
U-233	L	**a**	2.5E-03	1.0E-03	2.5E-06	6.89E+00	1.7E-05	1.0E+00	2.5E-06	1.7E-05
U-234	L	**a**	1.0E-06	1.0E-03	1.0E-09	6.75E+00	6.8E-09	1.0E+00	1.0E-09	6.8E-09
U-235	L	**a**	2.5E-03	1.0E-03	2.5E-06	6.03E+00	1.5E-05	1.0E+00	2.5E-06	1.5E-05
U-236	L	**a**	1.0E-06	1.0E-03	1.0E-09	6.23E+00	6.2E-09	1.0E+00	1.0E-09	6.2E-09
U-237	L	**b**	1.0E-06	1.0E-03	1.0E-09	4.38E-03	4.4E-12	1.0E+00	1.0E-09	4.4E-12
U-238	L	**a**	2.5E-03	1.0E-03	2.5E-06	5.61E+00	1.4E-05	1.0E+00	2.5E-06	1.4E-05
U-239	L	**b**	1.0E-06	1.0E-03	1.0E-09	4.37E-05	4.4E-14	1.0E+00	1.0E-09	4.4E-14
U-240	L	**b**	1.0E-06	1.0E-03	1.0E-09	1.23E-03	1.2E-12	1.0E+00	1.0E-09	1.2E-12
Totals			**6.8E-02**		**7.03E-05**		**9.93E-04**		**7.03E-05**	**9.93E-04**

Footnotes to Appendix A:

[a] The form is listed as "G" for gases, "L" for liquids. The forms "P" for particulates and "S" for solids are not used.

[b] **a** = alpha emitter; **b** = beta (and gamma) emitter.

[c] Reference DOE/RL 2010.

[d] Alpha emitting representative for activities where the temperature may exceed 100°C

[e] Beta emitting representative for activities where the temperature may exceed 100°C

Appendix B. List of Isotopes for Authorized Use

Ac-225	As-74	Bi-210m	Cd-109	Cm-244	Cs-138	Fe-59	Hf-179m	I-134m	Kr-87	Mo-105
Ac-227	As-76	Bi-211	Cd-111m	Cm-245	Cs-139	Fr-221	Hf-181	I-135	Kr-88	N-13
Ac-228	As-77	Bi-212	Cd-113	Cm-246	Cs-140	Fr-223	Hf-182	In-106	Kr-89	Na-22
Ag-108	At-217	Bi-213	Cd-113m	Cm-247	Cs-141	Ga-67	Hg-203	In-111	Kr-90	Na-24
Ag-108m	Au-195	Bi-214	Cd-115	Cm-248	Cu-64	Ga-68	Ho-163	In-113m	La-137	Na-24m
Ag-109m	Au-198	Bk-247	Cd-115m	Cm-250	Cu-66	Ga-70	Ho-166	In-114	La-138	Nb-91
Ag-110	Au-198m	Bk-249	Cd-117	Co-56	Dy-159	Ga-72	Ho-166m	In-114m	La-140	Nb-91m
Ag-110m	Ba-131	Bk-250	Cd-117m	Co-57	Dy-165	Gd-148	I-122	In-115	La-141	Nb-92
Ag-111	Ba-133	Br-82	Ce-139	Co-58	Dy-169	Gd-149	I-123	In-115m	La-142	Nb-93m
Al-26	Ba-133m	Br-82m	Ce-141	Co-60	Er-169	Gd-151	I-125	In-116	La-144	Nb-94
Al-28	Ba-137m	Br-83	Ce-142	Co-60m	Er-171	Gd-152	I-126	In-116m	Lu-177	Nb-95
Am-241	Ba-139	Br-84	Ce-143	Cr-49	Es-254	Gd-153	I-128	In-117	Lu-177m	Nb-95m
Am-242	Ba-140	Br-84m	Ce-144	Cr-51	Eu-150	Ge-68	I-129	In-117m	Mg-27	Nb-97
Am-242m	Ba-141	Br-85	Cf-249	Cr-55	Eu-152	Ge-71	I-130	Ir-192	Mg-28	Nb-97m
Am-243	Ba-142	C-11	Cf-250	Cs-131	Eu-152m	Ge-71m	I-130m	K-40	Mn-52	Nb-98
Am-245	Ba-143	C-14	Cf-251	Cs-132	Eu-154	Ge-75	I-131	K-42	Mn-54	Nb-100
Am-246	Be-7	C-15	Cf-252	Cs-134	Eu-155	Ge-77	I-132	Kr-81	Mn-56	Nb-101
Ar-37	Be-10	Ca-41	Cl-36	Cs-134m	Eu-156	Ge-77m	I-132m	Kr-81m	Mo-93	Nb-103
Ar-39	Bi-207	Ca-45	Cm-241	Cs-135	Eu-157	H-3	I-133	Kr-83m	Mo-99	Nd-144
Ar-41	Bi-208	Ca-47	Cm-242	Cs-136	F-18	Hf-175	I-133m	Kr-85	Mo-103	Nd-147
Ar-42	Bi-210	Cd-107	Cm-243	Cs-137	Fe-55	Hf-178m	I-134	Kr-85m	Mo-104	Ni-56

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Pb-214
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Pm-145
Pm-146
Pm-147
Pm-148
Pm-148m
Pm-149
Pm-151
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Po-215

Po-216
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Pu-238
Pu-239
Pu-240
Pu-241
Pu-242
Pu-243
Pu-244
Pu-246
Ra-223
Ra-224
Ra-225
Ra-226
Ra-228
Rb-81

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Rb-84
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Rb-87
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Sn-126
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Sr-91
Sr-92
Ta-179
Ta-180

Ta-182
Ta-182m
Ta-183
Tb-157
Tb-158
Tb-160
Tb-161
Tc-95
Tc-95m
Tc-97
Tc-97m
Tc-98
Tc-99
Tc-99m
Tc-101
Tc-103
Tc-106
Te-121
Te-121m
Te-123
Te-123m
Te-125m

Te-127
Te-127m
Te-129
Te-129m
Te-131
Te-131m
Te-132
Te-133
Te-133m
Te-134
Th-227
Th-228
Th-229
Th-230
Th-231
Th-232
Th-233
Th-234
Ti-44
Ti-45
Ti-51
Tl-201

Tl-204
Tl-206
Tl-207
Tl-208
Tl-209
Tm-168
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-127m
Xe-129m
Xe-131m
Xe-133
Xe-133m
Xe-135
Xe-135m
Xe-137
Xe-138
Xe-139
Y-88
Y-90
Y-90m
Y-91
Y-91m
Y-92
Y-93

Yb-164
Yb-169
Yb-175
Yb-177
Zn-65
Zn-69
Zn-69m
Zr-88
Zr-89
Zr-93
Zr-95
Zr-97
Zr-98
Zr-99
Zr-100

HANFORD SITE AIR OPERATING PERMIT

NOTIFICATION OF OFF-PERMIT CHANGE
Permit Number: 00-05-006 Renewal 2
for the Radioactive Air Pollutants Notice of Construction Application
for the Life Sciences Laboratory-I (331 Building), EP-331-09-S Emission Unit

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

This change is allowed pursuant to WAC 173-401-724(1), WAC 173-401-724(2), and WAC 173-401-724(6):
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:	
The mission of the 331 Building is to conduct fundamental science and develop environmental technology. The 331 Building provides research capabilities to study the interactions of chemicals and radionuclides with plants, animals, and microorganisms and the fate of chemicals and radionuclides in the environment. The building also has research capabilities for NMR and actinide chemistry. This modification is for permitting the existing EP-331-09-S emission unit for low potential emissions.	
Date of Change: (To be provided in the agency approval order.)	
TBD	
Describe the emissions resulting from the change:	
The permitted potential-to-emit will be low, not require sampling, and be determined using 40 CFR 60, Appendix D.	
Describe the new applicable requirements that will apply as a result of the change: (To be provided in the agency approval order.)	
TBD	
For Hanford Use Only:	
AOP Change Control Number:	Date Submitted: