HANFORD SITE AIR OPERATING PERMIT

2006 RENEWAL

In the matter of the compliance by the	)	Number: 00-05-006 Renewal 1
U.S. Department of Energy – Hanford Operations, with	)	Issue Date: December 1, 2006
Section 70.94.161 RCW, Operating Permits for Air	)	Effective Date: January 1, 2007
Contaminant Sources, and the applicable rules and	)	Expiration Date: December 31, 2011
regulations of Ecology and Health.	)	

In accordance with the provisions of Washington Administrative Code (WAC) Chapter 173-401, Operating Permit Regulation, the permittee, U.S. Department of Energy (DOE) at the Hanford Site is required to comply with provisions within this air operating permit, including all standard terms and general conditions and provisions contained in all the Attachments, identified below.

Attachments 1, 2, and 3 are integral and enforceable provisions of this permit.

Attachment 1 contains the State of Washington Department of Ecology (Ecology) permit terms and conditions.

Attachment 2 contains the State of Washington Department of Health (Health) Radioactive Air Emissions License (FF-01) as permit terms and conditions.

Attachment 3 contains the Benton Clean Air Authority (BCAA) permit terms and conditions applicable to the regulations of open burning and asbestos.

The regulatory agency relationships are described in the Statement of Basis (Statement). The Statement is issued by the permitting agencies as a separate supporting reference document to this air operating permit. The Statement contains non-enforceable legal and factual basis for AOP conditions. The Statement also includes references to the applicable statutory or regulatory provisions, technical supporting information on specific emission units, and clarifications of specific requirements. [WAC 173-401-700(8)]

The Hanford Site and facilities are managed by two DOE offices in Richland, Washington. The Office of River Protection (ORP) oversees the Hanford Site's tank waste remediation system at the 200 Area. The Richland Operation Office (RL) is responsible for the Hanford Site's environmental cleanup activities and the site-wide infrastructure support. The Pacific Northwest Site Office (PNSO), located in Richland, Washington, of the DOE Office of Science provides programmatic, operational, and institutional stewardship and oversight of the Pacific Northwest National Laboratory (PNNL) operations on the PNNL Site, which is adjacent to the Hanford Site. The PNSO also provides oversight of some Hanford Site facilities utilized by PNNL, located in the 300 area and in conjunction with RL who is the owner and steward of these

facilities. This joint oversight is conducted in accordance with a memorandum of agreement (MOA) between RL and PNSO. The official addresses are listed below:

Department of Energy-RL P.O. Box 550 825 Jadwin Ave. Richland, WA 99352	Department of Energy-ORP P.O. Box 450 2440 Stevens Ave. Richland, WA 99352

The Hanford Air Operating Permit (AOP) was initially issued in 2001, and shall be renewed toward the end of each five-year term. The AOP Renewal of 2006 is issued for a fixed term of 5 years from January 1, 2007 to December 31, 2011. Before the expiration date of December 31, 2011, the permittee shall apply for another five-year renewal according to WAC 173-401-500 and WAC 173-401-710 requirements. Ecology will notify the permittee at least 18 months in advance of the expiration date by sending an application for renewal which details the necessary data required to have a complete application submitted at least 9 months prior to the expiration date.

All terms and conditions (or underlying applicable requirements where regulations are paraphrased) are enforceable by the U.S. Environmental Protection Agency (EPA) and United States citizens unless specifically designated as not federally enforceable or listed as an inapplicable requirement in Table 5.1. (WAC 173-401-625). Any paraphrasing of regulations or other applicable requirements is for the convenience of the reader. The underlying applicable requirement is the enforceable requirement**.**

_____ _____

Jane Hedges, Program Manager
Nuclear Waste Program
Department of Ecology
State of Washington

Date

_____ _____

Gary Robertson, Director
Division of Radiation Protection
Department of Health
State of Washington

Date

_____ _____

David Lauer, Ph.D.
Control Officer
Benton Clean Air Authority

Date

_____ _____

Oliver Wang, Environmental Engineer, PE
Nuclear Waste Program
Department of Ecology
State of Washington

Date

This page intentionally left blank.

CONTENTS

1.0 ACRONYMS AND ABBREVIATIONS 7
2.0 GENERAL PROCESS INFORMATION 9
3.0 STANDARD TERMS 11
3.1 DUTY TO COMPLY 11
3.2 NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE 11
3.3 PERMIT ACTIONS 11
3.4 PROPERTY RIGHTS 11
3.5 DUTY TO PROVIDE INFORMATION 11
3.6 PERMIT FEES 12
3.7 EMISSIONS TRADING 12
3.8 SEVERABILITY 12
3.9 PERMIT APPEALS 13
3.10 PERMIT CONTINUATION 13
3.11 CERTIFICATIONS 13
4.0 GENERAL CONDITIONS 15
4.1 PERMIT RENEWAL AND CONDITIONS 15
4.2 TRANSFER OF OWNERSHIP OR OPERATION 16
4.3 SUBMITTALS 16
4.3.1 Annual NESHAP Report 17
4.3.2 Annual Air Emission Inventory 18
4.3.3 Semiannual Reports 19
4.3.4 Annual Compliance Certification 20
4.4 INSPECTION AND ENTRY 20
4.5 PERMIT DEVIATION REPORTING 21
4.5.1 Potential Threats to Human Health or Safety 21
4.5.2 Non-Health or -Safety Related Deviations 22
4.6 REOPENING FOR CAUSE 23
4.7 MONITORING 23
4.8 NEW SOURCE REVIEW APPLICABILITY 24
4.9 EMISSION STANDARDS AND CONTROLS FOR SOURCES EMITTING GASOLINE VAPORS 24
4.10 STRATOSPHERIC OZONE PROTECTION 24
4.11 ACCIDENTAL RELEASE PREVENTION REQUIREMENTS: RISK MANAGEMENT PROGRAMS UNDER THE CLEAN AIR ACT, SECTION 112(R)(7). 24
4.12 APPROVAL ORDER TERMS AND CONDITIONS THAT BECOME IRRELEVANT DURING THE TERM OF THIS PERMIT. 24
4.13 MONITORING AND ASSOCIATED RECORDKEEPING FOR EMISSION UNITS WITHOUT CONTINUOUS OPERATION 25
5.0 PERMIT SHIELD 27
5.1 APPLICABLE REQUIREMENTS 27
5.2 INAPPLICABLE REQUIREMENTS 27
6.0 STATEMENT OF BASIS 31

TABLES

Table 5-1. Inapplicable Requirements. 28

ATTACHMENT 1 .....Ecology Permit

1. Emission Standards and Limitations
2. Compliance and Periodic Monitoring Provisions
3. Recordkeeping

ATTACHMENT 2 .....Health License

1. Emission Standards
2. Applicable Requirement Terms
3. Monitoring, Testing, Quality Assurance, Reporting and Recordkeeping
4. Radioactive Air Emission Units Specific Applicable Requirements Tables

ATTACHMENT 3 .....Benton Clean Air Authority Permit

1.0 ACRONYMS AND ABBREVIATIONS

ALARACT – as low as reasonably achievable control technology
AOP - Air Operating Permit
BACT - best available control technology
BCAA - Benton Clean Air Authority
CAA - Clean Air Act
CERCLA - *Comprehensive Environmental Response, Compensation and Liability Act of 1980*
CFR - Code of Federal Regulations
DOE - U.S. Department of Energy, Hanford Operations
DOE-ORP - U.S. Department of Energy, Office of River Protection
DOE-RL - U.S. Department of Energy, Richland Operations Office
DST - double-shell tanks
Ecology - State of Washington Department of Ecology
EFSEC – Energy Facility Site Evaluation Council
EPA - U.S. Environmental Protection Agency
FCAA - Federal Clean Air Act
Health - State of Washington Department of Health
HEPA – high-efficiency particulate air (filter)
IEU - insignificant emission unit
MEI – maximally exposed individual
MOA – memorandum of agreement
MOU - memorandum of understanding
NAAQS - National Ambient Air Quality Standards
NESHAP - National Emission Standard for Hazardous Air Pollutants
NOC - notice of construction
NRC - Nuclear Regulatory Commission
NSR - new source review
ORP - U.S. Department of Energy, Office of River Protection
PCHB - Pollution Control Hearings Board
PM-10 or PM_{10} – particulate matters 10 microns or less
PNNL - Pacific Northwest National Laboratory
PSD - prevention of significant deterioration
PTRAEU – portable/temporary radioactive air emission units
R&D - research and development
RACT - reasonably available control technology
RCHC - Richland Central Area
RCHN - Richland North Complex
RCW - Revised Code of Washington
RL - U.S. Department of Energy, Richland Operations Office
Statement – Statement of Basis
TAPs - toxic air pollutants
TSD - treatment, storage and/or disposal
VOC – volatile organic compound
WAC - Washington Administrative Code

This page intentionally left blank.

2.0 GENERAL PROCESS INFORMATION

The Hanford Site was acquired by the federal government in 1943 and for many years was dedicated primarily to the production of plutonium for national defense and the management of the resulting waste. With the shutdown of the production facilities in the 1970s and 1980s, missions were redirected to decommission and site cleanup, and diversified to include research and development in the areas of energy, waste management, and environmental restoration. Decommissioned facilities or emission units are those that can not be operated as is, and are not planned to operate again. In an extremely unlikely event that a decommissioned facility or emission unit is reactivated, an applicable requirements assessment must be completed first.

The Hanford Site, located in south central Washington State, occupies about 1,450 square kilometers (approximately 560 square miles) of semi-arid shrub and grasslands just north of the confluence of the Snake and Yakima Rivers with the Columbia River. This land, with restricted public access, provides a buffer for the smaller areas historically used for the production of nuclear materials, waste storage, and waste disposal. About 6% of the land area has been disturbed and is actively used or excluded from this permit under documented CERCLA authority. This 6% used land is divided into the following five operational areas:

- 100 Area, including 100-B/C, 100-D, 100-DR, 100-F, 100-H, 100-K, and 100-N Areas, which lie along the south shore of the Columbia River in the northern portion.

- 200 Area, including 200 East and 200 West Areas, which lie in the center near the basalt outcrops of Gable Mountain and Gable Butte.

- 300 Area, near the southern border of the Hanford Site.

- 400 Area, between the 300 and 200 Areas.

- 600 Area, land between the other operational areas located on the Central Plateau.

Other areas and facilities that support Hanford Site activities can be found in the nearest cities (i.e., Richland, Kennewick, and Pasco). The facilities in these areas are not considered part of the Hanford Site major source because these areas are not considered contiguous or adjacent to the Hanford Site. These areas include, but are not limited to, the following facilities:

- 700 Area in Richland, i.e., 825 Jadwin, 748 Building, and 712 Building on Jadwin Avenue.

- Richland Central (RCHC) Area, i.e., Butler Loop facilities and the Hanford Technical Training Center.

- 1100 Area, Stevens Center, Evergreen Facilities, Hammer, Cold Test Facility, various PNNL facilities (as specified herein), Benton County Sheriff's Facilities including firing range and training

The Major stationary source covered by this permit includes the following North American Industry Classification System (NAICS) categories:

541710	Research and Development in the Engineering and Life Sciences
562210	Waste Treatment and Disposal
562910	Remediation Services
924110	Administration of Air and Water Resource and Solid Waste Management Program
999999	Unclassified Establishments.

This AOP specifically excludes facilities that do not meet the criteria for inclusion in a major source subject to the Air Operating Permit Regulation (i.e., WAC 173-401); the criteria are described in the Statement of Basis. Examples of facilities excluded at the time of AOP renewal in 2006 are the following:

- Pacific EcoSolutions, Inc., Richland facility
- Interstate Nuclear Services laundry
- Battelle Richland North facilities
- Applied Process Engineering Laboratory
- Laser Interferometer Gravitational-Wave Observatory
- all Energy Northwest facilities unless leased to DOE as a support facility
- all Port of Benton facilities unless leased to DOE as a support facility
- US Ecology, Inc., commercial low-level radioactive waste burial site
- Kaiser Aluminum and Chemical Corporation extrusion press located in an 1100 Area Building
- AREVA NP
- Tri-City and Olympia Railroad, located in an 1100 Area Building
- PN Services
- Environmental and Molecular Science Laboratory
- Oasis Physical Therapy located at the Stevens Center
- Montessori School located at the Stevens Center
- Corporate Health Facility located at the Stevens Center
- Bulk Vitrification Testing Facility located across from Hammer in Richland.
- Non-Road Engines

3.0 STANDARD TERMS

Standard terms and conditions are provided in the following sections.

3.1 DUTY TO COMPLY

The permittee must comply with all conditions of this Chapter 401 permit. Any AOP noncompliance constitutes a violation of Chapter 70.94 Revised Code of Washington (RCW) and, for federally enforceable provisions, a violation of the FCAA. Such violations are grounds for enforcement action; for AOP termination, revocation and re-issuance, or modification; or for denial of an AOP renewal application. WAC 246-247 and WAC 173-460 are state-only enforceable requirements. [WAC 173-401-620(2)(a)]

3.2 NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [WAC 173-401-620(2)(b)]

3.3 PERMIT ACTIONS

This AOP may be modified, revoked, reopened, reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [WAC173-401-620(2)(c)]

3.4 PROPERTY RIGHTS

This AOP does not convey any property rights of any sort, or any exclusive privilege. [WAC 173-401-620(2)(d)]

3.5 DUTY TO PROVIDE INFORMATION

The permittee shall furnish to Ecology, Health, or BCAA, within a reasonable time, any information that Ecology, Health, or BCAA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. On request, the permittee also shall furnish to Ecology, Health, or BCAA copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the administrator along with a claim of confidentiality. Ecology, Health, or BCAA shall maintain confidentiality of such information in accordance with RCW 70.94.205. [WAC 173-401-620(2)(e)]

[Note: The permittee shall afford access to requested copies of records containing classified information provided the Ecology, Health or BCAA representatives reviewing the documents possess (1) the appropriate access authorizations (security clearances) for the level and category of information involved, (2) all required formal access approval(s), and (3) a legitimate need-to-know. WAC 246-247-080(10) (state only)]

3.6 PERMIT FEES

The permittee shall pay fees as a condition of this AOP in accordance with the permitting authority's fee schedule. Failure to pay fees in a timely fashion shall subject the permittee to civil and criminal penalties as described in Chapter 70.94 RCW. [WAC 173-401-620(2)(f)]

The State AOP program shall require that the owner (or operator) of Part 70 sources pay annual fees that are sufficient to cover the permit program costs and shall ensure that any fee required by this section will be used solely for permit program costs.
[40 CFR 70.9(a)]

Ecology shall conduct a workload analysis projecting resource requirements for the purpose of preparing the budget. Ecology shall publish a draft workload analysis together with the draft budget for the following biennium on or before February 28 of each even-numbered year and shall provide opportunity for public comment thereon in accordance with WAC 173-401-920(1). Ecology shall publish a final workload analysis together with the final budget for the following biennium on or before June 30 of each even-numbered year.
[WAC 173-401-900(3)]

Per WAC 246-247-065 [Fees], fees for airborne emissions of radioactive materials shall be submitted in accordance with WAC 246-254-160. The permittee shall pay costs associated with direct staff time of the air emissions program in accordance with WAC 246-254-120(1)(e). In any case where the permittee fails to pay a prescribed fee or actual costs incurred during a calendar quarter, Health (1) shall not process an application and (2) may suspend or revoke any license or approval involved; or (3) may issue any order with respect to licensed activities as Health determines appropriate or necessary to carry out the provisions of WAC 246-254-170.
[WAC 246-247-065 (state only), WAC 246-254-120(1)(e) (state only), WAC 246-254-170 (state only)]

3.7 EMISSIONS TRADING

No AOP revision shall be required under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided in this permit. [WAC 173-401-620(2)(g)]

3.8 SEVERABILITY

If any provision of this AOP is held to be invalid, all unaffected provisions of the permit shall remain in effect and be enforceable. [WAC 173-401-620(2)(h)]

3.9 PERMIT APPEALS

This AOP or any condition in the AOP, including the attachments or any conditions in the attachments, may be appealed only by filing an appeal with the Pollution Control Hearings Board (PCHB) and serving the appeal on the permitting authority within 30 days of receipt pursuant to RCW 43.21B.310. This provision for appeal in this section is separate from and in addition to any federal rights to petition and review under Section 505(b) of the FCAA. [WAC 173-401-620(2)(i), WAC 173-401-735]

3.10 PERMIT CONTINUATION

This AOP and all terms and conditions contained therein, including any permit shield provided under WAC 173-401-640, shall not expire until renewal permit has been issued or denied if a timely and complete application has been submitted. An application shield granted pursuant to WAC 173-401-705(2) shall remain in effect until the renewal permit has been issued or denied if a timely and complete application has been submitted. [WAC 173-401-620(2)(j)]

3.11 CERTIFICATIONS

Any application form, report, or compliance certification submitted to Ecology, Health, BCAA or EPA pursuant to this AOP shall contain a certification of truth, accuracy, and completeness by a responsible official. All certifications shall be in accordance with the requirements of WAC 173-401-520 and WAC 173-401-615.

No person shall make any false material statement, representation or certification in any form, notice or report required under chapter 70.94 or 70.120 RCW, or any ordinance, resolution, regulation, permit or order in force pursuant thereto. [WAC 173-400-105(7)]

No person shall render inaccurate any monitoring device or method required under chapter 70.94 or 70.120 RCW, or any ordinance, resolution, regulation, permit, or order in force pursuant thereto. [WAC 173-400-105(8)]

This page intentionally left blank.

4.0 GENERAL CONDITIONS

4.1 PERMIT RENEWAL AND CONDITIONS

This AOP is issued for a fixed term of 5 years from its effective date. The permittee's right to operate this Chapter 401 source terminates with the expiration of this AOP unless a timely and complete renewal application is submitted at least 6 months but no earlier than 18 months before the date of AOP expiration. On receipt of a timely and complete application for renewal, this source may continue to operate subject to final action by Ecology, Health, and BCAA on the renewal application. This protection shall cease to apply if, subsequent to a completeness determination, the applicant fails to submit by the deadline specified in writing by Ecology, Health, or BCAA any additional information identified as being needed to process the renewal application. The application for renewal shall include the current AOP number, description of AOP revisions and off-permit changes that occurred during the permit term, any applicable requirements that were promulgated and not incorporated into the AOP during the permit term, and information listed in the renewal application sent to the applicant no later then 18 months prior to the expiration date by Ecology and coordinated with the Health and BCAA. The renewal application should be sent to:

Program Manager
Nuclear Waste Program
State of Washington Department of Ecology.
3100 Port of Benton Blvd.
Richland, WA 99354

and

Section Head
State of Washington Department of Health
The Division of Environmental Health
The Office of Radiation Protection
Air Emissions and Defense Waste
111 Israel Road, Town Center 2
P.O. Box 47827
Olympia, WA 98504-7827

and

Control Officer
Benton Clean Air Authority
114 Columbia Point Drive, Suite C
Richland, WA 99352

or other address, as directed by the agencies.
[WAC 173-401-610, WAC 173-401-710(1), WAC 246-247-060(6) (state only)]

4.2 TRANSFER OF OWNERSHIP OR OPERATION

This AOP is nontransferable by the DOE, the owner and operator. Future owners and operators must obtain a new AOP. A change of ownership or operational control of this source shall be treated as an administrative permit amendment if no other changes in this AOP are necessary and provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to Ecology, Health, and BCAA. [WAC 173-401-720(1)(d)]

4.3 SUBMITTALS

Reports, test data, monitoring data, notifications, and compliance certifications regarding nonradioactive air emissions, except asbestos and open burning, shall be submitted as specified in Attachment 1 to:

Program Manager
Nuclear Waste Program
State of Washington
Department of Ecology
3100 Port of Benton Blvd
Richland, WA 99354

or other address as directed by Ecology.

Reports, test data, monitoring data, notifications, and compliance certifications regarding radioactive air emissions shall be submitted as specified in Attachments 2 to:

Section Head
State of Washington Department of Health
The Division of Environmental Health
The Office of Radiation Protection
Air Emissions and Defense Waste
111 Israel Road, Town Center 2
P.O. Box 47827
Olympia, WA 98504-7827

or other address as directed by Health.

Reports, test data, monitoring data, notifications, and compliance certifications required to be sent to the EPA shall be submitted to:

U.S. EPA Region 10 Administrator
Air Permits, MS: OAQ-107
1200 Sixth Avenue
Seattle, WA 98101

or other address as directed by the EPA.

Reports, notifications, and compliance certifications regarding regulated asbestos and open burning activities shall be submitted as specified in Attachment 3 to:

Control Officer
Benton Clean Air Authority
114 Columbia Point Drive, Suite C
Richland, WA 99352

or other address as directed by the BCAA.

The permittee shall promptly, on discovery, report to Ecology, Health, BCAA or EPA, any material error or omission in these records, reports, plans, or other documents.

Any submittal under this section shall comply with Section 3.11 Certifications.

4.3.1 Annual NESHAP Report

The annual report shall consist of the annual Radionuclide Air Emissions Report for the Hanford Site required by 40 CFR 61.94:

(a) Compliance with this standard shall be determined by calculating the highest effective dose equivalent to any member of the public at any offsite point where there is a residence, school, business or office. The owners or operators of each facility shall submit an annual report to both EPA headquarters and the appropriate regional office by June 30 which includes the results of the monitoring as recorded in DOE's Effluent Information System and the dose calculations required by § 61.93(a) for the previous calendar year.

(b) In addition to the requirements of paragraph (a) of this section, an annual report shall include the following information:

"(1) The name and location of the facility.
(2) A list of the radioactive materials used at the facility
(3) A descriptions of the handling and processing that the radioactive materials undergo at the facility.
(4) A list of the stacks or vents or other points where radioactive materials are released to the atmosphere.
(5) A description of the effluent controls that are used on each stack, vent, or other release point and an estimate of the efficiency of each device.
(6) Distances from the points of release to the nearest residence, school, business or office and the nearest farms producing vegetables, milk, and meat.
(7) The values used for all other user supplied input parameters for the computer models (e.g., meteorological data) and the sources of these data.
(8) A brief description of all construction and modifications which were completed in the calendar year for which the report is prepared, but for which the requirement to apply for approval to construct or modify was waived under § 61.96 and associated documentation developed by DOE to support the waiver. EPA reserves the right to require that DOE send to

EPA all the information that normally would be required in an application to construct or modify, following receipt of the description and supporting documentation.
(9) Each report shall be signed and dated by a corporate officer or public official in charge of the facility and contain the following declaration immediately above the signature line: ‘‘I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment. See, 18 U.S.C. 1001.”

and shall include the following information per WAC 246-247-080(3):

1. Results of emission measurements for those emission units subject only to periodic confirmatory measurements

2. Wind rose or joint frequency table

3. Annual average ambient temperature

4. Annual average emission unit gas temperature, if available

5. Annual total rainfall

6. Annual average emission unit flow rate and total volume of air released during the calendar year.

If the additional information is available in another annual report, the permittee may provide a copy of that report along with the listed information requirements.
[WAC 246-247-080(3) (state only)]

4.3.2 Annual Air Emission Inventory

The permittee shall upon notification by the director of Ecology, maintain records on the type and quantity of emissions from the source and other information deemed necessary to determine whether the source is in compliance with applicable emission limitations and control measures. The annual emission inventory shall be submitted to Ecology on forms provided by Ecology. When submittal of emission inventory information for criteria pollutants is requested by Ecology, the emissions inventory shall be submitted no later than 105 days after the end of the calendar year. The annual air emissions inventory report will minimally contain information on air emissions:

- for emission unit composites, as requested and listed in AOP Attachment 1, *Tables 1.3, 1.4, and 1.5*, and,

- for other emission units as directed by Ecology on forms provided to the permittee.

[WAC 173-400-105]

4.3.3 Semiannual Reports

Semiannual reports shall be submitted by September 15th and by March 15th. The semiannual report submitted by September 15th shall contain information for the period from January 1 through June 30. The semiannual report submitted by March 15th shall contain information for the period from July 1 through December 31. The semiannual reports shall be in addition to the currently submitted reports. Submittal of the information required in Section 4.3.1 Annual NESHAPs Report will meet the semiannual reporting requirements of diffuse and fugitive sources in Table 2.1 and point source emission unit specific information (i.e.; height, diameter, velocity, temperature, and operational status) of the FF-01 License. There are no semiannual reporting requirements for insignificant emission units (IEUs) defined by WAC 173-401-530. Each semiannual report shall be certified consistent with WAC 173-401-520.

Each semiannual report shall contain the following information for the applicable reporting period (January 1 through June 30, or July 1 through December 31).

1. Each semiannual report will provide a reference to reports submitted to the regulatory agencies as required by General Conditions Section 4.5, “Permit Deviation Reporting”.

2. Each semiannual report will consist of reports of any required monitoring not submitted according to Section 4.3 or reference to reports of required monitoring that were submitted previously during the reporting period.

3. Each semiannual report will contain a summary of any substantiated air emission complaint investigation(s) required in Table 1.2 of Attachment 1 and issued during the reporting period.

4. For all minor radioactive emission units (potential to emit <0.1 mrem to the maximally exposed individual (MEI) listed in Attachment 2, each semiannual report will contain 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.

5. For all emission units with continuous monitoring, a general statement will be provided stating that required monitoring operated continuously.

6. For an emission unit(s) that operated for any part of the calendar year, and was not closed per WAC 246-247-080(6) (reference to FF-01 Attachment 2), monitoring data will be reported in the annual NESHAP report (Section 4.3.1). 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.

7. Each semiannual report will list any new regulatory orders, (e.g., Notice of Construction or License to Operate) imposed during the reporting period by Ecology or Health.

[WAC 173-401-615(3)(a)

4.3.4 Annual Compliance Certification

The annual compliance certification will be certified consistent with WAC 173-401-520 requirements, and submitted by July 31 for the previous calendar year. The report is to be certified for truth, accuracy, and completeness by a Responsible Official [WAC 173-401-200(29)]. The compliance certification will consist of the following:

1. Each emission unit-specific term or condition listed in Attachments 1 and 2, as well as Attachment 3 for asbestos and open burning compliance, pursuant to the source's or emission unit's operational portion of the calendar year. Source(s) or emission unit(s) closed per request letter (Ecology) or pursuant to WAC 246-247-080(6) (WDOH), prior to the January 1 of the reporting period will not be included in the calendar year certification report.

2. The compliance status

3. Whether compliance was continuous, intermittent, or not applicable.

4. The method(s) used to determine the compliance status of the source over the reporting period consistent with WAC 173-401-615(3)(a)

5. Such other facts as Ecology, Health, or BCAA may require to determine the compliance status of the source.

All compliance certifications shall be submitted to Ecology, Health, or BCAA with a copy to EPA at the address shown in Section 4.3 by July 31 of the following calendar year.

No certification shall be required for IEUs per WAC 173-401-530(2)(d) .
[WAC 173-401-630(5)]

Submittal of the information required in Section 4.3.1 Annual NESHAPs Report will meet the annual compliance certification requirements of diffuse and fugitive sources in Table 2.1 and point source emission unit specific information (i.e.; height, diameter, velocity, temperature, and operational status) of the FF-01 License.
[WAC 173-401-520, WAC 173-401-630 and WAC 246-247]

4.4 INSPECTION AND ENTRY

On presentation of appropriate credentials and equipped with appropriate personal protective equipment, the permittee shall allow Ecology, Health, BCAA, or an authorized representative to perform the following:

1. Enter, at reasonable times, upon the permittee’s premises where a Chapter 401 source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit.

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit.

3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this AOP. Health may require a demonstration of as low as reasonably achievable control technology (ALARACT) at any time. Where controlled access areas will be entered, Ecology, Health, or BCAA shall provide a reasonable advance notice and enter in the presence of a facility representative.

4. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit.

5. The permittee shall respond in writing in a timely manner, or within a time limit set by Health per WAC 246-247-080(11) (state only), to inspection results that require a facility to implement corrective actions or any other actions so directed by Health.

Nothing in this condition shall limit the ability of EPA to inspect or enter the premises of the permittee under Section 114 or other provisions of the FCAA.

No person shall obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out their official duties. In the event the hazards associated with accessibility to a unit require training and/or restrictions or requirements for entry, the permittee shall inform Ecology, Health, or BCAA before arrival of those restrictions or requirements. The permittee shall be responsible for providing the necessary training, escorts, and support services to allow Ecology, Health, or BCAA to inspect. [WAC 173-401-630(2), WAC 246-247-080(1) (state only), and WAC 246-247-080(9) (state only)]

4.5 PERMIT DEVIATION REPORTING

The permittee shall report deviations from permit conditions, including those attributable to upset conditions as defined below, the probable cause of such deviations, and any corrective actions or preventative measures taken.

4.5.1 Potential Threats to Human Health or Safety

Deviations, which represent a potential threat to human health or safety, shall be reported promptly or as soon as possible. Promptly, as defined here, means as soon as possible following discovery[1], but in no case later than 12 hours after discovery[1] of a potential threat to human health or safety. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This notice fulfills the immediate reporting requirements of WAC 173-401-615(3)(b), WAC 173-400-107(3) and WAC 246-247-080(5) (state only).

[1] Qualitative determination that a potential threat to public health or safety exists or existed after an evaluation of pertinent information.

4.5.2 Non-Health or -Safety Related Deviations

Other deviations from AOP requirements or excess emissions shall be reported within 30 days after the end of the month during which the deviation is discovered or as part of routine emission monitoring reports. [WAC 173-401-615(3)(b) and WAC 173-400-107(3)]

Additional written reports may be required by either Ecology or Health, according to the requirements of WAC 173-400-107(3) or WAC 246-247-080(5) (state only) respectively.

Notification must be given to Health within 24 hours (or during the course of the next normal business day) from the time of discovery of the condition or emission that would require notification pursuant to WAC 246-247-080(5) (state only). Such notification shall be required for other than normal operations when a potential or actual release of radionuclides to the air is due to any one or more of the following:

1. Non-routine bypass or failure of required abatement control technology identified in Attachment 2

2. Non-routine and/or unexpected operational changes resulting in increased emissions

3. An excess of the dose standard of 10 mrem/yr for the Hanford Site

4. Emission in excess of emission limits or conditions in a regulatory order (e.g., NOC, enforcement actions, or License).

The permittee may seek to establish that excess emissions were unavoidable because of startup or shutdown conditions, maintenance, or upset conditions, in accordance with WAC 173-400-107. The permittee also may seek to establish that noncompliance with a technology-based[2] emission limitation under this AOP was because of an emergency[3], in accordance with WAC 173-401-645. To do so, the permittee shall demonstrate the affirmative defense of emergency through properly signed, contemporaneous operating logs, or other relevant evidence that:

1. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

2. The permitted facility was at the time being properly operated;

---

[2] Technology-based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a new source performance standard) rather than those established to attain a health based air quality standard.

[3] An “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of this source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes this source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

3. During the period of the emergency the permittee did not allow the condition to persist and took all reasonable steps to minimize levels of emissions that exceeded the emissions standards, or other requirements in this permit; and

4. The permittee submitted notice of the emergency to Ecology (non-radiological emissions) and Health (radiological emissions) within 24 hours of the time when emission limitations were discovered exceeded due to the emergency, and within 12 hours when there is a threat to human health. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This notice fulfills the requirements of WAC 173-401-615.

[WAC 173-400-107, WAC 173-401-615, WAC 173-401-645, WAC 246-247-080 (state only)]

4.6 REOPENING FOR CAUSE

The Ecology, and/or Health, or BCAA, acting through Ecology, shall re-open and revise this AOP, as necessary, in the following circumstances.

1. Additional requirements become applicable to the Hanford Site three or more years before the expiration date of this AOP. Such a re-opening shall be completed no later than 18 months after promulgation of the applicable requirement. No such re-opening is required if the effective date of the requirement is later than the expiration date of this AOP, unless the original AOP or any terms and conditions have been extended pursuant to WAC 173-401-620(2)(j).

2. Ecology, Health, BCAA, or the EPA determines that this AOP contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions.

3. Ecology, Health, BCAA, or the EPA determines that the AOP must be revised or revoked to ensure compliance with the applicable requirements.

Re-openings shall not be initiated before a notice of intent to re-open is provided to the permittee by Ecology at least 30 days in advance of the date that this AOP is to be re-opened, except that Ecology, Health, or BCAA may provide a shorter period in the case of an emergency.

All AOP conditions remain in effect until such time as Ecology takes final action. Respective regulatory agencies may take temporary corrective measures in cases of material mistakes or potential negative impact to public health.
[WAC173-401-730]

4.7 MONITORING

Under the requirements of WAC 246-247-075(9), Health may conduct an environmental surveillance program to ensure that radiation doses to the public from emission units are in compliance with applicable standards. Health may require the operator of an emission unit to

conduct stack sampling, ambient air monitoring, or other testing as necessary to demonstrate compliance with the standards in WAC 246-247-040.

4.8 NEW SOURCE REVIEW APPLICABILITY

The permittee shall not be allowed to construct or operate new or modified emission units without previous approval pursuant to the new source review requirements except as allowed by regulations. Additionally, before a deactivated emission unit is re-activated, an applicable requirements assessment shall be performed. This applicable requirements assessment shall include a determination of the applicability of the new source review requirements. [WAC 173-400-110, -560 and -700, WAC 173-460-040 (state only), and WAC 246-247-060 (state only)]

4.9 EMISSION STANDARDS AND CONTROLS FOR SOURCES EMITTING GASOLINE VAPORS

Stage 1 requirements are applicable to 20 eastern Washington counties (including Benton County) with new gasoline dispensing facilities greater than 10,000 gallons storage capacity (Table 1.7 in Attachment 1). Total annual throughput records shall be maintained for the most recent 2- year period. [WAC 173-491]

4.10 STRATOSPHERIC OZONE PROTECTION

The permittee shall comply with the labeling, procurement, maintenance, service, repair, and disposal standards relevant to stratospheric ozone protection under 40 CFR 82. Records shall be maintained as required. [40 CFR 82]

4.11 ACCIDENTAL RELEASE PREVENTION REQUIREMENTS: RISK MANAGEMENT PROGRAMS UNDER THE CLEAN AIR ACT, SECTION 112(R)(7).

The Hanford Site is subject to Part 68 (Chemical Accident Prevention Provisions) and shall certify compliance with all requirements of 40 CFR 68 as part of the annual compliance certification required by 40 CFR 70.6(c)(5). The 283-W Water Treatment Plant has more than a threshold quantity of a regulated substance (chlorine) in a process, as determined pursuant to 40 CFR 68.115; therefore, the plant is required to have a risk management plan (RMP) to prevent accidental release of chlorine (Table 1.7 in Attachment 1). [40 CFR 68.215]

4.12 APPROVAL ORDER TERMS AND CONDITIONS THAT BECOME IRRELEVANT DURING THE TERM OF THIS PERMIT.

Nothing herein shall be construed to preclude the permittee from making changes consistent with Chapter 401 that would render existing AOP compliance terms and conditions irrelevant.

[(WAC 173-401-725(4)(a)]

4.13 MONITORING AND ASSOCIATED RECORDKEEPING FOR EMISSION UNITS WITHOUT CONTINUOUS OPERATION

1. For Emission Units with Nonradioactive Air Emissions Conditions

The permittee is not required to conduct the monitoring and associated recordkeeping for any emission unit if the emission unit did not operate at any time between required monitoring events (e.g., if the monitoring requires recording pressure drop daily, such readings would not be required on any full day in which the emission unit did not operate), provided the following conditions are met.

(a) In the case of a permanent shut down of the emission unit:

(i) the permittee makes a contemporaneous record in a log or file maintained on site of the date and time that the emission unit ceased operation.

(ii) the permittee shall provide written notice to Ecology within a reasonable time.

(b) In the case of a temporary shut down of the emission unit:

(i) the permittee makes a contemporaneous record in a log or file maintained on site of the date and time that the emission unit ceased operation and the reason why the emission unit did not operate.

(ii) the permittee makes a contemporaneous record in a log or file maintained on site of the date and time that the emission unit resumed operation.

(iii) the periodic report of monitoring required by Standard Terms and Conditions Section 4.3.3, “Semiannual Reports”, and/or the specific permit condition includes a summary of the period or periods when the emission unit did not operate.

2. For Emission Units with Radioactive Air Emission Conditions

The permittee is not required to conduct the monitoring and associated recordkeeping for any emission unit if the emission unit did not operate at any time between required monitoring events (e.g., if the monitoring requires continuous sampling, such readings would not be required on any full day in which the emission unit did not operate), provided the following conditions are met.

(a) In the case of a permanent shut down of the emission unit:

(i) the permittee completes the monitoring and associated recordkeeping for that period before the shutdown.

(ii) The facility shall file a report of closure with Health whenever operations producing emissions of radioactive material are permanently ceased at any emission unit (except temporary emission units) regulated under this chapter. The closure report shall indicate whether, despite cessation of operations, there is still a potential for radioactive air emissions and a need for an active or passive ventilation system with emission control and/or monitoring devices. If decommissioning is planned and will constitute a modification, a NOC shall be required, as applicable, in accordance with WAC 246-247-080(6).

Note: These conditions do not apply to temporary radioactive emissions units [e.g., high-efficiency particulate air (HEPA) vacuums or portable/temporary radioactive air emission units (PTRAEUs), etc].

5.0 PERMIT SHIELD

Each chapter 401 permit shall include a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that such applicable requirements are included and are specifically identified in the permit.

5.1 APPLICABLE REQUIREMENTS

Compliance with the AOP conditions that are identified specifically in the "Standard Terms and Conditions" and "General Conditions" sections (Sections 3.0 and 4.0) and Attachments 1 and 2 shall be deemed compliant with the applicable requirements on which that condition is based, as of the date of AOP issuance. The permit shield does not apply to IEUs or activities identified in WAC 173-401-530.

Exclusions:

Nothing in this AOP shall alter or affect the liability of the permittee for the following.

- The provisions of Section 303 of the FCAA (emergency orders), including the authority of the administrator under that section
- The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance
- The applicable requirements of the acid rain program, consistent with Section 408(a) of the FCAA
- The ability of EPA to obtain information from a source pursuant to Section 114 of the FCAA
- The ability of Ecology to establish or revise requirements for the use of reasonably available control technology (RACT) as provided in Chapter 252, Laws of 1993.

[WAC 173-401-640(1)]

5.2 INAPPLICABLE REQUIREMENTS

Ecology has determined that the Hanford Site, including all sources, is not subject to certain requirements. In accordance with the provisions of WAC 173-401-640(2), inapplicable requirements at the time of AOP issuance are shown in Table 5-1. The permit shield shall apply to these inapplicable requirements.
[WAC 173-401-640(2)]

Table 5-1. Inapplicable Requirements.

Requirement	Reason for inapplicability
WAC 173-400-040(3)(b) Fugitive emissions in a nonattainment area	The site is not located in a nonattainment area.
WAC 173-400-040(8)(b) Fugitive dust in a PM-10 nonattainment area	The site has not been indicated as a significant contributor to a PM-10 nonattainment area.
WAC 173-400-060 Emission Standards for General Process Units	No general process units have been identified on the Hanford Site.
WAC 173-400-070 Emission Standards for Certain Source Categories	None of the facilities described exist on the site.
WAC 173-400-105(5)(b)(c)(d) Continuous monitoring and recording for Sulfuric acid plants, fluid bed catalytic cracking units and wood residue fuel-fired steam generators	No facilities as described exist on the Hanford Site.
WAC 173-400-112 Preconstruction permits issued under Title I Part D Plan Requirements for Nonattainment Areas.	The site and surrounding areas have never been determined to be in nonattainment of NAAQS's, therefore permits under this provision have not been required.
WAC 173-400-151 Retrofit Requirements for Visibility Protection	The Hanford Site has not been identified as a cause or contributor to visibility impairment in any mandatory Class I area.
WAC 173-400-190 Requirements for Nonattainment Areas	The Hanford Site is not located in a nonattainment area.
WAC 173-400-210 Emission Requirements for Prior Jurisdictions	The Hanford Site always has been regulated by Ecology. No local authority previously has regulated the Hanford Site.
WAC 173-421, Motor Vehicle Emission Control Systems	The site is not located in a noncompliance area or emission contributing area requiring a vehicle inspection program.
WAC 173-422, Motor Vehicle Emission Inspection	The site is not located in a noncompliance area or emission contributing area requiring a vehicle inspection program.
WAC 173-490, Emission Standards and Controls for Sources Emitting Volatile Organic Compounds	This supplements WAC 173-400 and applies to VOC sources in ozone nonattainment areas. The site is not located in a designated ozone nonattainment area.
WAC 173-492, Motor Fuel Specifications for Oxygenated Gasoline	The site is not located in the control areas requiring oxygenated gasoline use.
WAC 246-247-060(10) Commercial nuclear power plants	The permittee does not operate a commercial nuclear power plant.
WAC 246-247-075(5) and (7) Facilities licensed by NRC	The permittee does not have point source emissions from NRC licensed facilities. Any NRC license would be to handle a specific sealed source term.
WAC 463-39, General Regulations for Air Pollution Sources	The site emission sources are not subject to EFSEC jurisdiction/authority.
40 CFR 72–78 WAC 173-406 Acid Rain Regulation	Steam generators on the site are not included in the acid rain control program and the site does not opt in at this time.
40 CFR 79 Registration of Fuels and Fuel Additives	DOE does not manufacture or import fuel on the Hanford Site.
40 CFR 63, Subpart IIII National Emission Standards for Hazardous Air Pollutants: Surface	40 CFR 63, Subpart IIII does not apply to surface coating that Occurs during research or laboratory activities or that is part of janitorial, building, and facility maintenance

Table 5-1. Inapplicable Requirements.

Requirement	Reason for inapplicability
Coating of Automobiles and Light Duty Trucks	operations, including maintenance spray booths used for painting production equipment, furniture, signage, etc., for use within the plant.
40 CFR 63, Subpart JJJJ National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating of the Federal Code of Regulations	DOE does not use paper and other web coating lines.
40 CFR 63, Subpart KK National Emission Standards for Printing and Publishing Industry	DOE does not use flexographic or rotographic presses.
40 CFR 60, Subpart MM Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations	40 CFR 60, Subpart MM only applies to assembly plants.
40 CFR 63, Subpart MMMM National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products	Not applicable to facility maintenance.
WAC 173-407 Carbon Dioxide Mitigation Program for Fossil-Fueled Thermal Electric Generating Facilities	No new or modified fossil-fueled thermal electric generating facilities.
BCAA, Regulation 1, Articles 1, 2, 3, 4, 6, 7, 9	Authority to regulate Hanford Site air emissions pre-empted by Ecology (Statement of Basis), except for Articles 5 and 8.
Hazardous Waste Combustion (40 CFR 63, Subpart M)	None of the facilities described exist on the site.
Site Remediation (40 CFR 63, Subpart GGGGG)	The facility is exempt from the requirement.
Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ)	The facility is exempt from the requirements except initial notifications.
Industrial/Commercial/Institutional Boilers and Process Heaters (40 CFR 63, Subpart DDDDD)	The facility is exempt from the requirements except initial notifications.

This page intentionally left blank.

6.0 STATEMENT OF BASIS

The Statement of Basis (Statement) is issued by the permitting agencies as a separate supporting reference document to this air operating permit. This Statement is non-enforceable and sets forth the legal and factual basis for AOP conditions. The Statement includes references to the applicable statutory or regulatory provisions, technical supporting information on specific emission units, and clarifications of specific requirements.
[WAC 173-401-700(8)]