

Hanford Site Title V Air Operating Permit Program Plan

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



**United States
Department of Energy**
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PREFACE

This Program Plan describes how the U.S. Department of Energy and its various Hanford Site contractors fulfill the requirements of the Hanford Site Title V Air Operating Permit #00-05-006 Renewal 1 (effective 1/1/2007). This high-level document is not intended to replace facility-specific compliance instructions, directions, or procedures. This document outlines the processes used to reasonably assure compliance from a site-wide perspective with the Air Operating Permit terms and conditions. Individual site contractors are responsible for complying with Air Operating Permit terms and conditions specific to the facilities under their control.

The Air Operating Permit, as well as additional supporting and associated documentation (including this Program Plan), can be viewed or downloaded from the Air Operating Permit website on the Hanford Intranet at <http://www7.rl.gov/aop/>.

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CONTENTS

| | | |
|-------|--|-----|
| 1.0 | INTRODUCTION..... | 1-1 |
| 2.0 | ROLES AND RESPONSIBILITIES | 2-1 |
| 2.1 | U.S. DEPARTMENT OF ENERGY..... | 2-1 |
| 2.2 | HANFORD SITE CONTRACTORS..... | 2-1 |
| 2.3 | AOP TEAM..... | 2-2 |
| 3.0 | OVERVIEW OF AIR OPERATING PERMIT | 3-1 |
| 3.1 | STANDARD TERMS AND GENERAL CONDITIONS | 3-1 |
| 3.2 | ATTACHMENT 1 (ECOLOGY REQUIREMENTS)..... | 3-2 |
| 3.3 | ATTACHMENT 2 (WDOH REQUIREMENTS)..... | 3-3 |
| 3.4 | ATTACHMENT 3 (BCAA REQUIREMENTS)..... | 3-3 |
| 4.0 | MONITORING REQUIREMENTS | 4-1 |
| 4.1 | CRITERIA AND TOXIC AIR EMISSION SOURCES | 4-1 |
| 4.1.1 | Visible Emissions (Opacity)..... | 4-1 |
| 4.1.2 | Sulfur Dioxide Emissions..... | 4-2 |
| 4.1.3 | Complaint Investigations..... | 4-3 |
| 4.1.4 | Fugitive Emissions and Fugitive Dust | 4-3 |
| 4.1.5 | Boilers/Steam Generating Units..... | 4-3 |
| 4.1.6 | Non-Operational Units | 4-4 |
| 4.2 | RADIOACTIVE AIR EMISSION SOURCES | 4-4 |
| 4.2.1 | Major Point Sources..... | 4-4 |
| 4.2.2 | Minor Point Sources..... | 4-4 |
| 4.2.3 | Diffuse and Fugitive Sources | 4-5 |
| 4.2.4 | Non-Operational Units | 4-5 |
| 5.0 | RECORDKEEPING REQUIREMENTS..... | 5-1 |
| 5.1 | CRITERIA AND TOXIC AIR EMISSION SOURCES | 5-1 |
| 5.1.1 | Boilers | 5-1 |
| 5.2 | RADIOACTIVE AIR EMISSION SOURCES | 5-1 |
| 5.2.1 | Major Point Sources | 5-1 |
| 5.2.2 | All Sources | 5-2 |
| 5.2.3 | State-Only Records | 5-2 |
| 6.0 | REPORTING REQUIREMENTS..... | 6-1 |
| 6.1 | ANNUAL HANFORD SITE RADIONUCLIDE AIR EMISSIONS REPORT | 6-1 |
| 6.2 | ANNUAL CRITERIA AND TOXIC AIR EMISSIONS INVENTORY REPORT | 6-1 |
| 6.3 | SEMIANNUAL AOP REPORT | 6-1 |
| 6.4 | ANNUAL AOP COMPLIANCE CERTIFICATION REPORT..... | 6-2 |
| 6.5 | ASBESTOS NOTIFICATIONS OF INTENT | 6-2 |
| 6.5.1 | Individual Project/Activity NOIs | 6-2 |
| 6.5.2 | Site-wide Annual NOI..... | 6-2 |
| 6.6 | REGULATORY NOTIFICATIONS..... | 6-3 |
| 6.6.1 | Potential Threats to Human Health or Safety..... | 6-3 |
| 6.6.2 | Non-Health or Safety Related Deviations | 6-3 |
| 6.6.3 | Closure of Radioactive Air Emission Units | 6-3 |
| 7.0 | MISCELLANEOUS REQUIREMENTS..... | 7-1 |

| | | |
|-------|--|------|
| 7.1 | RISK MANAGEMENT PROGRAM | 7-1 |
| 7.2 | GASOLINE VAPOR CONTROL..... | 7-1 |
| 7.3 | STRATOSPHERIC OZONE PROTECTION..... | 7-1 |
| 7.4 | REGULATORY PERSONNEL ACCESS..... | 7-1 |
| 7.5 | PERMIT APPEALS..... | 7-2 |
| 8.0 | REVISIONS TO THE AIR OPERATING PERMIT | 8-1 |
| 8.1 | GENERAL HANFORD SITE AOP REVISION PROCESS..... | 8-1 |
| 8.2 | NEW SOURCE REVIEW..... | 8-1 |
| 8.2.1 | Potential Exemptions | 8-1 |
| 8.2.2 | Ecology Notice of Construction Applications..... | 8-2 |
| 8.2.3 | WDOH Notice of Construction Applications | 8-2 |
| 8.3 | TYPES OF AOP MODIFICATIONS OR CHANGES | 8-2 |
| 8.3.1 | Changes Not Requiring Permit Revision | 8-3 |
| 8.3.2 | Off-Permit Changes | 8-3 |
| 8.3.3 | Administrative Amendments..... | 8-4 |
| 8.3.4 | Minor Modifications | 8-4 |
| 8.3.5 | Significant Modifications..... | 8-4 |
| 8.4 | AOP RENEWAL | 8-5 |
| 8.5 | NEW APPLICABLE REQUIREMENTS..... | 8-5 |
| 9.0 | DATA MANAGEMENT..... | 9-1 |
| 9.1 | AOP DATABASE..... | 9-1 |
| 9.2 | AOP WEBSITE..... | 9-1 |
| 10.0 | REFERENCES..... | 10-1 |

APPENDICES

- A HANFORD SITE AOP MODIFICATION EVALUATION PROCESS
- B HANFORD SITE AOP MODIFICATION PROCESSING PROCEDURES
- C HANFORD SITE AOP MODIFICATION PROCESSING FORMS

ABBREVIATIONS AND ACRONYMS

| | |
|----------|--|
| AA | administrative amendment |
| ALARACT | as low as reasonably achievable control technology |
| AOP | Air Operating Permit (Hanford Site) |
| BARCT | best available radionuclide control technology |
| BCAA | Benton Clean Air Agency |
| CAA | Clean Air Act |
| CFR | Code of Federal Regulations |
| CNRR | changes not requiring permit revision |
| DOE | U.S. Department of Energy |
| DOE-ORP | U.S. Department of Energy, Office of River Protection |
| DOE-PNSO | U.S. Department of Energy, Pacific Northwest Site Office |
| DOE-RL | U.S. Department of Energy, Richland Operations Office |
| Ecology | Washington State Department of Ecology |
| EPA | U.S. Environmental Protection Agency |
| ESPC | Energy Savings Performance Contract |
| FCAA | <i>Federal Clean Air Act Amendments of 1990</i> |
| HEPA | high-efficiency particulate air |
| IEU | insignificant emission unit |
| MM | minor modification |
| MOA | memorandum of agreement |
| MOU | memorandum of understanding |
| NESHAP | National Emission Standard for Hazardous Air Pollutants |
| NOC | notice of construction |
| NOCA | notice of construction application |
| NOI | notification of intent |
| NSR | New Source Review |
| ONC | Occurrence Notification Center |
| OPC | off-permit changes |
| PCHB | Pollution Control Hearing Board |
| PCM | periodic confirmatory measurement |
| PNNL | Pacific Northwest National Laboratory |
| POC | point of contact |
| PP | Program Plan |
| PTRAEU | portable/temporary radioactive air emission unit |
| RACM | regulated asbestos-containing material |
| RACT | reasonably available control technology |
| RMP | risk management plan |

| | |
|------|---------------------------------------|
| SM | significant modification |
| SOB | Statement of Basis |
| STGC | Standard Terms and General Conditions |
| TAP | toxic air pollutant |
| WAC | Washington Administrative Code |
| WDOH | Washington State Department of Health |

1.0 INTRODUCTION

This Program Plan (PP) describes how the U.S. Department of Energy (DOE) and its various Hanford Site contractors comply with the requirements of the Hanford Site Title V Air Operating Permit (AOP) #00-05-006, Renewal 1. It is a high-level document and is not intended to replace facility-specific compliance instructions, directions, or procedures. This Program Plan does, however, provide guidance for specific processes that should be applied by all Hanford Site contractors to demonstrate an integrated and consistent approach to compliance with AOP requirements. Consistent with legal obligations and DOE expectations, Hanford Site contractors must comply with all AOP terms and conditions applicable to the facilities, projects and emission sources under their control.

The AOP is issued to the U.S. Department of Energy, Hanford Operations. Hanford Site operations are managed primarily by two separate DOE Environmental Management offices; the Richland Operations Office (RL) and Office of River of Protection (ORP). A third DOE office, the Pacific Northwest Site Office (PNSO), a division of the DOE Office of Science, is responsible for the management of certain Pacific Northwest National Laboratory (PNNL) buildings that are considered part of the Hanford Site. For AOP purposes, those responsibilities are conducted under the direction of DOE-RL.

The AOP was prepared and issued in accordance with the applicable provisions of 40 Code of Federal Regulations (CFR) Part 70 and Washington Administrative Code (WAC) Chapter 173-401. It was issued by the Washington State Department of Ecology (Ecology) as the lead permitting authority; and contains the terms and conditions set forth by Ecology, the Washington State Department of Health (WDOH), and the Benton Clean Air Agency (BCAA) [previously known as the Benton Clean Air Authority] for operation of criteria/toxic, radioactive and asbestos air emission sources on the Hanford Site.

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2.0 ROLES AND RESPONSIBILITIES

Implementation of the compliance programs and processes described in this Program Plan requires coordinated efforts and actions by various organizations. The applicable AOP roles and responsibilities for these organizations are defined and discussed in the following sections.

2.1 U.S. DEPARTMENT OF ENERGY

DOE-RL and DOE-ORP have signed a memorandum of agreement (MOA) that describes the interfaces and authorities for their respective organizations with respect to management and responsibility for site-wide environmental permits, including the AOP. In accordance with the MOA, DOE-RL is responsible for regulatory compliance and acts as signatory for regulatory agreements.

For site-wide submittals requiring certification by a responsible official, DOE-ORP provides appropriate management certification to DOE-RL for incorporation into the final transmittal along with the DOE-RL management certification. Other submittals to regulatory agencies are handled by DOE-RL or DOE-ORP, as appropriate, for air emission sources assigned to their respective contractors.

Throughout this Program Plan, reference to DOE is a reference to DOE-RL and/or DOE-ORP, depending on assigned responsibilities in accordance with their MOA. Specific duties and responsibilities include:

- Establishing programmatic expectations and contractual responsibilities that are consistent with AOP requirements and this Program Plan for all Hanford Site contractors.
- Coordinating contractor review of draft air emission regulatory approval orders, including negotiations with regulatory agencies, as necessary. Accepting or appealing final regulatory approval orders.
- Certifying and transmitting required reports to regulatory agencies.
- Reviewing draft regulatory documentation (e.g., permit applications, enforcement responses, miscellaneous reports and notifications, etc.) prepared by contractors. As necessary, transmitting final documentation to regulatory agencies.
- Providing AOP Team with copies of all DOE submittals to regulatory agencies.

2.2 HANFORD SITE CONTRACTORS

Hanford Site contractors include all contractors responsible for operation of air emission sources subject to the requirements of the AOP. Specific duties and responsibilities apply only to assigned air emission sources and include:

- Developing and implementing processes and procedures to effectively evaluate proposed new/modified air emission sources [i.e., New Source Review (NSR)] to determine required air permitting documentation [e.g., Notice of Construction application (NOCA), AOP modification request form, NSR exemption notification, temporary/portable source notification, asbestos notification of intent (NOI), etc.].
- Preparing required air permitting documentation for submittal to regulatory agencies.

- Developing and implementing processes and procedures to maintain and demonstrate compliance with applicable AOP requirements (monitoring, reporting, recordkeeping, etc.).
- Requesting sufficient funding from DOE each fiscal year to comply with applicable AOP requirements.
- Preparing draft documentation in response in regulatory agency requests or enforcement actions.
- Providing AOP Team with copies of all submitted NOCAs and received approval orders.
- Providing AOP Team with data, information and management certifications necessary to support preparation of required site-wide reports.

2.3 AOP TEAM

The AOP Team consists of Hanford Site contractor staff with the assigned responsibility to coordinate and manage the overall site AOP program on behalf of DOE. The AOP Team performs whatever tasks are necessary to accomplish that goal. Specific duties and responsibilities include:

- Managing and maintaining the AOP database and website.
- Coordinating, preparing and distributing the Semiannual AOP Report.
- Coordinating, preparing and distributing the Annual AOP Compliance Certification Report.
- Reviewing and updating this Program Plan, as necessary.
- Coordinating, preparing and distributing the annual Criteria and Toxic Air Emissions Inventory Report.
- Coordinating, preparing and distributing the annual Radionuclide Air Emissions Report.
- Reviewing and updating the Hanford Site Risk Management Program and Plan, as necessary (required at least every 5 years per 40 CFR Part 68).
- Coordinating, preparing and submitting the annual site-wide asbestos NOI.
- Coordinating, preparing and distributing AOP renewal application(s).
- Coordinating development of site-wide AOP compliance strategies, tools, guidance and interpretations.
- Functioning as site-wide point of contact (POC) for AOP regulatory interface and issues.
- Coordinating site-wide reviews of AOP documents, including revisions and modifications.

3.0 OVERVIEW OF AIR OPERATING PERMIT

DOE submitted an initial AOP application to Ecology on May 26, 1995 (DOE/RL-95-07). Ecology issued a draft Hanford Site AOP for public comment in January 2001. The initial Hanford Site AOP #00-05-006 was issued by Ecology effective July 2, 2001 for five years. DOE submitted a complete AOP renewal application (DOE/RL-2005-24) in December 2005 and Ecology issued a draft Hanford Site AOP Renewal 1 for public comment in June 2006. Hanford Site AOP #00-05-006 Renewal 1 was issued effective January 1, 2007 for five years and includes the following sections (described in greater detail in subsequent sections of this Program Plan):

- Standard Terms and General Conditions (STGC)
- Attachment 1 (Ecology requirements)
- Attachment 2 (WDOH requirements)
- Attachment 3 (BCAA requirements)

Each section of the AOP was issued with an accompanying Statement of Basis (SOB) that describes the basis for requirements included in that section. The SOB is not an enforceable part of the AOP, but provides valuable insight into the thought processes and expectations of the regulatory agencies with respect to specific permit terms and conditions. It includes references to the applicable statutory or regulatory provisions, technical supporting information on specific emission units, and clarifications of specific requirements.

Ecology and WDOH have entered into a contractual memorandum of understanding (MOU) describing each agency's enforcement authority and responsibilities related to the Hanford Site AOP. Ecology is the designated lead agency for preparation, issuance and management of the AOP. It is also responsible for enforcement of Attachment 1 requirements (criteria and toxic air pollutants). The WDOH is responsible for enforcement of Attachment 2 requirements (radioactive air emissions). The BCAA has enforcement authority for the demolition/asbestos removal and open burning regulations referenced in Attachment 3. Ecology and WDOH jointly enforce requirements in the STGC section.

3.1 STANDARD TERMS AND GENERAL CONDITIONS

The AOP STGC section addresses requirements that are generally applicable to the Hanford Site as a whole, including administrative processes, legal rights, reporting, monitoring, etc. Since the requirements in this section are not emission unit specific, they are not (with one exception noted below) subject to the annual compliance certification process. Key components include the following:

- General description of which Hanford Site buildings, facilities, processes, etc. are emission sources subject to the requirements of the AOP and which ones have been specifically excluded (Section 2.0).
- "Standard Terms" that reflect required elements for all AOPs pursuant to 40 CFR 70.6 and WAC 173-401-620 (Section 3.0).
- "General Conditions" that identify specific requirements addressing issues such as document submittal, reporting, permit changes, deviation reporting, agency notifications, inspection access, NSR applicability, stratospheric ozone protection, and management of non-operating sources, which are applicable to the entire Hanford Site. Included are the Chemical Accident Prevention/Risk Management Program requirements derived from the Clean Air Act (CAA) Section 112(r) and implemented by 40 CFR 68, which are subject to the annual compliance certification process. (Section 4.0).

- List of CAA regulatory requirements inapplicable to operation of Hanford Site air emission sources (Section 5.0).

3.2 ATTACHMENT 1 (ECOLOGY REQUIREMENTS)

Attachment 1 includes Ecology's applicable requirements for criteria and toxic air pollutant (TAP) emissions (often referred to as nonradioactive in the AOP) from operation of Hanford Site sources. It identifies the insignificant emission units (IEUs) that are not subject to the annual compliance certification process, as well as the significant ones that have specific operational and compliance requirements. IEUs must maintain compliance with the general standards for maximum emissions listed in Table 1.2 (see discussion below), but do not need to comply with any identified periodic monitoring, testing, recordkeeping or reporting requirements. Attachment 1 includes the following key components:

- Table 1.1, *List of Significant Emission Units* – identifies emission units subject to the annual compliance certification process and is intended to capture all emission units identified in Tables 1.3 through 1.7, which contain specific requirements for each unit. Emission units not included in Table 1.1 are considered IEUs.
- Table 1.2, *General Standards for Maximum Emissions* – lists general emission standards from WAC 173-400-040. Emission units listed in Table 1.1 must comply with these standards unless replaced by more specific or restrictive requirement(s) in Tables 1.3 through 1.7.
- Table 1.3, *Emission Limits and Periodic Monitoring Requirements for Steam Generating Units* – identifies the requirements for fuel oil and natural gas fired boilers operated as steam generating units under DOE's Energy Savings Performance Contract (ESPC).
- Table 1.4, *Internal Combustion Engines: 500 Horsepower and Greater* – identifies the requirements for specified internal combustion engines of greater than or equal to 500 horsepower that are operated as diesel-powered backup facility generators.
- Table 1.5, *Processes and Emission Units Exceeding Insignificant Emission Threshold Excluding Combustion Processes* – identifies the requirements for specified non-combustion emission units that exceed the thresholds for consideration as IEUs. These units are primarily tank exhausters used in the 200 East and 200 West Area tank farms.
- Table 1.6, *Emission Limits and Periodic Monitoring Requirements For Emission Units With NOC Approval Conditions* – identifies requirements extracted from NOC approval orders for construction and/or operation of specified emission units not listed in Tables 1.3, 1.4, 1.5, or 1.7. These emission units are primarily those identified by Hanford Site contractors via the NSR process for criteria pollutants (WAC 173-400-110) and/or TAPs (WAC 173-460).
- Table 1.7, *Miscellaneous Emission Units* – identifies requirements for specified emission units that are not listed in Tables 1.3 through 1.6. These emission units are primarily those with requirements from less prevalent CAA regulations (e.g., asbestos, gasoline vapors).
- Section 2.0, *Compliance and Periodic Monitoring Provisions* – describes the monitoring provisions associated with visible emission survey, fugitive emission/dust control, complaint investigation, reasonably available control technology (RACT) and sulfur dioxide (SO₂) emission requirements.

- Section 3.0, *Recordkeeping* – identifies the general requirements for maintaining records of monitoring data and supporting information. Also, provides reference to emission calculation models in the SOB that are used to determine compliance with specified emission limits.

3.3 ATTACHMENT 2 (WDOH REQUIREMENTS)

Attachment 2 includes WDOH's applicable requirements for radioactive air emissions from operation of Hanford Site sources. In essence, it is a copy of the latest version of the Hanford Site's radioactive air emission license #FF-01 issued by WDOH. Specifically, Attachment 2 includes the following pieces of the FF-01 license:

- Introductory section that includes copy of WDOH authority delegation from U.S. Environmental Protection Agency (EPA) for regulation of radioactive air emissions under the National Emission Standards for Hazardous Air Pollutants (NESHAP), citations of generally applicable requirements from 40 CFR 61 Subparts A and H, and WAC 246-247. Included are clarifications of quality assurance requirements for stack sampling used as periodic confirmatory measurements (Section 4.0) and monitoring/reporting requirements for diffuse and fugitive sources (Section 5.0).
- Copy of each emission unit specific license issued by WDOH for Hanford Site radioactive emission sources (Enclosure 1).
- List of diffuse or fugitive radioactive air emission sources on the Hanford Site. These sources are not subject to the annual compliance certification process (Enclosure 2, Table 2-1).
- Copy of each WDOH-approved as low as reasonably achievable control technology (ALARACT) agreement applicable to various Hanford Site operations and radioactive air emission sources (Enclosure 3).

3.4 ATTACHMENT 3 (BCAA REQUIREMENTS)

Attachment 3 includes BCAA's applicable requirements for demolition/asbestos removal and open burning activities on the Hanford Site. Individual requirements are not specifically identified, but the general legal requirements applicable to Hanford Site activities are provided. As noted in AOP STGC Section 4.3.4, these requirements are subject to the annual compliance certification process. The listed citations include:

- 40 CFR 61 Subpart M "Asbestos NESHAP" and BCAA Regulation 1, Article 8 "Asbestos"
- WAC 173-425 "Outdoor burning" and BCAA Regulation 1, Article 5 "Outdoor Burning"

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4.0 MONITORING REQUIREMENTS

The AOP requires that monitoring, either periodic or continuous, be conducted to demonstrate compliance with applicable regulatory requirements, emission limits, and work practice standards. Monitoring results are an integral component of the annual compliance certification process. Monitoring could involve actual emission measurements or other non-measurement methods such as recordkeeping, calculations, tracking of associated data, proper maintenance, personnel observations or complaint investigations. Monitoring requirements for criteria/toxic air emission sources are included in AOP Attachment 1, while those for radioactive air emission sources are found in Attachment 2. Requirements include those specific to individual emission units listed in the AOP, as well as those generally applicable to all emission units. The sections below provide additional discussion and clarification regarding certain types of monitoring that may be applicable to various Hanford Site emission sources.

4.1 CRITERIA AND TOXIC AIR EMISSION SOURCES

Emission sources not specifically identified in AOP Attachment 1 (i.e., not listed in Table 1.1) are considered IEUs and are subject to the general emission standards of WAC 173-400-040(1) through (8). In accordance with Section 1.1 of AOP Attachment 1, there is no requirement to perform any additional monitoring, reporting, or recordkeeping to demonstrate compliance.

Emission sources that are listed in Table 1.1 are also subject to the general emission standards. Unless the source has specific superseding requirements identified in Tables 1.3 through 1.7, Table 1.2 provides the monitoring requirements to demonstrate compliance with the general emission standards. These standards address visible emissions (opacity), fallout, fugitive emissions, odors, emissions detrimental to persons or property, sulfur dioxide, concealment and masking, and fugitive dust.

4.1.1 Visible Emissions (Opacity)

In accordance with Section 2.1 of AOP Attachment 1, Hanford Site contractors conduct all required visible emission surveys during daylight hours and while the emission unit is operating. Hanford Site contractors document the results of any performed visible emission surveys on a form that is provided on the AOP website at <http://www7.rl.gov/aop/>.

Ecology has established a tiered monitoring approach for demonstrating compliance with the visible emissions general standard. Each tier is based on the type of emission unit and probability of visible emissions. The appropriate tier for a particular emission source is identified in Tables 1.3 through 1.7 of AOP Attachment 1, or in the applicable NOC approval order.

Tier 1

This tier applies primarily to fossil-fuel combustion units and other units that might be a source of visible emissions. The required monitoring consists of operating personnel conducting visible emissions surveys from the emission unit according to the applicable frequency identified in AOP Attachment 1, Tables 1.3 through 1.7 (usually specified in the applicable NOC approval order). In accordance with AOP Attachment 1 Section 2.1, Hanford Site personnel conduct Tier 1 visible emission surveys after the unit has reached normal operating temperatures (and revolutions per minute, if applicable) or at least 15 minutes after startup. If visible emissions are observed for more than 10 consecutive minutes during the observation period, the cause(s) of the visible emissions is determined and corrective actions taken, as necessary, or a visible determination of opacity is performed using EPA Method 9. If the emissions observed during the Method 9 test are representative of normal operations and the results demonstrate compliance with the opacity requirement, no further observations are required until the next scheduled visible emissions survey. If corrective actions are unsuccessful and Method 9 test results show visible

emissions exceeding the opacity standard, an excess emissions report per WAC 173-400-107 is submitted to Ecology in accordance with the permit deviation notification requirements of AOP STGC Section 4.5.2. Hanford Site contractors maintain records of corrective actions taken to reduce opacity and such records remain available for Ecology inspection.

Tier 2

This tier applies to emission units that are unlikely sources of visible emissions and are not expected to exceed the applicable opacity limit based on past operating experience and/or expected process behavior (e.g., research and development laboratories, analytical laboratories, and small natural gas-fired boilers). Hanford Site personnel conduct Tier 2 visible emission surveys per the applicable frequency from AOP Attachment 1, Tables 1.3 through 1.7. Where no frequency is specified in either AOP Attachment 1 or the applicable NOC approval order for a particular emission unit, Tier 2 visible emission surveys are performed annually. As allowed by AOP Attachment 1 Section 2.1, Hanford Site contractors reduce the frequency of required Tier 2 visible emission surveys as follows:

- If weekly visible emission surveys are negative for 3 months, the frequency is reduced to quarterly for the next 6 months; and
- If visible emissions surveys are negative for 9 consecutive months, they are discontinued except for situations where visible emissions are either actually observed or reasonably expected (e.g., during startup, shutdown, or periods of malfunction).

If visible emissions are observed for more than 10 consecutive minutes, the responsible Hanford Site contractor documents the observation results and attempts to identify the cause(s). A description of any corrective actions taken and the likely frequency of a future recurrence are also documented. An opacity determination is made using EPA Method 9 if the event is likely to recur, and the visible emissions cannot be demonstrated to consist of water vapor.

Tier 3

This tier applies to emissions units having high-efficiency air particulate (HEPA) filters installed to satisfy radioactive air emission requirements in AOP Attachment 2 and are not expected to have any visible emissions. In accordance with AOP Attachment 1 Section 2.1, Hanford Site contractors maintain the required abatement control technology and do not perform any visible emission surveys for these units.

4.1.2 Sulfur Dioxide Emissions

Ecology has established a tiered monitoring approach for demonstrating compliance with the sulfur dioxide (SO₂) emissions standard. Each tier is based on the type of emission unit and its potential for SO₂ emissions. The appropriate tier for a particular emission source is identified in Tables 1.3 through 1.7 of AOP Attachment 1, or in the applicable NOC approval order.

Tier 1

This tier applies to fuel-oil fired combustion units. In accordance with AOP Attachment 1 Section 2.7, no actual emissions monitoring is performed. Based on sample calculations using Model 1 from the AOP Attachment 1 SOB, Ecology has determined that SO₂ emissions from Hanford Site sources in this category do not exceed the standard when they use fuel with less than 0.5% sulfur content. Therefore, Hanford Site contractors demonstrate compliance with the SO₂ emission standard by maintaining the following documentation:

- Amount and type of fuel burned; and
- Vendor documentation or annual fuel analysis results.

Tier 2

This tier applies to other significant emission units (identified in the AOP) that Ecology has determined, based on process knowledge, do not emit significant levels of SO₂. In accordance with AOP Attachment 1 Section 2.7, no actual emissions monitoring is performed. Hanford Site contractors demonstrate compliance with the SO₂ emission standard by verifying that processes have not been modified in a manner that increases SO₂ emissions.

4.1.3 Complaint Investigations

Compliance with the general standards for fallout, odor, emissions detrimental to persons or property, or concealment and masking issues is demonstrated by maintaining records associated with investigations of complaints concerning Hanford Site emission sources. No actual emissions monitoring is performed. If no complaints are received, emission sources are assumed to have demonstrated compliance. Only complaints received through Ecology are subject to the requirements of the AOP (annual compliance certification), but Hanford Site contractors may choose to address complaints brought directly to their attention in a similar fashion.

Ecology forwards to DOE complaints it receives regarding fallout, odor, emissions detrimental to persons or property, or concealment and masking related to Hanford site emission sources. With support from the responsible Hanford Site contractor, DOE performs the following actions:

- Promptly addresses the complaint and identifies any planned corrective actions.
- Provides an initial informal response to Ecology within 30 days of receipt of the complaint with the results of the complaint investigation and any planned or completed corrective actions.
- Provides Ecology with any requested follow-up report(s).

Hanford Site contractors document any complaints received from Ecology, the results of the subsequent investigation and any planned or completed correction actions on a form provided on the AOP website at <http://www7.rl.gov/aop/>. The AOP Team and the responsible Hanford Site contractor (if known) maintain records of these complaints for a period of 5 years from the date of the complaint.

4.1.4 Fugitive Emissions and Fugitive Dust

WAC 173-400-030 defines fugitive emissions to be those that could not reasonably pass through a stack (i.e., not point sources) and fugitive dust as airborne particulate matter, which is considered a type of fugitive emission. Hanford Site contractors demonstrate compliance with the standards for these pollutants by addressing fugitive emissions and fugitive dust control as part of the pre-job planning process for construction projects with the potential to generate particulates. Examples of some of the measures considered and often implemented are shown in AOP Attachment 1 Section 2.3.

4.1.5 Boilers/Steam Generating Units

Hanford Site contractors no longer conduct monitoring of actual emissions from boilers (including those operating as steam generating units). Source tests previously conducted in accordance with accepted EPA and Ecology procedures demonstrated that emissions from these units are below applicable limits. Based on the results of these previous source tests, Ecology agreed to eliminate the requirement to conduct confirmatory source tests every five years. Additional source tests are performed when requested by Ecology or for new emission units. Hanford Site contractors demonstrate continued compliance with applicable emission limits by using low sulfur fuel and maintaining good combustion practices (including proper maintenance of the units), along with appropriate recordkeeping as detailed in Section 5.1.1 of this Program Plan.

4.1.6 Non-Operational Units

Hanford Site contractors are allowed to discontinue monitoring (and associated recordkeeping) for any criteria and toxic air emission units that are non-operational for timeframes exceeding the normally required monitoring periodicity. In such a situation, the responsible Hanford Site contractor takes the actions below in accordance with the requirements of AOP STGC Section 4.13.

For permanent shut downs:

- Makes a contemporaneous record in a log or file maintained onsite of the date and time that the emission unit ceased operation.
- Submits written notification of the shut down to Ecology within a reasonable time. A letter or email may be submitted, depending on the circumstances.
- Sends the AOP Team a copy of the notification.

For temporary shut downs:

- Makes a contemporaneous record in a log or file maintained onsite of the date and time that the emission unit ceased operation, the reason why the emission unit did not operate, and the date and time that the emission unit resumed operation.
- Provides the AOP Team with a summary of the timeframe(s) when the emission unit did not operate for inclusion in the AOP Semiannual Report.

4.2 RADIOACTIVE AIR EMISSION SOURCES

Hanford Site contractors perform required monitoring for all permitted radioactive air emissions sources, which include major point sources (i.e., stacks having an offsite dose potential of equal to or greater than 0.1 mrem per year), minor point sources (i.e., stacks with an offsite dose potential of less than 0.1 mrem per year) and diffuse/fugitive sources. Monitoring systems, including applicable abatement control technology, are maintained in accordance with required quality assurance requirements to ensure data integrity.

Recordkeeping approaches are not typically allowed to demonstrate compliance with monitoring requirements for radioactive air emission sources. Monitoring ranges from continuous to periodic confirmatory measurements (PCM) to ambient monitoring networks, depending on the type of source. Specific requirements for each permitted source are identified in the Emission Unit Specific Licenses located in AOP Attachment 2 Enclosure 1. The sections below provide some additional discussion of the general requirements for different types of radioactive air emission sources.

4.2.1 Major Point Sources

Major point sources are monitored continuously unless an alternative approach has been approved by WDOH. Record samples are collected for analysis. At a minimum, the analysis usually measures all radionuclides which contribute ten percent (10%) or greater of the offsite dose potential for the source. The results of continuous monitoring on major point sources are reported in the annual Hanford Site Radionuclide Air Emissions Report.

4.2.2 Minor Point Sources

Minor point sources on the Hanford Site are either actively or passively ventilated. Some form of PCM is used to monitor each type of unit. Record samples representing one to four weeks of operation annually are typically collected for actively ventilated minor point sources. Samples are analyzed for the radionuclides of concern (often just total alpha/beta/gamma) to demonstrate low emissions from the source. Smear samples of the exhaust outlet or ductwork downstream of HEPA filters are typically

collected for passively ventilated minor point sources. Contamination below established screening levels demonstrates low emissions from the source. The results of PCM on minor point sources are reported in the annual Hanford Site Radionuclide Air Emissions Report.

4.2.3 Diffuse and Fugitive Sources

Diffuse and fugitive sources on the Hanford Site are monitored indirectly via the site-wide ambient air (i.e., near-field) monitoring program. This approach is consistent with WDOH requirements and expectations. The sampling results from the site-wide ambient air monitoring program are reported in the annual Hanford Site Radionuclide Air Emissions Report.

4.2.4 Non-Operational Units

Hanford Site contractors are allowed to discontinue monitoring (and associated recordkeeping) for any radioactive air emission units that are non-operational for timeframes exceeding the normally required monitoring periodicity. In such a situation, the responsible Hanford Site contractor takes the actions below in accordance with the requirements of AOP STGC Section 4.13.

For permanent shut downs [these actions are not applicable for temporary radioactive air emissions units such as HEPA vacuums or portable/temporary radioactive air emission units (PTRAEUs)]:

- Completes the monitoring and associated recordkeeping for the period before the shutdown.
- Submits a report of closure to WDOH in accordance with WAC 246-247-080(6). An emission unit is not considered to be shut down permanently or completed until a report of closure is received by WDOH.
- Sends the AOP Team a copy of the closure report.

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5.0 RECORDKEEPING REQUIREMENTS

Hanford Site contractors maintain records to document compliance with applicable AOP requirements. In many cases, recordkeeping is used to actually satisfy periodic monitoring requirements for a particular emission unit. Recordkeeping requirements for criteria/toxic air emission sources are primarily located in AOP Attachment 1, while those for radioactive air emission sources are found in Attachment 2. Requirements include those specific to individual emission units listed in the AOP, as well as those generally applicable to all emission units or types of records. The sections below provide additional discussion and clarification regarding recordkeeping that may be applicable to various Hanford Site emission sources.

5.1 CRITERIA AND TOXIC AIR EMISSION SOURCES

Hanford Site contractors maintain records of all required monitoring and support information, including calibration and maintenance records for continuous monitoring instrumentation. When recordkeeping is the required periodic monitoring method, records are maintained in accordance with the applicable requirements of AOP Attachment 1 Tables 1.2 through 1.7. This includes the results of emission calculations performed using the models identified in AOP Attachment 1 Section 3.1.

Hanford Site contractors maintain criteria and toxic air emission records for at least 5 years from the date of the monitoring, source test, measurement, report, or application. Records are maintained in either hard copy or electronic format. Upon request, copies of these records are provided to Ecology in a timely manner.

5.1.1 Boilers

Monthly fuel usage records are maintained by the responsible Hanford Site contractor, along with emission estimates (using appropriate emission factors from Ecology approval order 97NM-138) for each boiler and collectively for the 200 East, 200 West and 300 Areas. Logs of boiler tune-ups and significant maintenance activities are maintained, as well as records of fuel supplier certifications for all fuel combusted during each year.

5.2 RADIOACTIVE AIR EMISSION SOURCES

As specified in AOP Attachment 2, Hanford Site contractors maintain all required records for radioactive emission sources onsite for at least five years from the date of the monitoring, sampling, measurement, or reporting. Records are maintained in either hard copy or electronic form, and include instrument calibration and maintenance documentation, continuous monitoring data and required reports.

In accordance with WAC 246-247-080 and DOE agreement with WDOH, Hanford Site contractors classify certain records as requisite retrievable records and maintain them such that they can be retrieved within 24 hours of WDOH request. Electronic copies of these requisite retrievable records include displays of original signatures and approvals. The following sections provide a list of requisite retrievable records.

5.2.1 Major Point Sources

The following requisite retrievable records are maintained for major point sources (often referred to as NESHAP major designated stacks):

- Records and procedures for stack sampling system instrumentation functional checks and periodic calibrations
- Stack flow and sampling data, including flow rate calculations
- Documentation verifying compliance with quality assurance requirements of 40 CFR 61, Subpart H, Appendix B, Method 114
- Documentation of periods of malfunction or non-operation (i.e., monitoring system down time)

5.2.2 All Sources

The following requisite retrievable records are maintained, as applicable, for all power ventilated point sources, passively ventilated point sources and diffuse/fugitive sources:

- Copy of annual Hanford Site Radionuclide Air Emissions Report
- Copy of notice of construction applications
- Copy of WDOH approval orders
- Copy of EPA approval to construct letters
- Copy of annual Hanford Site Environmental Report (passively ventilated and diffuse/fugitive)
- Stack flow and sampling data, including flow rate calculations (power ventilated)
- NESHAP assessments (power ventilated)

5.2.3 State-Only Records

The following requisite retrievable records are maintained, as applicable, to meet WDOH requirements. These records are in addition to those required in Sections 5.2.1 and 5.2.2 above:

- Documentation of best available radionuclide control technology (BARCT) and ALARACT demonstrations
- Drawings and/or process flow diagrams for effluent control and monitoring systems (major point sources)
- Estimated and documented line losses and sample collection efficiency studies
- Maintenance records and procedures, and all original strip chart records (major point sources) or equivalent for stack sampling system instrumentation
- Maintenance records and procedures for abatement control technology equipment
- Records and procedures for stack instrumentation functional checks and periodic calibrations
- HEPA filter/aerosol test procedures and results
- Training records of personnel and supervisors responsible for operation of sources
- Closure reports
- Ten-day notification follow-up reports
- Operational logs
- Documentation verifying compliance with quality assurance requirements of WAC 246-247-075(6)

6.0 REPORTING REQUIREMENTS

DOE and Hanford Site contractors compile and submit reports with the results of required monitoring and other information in accordance with AOP requirements. Some reports are prepared exclusively to satisfy AOP requirements, while others serve multiple purposes. Most reports are submitted annually, but some are submitted more frequently (e.g., semiannually). In accordance with the requirements of AOP STGC Sections 3.11 and 4.3, all reports submitted to satisfy AOP requirements are certified by DOE as the responsible official in accordance with WAC 173-401-520, 173-401-615 and 173-401-630.

In addition, DOE and responsible Hanford Site contractors provide various required notifications to the regulatory agencies. These notifications are verbal (i.e., phone calls) or written (e.g., emails or formal correspondence), depending on the situation and the procedures/processes that have been established with the applicable regulatory agency.

6.1 ANNUAL HANFORD SITE RADIONUCLIDE AIR EMISSIONS REPORT

In accordance with the requirements of AOP STGC Section 4.3.1, and to satisfy underlying regulations found in 40 CFR 61.94 and WAC 246-247-080, DOE submits the Hanford Site Radionuclide Air Emissions Report to WDOH and EPA no later than June 30 each year with information and data for the previous calendar year. The primary purpose of the Radionuclide Air Emissions Report is to document that Hanford Site operations do not produce radioactive air emissions resulting in a potential off-site exposure greater than 10 millirem/year.

The AOP Team coordinates preparation of the Radionuclide Air Emissions Report in accordance with the procedures of HNF-PRO-15335, Section 5.6. The AOP Team provides reporting guidance to all Hanford Site contractors and compiles their input into a single report; and then transmits the report to DOE for certification and submittal to WDOH and EPA. The Radionuclide Air Emissions Report includes sampling results from all continuous monitoring of major point sources, all PCM from minor point sources and all samples from the site-wide ambient air monitoring program.

6.2 ANNUAL CRITERIA AND TOXIC AIR EMISSIONS INVENTORY REPORT

In accordance with the requirements of AOP STGC Section 4.3.2, and to satisfy the underlying regulation found in WAC 173-400-105, DOE submits the Hanford Site Criteria and Toxic Air Emission Inventory Report to Ecology each year no later than 105 days after the end of the previous calendar year (April 14 or 15) with information and data for the previous calendar year. The primary purpose of the Criteria and Toxic Air Emission Inventory Report is to document that emissions from Hanford Site operations do not exceed applicable standards. The reported emissions are also used to establish the total AOP fee assessed to DOE by Ecology.

Using forms provided each year by Ecology staff, the AOP Team coordinates preparation of the Criteria and Toxic Air Emission Inventory Report in accordance with the procedures of HNF-PRO-15335, Section 5.7. In addition, the AOP Team includes any information required by individual source NOC approval orders. The AOP Team provides reporting guidance to all Hanford Site contractors and compiles their input into a single report; and then transmits the report to DOE for certification and submittal to Ecology.

6.3 SEMIANNUAL AOP REPORT

In accordance with the requirements of AOP STGC Section 4.3.3, and to satisfy the underlying regulation found in WAC 173-401-615, DOE submits semiannual AOP reports to the regulatory agencies by

September 15 (for January 1 through June 30 reporting period) and March 15 (for July 1 through December 31 reporting period) each year. The primary purpose of the Semiannual AOP Report is to provide a status of required air emissions monitoring on the Hanford Site.

The AOP Team coordinates preparation of each Semiannual AOP Report in accordance with the procedures of HNF-PRO-15335, Section 5.8. The AOP Team provides reporting guidance to all Hanford Site contractors and compiles their input into a single report; and then transmits the report to DOE for certification and submittal to the regulatory agencies. A copy of the most recent reporting guidance for the Semiannual AOP Report is located on the AOP website at <http://www7.rl.gov/aop/>.

6.4 ANNUAL AOP COMPLIANCE CERTIFICATION REPORT

In accordance with the requirements of AOP STGC Section 4.3.4, and to satisfy the underlying regulation found in WAC 173-401-630, DOE submits an Annual AOP Compliance Certification Report to the regulatory agencies each year by July 31 with information and data for the previous calendar year. The Annual AOP Compliance Certification Report documents the compliance status of AOP requirements for the duration of the reporting period. The Annual AOP Compliance Certification Report does not include IEUs or generally applicable AOP requirements.

The AOP Team coordinates preparation of the Annual AOP Compliance Certification Report in accordance with the procedures of HNF-PRO-15335, Section 5.9. The AOP Team provides reporting guidance to all Hanford Site contractors and compiles their input into a single report; and then transmits the report to DOE for certification and submittal to the regulatory agencies. The AOP Team uses an interactive data entry tool located on the AOP website to gather compliance status information from Hanford Site contractors (see Section 9.0 of this Program Plan for additional discussion on AOP website functions). A copy of the most recent reporting guidance for the Annual AOP Compliance Certification Report is located on the AOP website at <http://www7.rl.gov/aop/>.

6.5 ASBESTOS NOTIFICATIONS OF INTENT

In accordance with the requirements of AOP Attachment 3, and to satisfy the underlying regulations found in 40 CFR 61, Subpart M and BCAA, Regulation 1, Article 8, Hanford Site contractors submit NOIs to BCAA for any planned activities that involve demolition or asbestos renovation. Hanford Site contractors submit NOIs directly to BCAA in accordance with the Memorandum of Agreement (MOA) between BCAA and DOE (a copy of the MOA is included as part of AOP Attachment 3 SOB). Hanford Site contractors submit NOIs for each individual project, as applicable, unless the activity is included as part of the site-wide annual NOI. Hanford Site contractors submit an NOI amendment when the estimated amount of disturbed regulated asbestos-containing material (RACM) increases by 20 percent or more.

6.5.1 Individual Project/Activity NOIs

Individual NOIs are submitted for all demolition work (whether RACM is present or not) and any renovation projects where the amount of RACM to be disturbed is above BCAA threshold values (10 linear feet on piping or 48 square feet on other facility components). The individual NOI is submitted to the BCAA at least 10 working days before commencement of the renovation or demolition activities.

6.5.2 Site-wide Annual NOI

The AOP Team (on behalf of DOE) submits the annual site-wide asbestos NOI directly to BCAA no later than 10 working days prior to the end of the calendar year (approximately December 15) for asbestos renovation activities planned or scheduled for the next calendar year. The annual NOI is filed based on

the amounts of planned asbestos renovations that collectively are above BCAA threshold values (10 linear feet or 48 square feet) but below the federal NESHAP limits (260 linear feet on pipes or 160 square feet on other facility components). No demolition activities are included as part of the annual NOI.

6.6 REGULATORY NOTIFICATIONS

In accordance with the requirements of AOP STGC Section 4.5, Hanford Site contractors (on behalf of DOE) notify the applicable regulatory agency(ies) using established protocols whenever there is a deviation from AOP conditions. All notifications per AOP STGC Section 4.5, made either directly to the regulatory agency(ies) or through the Hanford Site Occurrence Notification Center (ONC), are included in the Semiannual AOP Report.

6.6.1 Potential Threats to Human Health or Safety

In accordance with the requirements of AOP STGC Section 4.5.1, and to satisfy the underlying regulations found in WAC 173-401-615(3)(b), WAC 173-400-107(3), and WAC 246-247-080(5), deviations representing a potential threat to human health or safety are reported to Ecology, WDOH, and/or BCAA as soon as possible (within 12 hours) following discovery (i.e., when an evaluation of pertinent information allows a qualitative determination that a potential threat to public health or safety exists or existed).

6.6.2 Non-Health or Safety Related Deviations

In accordance with the requirements of AOP STGC Section 4.5.2, and to satisfy the underlying regulations found in WAC 173-401-615(3)(b), WAC 173-400-107(3), and WAC 246-247-080(5), non-health or safety related deviations involving criteria or toxic air pollutant emission sources are reported to Ecology within 30 days after the end of the month during which the deviation was discovered. These notifications are provided using established processes (typically via email). For deviations at radioactive air emission units, WDOH is notified using established processes (typically via email) within 24 hours (or during the course of the next normal business day) of discovery. Deviations involving demolition or asbestos removal activities, as well as those associated with open burning activities, are reported to BCAA within 30 days after the end of the month during which the deviation was discovered.

6.6.3 Closure of Radioactive Air Emission Units

In accordance with the requirements of AOP STGC Section 4.13, and to satisfy the underlying regulation found in WAC 246-247-080(6), DOE and Hanford Site contractors submit a closure report to WDOH whenever radioactive emissions permanently cease at non-temporary regulated sources.

Hanford Site contractors submit an NOC application to WDOH if the planned decommissioning activities constitute a modification.

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7.0 MISCELLANEOUS REQUIREMENTS

7.1 RISK MANAGEMENT PROGRAM

Under 40 CFR Part 68, owners of stationary sources are required to develop a Risk Management Plan (RMP) if they meet the threshold requirements of the chemical accident prevention program. Hanford Site contractors performed a site-wide evaluation in 1999 and determined that the 283-W Water Treatment Facility, which stores quantities of chlorine above the trigger threshold, was the only facility subject to the requirements of 40 CFR Part 68. An initial risk management program (DOE/RL-99-38, Revision 0, *Risk Management Program for the 283-W Water Treatment Facility*) was developed in May 1999. A RMP (no assigned document number) containing information from the risk management program document was prepared and issued to EPA in June 1999. In accordance with the requirements of 40 CFR 68.190, a five year update review was completed in June 2004 (DOE/RL-99-38, Revision 1; and DOE/RL-2004-44, Revision 0, *Risk Management Plan for the 283-W Water Treatment Facility*).

Hanford Site contractors evaluate proposed activities and new facilities as part of established new source review and air quality compliance procedures. If it is determined that a regulated substance is present in quantities above trigger thresholds, the responsible Hanford Site contractor prepares and submits the required RMP to EPA.

In accordance with the requirements of AOP STGC Section 4.11, and to satisfy the underlying regulations found in 40 CFR 68.215, all Hanford Site facilities subject to the requirements of 40 CFR 68 are included as part of the annual AOP compliance certification process.

The AOP Team coordinates the preparation, completion and issuance of required five year updates of all applicable Hanford Site Risk Management Programs and Plans.

7.2 GASOLINE VAPOR CONTROL

In accordance with the requirements of AOP STGC Section 4.9, and to satisfy the underlying regulations found in WAC 173-491, Hanford Site contractors maintain established procedures and processes to ensure appropriate review, control and documentation of activities involving operation of gasoline dispensing facilities with annual throughput greater than 360,000 gallons or storage capacity greater than 10,000 gallons. Total annual throughput records are maintained for the two most recent calendar years.

7.3 STRATOSPHERIC OZONE PROTECTION

In accordance with the requirements of AOP STGC Section 4.10, and to satisfy the underlying regulations found in 40 CFR Part 82, Hanford Site contractors maintain established procedures and processes to ensure appropriate review, control and documentation of activities involving regulated ozone depleting substances.

7.4 REGULATORY PERSONNEL ACCESS

In accordance with the requirements of AOP STGC Section 4.4, DOE and Hanford Site contractors maintain established procedures and processes to ensure regulatory agency personnel are provided access, as necessary, to conduct assigned responsibilities under their authority. Purposes for such access include inspections, records review, and sampling/monitoring of air emission sources.

7.5 PERMIT APPEALS

In accordance with AOP STGC Section 3.9, and as allowed by the underlying regulations WAC 173-401-620 and 173-401-735, DOE has the right to file an appeal with the Washington State Pollution Control Hearings Board (PCHB) regarding any condition included in the AOP. Hanford Site contractors carefully review all proposed AOP changes and draft approval orders, and advise DOE of any issues or concerns that may warrant resolution. DOE reviews the issue and makes a decision within the allowable timeframe (30 days from issuance) on whether to appeal to the PCHB.

8.0 REVISIONS TO THE AIR OPERATING PERMIT

The AOP undergoes changes and revisions periodically throughout its effective duration. Changes and revisions occur for a number of reasons and are initiated primarily by DOE and Hanford Site contractors, but occasionally by the regulatory agencies. Changes/revisions are accomplished through established regulatory and administrative processes. The following sections discuss the types of potential changes/revisions, how they are accomplished and any unique factors that may apply.

8.1 GENERAL HANFORD SITE AOP REVISION PROCESS

In general, Hanford Site contractors perform the following actions when evaluating proposed activities and air permitting requirements that have the potential to revise the AOP:

- Evaluate proposed new/modified air emission sources to determine air permitting requirements, including whether an NOC application is required and what AOP modification forms are necessary. This includes determining whether proposed new sources qualify as IEUs per WAC 173-401-530 and do not need to be added to the AOP.
- As applicable, prepare NOC application and AOP modification form(s) for submittal to the appropriate regulatory agency via established processes.
- Provide AOP Team with copies of all NOC applications and approval orders, AOP modification forms and any related documents.

Appendix A of this Program Plan provides a more detailed description of the AOP modification decision process, while Appendix B provides additional detail on the administrative procedures for each type of AOP modification. Appendix C includes examples of the various AOP modification forms.

The AOP Team maintains current copies of the AOP modification forms and the latest guidance for determining which AOP forms to use on the AOP website at <http://www7.rl.gov/aop/>.

8.2 NEW SOURCE REVIEW

Hanford Site contractors maintain and implement NSR procedures and processes that evaluate proposed new/modified air emission sources to determine required air permitting documentation. The evaluation process determines whether the proposed action is exempt from NSR requirements, including preparation of a NOC application, whether an NOC application must be submitted to the applicable regulatory agency (Ecology or WDOH), and whether an AOP modification request form is needed. Hanford Site contractors conduct the evaluation process during the activity planning phase and prior to initiation of any field work activities. Hanford Site contractors maintain supporting documentation for performed NSR evaluations.

8.2.1 Potential Exemptions

For criteria and toxic air pollutant sources (other than those that are temporary or portable), certain types of proposed activities are exempt from NSR requirements (including submittal of an NOC application) either because (1) potential emissions are below threshold levels listed in WAC 173-400-110(5)(d); (2) they are included in the categorical lists in WAC 173-400-110(4); or (3) they are not identified in WAC 173-460-030 as subject to the provisions of WAC 173-460. Hanford Site contractors maintain documentation supporting NSR exemptions based on the categorical lists in WAC 173-400-110(4) and/or determinations of non-applicability per WAC 173-460-030, but are not required to notify Ecology.

In accordance with the requirements of WAC 173-400-110(5)(b), Hanford Site contractors notify Ecology of any NSR exemptions based on potential emissions below the threshold levels in WAC 173-400-110(5)(d). As part of the notification, a summary of the proposed action is provided that includes sufficient information for Ecology to determine whether or not it has more than a de minimus impact on air quality. Hanford Site contractors begin construction on the proposed activity 31 days after submittal of the notification to Ecology, unless Ecology provides notification within 30 days that an NOC application is required. Construction begins earlier if Ecology provides advance notification that the NSR exemption is acceptable.

8.2.2 Ecology Notice of Construction Applications

In accordance with AOP STGC Section 4.8, DOE and Hanford Site contractors prepare required NOC applications for submittal to Ecology for approval to construct and operate new or modified criteria and toxic air emission sources. NOC applications are prepared in accordance with Ecology guidelines and include sufficient information to allow Ecology staff to determine the proposed source will be constructed and operated in accordance with all applicable regulations. Typically, this includes: (1) a detailed process description of the proposed activity and emission sources; (2) an estimate of potential criteria and/or toxic air emissions; (3) a description of planned emission control measures/technology, including demonstration that the applicable control standard (e.g., RACT, BACT) will be met; and (4) a description of planned monitoring or emissions measurement. As appropriate, Hanford Site contractors initiate preliminary discussions with Ecology air quality staff regarding the proposed activities to ensure appropriate information is included in the NOC application.

To ensure the AOP database and website are maintained current and accurate, Hanford Site contractors provide the AOP Team with a copy of all NOC applications submitted to and NOC approval orders received from Ecology.

8.2.3 WDOH Notice of Construction Applications

In accordance with AOP Attachment 2, and the underlying regulations found in WAC 246-247-060, DOE and Hanford Site contractors prepare required NOC applications for submittal to WDOH for approval to construct and operate new or modified sources with the potential to emit radioactive air emissions. NOC applications are prepared in accordance with WDOH guidelines and include the information required by WAC 246-247-110. As appropriate, Hanford Site contractors initiate preliminary discussions with WDOH permitting staff regarding the proposed activities to ensure appropriate information is included in the NOC application.

To ensure the AOP database and website are maintained current and accurate, Hanford Site contractors provide the AOP Team with a copy of all NOC applications submitted to and NOC approval orders received from WDOH.

8.3 TYPES OF AOP MODIFICATIONS OR CHANGES

Ecology's air operating permit regulations in WAC 173-401 identify five types of potential changes to the AOP. They are as follows:

- Changes not requiring permit revision (CNRR) as defined in WAC 173-401-722
- Off-permit changes (OPC) as defined in WAC 173-401-724
- Administrative amendments (AA) as defined in WAC 173-401-720
- Minor modifications (MM) as defined in WAC 173-401-725(2)
- Significant modifications (SM) as defined in WAC 173-401-725(4)

A related type of modification is commonly referred to as a "Title I Modification" or "modification under any provision of Title I of the *Federal Clean Air Act Amendments of 1990* (FCAA)." This distinction is important because an AOP change that meet the definition of a Title I modification is generally processed as a significant modification. WAC 173-401-200(35) defines a Title I modification as:

"Any modification under Sections 111 (Standards of Performance for New Stationary Sources) or 112 (Hazardous Air Pollutants) of the FCAA and any physical change or change in the method of operations that is subject to the preconstruction review regulations promulgated under Parts C (Prevention of Significant Deterioration) and D (Plan Requirements for Nonattainment Areas) of Title I of the FCAA."

Proposed activities involving radioactive air emission sources are not considered Title I modifications.

Additional guidance on how to use the various types of AOP modifications is located in the AOP STGC Statement of Basis.

8.3.1 Changes Not Requiring Permit Revision

In general, changes not requiring an AOP revision include those that decrease emission rates or total emissions, remove irrelevant permit terms and conditions, remove requirements for closed emission units, or change abatement technology in a manner that does not impact provisions of the AOP designed to control emissions. The CNRR process is also used for AOP changes that do not violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements [*often referred to as Section 502(b)(10) changes defined in WAC 173-400-200(30)*].

AOP changes that qualify as Title I modifications are not processed as CNRRs.

AOP changes processed as CNRRs are implemented seven days after notification of the changes is submitted to the regulatory agencies. The AOP Team attaches a copy of each CNRR to the AOP record copy maintained on the AOP website. AOP changes made via the CNRR process are not covered by the AOP permit shield.

The AOP Team maintains a list of previously submitted changes not requiring permit revision on the AOP website at <http://www7.rl.gov/aop/>.

8.3.2 Off-Permit Changes

In general, off-permit changes include those not specifically addressed nor prohibited by the AOP terms and conditions without requiring a permit revision, add new emission units from approvals issued by the regulatory agencies, or are similar to existing AOP terms and conditions. The most common example of an AOP change that qualifies as an OPC is a WDOH NOC approval order for a radioactive air emission source.

AOP changes that (1) qualify as Title I modifications, (2) are subject to the acid rain requirements under Title IV of the FCAA, or (3) weaken the enforceability of existing AOP requirements are not processed as OPCs.

AOP changes processed as OPCs are implemented immediately upon submittal of a notification to the regulatory agencies. AOP changes made via the OPC process are not covered by the AOP permit shield.

The AOP Team maintains a list of previously submitted off-permit changes on the AOP website at <http://www7.rl.gov/aop/>.

8.3.3 Administrative Amendments

In general, administrative amendments are used to correct typographical errors, reflect personnel name or emission unit ownership changes, increase monitoring or reporting frequencies, and/or incorporate NOC approval orders that have gone through a public review process.

Administrative amendments are not used to revise the AOP SOB, revise NOC approval orders listed in the AOP, add new applicable requirements, decrease monitoring or reporting frequencies, or incorporate NOC approval orders that have not gone through a public review process.

AOP changes requested via administrative amendment are implemented immediately upon submittal to the regulatory agencies. Administrative amendment changes are covered by the AOP permit shield once Ecology takes final action granting the request.

The AOP Team maintains a list of previously submitted administrative amendments on the AOP website at <http://www7.rl.gov/aop/>.

8.3.4 Minor Modifications

In general, minor modifications are used for AOP changes that involve non-significant changes to existing AOP monitoring, reporting or recordkeeping requirements (e.g., provides clarification or standardization) and do not violate any applicable requirements. This includes allowed operational changes that might increase emissions above existing AOP limits. When certain criteria are met, minor modifications can be processed as a group rather than individually. In theory, the advantage of group processing is that the modifications are added to the AOP as a single action, avoiding multiple and potentially conflicting public review processes. Due to practical and logistical concerns, DOE and Hanford Site contractors typically do not request group processing of minor modifications.

AOP changes that qualify as Title I modifications or that relax any existing AOP terms and conditions are not processed as minor modifications.

Minor modification AOP changes are implemented immediately upon submittal of the request (including EPA/Tribes/affected states notification form) to the regulatory agencies unless there is an associated NOC application for the proposed change. In that case the changes are implemented immediately upon issuance of the NOC approval order by the applicable regulatory agency. DOE and Hanford Site contractors comply with the revised NOC approval order terms and conditions (not the existing AOP terms and conditions being modified) until Ecology formally incorporates the minor modification into the AOP. AOP changes made via the minor modification process (including group processing) are not covered by the AOP permit shield.

The AOP Team maintains a list of previously submitted minor modifications on the AOP website at <http://www7.rl.gov/aop/>.

8.3.5 Significant Modifications

In general, significant modifications are used for AOP changes that do not qualify as administrative amendments or minor modifications. This includes Title I modifications, changes that relax existing AOP monitoring, reporting, or recordkeeping requirements, and other significant changes.

Significant modifications are not used for AOP changes that can be handled using other processes, such as administrative amendments, minor modifications, off-permit changes, etc.

Significant modifications are not implemented until the proposed changes have been approved and formally incorporated into the AOP. AOP changes made via the significant modification process are covered by the AOP permit shield.

The AOP Team maintains a list of previously submitted significant modifications on the AOP website at <http://www7.rl.gov/aop/>.

8.4 AOP RENEWAL

The AOP is issued for a fixed term of 5 years from the effective date of issuance. The current AOP Renewal 1 became effective on January 1, 2007. The right to operate under AOP Renewal 1 terminates on December 31, 2011, unless DOE submits a complete renewal application in accordance with AOP STGC Section 4.1 at least six months in advance (no later than June 30, 2011). DOE and Hanford Site contractors intend to submit a renewal application by the required date to ensure continued operation of site activities and facilities until another renewal AOP is issued by Ecology, WDOH, and BCAA. The AOP Team coordinates preparation and issuance of AOP renewal applications.

8.5 NEW APPLICABLE REQUIREMENTS

Occasionally, new applicable requirements may become effective and need to be incorporated into the AOP. Per WAC 173-401-730, Ecology re-opens the AOP to add those requirements that become applicable with 3 years or more remaining before the AOP expires. While Ecology is not required to re-open the AOP to include new requirements when the AOP is due to expire in two years or less, it is expected that Ecology will do so. The AOP Team coordinates with DOE and Hanford Site contractors to implement new requirements.

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9.0 DATA MANAGEMENT

The AOP Team uses two primary electronic information management tools to manage information and data related to the AOP program, establish consistent site-wide processes, generate required reports, and help DOE and Hanford Site contractors maintain compliance with applicable requirements. The AOP database manages requirements and other related information for air emission units on the Hanford Site, while the AOP website supports an interactive environment that provides field compliance support and tools, reference materials and a data collection capability for the annual compliance certification process.

9.1 AOP DATABASE

The AOP Team maintains the AOP database current with the latest air permitting requirements for each Hanford Site criteria/toxic and/or radioactive air emissions source. Hanford Site contractors, as well as each of the applicable regulatory agencies, copy the AOP Team on all air permitting documentation and approvals related to Hanford Site air emission sources to ensure updated information is available for input into the database. The AOP Team uses established data entry procedures to ensure timely and accurate input of new and updated information. The AOP database is also programmed to provide certain report generation capabilities in support of the AOP Team's preparation of required semiannual and annual reports.

The AOP Team maintains a significant quantity of data related to each emission unit in the AOP database. The information in the database includes:

- emission unit name (common, air emission inventory, WDOH license, aliases, etc.);
- emission unit location (building, stack, Hanford area, etc.);
- contractor responsible for operation of the unit;
- applicable NOC approval order requirements (Ecology and WDOH) and effective dates;
- applicable AOP requirements and effective dates;
- compliance demonstration method for applicable requirements;
- emission unit revision history; and
- linked electronic copies of applicable requirements and other related documents.

The AOP database is maintained on a secure server not generally accessible by Hanford Site personnel. Except for limited data entry during the annual compliance certification process (reference Sections 6.4 and 9.2 of this Program Plan), only the AOP Team (and designated computer support personnel) is authorized to perform data entry or database maintenance activities. The AOP Team data entry procedures are documented as part of an internal desk instruction (EP-DI-608).

9.2 AOP WEBSITE

The AOP Team manages the AOP website (<http://www7.rl.gov/aop/>) as an interactive resource for Hanford Site contractors who operate air emission sources with applicable AOP requirements. It is configured so that users can sort the information in the AOP database to show a list of emission units assigned to a particular Hanford Site contractor. The website displays all associated information and applicable requirements in the AOP database for those emission units, and provides a link to an electronic mapping software application that shows the emission unit location (and in some cases, physical characteristics and a process flow diagram).

The most visible and widely used capability of the AOP website is as a data collection tool during the annual compliance certification process. At specified times during the year, the AOP Team authorizes

access for designated Hanford Site personnel to input information on the compliance demonstration method for applicable requirements for assigned emission units. The temporary data entry access granted to Hanford Site contractor personnel facilitates a more efficient process to input required information to the AOP database in support of the AOP Team's preparation of the annual AOP Compliance Certification Report. Specific guidance and instructions for using this feature and timeframes for completing the certification process are provided in the reporting guidance issued each year by the AOP Team.

The AOP Team also maintains a current copy of the AOP on the website, along with numerous other AOP-related reference materials and air permitting requirements. Included are:

- Contact information for AOP Team and regulatory agency personnel;
- Copies of previous AOP modifications sorted by type;
- Copies of previous emission unit closure reports;
- Copy of latest version of this Implementation Plan;
- Copies of past semiannual and annual AOP reports;
- Copies of most recent reporting guidance issued by AOP Team;
- Copy of latest AOP modification determination process and AOP modification forms;
- Links to applicable federal, state and local air quality and permitting regulations and guidance manuals;
- Copies of pertinent DOE guidance documents; and
- Other pertinent documents/information, as determined appropriate by the AOP Team.

Only the AOP Team (and designated computer support personnel) is authorized to perform website maintenance activities.

10.0 REFERENCES

40 CFR Part 61, Subpart M, *National Emission Standard for Asbestos*

40 CFR Part 68, *Chemical Accident Prevention Provisions*

40 CFR Part 70, *State Operating Permit Programs*

40 CFR Part 82, *Protection of Stratospheric Ozone*

DOE/RL-99-38, Rev. 1, *Risk Management Program for the 283-W Water Treatment Facility*,
U.S. Department of Energy, Richland Operations Office, June 2004

DOE/RL-95-07, *Hanford Site Air Operating Permit Application*, U.S. Department of Energy, Richland
Operations Office, Richland, Washington, May 1995 (and periodic updates)

DOE/RL-2004-44, Rev. 0, *Risk Management Plan for the 283-W Water Treatment Facility*,
U.S. Department of Energy, Richland Operations Office, April 2004

DOE/RL-2005-24, Revision 1, *Hanford Site Air Operating Permit Renewal Application*, U.S. Department
of Energy, Richland Operations Office, Richland, Washington, October 2005

EP-DI-608, Rev. 1, *AOP Data Entry*, December 2007

Hanford Site Title V Air Operating Permit 00-05-006 Renewal 1, Washington State Department of
Ecology, Washington State Department of Health, and Benton Clean Air Authority (effective
January 1, 2007).

HNF-PRO-15335, Revision 6, *Environmental Permitting and Documentation Preparation*, Project
Hanford Management System, September 2007

Letter, 97-EAP-245, James Rasmussen, DOE-RL to Al Conklin, WDOH, dated 2/12/97

Memorandum of Agreement between DOE-RL and DOE-ORP, 02-RCA-050-MOA, Revision 1, Signed
September 2002.

Regulation 1, Benton Clean Air Authority, April 2005

WAC 173-400, *General Regulations for Air Pollution Sources*

WAC 173-401, *Operating Permit Regulation*

WAC 173-425, *Outdoor Burning*

WAC 173-460, *Controls for New Sources of Toxic Air Pollutants*

WAC 246-247, *Radiation Protection-Air Emissions*

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APPENDIX A

HANFORD SITE AOP MODIFICATION EVALUATION PROCESS

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HANFORD SITE AOP MODIFICATION EVALUATION PROCESS

Permit Number 00-05-006 Renewal 1

Hanford Site contractors use the following questions to determine what type of AOP modification is appropriate for a particular proposed change or activity. As necessary, the AOP Team assists with the determination process on a case-by-case basis. The questions are evaluated in numerical order until the evaluation process is complete and an appropriate path forward is determined.

Once the evaluation has determined what type of AOP modification should be processed, the applicable administrative procedures in Appendix B of this Program Plan outline the specific actions to be taken and which AOP modification forms from Appendix C need to be completed.

Evaluation Questions

1. Is the proposed change to an applicable requirement, term, or condition that is already in the AOP?
If Yes – Proceed to Question #2.
If No – Proceed to Question #6.
2. Is the proposed change a Title I modification, or does proposed change involve significant changes and/or any relaxation to existing monitoring, reporting, or recordkeeping requirements in the AOP?
If Yes – Stop; evaluation complete. Proposed change is a Significant Modification.
If No – Proceed to Question #3.
3. Does the proposed change only:
 - Correct typographical errors?
 - Identify a change in the name, address, or telephone number of any person identified in the AOP, or provide a similar minor administrative change at the source?
 - Require more frequent monitoring or reporting?
 - Incorporate into the AOP the terms, conditions, and provisions from notice of construction approval orders processed under an EPA-approved program that substantially is equivalent to the AOP approval process, like new source review, including public, Tribes, affected states, and EPA review?If Yes (to any) – Stop; evaluation complete. Proposed change is an Administrative Amendment.
If No (to all) – Proceed to Question #4.
4. Does the proposed change alter any existing AOP term or condition specifically addressing:
 - Monitoring (including test methods)?
 - Recordkeeping?
 - Reporting?
 - Compliance certification requirements?If Yes (to any) – Stop; evaluation complete. Proposed change is a Minor Modification.
If No (to all) – Proceed to Question #5.
5. Does the proposed change:
 - Result in emissions that exceed those allowable under the AOP, whether expressed as a rate of emissions or in total emissions?
 - Alter AOP terms that are necessary to enforce limitations on emissions from units covered by the AOP?If Yes (to any) – Stop; evaluation complete. Proposed change is a Minor Modification.
If No (to both) – Stop; evaluation complete. Proposed change is a Change Not Requiring Revision.

6. Is/Does the proposed change:

- Specifically addressed or prohibited by AOP terms or conditions?
- A Title I modification or subject to the acid rain requirements under Title IV of the *Federal Clean Air Act Amendments of 1990*?
- Weaken the enforceability of an existing AOP term or condition?

If Yes (to any) – Proceed to Question #7.

If No (to all) – Stop; evaluation complete. Proposed change is an Off-Permit Change.

7. Does the proposed change incorporate into the AOP the terms, conditions, and provisions from notice of construction approval orders processed under an EPA-approved program, like new source review, that substantially are equivalent to the AOP approval process, including public, Tribes, affected states, and EPA review?

If Yes – Stop; evaluation complete. Proposed change is an Administrative Amendment.

If No – Stop; evaluation complete. Proposed change is a Significant Modification.

APPENDIX B

HANFORD SITE AOP MODIFICATION PROCESSING PROCEDURES

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SIGNIFICANT MODIFICATIONS [WAC 173-401-725(4)]

1. Hanford Site contractors, in consult with AOP Team, prepare significant modification (SM) request package that includes the following components:
 - Complete NOC application or revision form, as applicable;
 - 'Significant Modification Request' form, certified by responsible official per WAC 173-401-520; and
 - 'Notification of Permit Modification Request to the EPA/Tribes/Affected States' form for Ecology use in accordance with WAC 173-401-810 and 173-401-820.
2. DOE and Hanford Site contractors submit SM request package to Ecology/WDOH and provide copy to AOP Team.
3. Ecology/WDOH provides EPA a copy of SM request package.
4. Ecology/WDOH reviews NOC application for completeness and either (1) notifies DOE and Hanford Site contractors that it is incomplete; or (2) prepares draft proposed NOC approval order.

****NOTE**** *As part of normal SM processing, Ecology will publish notices, as required per WAC 173-401-805, in their AOP register.*

5. Ecology prepares/publishes required public notices and conducts public hearing(s), as appropriate, regarding the proposed draft NOC approval order.
6. Ecology conducts 30-day comment period on the proposed draft NOC approval order for members of the public and affected states.
7. Ecology responds to any received comments, prepares responsiveness summary, and revises the proposed draft NOC approval order accordingly.
8. Ecology provides proposed final NOC approval order to EPA for 45-day review.
9. Ecology/WDOH issues final decision on NOC approval order to DOE and Hanford Site contractors within 15 days after conclusion of EPA review, and provides copy to AOP Team.
10. Ecology formally incorporates approved SM into AOP and issues revised AOP to DOE and Hanford Site contractors.
11. Hanford Site contractors implement change after Ecology formally incorporates it into the AOP.

****NOTE**** *In accordance with WAC 173-401-725(4)(b), Ecology completes its review of a majority of AOP significant modifications within 9 months after receipt of a complete NOC application.*

MINOR MODIFICATIONS [WAC 173-401-725(2)]

1. Hanford Site contractors, in consult with AOP Team, prepare minor modification (MM) request package that includes the following components:
 - Complete NOC application or revision form, as applicable;
 - 'Minor Modification Request' form, certified by responsible official per WAC 173-401-520; and
 - 'Notification of Permit Modification Request to the EPA/Tribes/Affected States' form for Ecology use in accordance with WAC 173-401-810 and 173-401-820.

****NOTE**** Hanford Site contractors, in consult with AOP Team, determine whether MM is more appropriately processed as part of a group request (see procedure below).

2. DOE and Hanford Site contractors submit MM request package to Ecology/WDOH and provide copy to AOP Team.
3. IF the proposed MM did not require submittal of an NOC application, Hanford Site contractors implement change immediately upon submittal of the MM request package. Hanford Site contractors comply with the applicable requirements governing the change and the proposed AOP terms and conditions.
4. Ecology/WDOH reviews MM request package for completeness determination.
5. Within 5 working days of receipt of a complete MM request package, Ecology notifies the EPA, Tribes, and affected states of the requested AOP modification per WAC 173-401-810 and 173-401-820.
6. Ecology publishes notice in the AOP register describing the proposed MM and specifying the deadline to file comments with Ecology on the proposal.
7. Ecology conducts a 21-day public comment period on the proposed MM.
8. Ecology resolves comments received during the 21-day public comment period and submits proposed MM to EPA for a 45-day review period. At this time, Ecology notifies EPA and affected state(s) per WAC 173-401-820(2) of any recommendation on the proposed MM from the affected state(s) that is not accepted.
9. Within 90 days of receipt of complete MM request package, or within 15 days after the end of EPA's 45-day review period (whichever is later), Ecology either:
 - Approves and issues the MM as proposed;
 - Denies the proposed MM;
 - Determines the proposed MM should be reviewed under significant modification procedures; or
 - Revises the proposed MM and submits to EPA for a new 45-day review period.
10. If the proposed MM required submittal of an NOC application, Hanford Site contractors implement the change immediately upon Ecology's issuance of the NOC approval order. Hanford Site contractors comply with the applicable requirements governing the change and the proposed AOP terms and conditions.
11. Ecology formally incorporates approved MM into AOP and issues revised AOP to DOE and Hanford Site contractors.

GROUP PROCESSING OF MINOR MODIFICATIONS [WAC 173-401-725(3)]

1. Hanford Site contractors, in consult with AOP Team, prepare minor modification (MM) request package that includes the following components:
 - Complete NOC application or revision form, as applicable;
 - 'Request for Group Processing of Minor Modification' form, certified by responsible official per WAC 173-401-520; and
 - 'Notification of Permit Modification Request to the EPA/Tribes/Affected States' form for Ecology use in accordance with WAC 173-401-810 and 173-401-820.
2. DOE and Hanford Site contractors submit MM request package to Ecology/WDOH and provide copy to AOP Team.
3. **IF** the proposed MM did not require submittal of an NOC application, Hanford Site contractors implement change immediately upon submittal of the MM request package. Hanford Site contractors comply with the applicable requirements governing the change and the proposed AOP terms and conditions.
4. Ecology/WDOH reviews MM request package for completeness determination.
5. On a quarterly basis, or within 5 working days of receipt of a complete MM request package that causes the aggregate emissions of MMs pending group processing to exceed applicable thresholds, Ecology notifies the EPA, Tribes, and affected states of the proposed MM group per WAC 173-401-810 and 173-401-820.
6. Ecology publishes notice in the AOP register describing the proposed MM group and specifying the deadline to file comments with Ecology on the proposal.
7. Ecology conducts a 21-day public comment period on the proposed MM group.
8. Ecology resolves comments received during the 21-day public comment period and submits proposed MM group to EPA for a 45-day review period. At this time, Ecology notifies EPA and affected state(s) per WAC 173-401-820(2) of any recommendation on the proposed MM group from the affected state(s) that is not accepted.
9. Within 180 days of receipt of the initial complete MM request package pending group processing, or within 15 days after the end of EPA's 45-day review period (whichever is later), Ecology either:
 - Approves and issues the MMs as proposed;
 - Denies the proposed MMs;
 - Determines the proposed MMs should be reviewed under significant modification procedures; or
 - Revises the proposed MMs and submits to EPA for a new 45-day review period.
10. If the proposed MM required submittal of an NOC application, Hanford Site contractors implement the change immediately upon Ecology's issuance of the NOC approval order. Hanford Site contractors comply with the applicable requirements governing the change and the proposed AOP terms and conditions.
11. Ecology formally incorporates approved MM group into AOP and issues revised AOP to DOE and Hanford Site contractors.

ADMINISTRATIVE AMENDMENTS [WAC 173-401-720]

1. Hanford Site contractors, in consult with AOP Team, prepare administrative amendment (AA) notification using the 'Notification of Administrative Amendment' form.
2. DOE and Hanford Site contractors submit AA notification to Ecology/WDOH and provide copy to AOP Team.

****NOTE*****For purposes of ensuring incorporation of the AA into the next revision of the AOP, the AOP Team will maintain a copy of the AA with its record copy of the AOP.*

3. Hanford Site contractors implement change immediately upon submittal of the AA notification to Ecology/WDOH.

****NOTE*****A majority of AA notifications submitted by Hanford Site contractors are for the purpose of incorporating the requirements of an NOC approval order that has gone through a WAC 173-401 equivalent public review process. For administrative efficiency purposes, the AA notification form is often submitted in advance with the initial NOC application. In such a situation, Hanford Site contractors implement the change upon issuance of the NOC approval order.*

4. Within 60 days of receipt of a AA notification, Ecology takes final action and formally incorporates the changes into the AOP without public notice. Ecology issues a revised AOP to DOE and Hanford Site contractors.
5. Ecology submits a copy of the revised AOP to EPA.

CHANGES NOT REQUIRING PERMIT REVISION [WAC 173-401-722]

1. Hanford Site contractors, in consult with AOP Team, prepare notification of changes not requiring permit revision (CNRR) using the 'Notification of Change Not Requiring Permit Revision' form.
2. DOE and Hanford Site contractors submit CNRR notification to Ecology and EPA, and provide copy to AOP Team.
3. Hanford Site contractors implement change seven days after submittal of the CNRR notification to EPA and Ecology.

****NOTE*****Hanford Site contractors comply with applicable preconstruction review requirements for any CNRR.*

4. Ecology reviews and approves (or denies) proposed CNRR prior to the 7-day implementation date.

****NOTE*****Per informal agreement, Ecology attempts to review/approve CNRR notifications within three working days.*

5. AOP Team and Ecology both attach CNRR notification to their respective record copies of the AOP.
6. Ecology incorporates change into AOP and issues revised AOP to DOE and Hanford Site contractors.

OFF-PERMIT CHANGES [WAC 173-401-724]

1. Hanford Site contractors, in consult with AOP Team, prepare notification of off-permit change (OPC) using the 'Notification of Off-Permit Change' form.
2. DOE and Hanford Site contractors submit OPC notification to Ecology and EPA, and provide copy to AOP Team.
3. Hanford Site contractors implement change contemporaneously with submittal of the OPC notification to EPA and Ecology.

****NOTE*****Hanford Site contractors comply with applicable preconstruction review requirements for any OPC.*

4. Hanford Site contractors maintain records describing changes that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the AOP, and the emissions resulting from those changes.
5. Ecology reviews and approves (or denies) proposed OPC prior to the 7-day implementation date.

****NOTE*****Per informal agreement, Ecology attempts to review/approve CNRR notifications within three working days.*

6. Ecology incorporates change into AOP with the next revision subject to public review and issues revised AOP to DOE and Hanford Site contractors.

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APPENDIX C

HANFORD SITE AIR OPERATING PERMIT MODIFICATION FORMS

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SIGNIFICANT MODIFICATION REQUEST

Hanford Site AOP Number 00-05-006 Renewal 1

(Attach the completed Notification of Permit Modification Request Form to the EPA/tribes/affected state)

Significant modifications are allowed under WAC 173-401-725(4) for those modifications that do not meet the requirements for a minor modification or an administrative amendment.

Identify the emission point and describe the proposed change:

Describe the emissions resulting from the proposed change:

Describe the new applicable requirements that will apply as a result of the proposed change:

Provide suggested AOP revisions to reflect the proposed change:

- *Monitoring/PCM that will be used to support compliance determination/certification?*
- *Description of air pollution control equipment (abatement technology)?*
- *Other controls such as limits on inventory; process limits such as throughput, hours of operation, or acceptance criteria; or other assumptions used in potential to emit calculations?*
- *Other process descriptions that constitute a term or condition, such as reporting or recordkeeping requirements?*

CERTIFICATION

Provide certification pursuant to WAC 173-401-520

I certify that based on information and belief formed after reasonable inquiry of the person or persons who perform activities, or those persons directly responsible for gathering the information, the statements and information provided in this modification request are true, accurate, and complete.

Responsible Official:

Title:

Signature:

Date:

MINOR MODIFICATION REQUEST

Hanford Site AOP Number 00-05-006 Renewal 1

(Attach the completed Notification of Permit Modification Request Form to the EPA/tribes/affected state)

Minor modifications are allowed under WAC 173-401-725 for a change that meets the following criteria:

- Does not violate any applicable requirement;
- Does not involve significant changes to monitoring, reporting, or recordkeeping requirements in the permit; and
- Is not a Title I modification.

Describe the proposed change:

Describe the emissions resulting from the proposed change:

Describe the new applicable requirements that will apply as a result of the proposed change:

Provide suggested AOP revisions to reflect the proposed change:

for example:

- *Monitoring/PCM that will be used to support compliance determination/certification*
- *Description of air pollution control equipment (abatement technology)*
- *Other controls such as limits on inventory; process limits such as throughput, hours of operation, or acceptance criteria; or other assumptions used in potential to emit calculations*
- *Other process descriptions that constitute a term or condition, such as reporting or recordkeeping requirements.*

CERTIFICATION

Provide certification pursuant to WAC 173-401-725(2)(b)(iii)

I certify that based on information and belief formed after reasonable inquiry of the person or persons who perform activities, or those persons directly responsible for gathering the information, the statements and information provided in this modification request are true, accurate, and complete. I also certify that the proposed modification meets the criteria for use of minor permit modification procedures, as hereby requested.

Responsible Official:

Title:

Signature:

Date:

REQUEST FOR GROUP PROCESSING OF MINOR MODIFICATION

Hanford Site AOP Number 00-05-006 Renewal 1

(Attach the completed Notification of Permit Modification Request Form to the EPA/affected states/tribes)

Group processing of minor modifications is limited to changes that individually meet the criteria for a minor modification, and that collectively have emissions below the lesser of the following thresholds:

- 10% of the emission limits for the emission unit that is the subject of the application;
- 20% of the applicable definition of major source in WAC 173-401-200(19); or
- 5 tons per year.

Describe the proposed change:

Describe the emissions resulting from the proposed change:

Describe the new applicable requirements that will apply as a result of the proposed change:

Provide suggested AOP revisions to reflect the proposed change:

- *Monitoring/PCM that will be used to support compliance determination/certification?*
- *Description of air pollution control equipment (abatement technology)?*
- *Other controls such as limits on inventory; process limits such as throughput, hours of operation, or acceptance criteria; or other assumptions used in potential to emit calculations?*
- *Other process descriptions that constitute a term or condition, such as reporting or recordkeeping requirements?*

List all other pending minor modifications awaiting group processing:

Verify that group of minor modifications is below emission threshold:

Do the emissions resulting from this proposed change added to the emissions from the other minor modifications listed above equal or exceed the group processing thresholds? (Yes / No)

CERTIFICATION

Provide certification pursuant to WAC 173-401-725(3)(b)(iii)

I certify that based on information and belief formed after reasonable inquiry of the person or persons who perform activities, or those persons directly responsible for gathering the information, the statements and information provided in this modification request are true, accurate, and complete. I also certify that the proposed modification meets the criteria for use of group processing of minor permit modification procedures, as hereby requested.

Responsible Official:

Title:

Signature:

Date:

NOTIFICATION OF ADMINISTRATIVE AMENDMENT

Hanford Site AOP Number 00-05-006 Renewal 1

This notification is provided to the Washington State Department of Ecology, Washington State Department of Health, and the U.S. Environmental Protection Agency as notice of an administrative amendment described as follows.

The following changes are allowed pursuant to WAC 173-401-720 as administrative amendments if they only:

1. Correct typographical errors;
2. Identify a change in the name, address, or phone number of any person identified in the AOP, or provide a similar minor administrative change;
3. Require more frequent monitoring or reporting;
4. Allow for a change in ownership or operational control of a source where the permitting authority determines that no other change is necessary (and a written agreement containing the specific details of the transfer has been submitted to the permitting authority); or
5. Incorporate terms, conditions and provisions from NOC approval orders that have been processed under an EPA-approved program that meets the procedural requirements of WAC 173-401.

Describe the change:

Date of change:

Describe the emissions resulting from issued NOC approval orders that have gone through a WAC 173-401 equivalent public review process:

List the terms, conditions, and provisions from issued NOC approval orders that have gone through a WAC 173-401 equivalent public review process:

NOTIFICATION OF CHANGE NOT REQUIRING PERMIT REVISION

Hanford Site AOP Number 00-05-006 Renewal 1

This notification is provided to the Washington State Department of Ecology, Washington State Department of Health, and the U.S. Environmental Protection Agency as notice of a change not requiring permit revision described as follows.

The following changes are allowed pursuant to WAC 173-401-722 without a permit revision:

1. Planned change is not a Title I modification;
2. Planned change does not result in emissions that exceed those allowable under the permit, whether expressed as a rate of emissions or in total emissions;
3. Planned change does not alter permit terms that are necessary to enforce limitations on emissions from units covered by the permit; or
4. Planned change does not violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements [referred to as a Section 502(b)(10) change as defined in WAC 173-400-200(30)].

Describe the planned change:

Date of planned change:

Describe the emissions resulting from the planned change:

List any permit term or condition that will no longer be applicable as a result of the planned change:

NOTIFICATION OF OFF-PERMIT CHANGE

Hanford Site AOP Number 00-05-006 Renewal 1

This notification is provided to the 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.

The following changes are allowed pursuant to WAC 173-401-724(1) as off-permit changes:

1. Change is not specifically addressed or prohibited by the AOP terms and conditions;
2. Change does not weaken the enforceability of the existing AOP conditions;
3. Change is not a Title I modification or subject to the acid rain requirements under Title IV of the FCAA; or
4. Change meets all applicable requirements and does not violate an existing permit term or condition.

Describe the change:

Date of change:

Describe the emissions resulting from the change:

Describe the new applicable requirements that will apply as a result of the change:

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