



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

19-ESQ-0095

SEP 05 2019

Addressees:

HANFORD SITE AIR OPERATING PERMIT SEMIANNUAL REPORT FOR THE PERIOD JANUARY 1, 2019 THROUGH JUNE 30, 2019, (DOE/RL-2019-03)

Attached is DOE/RL-2019-03, "Hanford Site Air Operating Permit Semiannual Report for January 1, 2019 through June 30, 2019." The report is being submitted as required by the Hanford Site Air Operating Permit Standard Terms and General Conditions, Section 5.6, and is certified in accordance with Washington Administrative Code (WAC) 173-401-520 by me as the responsible official as defined in WAC 173-401-200 (29)(c).

If you have any questions, please contact me, or your staff may contact Brian J. Stickney, Assistant Manager for Safety and Environment, on (509) 376-9079.

Sincerely,

A handwritten signature in black ink, appearing to read "B. T. Vance".

Brian T. Vance
Manager

ESQ:TWF

Attachment:
Hanford Site Air Operating Permit
Semiannual Report

cc: See page 2

Addressees
19-ESQ-0095

-2-

SEP 05 2019

cc w/attach:

S. D. Berven, WDOH
J. M. McAuley, EPA Region 10
K. R. McFadden, EPA Region 10
L. M. Murphy, Ecology
Ecology NWP Library (Hardcopy + CD ROM)
Environmental Portal, G3-35

cc w/o attach:

J. Bell, NPT
R. Buck, Wanapum
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M. D. Gerle, WRPS
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A. L. Johnson, MSA
M. Johnson, CTUIR
L. Contreras, YN
T. M. McDermott, PNSO
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J. W. Schmidt, WDOH
B. R. Trimberger, ORP
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Addressees - Letter dated **SEP 05 2019**
19-ESQ-0095

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Region 10
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Mr. John Martell, Manager
Radioactive Air Emissions Section
Washington State Department of Health
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Richland, Washington 99352

Ms. Robin B. Priddy, Executive Director
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526 S. Clodfelter Road
Kennewick, Washington 99336

Ms. Alexandra K. Smith, Program Manager
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Washington State Department of Ecology
3100 Port of Benton Boulevard
Richland, Washington 99354

Attachment
Letter Number 19-ESQ-0095

Hanford Site Air Operating Permit Semiannual Report for
January 2, 2019 through June 30, 2019

Consisting of
32 pages including cover sheet

Hanford Site Air Operating Permit Semiannual Report for January 1, 2019, through June 30, 2019

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



P.O. Box 550
Richland, Washington 99352

Hanford Site Air Operating Permit Semiannual Report for January 1, 2019, through June 30, 2019

R. A. Kaldor
Mission Support Alliance

Date Published
August 2019

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

 U.S. DEPARTMENT OF
ENERGY Richland Operations
Office
P.O. Box 550
Richland, Washington 99352

APPROVED

By Janis D. Aardal at 11:12 am, Jul 30, 2019

Release Approval

Date

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Certification For

**Hanford Site Air Operating Permit
Number 00-05-006 Renewal 2**

Semiannual Report January 1, 2019 through June 30, 2019

Certification:

In accordance with WAC 173-401-200(29)(c) as the responsible official, I certify, pursuant to WAC 173-401-520, that, based on information and belief formed after reasonable inquiry, the statements and information provided in this Semiannual Report are true, accurate, and complete.

 9/5/19

Brian T. Vance, Manager¹ Date
U.S. Department of Energy
Office of River Protection

 9/5/19

Brian T. Vance, Manager² Date
U.S. Department of Energy
Richland Operations Office

¹ For emission units under control of the U.S. Department of Energy, Office of River Protection.

² For emission units under control of the U.S. Department of Energy, Richland Operations Office.

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EXECUTIVE SUMMARY

The Hanford Site Air Operating Permit requires submittal of a semiannual report to regulatory agencies by March 15 and September 15 each year. The report provides the following:

- Status on monitoring and reporting requirements
- Confirmation that required monitoring for specific air emissions units was completed for the reporting period
- A list of any permit deviations, summaries of complaint investigations formally forwarded to the U.S. Department of Energy by the Washington State Department of Ecology, and monitoring reports or permit deviation documentation submitted during the reporting period.

The permit requires the report to be certified for truth, accuracy, and completeness by a Responsible Official. During the January 1, 2019, through June 30, 2019, reporting period, there were eight permit deviations, no air emissions complaints, and required monitoring was conducted.

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1.0 INTRODUCTION

The Hanford Site Air Operating Permit (AOP) Number 00-05-006 Renewal 2 was effective on April 1, 2013. Revision A to AOP 00-05-006 Renewal 2 became effective on May 1, 2014. One condition contained in AOP Standard Terms and General Conditions (STGC) Section 5.6, "Semiannual Reporting," is the requirement to submit semiannual reports by March 15 and September 15 each year. The reports are required to be certified by a Responsible Official for truth, accuracy, and completeness.

Copies of semiannual reports are transmitted to the Washington State Department of Ecology (Ecology), the Washington State Department of Health (DOH), the Benton Clean Air Agency, and the U.S. Environmental Protection Agency Region 10.

This semiannual report contains information from January 1, 2019 through June 30, 2019.

AOP STGC Section 5.6, "Semiannual Reporting," identifies the following content for inclusion in the Semiannual Report.

- a. "Reference to reports submitted to the regulatory agencies as required by section 5.16."

This information is provided in Section 2.0 of the Semiannual Report.

- b. "Reports of any required monitoring not previously submitted or reference to reports of required monitoring that were submitted previously during the reporting period."

This information is provided in Section 4.0 of the Semiannual Report.

- c. "A summary of any substantiated air emission complaint investigation(s) required in Section 1.4 of Attachment 1 and issued during the reporting period."

This information is provided in Section 3.0 of the Semiannual Report.

- d. "For all minor radioactive emission units (potential to emit less than 0.1 mrem to the maximally exposed individual (MEI) listed in Attachment 2), a general statement confirming that any required monitoring was conducted to verify low emissions during the reporting period for those emission units with specific periodic monitoring required during that period. For all emission units with continuous monitoring, a general statement will be provided stating that required monitoring operated continuously."

This information is provided in Section 5.0 of the Semiannual Report.

- e. "Emission unit(s) that operated for any part of the calendar year, and were not closed per WAC 246-247-080(6) (reference to FF-01 Attachment 2), will have monitoring data reported in the annual NESHAP report (Section 5.11). Diffuse and Fugitive minor emission units listed in Attachment 2 are not required to be reported on except annually as a composite portion of the annual NESHAP report."

Diffuse and fugitive emission units are not included in the Semiannual Report.

- f. “List any new regulatory orders, (e.g., Notice of Construction) imposed during the reporting period by Ecology or Health.”

This information is provided in Section 6.0 of the Semiannual Report.

2.0 DEVIATION REPORTS

Table 1 contains reports or notifications submitted directly to the regulatory agencies during this reporting period as required by AOP STGC Section 5.16, “Permit Deviation Reporting.” The date column represents the date the agency was notified. Additional detail is available in the reference if one exists.

Table 1. Reports/Notifications for the Period January 1, 2019 through June 30, 2019. (2 Pages)

Date	Agency	Area	Location	Reference Number	Description
01/30/19	Ecology	200E	Waste Treatment Plant	CCN 312284	Required annual maintenance for the T-14 standby propane generator was not performed for calendar year 2018. Ecology was notified on 01/30/19. Annual maintenance was performed the next day, 01/31/19.
02/19/19	DOH	200E	WESF		Inadvertent shutdown of the exhaust system. The WESF K3N system was brought back up on the same day.
03/07/19	DOH	200W	TX/TY Tank Farms	TOC-ENV-NOT-2019-4535	Missed radial breather filter replacements for various units in TX and TY tank farms.
04/17/19	DOH	200E and 200W	B-Plant, PUREX, WESF		Power outage caused inadvertent shutdown at each of the three exhaust systems. B-Plant and WESF were brought back up on the same day. PUREX was brought back up on 04-18-19.

Table 1. Reports/Notifications for the Period January 1, 2019 through June 30, 2019. (2 Pages)

Date	Agency	Area	Location	Reference Number	Description
05/15/19	DOH	200W	WRAP		Process area supply and exhaust fans had multiple automatic fan shutdowns. As a result, total exhaust flows were outside the qualification window of the system. The system was brought back to normal configuration on 05/20/19.
05/29/19	DOH	200W	SY Tank Farm		Potential non-routine bypass of required abatement control technology for the HEPA-Filtered Vacuum Truck.
06/11/19	Ecology	200E	Concrete Batch Plant (at IDF)		The batch plant that supported the stabilization effort for PUREX Tunnel 2 had originally filled out an <i>Air Quality Notification Form for Portable Sources</i> . After going past the initially anticipated end date the form was not resubmitted.
06/27/19	DOH	200E	CSB		Lightning caused an interruption in electrical power, shutting down the exhaust ventilation system. Power was restored 06/27/19.

CSB = Container Storage Building
 DOH = Washington State Department of Health
 Ecology = Washington State Department of Ecology
 HEPA = high-efficiency particulate air
 IDF = Integrated Disposal Facility
 PUREX = Plutonium Uranium Extraction Plant
 WESF = Waste Encapsulation and Storage Facility
 WRAP = Waste Receiving and Processing Facility

3.0 AIR EMISSION COMPLAINT INVESTIGATIONS

No substantiated air emission complaints were received by the U.S. Department of Energy, Richland Operations Office or by the U.S. Department of Energy, Office of River Protection from Ecology as specified in the AOP Attachment 1, Section 1.4, during this reporting period.

4.0 PERMIT REQUIRED MONITORING REPORTS

Table 2 lists the required monitoring reports submitted during the reporting period.

Table 2. Permit Required Monitoring Reports.

Date	Title
01/28/19	MSA-1101757.31, 2019, "Fourth Quarter Calendar Year 2018 High-Efficiency Particulate Air Vacuum Usage Report," external letter to J. Martell, Washington State Department of Health, from M. B. Wilson, Mission Support Alliance, LLC, Richland, Washington,, January 28.
02/14/19	MSA-1900191, 2019, "Portable/Temporary Radioactive Air Emission Units Report for Calendar Year 2018" external letter to J. Martell, Washington State Department of Health, from M. B. Wilson, Mission Support Alliance, LLC, Richland, Washington, February 14.
03/07/19	19-ESQ-0053, 2019, "Hanford Site Air Operating Permit Semiannual Report for the Period July 1, 2018 through December 31, 2019 (DOE/RL-2019-01, Revision 0)," external letter to A. K. Smith, Washington State Department of Ecology, from B. T. Vance, U.S. Department of Energy, Richland Operations Office, Richland, Washington, March 7.
04/22/19	19-ESQ-0064, 2019, "Criteria and Toxic Air Pollutants Air Emissions Inventory Report for Calendar Year 2018," external letter to A. K. Smith, Washington State Department of Ecology, from B. T. Vance, U.S. Department of Energy, Richland Operations Office, Richland, Washington, April 22.
04/25/19	MSA-1101757.32, 2019, "First Quarter Calendar Year 2019 High-Efficiency Particulate Air Vacuum Usage Report," external letter to J. Martell, Washington State Department of Health, from M. B. Wilson, Mission Support Alliance, LLC, Richland, Washington, April 25.
06/26/19	19-ESQ-0077, 2019, "DOE/RL-2019-09, Revision 0, Radionuclide Air Emissions Report for the Hanford Site, Calendar Year 2019," external letter to T. B. Hamlin, U.S. Environmental Protection Agency, and J. Martell, Washington State Department of Health, from B. T. Vance, U.S. Department of Energy, Richland Operations Office, Richland, Washington, June 26.

5.0 STATUS OF REQUIRED MONITORING

Table 3 contains the status of required monitoring during this reporting period for minor radioactive emission units and all emission units with continuous monitoring requirements. The performance of monitoring is not required if the unit did not operate during the reporting period.

Table 3. Status of Required Monitoring. (13 Pages).

Emission Point (Common Name)	EU ID ^a	Required Monitoring	Monitoring Completed? (Yes, No, NA)	Comment
P-241C111-001 (241-C-111)	1	Smear survey, every 365 days	Yes	

Table 3. Status of Required Monitoring. (13 Pages).

Emission Point (Common Name)	EU ID^a	Required Monitoring	Monitoring Completed? (Yes, No, NA)	Comment
W-296P045-001 (296-P-45)	50	Record Sample, Continuous	NA	Unit did not operate during the reporting period.
P-296P022-001 (296-P-22)	53	Record Sample, 1 week sample/4 times per year	No	Will be completed in second half of CY 2019.
P-296SY-001 (296-P-23)	56	Record Sample, 1 week sample/4 times per year	No	Will be completed in second half of CY 2019.
W-296P043-001 (296-P-43)	57	Record Sample, Continuous	NA	Unit did not operate during the reporting period.
W-296P044-001 (296-P-44)	58	Record Sample, Continuous	NA	Unit did not operate during the reporting period.
S-296S025-001 (296-S-25)	59	Record Sample, 1 week sample/4 times per year	No	Will be completed in second half of CY 2019.
P-241T105-001	65	Smear survey, every 365 days	Yes	
P-241T106-001	66			
P-241T109-001	67			
P-241T102-001	68			
P-241T107-001	69			
P-241T111-001	70			
P-241T104-001	71			
P-241T112-001	72			
P-241T108-001	73			
P-241T203-001	74			
P-241T204-001	75			
P-241T110-001	76			
P-241T202-001	77			
P-241T103-001	78			
P-241T101-001	79			
P-241T201-001	80			
P-241TY106-001	81	Smear survey, every 365 days	Yes	
P-241TY102-001	82			
P-241TY105-001	83			
P-241TY104-001	84			
P-241TY103-001	85			
P-241TY101-001	86			
P-241A103-001	87	Smear survey, every 365 days	Yes	
P-241A104-001	88			
P-241A102-001	90			
P-241A105-001	91			

Table 3. Status of Required Monitoring. (13 Pages).

Emission Point (Common Name)	EU ID^a	Required Monitoring	Monitoring Completed? (Yes, No, NA)	Comment
P-241A101-001	92			
P-296A042-001 (296-A-42)	93	Record Sample, Continuous	Yes	
P-241A106-001 (241-A-106)	94	Smear survey, every 365 days	Yes	
P-204AR-001 (296-A-26)	96	Record Sample, 1 week sample/4 times per year (if operated other than for HEPA filter testing)	NA	Unit did not operate during reporting period.
P-241U103-001	97	Smear survey, every 365 days	Yes	
P-241U108-001	98			
P-241U107-001	99			
P-241U203-001	100			
P-241U102-001	101			
P-241U201-001	102			
P-241U101-001	103			
P-241U204-001	104			
P-241U109-001	105			
P-241U202-001	106			
P-241U111-001	107			
P-241U112-001	108			
P-241U104-001	109			
P-241U110-001	110			
P-241U106-001	111			
P-241U105-001	112			
P-241TX117-001	113	Smear survey, every 365 days	Yes	
P-241TX107-001	114			
P-241TX112-001	115			
P-241TX105-001	116			
P-241TX113-001	117			
P-241TX104-001	118			
P-241TX114-001	119			
P-241TX103-001	120			
P-241TX110-001	121			
P-241TX116-001	122			
P-241TX108-001	123			
P-241TX102-001	124			
P-241TX115-001	125			
P-241TX106-001	126			
P-241TX101-001	127			
P-241TX109-001	128			

Table 3. Status of Required Monitoring. (13 Pages).

Emission Point (Common Name)	EU ID ^a	Required Monitoring	Monitoring Completed? (Yes, No, NA)	Comment
P-241TX118-001 P-241TX111-001	129 130			
P-241S104-001 P-241S101-001 P-241S103-001 P-241S102-001 P-241S108-001 P-241S109-001 P-241S105-001 P-241S110-001 P-241S106-001 P-241S107-001	131 132 133 134 135 136 137 138 139 140	Smear survey, every 365 days	Yes	
P-242A-002 (296-A-22)	142	Record Sample. One week sample per quarter, and continuous sampling during campaign	Yes	
P-242AL44-001 (LERF Basin #44)	146	Near Field Environmental Sampling. Air - Every 2 weeks continuous/ deposition - annually	Yes	
P-242AL43-001 (LERF Basin #43)	147	Near Field Environmental Sampling. Air - Every 2 weeks continuous/ deposition - annually	Yes	
P-242AL42-001 (LERF Basin #42)	148	Near Field Environmental Sampling. Air - Every 2 weeks continuous/ deposition - annually	Yes	
P-296A028-001 (296-A-28)	156	Record Sample, 1 week sample/4 times per year	Yes	
P-242S-001 (296-S-18)	163	Record Sample, 1 week sample/4 times per year	NA	Unit did not operate during the reporting period.
P-296A020-001 (296-A-20)	174	Record Sample, 1 week sample/4 times per year	Yes	

Table 3. Status of Required Monitoring. (13 Pages).

Emission Point (Common Name)	EU ID^a	Required Monitoring	Monitoring Completed? (Yes, No, NA)	Comment
EP-318-01-S (EP-318-01-S)	175	Record Sample, 2 week sample/year	NA	Superseded on 03/12/15. Closure Report filed on 08/26/16 (16-ESQ- 0120).
P-296W004 001 (296-W-4)	193	Record Sample, Continuous, collect samples biweekly at a minimum	No	Unit shutdown from 05-15-19 to 05-20-19 (See Table 1).
P-241SX115-001 P-241SX113-001	200 201	Smear survey, every 365 days	Yes	
P-241S111-001	202	Smear survey, every 365 days	Yes	
P-241S112-001	203	Smear survey, every 365 days	Yes	
P-296AP-001 (296-A-40)	204	Record Sample, 1 week sample/4 times per year	NA	Unit closed 04/11/2017 per AIR 17-403.
P-296A041-001 (296-A-41)	205	Record Sample, 1 week sample/4 times per year	Yes	
P-296A043-001 (296-A-43)	216	Record Sample, 1 week sample/4 times per year	Yes	
P-296A018-001 (296-A-18)	217	Record Sample, 1 week sample/4 times per year	Yes	
P-296A019-001 (296-A-19)	218	Record Sample, Continuous	N/A	Unit did not operate during the reporting period.
P-296A030-001 (296-A-30)	228	Record Sample, 1 week sample/4 times per year	Yes	
P-241C107-001 P-241C108-001 P-241C112-001 P-241C201-001 P-241C204-001 P-241C102-001 P-241C203-001 P-241C110-001 P-241C109-001 P-241C202-001 P-241C101-001	230 231 232 233 235 237 242 244 245 246 247	Smear survey, every 365 days	Yes	

Table 3. Status of Required Monitoring. (13 Pages).

Emission Point (Common Name)	EU ID ^a	Required Monitoring	Monitoring Completed? (Yes, No, NA)	Comment
S-296S021-001 (296-S-21)	254	Record Sample, Continuous	Yes	
P-241BX104-001 P-241BX110-001 P-241BX103-001 P-241BX107-001 P-241BX101-001 P-241BX112-001 P-241BX106-001 P-241BX102-001 P-241BX109-001 P-241BX111-001 P-241BX108-001	255 256 257 258 259 260 261 262 263 264 265	Smear survey, every 365 days	Yes	
P-241B105-001 P-241B201-001 P-241B108-001 P-241B101-001 P-241B102-001 P-241B204-001 P-241B104-001	266 267 268 269 270 271 272	Smear survey, every 365 days	Yes	
P-241BX105-001	273	Smear survey, every 365 days	Yes	
P-241B112-001 P-241B107-001 P-241B111-001 P-241B109-001 P-241B110-001 P-241B103-001 P-241B202-001 P-241B106-001 P-241B203-001	274 275 276 277 278 279 280 281 282	Smear survey, every 365 days	Yes	
P-241BY101-001 P-241BY105-001 P-241BY106-001 P-241BY102-001 P-241BY112-001 P-241BY103-001 P-241BY104-001 P-241BY109-001 P-241BY108-001 P-241BY111-001 P-241BY110-001 P-241BY107-001	283 284 285 286 287 288 289 290 291 292 293 294	Smear survey, every 365 days	Yes	

Table 3. Status of Required Monitoring. (13 Pages).

Emission Point (Common Name)	EU ID^a	Required Monitoring	Monitoring Completed? (Yes, No, NA)	Comment
P-2025E ETF (296-E-1)	301	Four week sample/year Monitoring Stations N498, N499, N972, and N999	Yes	
P-241AX104-001 P-241AX102-001 P-241AX103-001 P-241AX101-001	302 303 304 305	Smear survey, every 365 days	Yes	
P-291T001-001 (291-T-1)	314	Record Sample, Continuous	Yes	
P-296T007-001 (296-T-7)	315	Record Sample, Continuous, collected monthly when ventilation system is operating	Yes	
P-291S001-001 (291-S-1)	332	Record sample, 4 week sample/year	NA	CERCLA documentation has been completed to take the place of Title V air permitting requirements. Transition paperwork is being finalized for transmittal to the regulatory agencies.
P-296S016-001 (296-S-16)	337	Record Sample, 1 week sample/4 times per year	Yes	
P-296B010-001 (296-B-10)	340	Record Sample, Continuous	No	Unit shutdown on 02/19/19 and 04/17/19 (see Table 1).
EP-325-01-S	361	Record Sample - Continuous; Tritium by silica gel - monthly	Yes	
P-291A001-001 (291-A-1)	369	Record Sample, Continuous	No	Unit shutdown on 04/17/19 (see Table 1).
P-296A010-001 (296-A-10)	384	Record Sample, 1 week sample/year (when operating)	NA	Unit did not operate during the reporting period.
P-437MN&ST-001 (437-MN&ST)	385	Record Sample, 4 week sample/year	No	To be performed during the second half of CY 2019.

Table 3. Status of Required Monitoring. (13 Pages).

Emission Point (Common Name)	EU ID ^a	Required Monitoring	Monitoring Completed? (Yes, No, NA)	Comment
P-FFTFRESB-001 (FFTF-RE-SB)	395	Record Sample, 4 week sample/year or continuously whichever is less (if operated)	NA	Unit did not operate during the reporting period.
P-FFTFHTTR-001 (FFTF-HT-TR)	396	Record Sample, 4 week sample/year or continuously whichever is less (if operated)	NA	Unit did not operate during the reporting period.
P-FFTFCBEX-001 (FFTF-CB-EX)	397	Annual (calculation)	No	To be performed as part of the CY 2019 Radionuclide Air Emissions Report
FFTF-402-1 (Sodium Storage Facility)	398	See AIR 12-321, Condition 5	NA	Unit did not operate during the reporting period.
P-437-002 (437-1-61)	399	Record Sample, 4 week sample/year	No	To be performed during the second half of CY 2019
P-296B001-001 (296-B-1)	402	Record Sample, Continuous	No	Unit shutdown on 04/17/19 (see Table 1).
EP-331-01-V (331 Life Sciences Lab)	412	Record Sample, Continuous	Yes	
P-296H212 001 (296-H-212)	435	Record filter replaced monthly and analyzed quarterly using gamma spectrometer calibrated to Cs-137. Record filter counted annually using gamma spectrometer calibrated to Cs-137.	No	The unit shutdown on 06/27/19 (see Table 1).
S-296S023-001 (296-S-23)	438	One nondestructive assay (NDA) every 2 years	Yes	
J-CWC 001	439	Near Field ambient monitoring program monitors N449, N457, N964, & N433	Yes	
Hanford Sitewide type-1, type-2, type-3 (PTRAEUs)	447	Annual unless specified by the NOC; NDA or record sampler or continuous	Yes	

Table 3. Status of Required Monitoring. (13 Pages).

Emission Point (Common Name)	EU ID^a	Required Monitoring	Monitoring Completed? (Yes, No, NA)	Comment
		air monitoring; AIR 12-316, Condition 4		
Hanford Sitewide Vented Containers	448	Environment Sampling, Air every 2 weeks continuous/ deposition – annually	Yes	
200 Area ISA (200 Area Interim Storage Area)	454	Smear survey – annual	No	To be performed during the second half of CY 2019.
Hanford Sitewide W-PORTEX 007 (HEPA Vacuums)	455	See AIR 06-1024 Condition 5	Yes	
W-PORTEX 011 (Permacon Unit)	461	Quarterly for 2 weeks of operations	NA	Unit did not operate during the reporting period.
Hanford Sitewide Guzzler- 001 (Guzzler™)	476	Radiation surveys, NDA testing HEPAs when replaced, and annually screening the HEPA filtration system	Yes	Radiological surveys, NDA testing HEPAs was performed in the 2nd half of 2018. Annual screening will be performed in 2nd half of CY 2019.
W-296P047-001 (296-P-47)	498	Record sample, Continuous	NA	Unit did not operate during the reporting period.
P-241C-004 (241-C-106)	712	Smear survey, every 365 days	Yes	
P-244CR-002 (244-CR Vault Passive Filter A)	713	Smear survey, every 365 days	Yes	
P-241C-002 (241-C-104)	716	Smear survey, every 365 days	Yes	
P-241C-003 (241-C-105)	717			
P-296A044-001 (296-A-44)	735	Record sample, Continuous	Yes	
P-296A045-001 (296-A-45)	736	Record sample, Continuous	Yes	
P-241C103-001 (241-C-103)	737	Smear survey, every 365 days	Yes	
P-244A-002 (244-A Primary HEPA)	738	Smear survey, every 365 days	Yes	

Table 3. Status of Required Monitoring. (13 Pages).

Emission Point (Common Name)	EU ID ^a	Required Monitoring	Monitoring Completed? (Yes, No, NA)	Comment
P-244BX-002 (244-BX Primary HEPA)	740	Smear survey, every 365 days	Yes	
P-244S-002 (244-S Primary HEPA)	742	Smear survey, every 365 days	Yes	
P-244TX-002 (244-TX Primary HEPA)	744	Smear survey, every 365 days	Yes	
W-296P048-001 (296-P-48)	749	Record sample, Continuous	NA	Unit did not operate during the reporting period.
P-241AZ301-001 (241-AZ-301)	751	Smear survey, every 365 days	Yes	
DVS - Active (Drum Venting System – Active Vent)	755	Smears of the exhaust vent at the end of each shift of operation	NA	Unit did not operate during the reporting period.
DVS - Passive	756	Smears of the exhaust vent at the end of each shift of operation	NA	Unit did not operate during the reporting period.
P-296A046-001 (296-A-46)	855	Record sample, Continuous	Yes	
P-296A047-001 (296-A-47)	856	Record sample, Continuous	Yes	
P-BULKVIT-001 (Bulk Vit Demo Exhauster)	878	Record sample collected biweekly, and a continuous air monitor for beta and gamma, Continuous	NA	Unit closed 10/30/15 per AIR 15-1119.
W-296P049-001 (296-P-49)	885	Record sample, Continuous	Yes	
W-296P050-001 (296-P-50)	886	Record sample, Continuous	Yes	
Hanford Sitewide Tanker Loading of Contaminated Waste Water	888	As listed in the Conditions and Limitations. AIR 09-705 Condition 5.	NA	No shipments during the reporting period.
P-241UX302A-001 (241-UX-302A)	894	Smear survey, every 365 days	No	Will be completed in 2nd half of CY 2019.
P-241ER311-001 (ER311)	910	Smear survey, every 365 days	Yes	
P-244A-003 (244-A Annulus HEPA)	912	Smear survey, every 365 days	Yes	
P-244BX-003 (244-BX Annulus HEPA)	922	Smear survey, every 365 days	Yes	

Table 3. Status of Required Monitoring. (13 Pages).

Emission Point (Common Name)	EU ID^a	Required Monitoring	Monitoring Completed? (Yes, No, NA)	Comment
P-244S-003 (244-S Annulus HEPA)	959	Smear survey, every 365 days	Yes	
P-244TX-003 (244-TX Annulus HEPA)	969	Smear survey, every 365 days	Yes	
P-241U301B-001 (241-U-301B)	1129	Smear survey, every 365 days	Yes	
P-241AZ154-001 (241-AZ-154)	1130	Smear survey, every 365 days	Yes	
FFTF PTRAEU's	1176	Samples of waste water, prior to transfer or once per calendar year during operations	NA	Unit did not operate during the reporting period.
DVS – 2	1181	Smears of exhaust vent at end of each shift of operation	NA	Unit did not operate during the reporting period.
S-MO444-001 (WRAP Head Space Gas Sampling)	1183	Per calculations in Air 12-301	NA	Unit did not operate during the reporting period.
P-241SX107-001 P-241SX108-001 P-241SX109-001 P-241SX110-001 P-241SX111-001 P-241SX112-001 P-241SX114-001 P-241SX101-001 P-241SX102-001 P-241SX103-001 P-241SX104-001 P-241SX105-001 P-241SX106-001	1207 1208 1209 1210 1211 1212 1213 1219 1220 1221 1222 1223 1224	Smear survey, every 365 days	Yes	
P-241S304-001 (241-S-304)	1227	Smear survey, every 365 days	Yes	
P-241A417-001 (241-A-417)	1229	Smear survey, every 365 days	Yes	
P-241EW151-001 (241-EW-151)	1231	Smear survey, every 365 days	No	Will be completed in 2nd half of CY 2019.
P-241S302-001 (241-S-302)	1232	Smear survey, once per month. NDA if required by Condition 6.	Yes	

Table 3. Status of Required Monitoring. (13 Pages).

Emission Point (Common Name)	EU ID ^a	Required Monitoring	Monitoring Completed? (Yes, No, NA)	Comment
W-TRUDECON-001	1243	Radiological field surveys, per the sitewide ambient monitoring program	NA	Unit did not operate during the reporting period.
P-241S102-002 (241-S-102 Inlet Filter)	1249	Smear survey, 1 per year.	NA	Unit closed 05/12/16 per AIR 16-511.
W-296P107-001 (296-P-107)	1293	Record sample, Continuous	NA	Unit did not operate during the reporting period.
P-242A-003 (296-A21A)	1294	Record Sample, 1 week sample/4 times per year	Yes	
W-PES-001	1322	Destructive Examination of filters, once per year minimum.	NA	Unit did not operate during the reporting period.
296-P-53 (Vapor Extraction System)	1326	Smear survey, 1 per month during operation	NA	Unit did not operate during the reporting period.
296-P-52 (Next Generation Retrieval (Active))	1327	Destructive examination of filters, 1 per month anytime it is operated	NA	Unit did not operate during the reporting period.
P-296A048-001 (296-A-48)	1328	Record sample, Continuous	Yes	
P-296A049-001 (296-A-49)	1329	Record sample, Continuous	Yes	
W-MARS-001 (W-MARS-001)	1334	Smear survey, every 365 days	NA	Unit closed 07/23/15 per AIR 15-801.
P-296S26-001 (296-S-26)	1335	Record sample, Continuous	NA	Unit not installed.
P-296S27-001 (296-S-27)	1342	Record sample, Continuous	NA	Unit not installed.
W-MARS-002 (W-MARS-002)	1343	Smear survey, every 365 days	NA	Unit closed 07/23/15 per AIR 15-801.
W-MARS-003 (W-MARS-003)	1371	Smear survey, every 365 days	NA	Unit did not operate during the reporting period.
W-MARS-004 (W-MARS-004)	1384	Smear survey, every 365 days	NA	Unit did not operate during the reporting period.
W-SXPWET-001	1391	Smear survey, annually at a	NA	Unit closed 04/11/17 per AIR-17-403.

Table 3. Status of Required Monitoring. (13 Pages).

Emission Point (Common Name)	EU ID ^a	Required Monitoring	Monitoring Completed? (Yes, No, NA)	Comment
(SX Farm Pore Water Extraction Test)		minimum and at the end of the project.		
AZ-301 Tanker-001 (AZ-301 Tanker-001)	1406	Smear survey on the outside of the outlet of the vent annually at a minimum.	Yes	

^aEmission Unit Identification Number

TM Guzzler is a register trademark of Guzzler Manufacturing, Inc., Birmingham, Alabama.

CY = calendar year
DVS = Drum Venting System
EU = Emission Unit
FFTF = Fast Flux Test Facility
HEPA = high-efficiency particulate air
ID = identification
ISA = interim storage area
LERF = Liquid Effluent Retention Facility
NA = not applicable
NDA = non-destructive assay
NOC = notice of construction
PTRAEU = portable temporary radioactive air emission units [

6.0 REGULATORY APPROVALS ISSUED DURING THE REPORTING PERIOD

Table 4 lists the regulatory approvals issued by DOH and Ecology during this reporting period. The information contained in Table 4 is an AOP permit only requirement not mandated in WAC 173-401 "Operating Permit Regulation."

**Table 4. Regulatory Approvals Issued from January 1, 2019 through June 30, 2019.
(2 Pages)**

Letter	Issue Date	Agency	Title/Subject
AIR 19-114	01/29/19	DOH	Final Approval of As Low As Reasonably Achievable Control Technology 5.3
AIR 19-115	01/29/19	DOH	Final Approval of As Low As Reasonably Achievable Control Technology 29.2
AIR 19-116	01/29/19	DOH	Final Approval of Notice of Construction 1325 for 296-P-71 Operation
AIR 19-117	01/29/19	DOH	Final Approval of Notice of Construction 1326 for 296-P-75 Operation

**Table 4. Regulatory Approvals Issued from January 1, 2019 through June 30, 2019.
(2 Pages)**

Letter	Issue Date	Agency	Title/Subject
AIR 19-119	01/29/19	DOH	Closure of Emission Units 1371 and 1384 for W-MARS-003 and W- MARS-004
AIR 19-120	01/29/19	DOH	Transition of 296-W-3, Emission Unit 308, to Table 2-1 of the Radioactive Air Emissions License Number FF-01
AIR 19-303 (Corrected)	03/14/19	DOH	Final Approval of Notice of Construction 1337
AIR 19-304	03/14/19	DOH	Final Approval of Notice of Construction 1338
AIR 19-503	05/14/19	DOH	Final Approval of Notice of Construction 1362 for Tank Farm Operations Diffuse and Fugitive License

DOH = Washington State Department of Health

7.0 ADDITIONAL INFORMATION REQUIRING SUBMITTAL**Table 5. PSD-02-01 Amendment 3 Semiannual Reporting for Diesel Driven Fire Pump Engines.**

Permit Condition	Requirement	Compliance Method	Compliance Demonstration		
			Pump #	6 Month Reporting Period	Sum of Previous 12 Months
2	Each diesel fire pump shall be fired by ultra-low sulfur diesel fuel with a maximum sulfur content of 0.0015 percent by weight.	Compliance shall be monitored by including a written statement in each semiannual report of the type of fuel purchased.	Diesel fire pump operation was fired solely on fuel with a maximum sulfur content of 0.0015 percent by weight.		
15	The operation of each diesel fire pump shall not exceed 230 hours per year averaged over 12 consecutive months, calculated once per month.	Compliance shall be monitored by including a written statement in each semiannual report of the hours the diesel fire pumps operated in each of the 6 months covered by the report and the summation of hours operated over the previous 12 months.			
			A	19.2	29.8
			B	23.8	37.9

8.0 REFERENCES

- AIR 19-114, 2019, “Final Approval of As Low As Reasonably Achievable Control Technology (ALARACT) 5.3,” external letter to B. Vance, U.S. Department of Energy, Office of River Protection, from J. Martell, Washington State Department of Health, Richland, Washington, January 29.
- AIR 19-115, 2019, “Final Approval of As Low As Reasonably Achievable Control Technology (ALARACT) 29.2,” external letter to B. Vance, U.S. Department of Energy, Office of River Protection, from J. Martell, Washington State Department of Health, Richland, Washington, January 29.
- AIR 19-116, 2019, “Final Approval of Notice of Construction (NOC) 1325 for 296-P-71 Operation,” external letter to B. Vance, U.S. Department of Energy, Office of River Protection, from J. Martell, Washington State Department of Health, Richland, Washington, January 29.
- AIR 19-117, 2019, “Final Approval of Notice of Construction (NOC) 1326 for 296-P-75 Operation,” external letter to B. Vance, U.S. Department of Energy, Office of River Protection, from J. Martell, Washington State Department of Health, Richland, Washington, January 29.
- AIR 19-119, 2019, “Closure of Emission Units (EUs) 1371 and 1384 for W-MARS-003 and W-MARS-004,” external letter to B. Vance, U.S. Department of Energy, Office of River Protection, from J. Martell, Washington State Department of Health, Richland, Washington, January 29.
- AIR 19-120, 2019, “Transition of 296-W-3, Emission Unit (EU) 308, to Table 2-1 of the Radioactive Air Emissions License (RAEL) Number FF-01,” external letter to B. Vance, U.S. Department of Energy, Office of River Protection, from J. Martell, Washington State Department of Health, Richland, Washington, January 29.
- AIR 19-303 Corrected, 2019, “Final Approval of Notice of Construction (NOC) 1337,” external letter to B. Vance, U.S. Department of Energy, Office of River Protection, from J. Martell, Washington State Department of Health, Richland, Washington, March 14.
- AIR 19-304, 2019, “Final Approval of Notice of Construction (NOC) 1338,” external letter to B. Vance, U.S. Department of Energy, Office of River Protection, from J. Martell, Washington State Department of Health, Richland, Washington, March 14.
- AIR 19-503, 2019, “Final Approval of Notice of Construction (NOC) 1362 for Tank Farm Operations Diffuse and Fugitive License,” external letter to B. Vance, U.S. Department of Energy, Office of River Protection, from J. Martell, Washington State Department of Health, Richland, Washington, May 14.
- AOP 00-05-006, Renewal 2, *Hanford Site Title V Air Operating Permit 00-05-006 Renewal 2, Revision B*, effective August 1, 2016, Washington State Department of Ecology,

Washington State Department of Health, and Benton Clean Air Agency, Richland,
Washington.

WAC 173-401, "Operating Permit Regulation," *Washington Administrative Code*, Olympia,
Washington.

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