



DEPARTMENT OF
ECOLOGY
State of Washington

Response to Comments

Hanford Air Operating Permit Renewal 3

December 17, 2017 through April 6, 2018

July 22, 2018 through September 14, 2018

*Summary of a public comment period and responses
to comments*

August 2019

Publication no. 19-05-010

Publication and Contact Information

This publication is available on the Department of Ecology's (Ecology) website at <https://fortress.wa.gov/ecy/publications/SummaryPages/1905010.html>

For more information contact:

LilyAnn Murphy
Nuclear Waste Program
3100 Port of Benton Boulevard
Richland, WA 99354
Phone: 509-372-7950
Email: Hanford@ecy.wa.gov

Washington State Department of Ecology – www.ecology.wa.gov

- Headquarters, Lacey 360-407-6000
- Northwest Regional Office, Bellevue 425-649-7000
- Southwest Regional Office, Lacey 360-407-6300
- Central Regional Office, Yakima 509-575-2490
- Eastern Regional Office, Spokane 509-329-3400

Ecology publishes this document to meet the requirements of [Washington Administrative Code 173-401-800\(3\)\(b\)](#).

To request ADA accommodation including materials in a format for the visually impaired, call Ecology at 509-372-7950 or visit <https://ecology.wa.gov/accessibility>. People with impaired hearing may call Washington Relay Service at 711. People with speech disability may call TTY at 877-833-6341.

Response to Comments

*Hanford Air Operating Permit Renewal 3
December 17, 2017 through April 6, 2018
July 22, 2018 through September 14, 2018*

Nuclear Waste Program
Washington State Department of Ecology
Richland, Washington

This page is purposely left blank.

Table of contents

Introduction.....	1
Reasons for issuing the permit.....	1
Public involvement actions.....	3
List of Commenters.....	5
Attachment 1: Comments and responses	
Appendix A: Copies of all public notices	
References	

Introduction

The Washington State Department of Ecology’s Nuclear Waste Program (Ecology) regulates air pollution sources at the Hanford Site. In particular, Ecology is the overall permitting authority for the Hanford Air Operating Permit (AOP), No. 00-05-006. State regulations limit the term of an AOP to five years and require the permits to be renewed.

When a new permit or significant modification to an existing permit is proposed, or as in this case Ecology is renewing a permit, we hold a public comment period to allow the public to review the change and provide formal feedback. (See [Washington Administrative Code \[WAC\] 173-401-800](#) for Public Involvement requirements for air operating permits.)

The Response to Comments is the last step before issuing the final permit, and its purpose is to:

- Specify which provisions, if any, of a permit will become effective upon issuance of the final permit, providing reasons for those changes.
- Describe and document public involvement actions.
- List and respond to all significant comments received during the public comment period and any related public hearings.

This Response to Comments is prepared for:

Comment period: Hanford Air Operating Permit Renewal 3, December 17, 2017 through April 6, 2018 and July 22, 2018 through September 14, 2018

Permit: *Hanford Air Operating Permit No. 00-05-006*

Version: *Renewal 3*

Permittee(s): *U.S. Department of Energy*

Original issuance date: June 18, 2001

Permit effective date: August 1, 2019

To see more information related to the Hanford Site and nuclear waste in Washington, please visit our website: <https://www.ecology.wa.gov/Hanford>.

Reasons for issuing the permit

At the Hanford Site, USDOE is cleaning up wastes resulting from making plutonium for the nation’s nuclear arsenal. The Hanford Site, located in southeastern Washington, is a “major source” of air pollutants as defined in the Clean Air Act (CAA) Section 112. The U.S. Department

of Energy (USDOE) has an existing air operating permit for the Hanford Site, AOP No. 00-05-006, Renewal 2 Revision B. USDOE submitted an application in September 2017 to renew their air operating permit for the Hanford Site, AOP No. 00-05-006. The current permit, AOP Renewal 2, Revision B, expired on March 31, 2018, and the facility has been operating under the permit shield provisions of WAC 173-401-640.

The permit ensures air emissions from Hanford stay within safe limits to protect the public and the environment. An air operating permit brings all applicable requirements into one place and requires the manager of the source to certify that it complies with all the applicable requirements. Ecology is the lead agency for the Hanford AOP. The Hanford AOP is regulated and enforced by three agencies: Ecology, Washington Department of Health (DOH), and Benton Clean Air Agency (BCAA). Ecology regulates non radioactive toxic and criteria air emissions under the authority of 42 United States Code 7401, et. Seq, Revised Code of Washington (RCW) 70.94, and WAC 173-401; DOH regulates radioactive air emissions under the authority of RCW 70.92, WAC 173-480, and WAC 246-247; and BCAA regulates outdoor burning under delegation from Ecology under the authority of RCW 70.94, WAC 173-425, and BCAA Regulation 1, Article 5.

Public involvement actions

Ecology encouraged public comment on the draft Hanford Air Operating Permit No. 00-05-006, Renewal 3 during a 60-day public comment period held December 17, 2017 through February 16, 2018. The public comment period was then restarted and held from January 14, 2018, through March 16, 2018 due to a discrepancy in the permit register publication. The public comment period was extended to April 6, 2018, at the request of a stakeholder. To provide electronic access to some additional supporting documentation we reopened the public comment period for another 30 days from July 22, 2018, to August 24, 2018. This was extended to September 14, 2018, to provide further supporting documentation.

The following actions were taken to notify the public:

- Published notices in the December 8, 2017 (updated December 11, 2017), January 10, 2018, March 26, 2018, July 10, 2018 and August 10, 2018 volumes of the Ecology Permit Register.
- Mailed public notices announcing the comment periods and extensions to 1318 members of the public.
- Placed legal classified notices in the *Tri-City Herald* on December 17, 2017, January 14, 2018, March 28, 2018, July 22, 2018, and August 5, 2018.
- Emailed a notices announcing the start of the comment period and extensions to the [Hanford-Info email list](#), which has 1414 recipients.
- Posted the comment period as an event on the [Washington Department of Ecology – Hanford’s Facebook page](#).

The Hanford information repositories located in Richland, Spokane, and Seattle, Washington, and Portland, Oregon, received the following documents for public review:

- Transmittal letter
- Focus Sheet
- Draft Standard Terms and General Conditions
- Draft Statement of Basis for Standard Terms and General Conditions
- Draft Attachment 1: Ecology permitting conditions
- Draft Statement of Basis for Ecology permitting conditions
- Draft Attachment 2: Health permitting conditions
- Draft Statement of Basis for Health permitting conditions
- Draft Attachment 3: BCAA permitting conditions
- Draft Statement of Basis for BCAA permitting conditions
- Supporting Document – Ecology (PDF Portfolio)
- Supporting Documents – Department of Health License Files

Response to Comments
Hanford Air Operating Permit Renewal 3

- Supporting documents
- Notices of Construction

The following public notices for this comment period are in [Appendix A](#) of this document:

- Focus sheet
- Legal advertisements in the *Tri-City Herald*
- Notices mailed to the Hanford Facility mailing list
- Notices sent to the Hanford-Info email list

List of Commenters

The table below lists the names of organizations or individuals who submitted a comment on the Draft Hanford Site AOP No. 00-05-006, Renewal 3. The comments and responses are in [Attachment 1](#).

Commenter	Organization	Comment number
Bill Green	Citizen	I-1, I-4, I-7, I-8, I-10
Mike Conlan	Citizen	I-2
Anonymous Anonymous	Citizen	I-3
Nancy Kroening	Citizen	I-5, I-9
Jeanne Poirier	Citizen	I-6
United States Department of Energy	Agency	A-1, A-2, A-3
Confederated Tribes of the Umatilla Indian Reservation	Tribal nation	T-1

Attachment 1: Comments and responses

Description of comments:

Ecology accepted comments from December 17, 2017 through April 6, 2018 and July 22, 2018 through September 14, 2018. This section provides summary of comments that we received during the public comment period and our responses, as required by WAC 173-401-800(3)(b). Comments are grouped by individual and each comment is addressed separately.

Comments could be submitted through eComments, email, or by letter. EComment comments show in their entirety in the response to comment. Email or letter comments may be summarized.

LETTER I-1: BILL GREEN, 12/14/17 7:30 PM PT

Comment I-1-1

1st email

The December 17, 2017, date you cite for the start of public comment on Renewal 3 of Hanford's air operating permit will need to be adjusted to comply with WAC 173-401; specifically WAC 173-401-800 (3). This paragraph states: "Public comment. . . This comment period begins on the date of publication of notice in the Permit Register or publication in the newspaper of largest general circulation in the area of the facility applying for the permit, whichever is later." (emphasis is mine) The next edition of the Permit Register is not scheduled for publication until December 22, 2017. Assuming Ecology published a notice in the newspaper on December 17, 2017, by regulation, public comment still cannot begin until December 22, 2017. December 22 is later than December 17. Thus, the public comment period cannot start before December 22.

2nd email

Phil, Your problem is, the December 8, 2017, permit register entry contained no entries. (Subject line: "Dec. 8 permit register posted (none received) and new website coming soon!") It also contained the a sentence stating the next register would be issued on December 22. ("I will post next register on Fri., Dec. 22.") You must also be aware of the requirements in 401 that the permitting authority send information to the permit register within 3 days of the action. ["The permitting authority shall send information on any action requiring publication in the Permit Register to ecology within three days of the action." WAC 173-401-800 (2)(b)] Furthermore, I'm on the distribution list for Permit Register announcements. I never received this updated announcement. You need to do a better job of making stuff up.

Ecology Response to I-1-1

An email from Ms. Ebio did go out on 12/08/2017, at 12:14 PM to a distribution list that the commenter is a member of. The subject title of the email is "Dec. 8 permit register posted (none received) and new website coming soon!" Another email was sent out by Ms. Ebio on 12/11/2017, at 9:08 AM to the same distribution list. The title of this email is "UPDATED: Dec. 8 permit register posted and new website coming soon!" When reply all is clicked for either email, the email address list for all recipients are exactly the same in each email. Therefore, if the commenter received the first email, then they should have also received the second email.

The text of the second email is the same as the first, only the subject line was changed as well as the header information included (e.g. a reply all or forwarded email in appearance). This could have potentially looked like a duplicate email, but they are not. Clicking on the link in either email takes you to the exact same web page. Clicking on the "December 8, 2017 - Volume 18, Number 23" link takes you to the permit register entry that contains the notice of the public comment period for the Hanford Air Operating Permit.

As a question was raised about if the requirements in WAC 173-401 on when a public comment period actually starts, a new Permit Register Entry was posted on January 10, 2018. This posting listed the public comment period as running from January 14, 2018 through March 16, 2018. This posting resolves any issues in regards to timely notification of public comment periods in the Permit Register.

LETTER I-2: MIKE CONLAN, 12/15/17 5:02 PM PT

Comment I-2-1

1. *Remove all nuclear waste,*
2. *Do not allow anymore nuclear waste into the facility,*
3. *Replace all the single storage tanks,*
4. *Stop all the nuclear leakage entering the Columbia River*

Ecology Response to I-2-1

1. The Hanford Air Operating Permit covers active emissions to the atmosphere. It is not a Permitting mechanism in and of itself to clean-up the Hanford Site by removal of all nuclear waste. Other Programs on the Hanford Site (e.g. the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)) are used to clean-up the Hanford Site
2. The Hanford Air operating Permit has no authority over the allowance of radioactive waste on Hanford. It covers any emissions from sources (toxic or radiological) on the Hanford Site.
3. The Hanford Air Operating Permit covers active emissions to the atmosphere. It is not a Permitting mechanism in and of itself to require replacement of all of the single shell storage tanks.
4. The Hanford Air Operating Permit covers 'air' emissions. Groundwater contamination is covered under other programs (e.g. CERCLA).
No changes to the Permit are required.

LETTER I-3: ANONYMOUS, 12/26/17 12:00 PM PT

Comment I-3-1

I know that Commute Trip Reduction (CTR) is not within the regulatory scope of Ecology. However, the Hanford traffic has an immense, non-regulated impact on the air quality of Richland. I've observed the Hanford commuters, and it's unconscionable that there are so many single occupancy vehicles. Richland residents shouldn't have to breathe in all of their NOX and other pollutants. The City of Richland and the US DOE both evaluated implementation of CTR at Hanford, before Benton County was exempted. Ecology should act to put in place CTR for Hanford.

I urge the Dept of Ecology to work with the WA Department of Transportation to bring CTR to the Hanford Site. I request that the Dept of Ecology write a letter to the Dept of Transportation, requesting that Transportation introduce legislation to end the Benton County exemption from CTR. I request that the Dept of Ecology offer that their Legislative Affairs Director (currently Denise Clifford) will work with the Dept of Transportation to get the legislation enacted.

Ecology Response to I-3-1

Thank you for your comment. Commute Trip Reduction (CTR) is outside of the scope of the Hanford Air Operating Permit. Benton County's air emission requirements, except on the Hanford Site, are managed by the Benton Clean Air Agency (BCAA). The city of Richland is within Benton County, so the city's air emissions are also under the authority of BCAA. BCAA is the agency you could communicate with in regards to CTR. I have shared this comment with BCAA.

No change to the Permit is required.

Comment I-3-2

As a Richland resident, I am highly concerned about airborne releases of radioactivity from the 324 Building demolition. The fights between the Tri-Parties over regulatory authority to regulate air ignore the real problem. I request that Ecology and the Department of Health apply the highest possible oversight to radioactive air emissions from the 324 Building demolition. Based on DOE's (and CHPRC's) loss of control over radioactivity during the PFP demolition, I am highly concerned that lack of adequate controls at the 324 Building could contaminate Richland and Franklin County. Also we know that US EPA has cut back oversight of Hanford (they may hire their new manager in Seattle). US EPA has never had local air inspectors like Ecology and Health.

ECOLOGY Response to I-3-2

Thank you for your comment. The Hanford Air Operating Permit does not cover the 324 Building, so this comment is out of scope. The 324 Building transitioned to coverage under the Comprehensive Environmental Response, Compensations, and Liability Act (CERCLA). This comment has been forwarded this to the US EPA who has lead on the 324 CERCLA activity. US EPA informed Ecology that an approved Air Monitoring Plan for the 324 site will be in place prior to any remediation activities starting. It will be reviewed by US EPA, Ecology, and the Department of Health. In addition, a baseline air monitoring survey has already been performed by the Department of Health around the vicinity of the 324 site.

No change to the permit is required.

LETTER I-4: BILL GREEN, 1/12/18 9:27 AM PT

Comment I-4-1

Your statement "Copies of the proposed modification are located in the Administrative Record and Information Repositories. " may be incorrect. As of January 10, 2018, Ecology had not provided the information repository located at WSU Tri-Cities with any information related to this public comment period. The information repository at 2440 Stevens Drive lacked Health's supporting documentation. You are in a better position than I to determine whether Ecology supplied all required information to the other information repositories. In Ecology's public review announcement [publication 17-05-015, Dec. 2017], Ecology also identifies 5 "[] Information Repositories and Document Review Locations", plus Ecology NWP's Resource Center. It seems mis-leading for Ecology to include these 5 document review locations when these locations do not possess all required review material.

Ecology Response to I-4-1

Thank you for pointing out the link in question listed the Washington State University (WSU) Tri-Cities as a Hanford Information Repository for the Clean Air Act (CAA). As the current Nuclear Waste Program's office has all of the documents and is located in very close proximity to the WSU Tri-Cities repository in question. It was not Ecology's intent to list the WSU Tri-Cities as a repository for any CAA permits. We have corrected the web page to identify this repository "for Dangerous Waste only".

LETTER I-5: NANCY KROENING, 2/14/18 7:24 PM PT

Comment I-5-1

I request that the permit be even stronger than the previous one. There are fields where much food is grown, and animals consumed by people raised downwind. Also, people live downwind and need protection from toxics, including nuclear materials that have long half-lives. There should be no lessening of the permit specifications. Hanford was in the middle of nowhere when it was built. Now there are people and farms downwind. It is only reasonable to keep the toxics released at zero or tiny amounts. A close friend died of cancer. She was a downwinder and beautiful woman. A sweet soul. It is on her behalf, and for all the people downwind and who eat the food grown there, that I comment on this important issue. Thank you for taking my comments.

Ecology Response to I-5-1

Thank you for your comment.

The Hanford Air Operating Permit Renewal 3 was created under rules and regulations to implement both the Federal Clean Air Act and the Washington Clean Air Act. Both Acts require certain provisions for the various air emission points on site, such as periodic monitoring or record-keeping, to ensure emissions of pollutants are within regulatory limits. The AOP is a single permit that contains all of the various and distinct air emission permits or licenses the permittee (United States Department of Energy) is required to follow. The AOP does not lessen any of the requirements, but instead allows for the permittee, the regulatory agency, and the public to go to one permit and determine requirements for the site. Ecology strives to protect and preserve the air quality to safeguard public health and the environment in the surrounding community by ensuring the AOP contains all applicable requirements for the Hanford Site.

No change to the AOP is required.

LETTER I-6: JEANNE POIRIER, 3/16/18 7:00 PM PT

Comment I-6-1

Radioactive air - I am grateful you are operating under Clean Air policies by past congress and our state. Please don't ever go cheap or fall short on protection measures, even though the federal rules change and allow more pollution. Thank you for your challenging work at Hanford.

Ecology Response to I-6-1

Thank you for your comment.

The Washington Department of Health regulates radioactive emissions under the authority of RCW 70.92, WAC 173-480, and WAC 246-247. The FF-01 license contains all applicable rules from these regulations, including Federal Clean Air Act regulations, 40 CFR 61 Subparts A and H. The Hanford AOP Renewal 3 incorporates 40 CFR 61 Subparts A and H through incorporation of the FF-01 license in Attachment 2. The Hanford AOP Renewal 3 ensures compliance with applicable requirements of the Clean Air Act, including radioactive air emission requirements of 40 CFR 61 Subparts A and H.

No change to the AOP is required.

LETTER I-7: BILL GREEN, 3/13/18 12:00 PM PT

Comment I-7-1

Comment 1: [draft Renewal 3, general: timing of public review]: Beginning a public comment period on a Sunday or holiday is problematic because Ecology's offices and at least some of Hanford's document review locations are closed. WAC 173-401-800 (3) addresses when a comment period can begin. However, this paragraph does not consider a specific day-of-the-week on which the comment period can begin. Forty (40) C.F.R. 70.7 (h)(2) and Sierra Club v. Johnson, 436 F.3d 1269, 1284 (11th Cir. 2006) require that certain information must be provided to support public review. It seems that information required to support public review should be available at the onset of public review and not on some future date.

Ecology Response to I-7-1

As a matter of course, the Sunday edition of the local newspaper is the paper that has the highest circulation/readership. Therefore, all of the Air permits from the Nuclear Waste Program are run in the Sunday newspaper. To simplify the calculation of when a comment period starts, we start it on the day of publication in the newspaper. It is also important to note that the comment periods all run in excess of 30 days. As a result, losing a single day of not being able to obtain documents does not create a situation where the public comment period is less than 30 days.

Additionally, the public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. Material needed to review the draft Hanford AOP Renewal 3 was made available online for the duration of the reopened public comment period, satisfying the public involvement requirements of WAC 173-401-800(2)(e). Supplying the draft permit, statement of basis, and administrative record on the permitting authority's website provides sufficient availability for public inspection.

No change in the permit is required.

Comment I-7-2

Comment 2: [draft Renewal 3, general: typo on form]: Several of the forms submitted by the permittee to the Washington State Department of Health (Health) and Ecology regard a "Change not requiring a permit revision". Many of these forms incorrectly reference "Section 502 (2)(10)". The correct citation is "Section 502 (b)(10)" [rather than (2)(10)]. For example, Attachment 2 of letter 15-ECD-0003, dated Jan. 14, 2015, transmits a "Notification of Change not Requiring a Permit Revision" form regarding EU 254, 296- S-2 l. The line immediately below the heading of the change form reads: "Section 502 (2)(10)". It should read " ... (b)(10)*". (See also, Attachment 2 of letter 15-ECD-0046, dated Oct. 1, 2015.)*

Ecology Response to I-7-2

Thank you for your comment.

The permittee uses forms found in Appendix B of the Statement of Basis for Standard Terms and General Conditions in order to streamline the processing for administrative changes to the Hanford AOP. In the draft Hanford AOP Renewal 3, the form and process steps for changes not requiring a permit revision, found in Appendix B-3, pages 21-23, correctly reference Section 502(b)(10). Future submittals by the permittee would use the form found in the Hanford AOP Renewal 3, which cites the correct reference.

No change to the AOP is required.

Comment I-7-3

Comment 3: [draft Renewal 3, general: misleading public review announcement]: Ecology should not mention "Hanford's Information Repositories and Document Review Locations" in its announcements if all material needed to review draft Renewal 3 is not available at these repositories. Ecology announced the review opportunity for draft Renewal 3 in publication number 17-05-015 (Dec., 2017), and also in the Dec. 17, 2017, and Jan. 14, 2018, editions of the Tri-City Herald. Publication no. 17-05-015 and both announcements in the Tri-City Herald, show five (5) information repositories "where copies of the proposed modifications are located", in addition to Ecology's NWP Resource Center. It seems misleading for Ecology to include these five (5) "[] Information Repositories and Document Review Locations" when these locations do not possess all required review material.

ECOLOGY Response to I-7-3

Thank you for your comment.

Ecology acknowledges that the notices for the Hanford AOP Renewal 3 public comment period identified five information repositories and document review locations and materials were not sent to one of the repositories, the Washington State University Tri-Cities, DOE Public Reading Room. This repository had not been utilized for Hanford air-related public comment periods and was listed on the notices in error. Ecology agrees that this was unintentionally misleading. The list of Hanford Information Repositories on the Ecology Nuclear Waste Public Comment Period website has been updated to identify that the Washington State University Tri-Cities, DOE Public Reading Room is for Dangerous Waste only. The Washington State University Tri-Cities, DOE Public Reading Room will not be identified on future notices if Ecology does not plan to provide the repository with the materials needed for review.

The public comment period was reopened on July 22, 2018 and extended on August 10, 2018 to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. The notices for reopening the public comment period did not include the Washington State University Tri-Cities, DOE Public Reading Room as an information repository. Material needed to review the draft Hanford AOP Renewal 3 was also made available online for the duration of the reopened public comment period, satisfying the public involvement requirements of WAC 173-401-800(2)(e).

No change to the AOP is required.

Comment I-7-4

Comment 4: [draft Renewal 3, general: permit organization - underestimated risk]: Attachment 1 of draft Renewal 3 contains terms and conditions regulating most of Hanford's non-radioactive air emissions. Hanford's radioactive air emissions are regulated in Attachment 2 of draft Renewal 3. Regulating non-radioactive emissions and radioactive emissions in separate attachments, results in underestimating the total risk to the public from emissions of all pollutants. Overlooked in separately determining public risk from non-radioactive emissions alone and from radionuclide emissions alone, are the "... potential additive and synergistic effects of radioactive and non-radioactive releases. These factors dictate that greater precaution be applied regarding the designation of emission limits and requirements for monitoring and control technologies." {Footnote 1}

{Footnote 1} Cole Report, Enclosure 3, p. 2 [the "Cole Report" is: Review and Comments on Washington State Department of Ecology Requirements/or the Measurement and Control of Emissions from Hanford's Nuclear Waste Storage Tanks, Henry S. Cole, Ph.D., Henry S. Cole & Associates, Inc., Feb. 2017. Included as Enclosure 3.]

Ecology Response to I-7-4

Thank you for your comment.

Regulating non-radioactive emissions and radioactive emissions in separate attachments has no effect in estimating the total risk in the AOP. Neither state nor federal regulations account for synergistic effects of compounds emitted together. Individual constituents have an established emission level that is allowed and within acceptable risk limits. Since all non-radioactive and radioactive emissions are evaluated on an individual pollutant basis in state and federal regulation, organizing the Hanford AOP into separate attachments, rather than a single attachment, results in the same estimate of total risk. The discharge points and emission units at Hanford have followed the applicable state and federal regulations to permit the emission of regulated pollutants.

Furthermore, radiological components in sufficient quantity to create appreciable synergistic effects with chemicals are only present together in the single shell and double shell mixed waste tanks and related tank waste streams at Hanford. The underlying requirements (e.g. notice of construction approval orders and radiological air emission licenses) for discharge locations emitting Hanford tank waste utilized tank head space samples for determining the source term. Thus, the samples collected and used in the permitting process have already accounted for these potential synergistic interactions.

Additionally, once toxic and radioactive emissions leave the discharge location (e.g., the stack), any appreciable contamination that releases radiation to synergistically interact with vapors is captured on the HEPA filters required by the FF-01 license (Attachment 2).

No change to the AOP is required.

Comment I-7-5

Comment 5: [Standard Terms & General Conditions, draft Renewal 3, P. iii, misstated authority]: Lines 21-25 on Page iii misstate the authority under which Hanford's AOP is issued and enforced. It is Ecology, as the sole permitting authority, that is responsible for issuing and enforcing the entire AOP. Ecology cites to WAC 173-401-700(8) as the regulatory requirement governing statements of basis. Both 40 C.F.R. 70.7(a)(5) and WAC 173-401-700 (8) read, in part " ... the permitting authority shall provide a statement that sets forth the legal and factual basis for the draft permit conditions ... ". Ecology is the sole permitting authority for Hanford's AOP. Thus, only Ecology has the necessary authority to enforce this requirement. Lines 21 & 22 on Page iii, state: "The Statement is issued by the permitting agencies as a separate supporting reference ... ". However, the cited authority for this paragraph applies only to Ecology, the sole permitting authority for Hanford's AOP. It is impermissible for Ecology to use a permit to change a regulation. Ecology cannot provide Health & BCAA (the permitting agencies) with authority to issue the supporting reference addressed by WAC 173-401-700 (8) and 40 C.F.R. 70.7 (a)(5). Please accurately state the requirement.

Ecology Response to I-7-5

Thank you for your comment.

Ecology is the permitting authority for the Hanford AOP. The statements of basis are issued by Ecology in accordance with WAC 173-401-700(8). The Washington Department of Health authored the Attachment 2 statement of basis and Benton Clean Air Agency authored the Attachment 3 statement of basis for Ecology to issue.

Lines 21 and 22 of page iii will be revised to state, "The Statement is issued by Ecology as a separate supporting reference document to this air operating permit."

Comment I-7-6

Comment 6: [Standard Terms & General Conditions, draft Renewal 3, Section 2.0, p. 11, typo]: Line 11 on p. 11, states, incorrectly, that the Hanford Site is approximately 560 square miles. In the late 1990's a newer measurement resulted in changing Hanford's area to approximately 580 square miles. Please correct the typo.

Ecology Response to I-7-6

Thank you for your comment.

Line 11 on page 11 will be revised to state "approximately 580 square miles."

Comment I-7-7

Comment 7: [Standard Terms & General Conditions, draft Renewal 3, Section 5.2.2, p. 15, superseded version of "Source Test Manual ... "]: Lines 5 & 9 of section 5.2.2 on p. 15 cite to the version of Ecology's Source Test Manual in WAC 173-400-105 (4). WAC 173-400-105 (4) references the "September 20; 2004" version. Change line 5 to also reference the September 20, 2004, version rather than the "7/12/90" version.

Ecology Response to I-7-7

Thank you for your comment.

Line 6 of page 15 will be updated to reference September 20, 2004, version of the Source Test Manual, consistent with WAC 173-400-105.

Comment I-7-8

Comment 8: [Standard Terms & General Conditions, draft Renewal 3, Section 5.4, p. 15, permit condition changing a regulation]: Lines 37-44 of Section 5.4 on p.15 changes the language of WAC 173-401-620 (2)(e), the paragraph cited as providing the legal authority for this condition. WAC 173-401-620 (2)(e) only requires that "[t]he permittee shall furnish to the permitting authority, within a reasonable time, any information that the permitting authority may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit" There is no mention of providing such information to agencies that are not the permitting authority. A permit cannot change a regulation. Please accurately state the requirement.

Ecology Response to I-7-8

Thank you for your comment.

Ecology is the permitting authority for the Hanford AOP.

Section 5.4 of the Standard Terms and General Conditions will be revised to remove the Washington Department of Health and Benton Clean Air Agency from the requirement.

Comment I-7-9

Comment 9: [Standard Terms & General Conditions, draft Renewal 3, Section 5.11.1, p. 20, mis-published NESHAP report]: Section 5.1.1, p 20. Ecology is obligated to ensure that all reports and other documentation required by terms and conditions in Hanford's AOP and by federal law be made available by Ecology to support public review, and be entered into USDOE's on-line Administrative Record (<http://pdw.hanford.gov/arpir/index.cfrn>). Failing to make such records available to the public obstructs

the public review process, and may very well be contrary to 40 C.F.R. 70.7 (h). Both 40 C.F.R. 61.94 and condition 5.11.1 of the Standard Terms and General Conditions portion of draft Renewal 3 require USDOE to submit an annual report by June 30 of each year. The report containing information for C.Y. 2016 was due by June 30, 2017. That report is not contained in USDOE's on-line Administrative Record (<http://pdw.hanford.gov/arpi r/index.cfm>), nor does this report appear to be located in the information Ecology supplied to support this public review. Make this report available to support public review, and enter it into USDOE's on-line Administrative Record

Ecology Response to I-7-9

Thank you for your comment.

Ecology is not obligated to ensure that all reports and other documentation required by terms and conditions in Hanford's AOP and by federal law be entered into USDOE's online Administrative Record.

Ecology is obligated to provide relevant supporting materials used in developing the draft AOP. WAC 173-401-800(2)(e) allows for this information to be provided in at least one location near the source, which could be a physical location or posted on the permitting authority's website. Relevant supporting materials were provided at four information repositories across Washington, was available at Ecology's Richland Field Office administrative library, and was made available online. The annual Radionuclide Air Emissions Report required by 40 CFR 61.94 identified in Section 5.11 of the Standard Terms and General Conditions was not used in the development of draft Hanford AOP Renewal 3 and therefore does not need to be provided to support public review.

Additionally, there is no requirement for the annual report to be entered into USDOE's online Administrative Record. USDOE's online Administrative Record is a condition of the Hanford Federal Facility Agreement and Consent Order, or Tri-Party Agreement (TPA), which is an agreement for achieving compliance with the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) remedial action provisions and with the Resource Conservation and Recovery Act (RCRA) treatment, storage, and disposal unit regulations and corrective action provisions. AOP and other Clean Air Act related documents are not required to be included in USDOE's online Administrative Record by the TPA.

No change to the AOP is required.

Comment I-7-10

Comment 10: [Standard Terms & General Conditions, draft Renewal 3, Section 5.13, p. 21, missing word]: Line 30 on p. 21 reads: "Stage 1 requirements are applicable to 20 eastern Washington with new gasoline dispensing facilities". It appears the word "counties" should appear after "Washington" so the sentence reads "20 eastern Washington counties ... ". Supply the missing word.

Ecology Response to I-7-10

Thank you for your comment.

Line 30 of page 21 will be changed to read "Stage 1 requirements are applicable to 20 eastern Washington counties..."

Comment I-7-11

Comment 11: [Standard Terms & General Conditions, draft Renewal 3, Section 5.16.4.3 p. 23, mis-cited requirement]: Lines 24-33 on p. 23 cite to a now-replaced version of WAC 173-400-107 (3). The correct citation should be to WAC 173-400-107 (4). In accordance with Washington Court Rules, a citation without the year in parentheses after the citation, is the presently effective version {Footnote 1}. It appears the presently effective version is WAC 173-400-107 (4). Cite to the current regulatory paragraph [WAC 173-400-107 (4)] rather than to -107 (3). {Footnote 1} [https://www.courts.wa.gov/appellate/trialcourts/supreme/?fa=atc supreme.style](https://www.courts.wa.gov/appellate/trialcourts/supreme/?fa=atc%20supreme.style), Exceptions to Bluebook, No. 13

ECOLOGY Response to I-7-11

Thank you for your comment.

This is not a mis-cited requirement and WAC 173-400-107(3) has not been replaced. Sections 5.16.4.3 through 5.16.4.5 are restatements of WAC 173-400-107(4) through WAC 173-400-107(6). These regulations each state that excess emissions due to startup or shutdown, scheduled maintenance, or malfunction or upset "shall be considered unavoidable provided the source reports as required under subsection (3) of this section..." This has been restated in the draft Hanford AOP Renewal 3 as the excess emissions "shall be considered unavoidable provided the source reports as required under WAC 173-400-107(3)..."

No change to the AOP is required.

Comment I-7-12

Comment 12: [Standard Terms & General Conditions, draft Renewal 3, Section 5.16.4.3 p. 23, federally enforceable requirement in SIP]: a) Line 6 p. 24 incorrectly shows WAC 173-400-107 (3) as "State-only" enforceable. Because all paragraphs of WAC 173-400-107 are part of Washington's approved SIP, this paragraph is federally enforceable. Please correct. b) Line 6 should also include WAC 173-400-107 (4), the paragraph addressing "[e]xcess emissions due to startup or shutdown . . . ". Please correct.

Ecology Response to I-7-12

Thank you for your comment.

a) Line 6 of page 24 will be changed to state "[WAC 173-400-107(3)]."

b) Section 5.16.4.6 is a restatement of WAC 173-400-107(3) and, therefore, line 6 of page 24 should only cite the applicable regulation. WAC 173-400-107(4) is restated in Section 5.16.4.3, which requires reporting under WAC 173-400-107(3).

No change to the AOP is required due to part (b).

Comment I-7-13

Comment 13: [Standard Terms & General Conditions, draft Renewal 3, Section 5.18.1, p. 25, mis-stated authority]: Lines 19 & 20 on p. 25 incorrectly state final action on a permit renewal application is "by Ecology, Health, and BCAA". Only Ecology, as the sole permitting authority, can take final action on a permit renewal application submitted to obtain a permit required by WAC 173-401 and 40 C.F.R. 70. Please accurately reflect the regulatory requirement.

Ecology Response to I-7-13

Thank you for your comment.

Ecology is the permitting authority for the Hanford AOP.

Section 5.18.1 of the Standard Terms and General Conditions will be revised to remove the Washington Department of Health and Benton Clean Air Agency from the requirement.

Additionally, lines 23 and 24 of page 25 will be revised to state "The application for renewal shall provide all information required pursuant to WAC 173-401-510 and shall include the current permit number..." to be consistent with requirements under WAC 173-401.

Comment I-7-14

Comment 14: [Standard Terms & General Conditions, draft Renewal 3, Section 5.21.1 & 5.21.4, p. 28-29, mis-stated authority]: a) Lines 42 & 43 on p. 28 incorrectly state that Health and BCAA can determine "that the permit must be revised or revoked to assure compliance with the applicable requirements." Health and BCAA have no such authority with regard to Hanford's AOP. Only Ecology and EPA have such authority. Please accurately reflect the regulatory requirement. b) Lines 4-7 on p. 29 state: "Reopenings under this section shall not be initiated before a notice of such intent is provided to the Chapter 173-401 WAC source by Ecology at least thirty days in of the date that the permit is to be reopened, except that Ecology, Health, or BCAA may provide a shorter time period in the case of an emergency" citing to WAC 173-401-730 on line 9. While Health & BCAA certainly can enforce any reopening provisions in the regulations they enforce, only Ecology, the sole permitting authority, can enforce WAC 173-401-730 as it relates to Hanford's AOP. No permit can extend authority in a regulation to another agency. Please accurately reflect the regulatory requirement.

Ecology Response to I-7-14

Thank you for your comment.

a) Ecology is the permitting authority for the Hanford AOP.

Lines 42 and 43 of page 28 will be revised to state, "Ecology, or the administrator, determines that the permit must be revised or revoked to assure compliance with the applicable requirements."

b) Ecology is the permitting authority for the Hanford AOP.

Lines 6 and 7 of page 29 will be revised to state "... except that Ecology may provide a shorter time period..."

Comment I-7-15

Comment 15: [Standard Terms & General Conditions, draft Renewal 3, Section 5.22, p. 29, mis-stated enforceability]: Line 14 on p. 29 incorrectly states WAC 173-400-820 is state-only enforceable. WAC 173-400-820 was incorporated into Washington's SIP on 11/7/14 (see 79 Fed. Reg. 66,291). Please change line 14 to correctly reflect federal enforceability.

Ecology Response to I-7-15

Thank you for your comment.

Lines 14 and 15 will be changed to state "... WAC 173-400-820; ..."

Comment I-7-16

Comment 16: [Standard Terms & General Conditions, draft Renewal 3, Section 5.23, p. 29, incorrect citation]: Line 21 on p. 29 shown "WAC 173-400-045(4), (State only)". However, all of WAC 173-400-045 has been replaced by WAC 173-455. Please correct.

Ecology Response to I-7-16

Thank you for your comment.

WAC 173-400-045 was for control technology fees. Control technology fees are now found in WAC 173-455-100, which is cited in the same condition on line 22 of page 29. Line 21 of page 29 will be revised to remove "WAC 173-400-045(4), (State only)" from the text.

Comment I-7-17

Comment 17: [Standard Terms & General Conditions, draft Renewal 3, Section 6.0, p.51, mis-stated authority]: Citing to WAC 173-401-700 (8) (see line 6, p. 51) as providing legal authority for this condition, line 2 on p. 51 states the permitting agencies will issue a supporting reference to the AOP. The citation WAC 173-401-700 (8) reads, in part, " ... the permitting authority shall provide a statement that sets forth the legal and factual basis for the draft permit conditions ... ". It is Ecology's obligation, as the sole permitting authority, and not the obligation of the permitting agencies (Health & BCAA) to comply with requirements of WAC 173-401-700 (8). Furthermore, Ecology cannot use a condition in a permit to extend authority to other agencies that cannot enforce WAC 173-401-700 (8). Please accurately reflect the regulatory requirement.

Ecology Response to I-7-17

Thank you for your comment.

Ecology is the permitting authority for the Hanford AOP. The statements of basis are issued by Ecology in accordance with WAC 173-401-700(8). The Washington Department of Health authored the Attachment 2 statement of basis and Benton Clean Air Agency authored the Attachment 3 statement of basis for Ecology to issue.

Line 2 of page 51 will be revised to state "The Statement is issued by Ecology as a separate supporting reference document..."

Comment I-7-18

Comment 18 [draft Attachment 1, general: missing applicable requirements from an administrative order]: Contrary to 40 C.F.R. 70.7 (a)(1)(iv) and -70.6 (a)(1), Ecology did not include in the Permit applicable requirements from Administrative Order of Correction (AO) Number 20030006 for control of fugitive dust from the Marshalling Yard, now called the Material Handling Facility (MHF). On March 12, 2003, The Benton Clean Air Authority (BCAA) issued both an administrative Order of Correction (AO) (No. 20030006) and a Notice of Violation (NOV) (No. 20030006) to Bechtel National (BNI). The stated reason for the AO and NOV was serial observations by a BCAA inspector in late February and early March, 2003, of excessive and uncontrolled blowing dust. The AO requires as follows: 1. Bechtel National will immediately take steps to minimize fugitive dust emissions from this site. 2. Bechtel National will submit a dust control plan to the BCAA within 5 calendar days of receipt of this order. This plan will be subject to review and comment by the BCAA. The plan will include a site map. In addition, it will include a schedule of implementation, applications, and maintenance of control measures. If water is used as a control measure, or in conjunction with other control measures, include access to, available quantity, location of water sources, and method and rates of application 3. Bechtel National will actively

implement and manage the provisions of said plan to minimize fugitive dust emissions. 4. If the primary and contingency control measures outlined in the dust control plan subsequently prove to be inadequate or ineffective, Bechtel National will select and utilize additional control measures. BNI did not appeal either the AO or NOV within 30-days of issuance as BNI was allowed to do under RCW 43.218.310. On March 21, 2003, Mr. R.F. Naventi of BNI signed the Waste Treatment Plant Marshalling Yard Project Dust Control Plan (Plan). The Plan addresses all elements of the BCAA Order, above. From unsigned and undated records provided by BCAA, it appears that in a letter dated May 16, 2003, BCAA may have sent to BNI a blank application form for relief of penalty and for relief of the Notice Infraction. The unsigned, undated Notice of Penalty (NOP) letter contains the following paragraph: Failure to perform the terms of this order by Bechtel National or the continuance of the appeal process will result in the amount of the original penalty reinstated in full to \$2,000.00 and shall constitute grounds for injunction or other relief from Superior Court by BCAA. [BNI paid the full \$2,000.00 with check no. 6000952. (See below)] These unsigned, undated records were provided in response to a request pursuant to the Public Records Act (RCW 42.56) for "Any record(s) involving closure of BCAA Order of Correction 20030006 on October 16, 2003 or on any other date" plus other records. [A request for "any records addressing actions that occurred after BNI submitted the required dust control plan on March 21, 2003" was made on March 13, 2013. In the April 3, 2013, response to that request, Ms S.S. Young, signing the response as Office Manager for BCAA, states: "The original signed records you have requested reached retention and have been properly destroyed ... ". No records regarding order 20030006 were received by BCAA between 3/18/2003 and 1/15/2018.] On August 20, 2003, and on August 27, 2003, BNI and BCAA, respectively, signed an agreement" ... resolving a dispute over dust control". The agreement: • required BNI to pay \$2,000.00 (two thousand dollars) to BCAA; • required that BNI "shall continue to implement a dust control plan and work with the Benton Clean Air Authority in implementation of such plan"; and • required that BCAA "shall dismiss the Notice Infraction (NOi) and Notice of Penalty (NOP) upon payment of the TWO THOUSAND DOLLAR (\$2,000.00) administrative cost." It thus appears that while conditions of the NOi and NOP were satisfied, the AO and conditions therein remain active. On July 28, on July 31, and on August 11, 2006, Petitioner filed comments during the public comment period on the draft version of the "Hanford Site Air Operating Permit No. 00-05-006 2006, Renewal 1" (Renewal 1). Petitioner's comments #4 and #15 addressed missing fugitive dust requirements for the Bechtel lay-down yard (a.k.a., Marshalling Yard). Overlooking the merits of these comments (and others) Ecology issued Renewal 1 as final on December 29, 2006. On January 23, 2007, Petitioner filed a notice of appeal to the issuance of Renewal 1 before the Pollution Control Hearings Board (PCHB). (Petitioner also filed a petition before the Administrator of EPA that the Administrator never responded to.) On August 22, 2007, the PCHB resolved all remaining issues in its Order on Summary Judgment {Footnote 1}. With regard to the issue addressing the Waste Treatment Plant Marshalling Yard Project Dust Control Plan (Plan), the PCHB determined Appellant "Green has standing to challenge the adequacy of the dust control requirements contained in the AOP." {Footnote 2}. The PCHB also concurred with Ecology's argument' ... that the Plan and its contents are not "applicable requirements" as defined in the state's air operating permit program regulations and therefore, it was proper not to include the Plan in the AOP' {Footnote 3}. The PCHB writes: 'We conclude that the plain language of WAC 173-401-200(4)(b), which includes statutes, rules, and orders as "applicable requirements," does not extend to the specific content of the Plan developed in response to the Order of Correction issued by BCAA. The Order itself required Energy to submit and implement a plan to control dust. These requirements are included in the AOP. [footnote omitted] The specific provisions of the Plan were developed after the Order was issued and are not "requirements in a regulatory order." WAC 173-401-200(4)(b) emphasis added. Summary judgment on Legal Issue No.2 should be granted to Ecology. '{Footnote 4}. The PCHB thus determined the Plan is not an "applicable requirement" under WAC 173-401-200 (4)(b). Though, they do not address whether the AO, which requires the Plan, is an "applicable requirement". The PCHB continues: "We note, however, that Ecology's decision not to include the Plan as an applicable requirement in the AOP does not diminish its role in controlling dust at the marshalling yard. The Plan remains in effect and is subject to enforcement by the Benton Clean Air Authority. [reference omitted] Additionally, because Energy is

using the Plan in fulfillment of the AOP's requirement to implement a dust control plan, Ecology also has authority to enforce the Plan's implementation." {Footnote 5} [emphasis added] Defendants, Ecology and The U.S. Department of Energy, Richland, and the PCHB all believed the AO was still enforce when Renewal 1 was issued as final on Dec. 29, 2006. Defendants did not argue otherwise. Petitioner continued to believe that use of the words "all" and "each" by Congress in defining a Title V permit {Footnote 6} do not accommodate exception. Petitioner expressed his view in a letter sent, via certified mail, to then EPA Administrator Lisa Jackson, dated April 22, 2009. Administrator Jackson responded in a letter dated June 12, 2009. Her response reads, in part: "The EPA's approach to the way in which Title V operating permits address the provisions of various types of enforcement actions has recently been reviewed and addressed in the context of another Petition to Object pursuant to Title V of the Act. The Administrator's May 28, 2009 Order, responding to a Title V Petition addressing the permit issued to CITGO Refining and Chemicals Company L.P., in Texas, provides a summary of our position on some of these issues and references key supporting regulatory provisions and administrative precedent. [Cite CITGO order at 12-13.]" The cited portion of the "CITGO order", reads, in part: 'EPA believes that, because [A Os [administrative orders] reflect the conclusion of a[n][administrative process resulting from the enforcement of "applicable requirements" under the Act, all CAA-related requirements in such [] AOs are appropriately treated as "applicable requirements" and must be included in title V permits . . . ' In the Matter of CITGO Refining and Chemicals Company L.P., Petition Number VI-2007-01, at 12 (May 28, 2009) [Available at: https://www.epa.gov/sites/production/files/2015-08/documents/citgo_corpuschristi_west_response2007.pdf] Thus, the (4) four conditions in the AO, including the requirement to prepare a Plan containing specific elements (see Condition 2 of AO 20030006 above) are to be treated as "applicable requirements" and should already have been included in Hanford's AOP. Specific elements in the Plan implementing the CAA-related requirements of the AO are also to be included in Hanford's AOP as conditions required to assure compliance with the "applicable requirements" in the AO. The PCHB ruling that contents of the Plan required by an AO are not "applicable requirements" under Washington law is not inconsistent with EPA's determination that CAA-related requirements in the AO are to be treated as "applicable requirements" and must be included in Title V permits. The PCHB's ruling did not go beyond an analysis of the definition of "applicable requirement" in WAC 173-401-200 (4)(b) with respect to the Plan. For example, the PCHB ruling did not consider requirements in WAC 173-401-700(1)(e) and- 600 (1) mandating a title V permit contain conditions that assure compliance with all "applicable requirement". As with WAC 173-401-700 (1)(e) and - 600 (1), Part 70 requires that specific conditions in the Plan needed to assure compliance with the "applicable requirements" in the AO must also be included as conditions in the Title V permit {Footnote 7}. The Marshalling Yard remains active, though it has been renamed as the "Material Handling Facility" or "MHF". Add the 4 (four) conditions from the BCAA AO(# 20030006) to be consistent with EPA's determination that CAA-related requirements in an AO are to be treated as "applicable requirements" and must be included in a source's title v permit. {Footnote 1} Green v. Ecology and U.S. Department of Energy, PCHB No.07-012, Summary Judgment Order, Aug. 22, 2007. Available at: <http://v.rww.eluho.wa.gov/Globa/RenderPDF?source=casedocument&id=396> {Footnote 2} Id. at 9 {Footnote 3} Id. at 15 {Footnote 4} Id. at 16-17 {Footnote 5} Id. at 17 {Footnote 6} "The air permit program will ensure that all of a source's obligations with respect to each of the air pollutants it is required to control will be contained in one permit document. ... In addition, the source will file periodic reports, as determined by EPA regulations, identifying the extent to which it has complied with those obligations." S. Rep. No. 101-228, at 3730 (12-20-89), as reprinted in 1990U.S.C.C.A.N. 3385 {Footnote 7} "(l) A permit, permit modification, or renewal may be issued only if all of the following condition (sic) have been met: . . . (iv) The conditions of the permit provide for compliance with all applicable requirements and the requirements of this part" 40 C.F.R. 70.7 (a)(1)(iv) [see also 40 C.F.R. 70.6 (a)(1)]

Ecology Response to I-7-18

Thank you for your comment.

The Administrative Order (AO) is not in effect and is not an applicable requirement for the Hanford AOP. The AO was closed and disposed of, but the dust control requirements from that AO that remain in effect are found in the terms of the underlying requirement in Approval Order DE02NWP-002, Revision 2. Ecology offers the following history of the AO for control of fugitive dust from the Material Handling Facility (formerly the Marshalling Yard).

- The Dust Control Plan for the Waste Treatment Plant (WTP) Construction Site (24590-WTP-GPP-SENV-015) was originally prepared December 23, 2002, to meet DE02NWP-002, Condition 8.1. The original DE02NWP-002 did not include the WTP Marshalling Yard.
- On March 21, 2003, a separate WTP Marshalling Yard Dust Control Plan was developed in response to a BCAA Order of Correction 20030006.
- On October 16, 2003, BCAA's case involving Order of Correction 20030006 was closed.
- In 2006, Ecology incorporated the requirement for the WTP Marshalling Yard dust control plan into DE02NWP-002 via Amendment 4 in response to a public comment made during review of AOP 00-05-006, Renewal 1. The separate dust control plans for the Marshalling Yard and the remaining WTP locations continued to be implemented.
- On March 3, 2010, the above implemented and compliant Dust Control Plans were consolidated into one plan with issuance of 24590-WTP-GPP-SENV-015, Revision 1, Fugitive Dust Control.
- The Material Handling Facility dust control plan is a requirement of DE02NWP-002, Revision 2. DE02NWP-002, Revision 2 states the Construction Phase Fugitive Dust Control Plan(s) "shall address fugitive dust control at the WTP construction site adjacent to the Hanford 200 Area and the Material Handling Facility." Additionally, the dust control plan "shall be made available to Ecology upon request."
- The fugitive dust control plan addressing the Material Handling Facility is a requirement in the permit which is issued under the authority of Ecology.

The fugitive dust control condition from DE02NWP-002, Revision 2, which requires a dust control plan addressing the Material Handling Facility, is found in discharge point 1.4.23 on page 63 of the draft Hanford AOP Renewal 3. Therefore, the draft Hanford AOP Renewal 3 contains the applicable requirements in regards to the control of fugitive dust at the Material Handling Facility.

No change to the AOP is required.

Comment I-7-19

Comment 19: [draft Attachment 1, general: missing hazardous air pollutants (HAPs)]: Ecology previously determined Hanford was required to obtain a permit under 40 C.F.R 70, in part, because "[t]he cumulative emissions of hazardous air pollutants exceed[ed] 25 tons per year" {Footnote 1}. Identify, in Renewal 3, the specific HAPs in the emissions that, when combined, exceed 25 tons/year. {Footnote 1} Hanford "is included in the FCAA Title V AOP Program [in part] because: ... The cumulative emissions of hazardous air pollutants exceed 25 tons per year." Statement of Basis For Hanford Site Air Operating Permit No. 00-05-006 State of Washington Department of Ecology, Mar. 2001, p. 3

Ecology Response to I-7-19

Thank you for your comment.

The Hanford Site is included in the Federal CAA Title V AOP Program because it is a "major source" as defined in the CAA Section 112 for the Site's potential to emit (PTE) nitrogen oxides over 100 tons per year. The Hanford Site is not a "major source" due to hazardous air pollutants emissions, since the cumulative emissions and PTE do not exceed 25 tons per year.

No change to the AOP is required.

Comment I-7-20

Comment 20: [draft Attachment 1, general: missing, mis-copied, and incomplete information]: Requirements in regulatory orders developed pursuant to WAC 173-400 must be included in a source's operating permit, a permit developed in accordance with WAC 173-401 (401) and 40 C.F.R. 70 (part 70). It is apparent Ecology is struggling to develop a consistent format or process for use in preparation of regulatory orders under WAC 173-400 (400) that is also compatible with requirements of operating permits developed under 401 and part 70. As pointed out in numerous comments below, use of Ecology's current format or process results in a 401 permit where terms and conditions often reference sections, tables, figures, and the like, that were never copied or never completely copied into the 401 permit. Such missing, mis-copied, and incomplete information makes adequate public review of draft Attachment 1 very challenging, if not impossible. For example, the period monitoring condition on page 107 (lines 1 through 4) reads: "Compliance with Approval Condition 1.1.4 shall be demonstrated by stack sampling as described in Section 3.0 for ammonia, and applying these concentration readings with contemporaneous stack flow rate and temperatures to determine mass release rate of ammonia." However, neither "Approval Condition 1.1.4" or "Section 3.0" are included for the applicable discharge point, nor are they included in the public review material provided by Ecology [as required by 40 C.F.R. 70.7 (h)(2)]. Absent the referenced approval condition and "Section 3.0", public review of the associated "Period Monitoring" condition is stymied. Whether such periodic monitoring complies with 40 C.F.R. 70.6 (a)(3)(i)(B) {Footnote 1} can't be determined from the partial information provided. To be consistent with title v of the Clean Air Act, the permit must actually contain all of a source's obligations with respect to each of the pollutants that source is required to control. At a minimum, title v requires Ecology to ensure the completeness and accuracy of terms and conditions in this 401 permit. Provide the public with a complete version of draft Attachment 1, and re-start public review. {Footnote 1} "Where the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit, as reported pursuant to paragraph (a)(3)(iii) of this section. Such monitoring requirements shall assure use of terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement." 40 C.F.R. 70.6 (a)(3)(i)(B)

Ecology Response to I-7-20

Thank you for your comment.

The Hanford AOP Renewal 3 contains terms and conditions that assure compliance with all applicable requirements at the time of permit issuance in accordance with WAC 173-401-600. With a mega-site like Hanford, Ecology has chosen to streamline the process to reduce the complexity of the permit by using language from approval orders, including references to conditions, tables, and applications from approval orders, and references to other regulations. The Hanford AOP contains all approval conditions from current NOC approval orders for the associated discharge points, as well as other applicable regulatory requirements.

WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(a) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. This is not the same as saying that the permit itself has to include all applicable requirements, as implied by the comment. The regulations do not prohibit the permit from referencing requirements in NOC approval orders, rather than restating the provisions from the NOC approval orders. Ecology has determined that referencing requirements in the underlying orders complies with the above regulations and, furthermore, is appropriate and effective in streamlining the content for the Hanford AOP.

The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. Referenced sections, tables, figures and other information cited in AOP discharge point conditions from NOC approval orders were provided for review during this reopened public comment period, including the information from the example in the comment.

Ecology's use of streamlining and online access of the NOC approval orders provided the public with a complete version of draft Attachment 1 for review.

No change to the AOP is required.

Comment I-7-21

Comment 21: [draft Attachment 1, general: missing compliance verification requirements]: Both 40 C.F.R. 70 part 70 and WAC 173-401 (401) require every condition in a title v permit to have specific monitoring (periodic monitoring), reporting and recordkeeping requirements along with verification requirements needed to assure continuous compliance with permit conditions. Such verification requirements include test methods and test frequency. The test method specifies how the permittee must compliance with the periodic monitoring requirement. Test frequency identifies how often the test method must be employed to ensure continuous compliance with condition. Where the test method is "Not specified" or "Not applicable", the permittee is not obligated to implement any method to comply with the periodic monitoring requirement. Absent a test frequency, the permittee is not required to implement a test method even if a test method is specified. If either of the test method or the test frequency is "Not specified" or "Not applicable", the associated periodic monitoring requirement cannot be "sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit", as required by 40 C.F.R. 70.6 (a)(3)(i)(B) {Footnote 1}. Without periodic monitoring, the entire permit condition is unenforceable.

For example, specifying a test method, such as EPA Method 9, without identifying a test frequency creates no obligation for the permittee to ever perform a Method 9 test, thus rendering the permit condition unenforceable. Most NOC orders of approval now in draft Attachment I lack one or more of the necessary compliance verification requirements. Ecology is hereby asked to correct all occurrences of "None specified" or "Not applicable" for "Test Method" and/or "Test Frequency" even though not all these oversights are called-out in comments below.

Supply all compliance verification requirements and re-start public review.

[Suggestion:] NOC Orders of approval generated under WAC 173-400 (400) should also consider the continuous compliance requirements of part 70 and 401, in particular, the requirements in 40 C.F.R. 70.6 (a)(3)(i)(B) and WAC 173-401-615 (l)(b). Such consideration would aid in achieving a seamless transition for the transfer of conditions from a regulatory order generated under 400 into the source's 401 permit.

{Footnote 1} "Where the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit, as reported pursuant to paragraph (a)(3)(iii) of this section. Such monitoring requirements shall assure use of terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement." 40 C.F.R. 70.6 (a)(3)(i)(B)

Ecology Response to I-7-21

Thank you for your comment.

Under 40 CFR 70.6 and WAC 173-401, the permit must contain emission limitations and standards, including those operation requirements and limitations that assure compliance with all applicable requirements, and monitoring and related recordkeeping and reporting requirements. The regulations require the permit to contain all monitoring and analysis procedures or test methods required under applicable monitoring and testing requirements. Where the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), the permit must contain periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit. Recordkeeping provisions may be sufficient to meet the periodic monitoring requirements.

Identifying a test method or test frequency is not necessary for all conditions in the Hanford AOP Renewal 3, and is not always required to make the condition enforceable. For instance, many conditions that do not identify a test method or frequency are reporting or recordkeeping conditions. The applicable required information for the condition is found under periodic monitoring or required records. The required records are used to provide sufficient reliable data from the relevant time period representative of the source's compliance with the permit. An example of this would be the sulfur dioxide emission limit for discharge point 1.4.34 for SST Retrieval Direct Fired Waste Heaters. Compliance is shown through use of fuel containing no greater than 0.0015 weight percent sulfur. This is demonstrated by vendor certification for diesel fuel sulfur content for all purchases, listed under the required records. This is sufficient to yield reliable data from the relevant time period that are representative of the direct fired water heaters sulfur dioxide emission limits, even though a test method and a test frequency are not explicitly identified under the condition.

Ecology has included all applicable requirements in the draft Hanford AOP Renewal 3 and intends to keep the language of the requirement consistent with the underlying regulation or approval order. In order to maintain consistency, the requirements of each condition may not always be split into the different categories (e.g., test method, or test frequency), but rather restated in its entirety as part of the condition or periodic monitoring. Ecology has determined that this is a sufficient method to ensure that all requirements for the Hanford AOP have been incorporated accurately. Additionally, the underlying requirements from approval orders are sufficient to determine compliance with the emission and operational limits of the applicable discharge point. There was no change to the AOP applicability for this renewal, therefore, there is no requirement to gap fill above and beyond the approval order requirements to make the AOP enforceable.

No change to the AOP is required.

Comment I-7-22

Comment 22: [draft Attachment 1, general, "Test Method"]: For those conditions where "Periodic Monitoring" requires retention of specific records, the "Test Method" should read "Recordkeeping"

rather than "Not specified". For example, on page 65, the two (2) "Periodic Monitoring" conditions require retention of specific records, yet the "Test Method" reads "Not Specified". Compliance with the "Periodic Monitoring" condition implicates only recordkeeping designed to serve as monitoring. Thus, a test method is determined; that method is recordkeeping.

Ecology Response to I-7-22

Thank you for your comment.

Record-keeping is not a test method. If the periodic monitoring requires retention of specific records to determine compliance with the conditions, the specific records are listed under 'Required Records' for each condition.

No change to the AOP is required.

Comment I-7-23

Comment 23: [draft Attachment 1, general, continuous compliance]: Every condition implementing a federally-enforceable requirement must contain some form of "Periodic Monitoring" in order to comply with 40 C.F.R. 70 (part 70). On pages 70 through 75, and perhaps elsewhere, Ecology identifies periodic monitoring as not being applicable ["Periodic Monitoring: Not applicable"] for conditions Ecology identifies as federally-enforceable. Specify appropriate "periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit" as required by 40 C.F.R. 70.6 (a)(3)(i)(B). While part 70 does not impose substantive new requirements [40 C.F.R. 70.1 (b)], part 70 does require that where the applicable requirement does not contain monitoring "sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit" {Footnote 1}, supplemental or gap-fill monitoring must be included in a source's title v permit. Absent information in the material Ecology only references, but doesn't include in draft Attachment 1, or does not include in the information provided to support public review, the public cannot determine whether existing monitoring is sufficient or whether gap-fill monitoring is required. In accordance with WAC 173-401-615 (1)(b), conditions implementing state-only enforceable requirements also mandate periodic monitoring sufficient to ensure continuous compliance. Supply all material Ecology references so the public can determine whether periodic monitoring is sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit, and re-start public review. {Footnote 1} "Where the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit, as reported pursuant to paragraph (a)(3)(iii) of this section. Such monitoring requirements shall assure use of terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement." 40 C.F.R. 70.6 (a)(3)(i)(B)

Ecology Response to I-7-23

Thank you for your comment.

WAC 173-401-615(1)(c) and 40 CFR 70.6(a)(3)(B) both allow recordkeeping provisions as sufficient to meet the requirements to contain periodic monitoring to yield reliable data from the relevant time period that are representative of the source's compliance with the permit where the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring. The referenced conditions on pages 70 through 75 are applicable requirements from the Waste Treatment Plant Prevention of Significant Deterioration (PSD) permit. All of the referenced conditions require periodic testing of the

pollutant, using a continuous emission monitor, or records. While the line item for periodic monitoring for these conditions does state "not applicable," the applicable monitoring requirements are provided for each condition under the respective test method, test frequency, or required records. Therefore, federal and state regulations have been met. Additionally, the conditions are consistent with the underlying requirements, PSD-02-01, Amendment 3. Ecology has determined the periodic monitoring requirements from PSD-02-01 are sufficient.

The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018.

No change to the AOP is required.

Comment I-7-24

Comment 24: [draft Attachment 1, general, permit limits referenced, but not included): Several approval conditions contain the same, or a similar, statement: "All T APs, as submitted in the Permittee's Notice of Construction Application, shall be below their respective ASIL" {Footnote 1 and 2}. The specific TAP is omitted as is the applicable ASIL. Failing to identify specific TAPs regulated in draft Renewal 3, and failing to identify the applicable limit in permit conditions seems contrary to the purpose of a title V permit. A title V permit is to contain all of a permittee's obligations with respect to each air pollutant it is required to control {Footnote 3}. Neither the permittee nor the public should be required to seek out the permittee's NOC application in order to ascertain what specific air pollutants the permittee is required to control and the particular limit applicable to the air pollutant in question. If the practice of referencing were allowed, eventually an AOP would contain no specific terms and conditions, only references to other sources of information.

Supply specific air pollutants the permittee is required to control and the particular limit applicable to the air pollutant in question, and re-start public review.

{Footnote 1} As used in this condition ["All Taps ... shall be below their respective ASIL"], "their respective ASIL" functions as a limit.

{Footnote 2} This comment also applies to: a) 1.4.14 Discharge Point: CWC, Condition Approval 6/29/2006, p.46; b) 1.4.19 Discharge Point: P-2025E ETF, Condition Approval 6/6/2007 (DE07NWP-003) and 9/27 /2007

(Amendment 2), Revision 1 (8/10/2010), p.57; c) 1.4.20 Discharge Point: P-2706T 001, Condition Approval 6/29/2006, p.58; d) Reporting, Condition Approval 2/18/2005 (DE05NWP-OO 1), p.82; e) Reporting, Condition Approval 1011212005 (DE05NWP-002, Rev. 1), p.86; f) Condition Approval 0310312016, Periodic Monitoring, #5, p.1 05; g) 1.4.33 Discharge Point: Lagoon Treatment System, Condition Approval 2/6/2012, p.117; and, perhaps other discharge points

{Footnote 3} In the U.S. Senate report accompanying bill S. 1630 to amend the CAA, this body spoke to the intended contents of an AOP. "The air permit program will ensure that all of a source's obligations with respect to each of the air pollutants it is required to control will be contained in one permit document." S. Rep. No.101-228, at 3730 (12-20-89), as reprinted in 1990 U.S.C.C.A.N. 3385. (emphasis is mine)

Ecology Response to I-7-24

Thank you for your comment.

The Hanford AOP Renewal 3 contains terms and conditions that assure compliance with all applicable requirements at the time of permit issuance in accordance with WAC 173-401-600. With a mega-site like

Hanford, Ecology has chosen to streamline the process to reduce the complexity of the permit by using language from approval orders, including references to conditions, tables, and applications from approval orders, and references to other regulations. The Hanford AOP contains all approval conditions from current NOC approval orders for the associated discharge points, as well as other applicable regulatory requirements.

WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(a) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. This is not the same as saying that the permit itself has to include all applicable requirements, as implied by the comment. The regulations do not prohibit the permit from referencing requirements in NOC approval orders, rather than restating the provisions from the NOC approval orders. Ecology has determined that referencing requirements in the underlying orders complies with the above regulations and, furthermore, is appropriate and effective in streamlining the content for the Hanford AOP.

The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. Referenced sections, tables, figures and other information cited in AOP discharge point conditions from NOC approval orders were provided for review during this reopened public comment period, including the information from the referenced conditions in the comment.

No change to the AOP is required.

Comment I-7-25

Comment 25: [draft Attachment 1, general, unspecified regulated activities]: Specify the actual activity regulated by the permit, in the permit and not by reference to another document. Statements like: "The activities described in the Notice of Construction application will be permitted without additional control technologies required ... " {Footnote 1} call for both the permittee and the public to locate a copy of the permittee's NOC application in order to discover what activities are being regulated under the permit. An AOP needs to actually specify all regulated activities and not reference activities defined in some other document(s). Renewal 3 cannot be a "source-specific bible for Clean Air Act compliance"2 when determining what is regulated under the permit requires consulting a library of other documents.

Supply the activities regulated by the permit and re-start public review.

{Footnote 1} See also: 1.4.18 Discharge Point: Emergency Diesel Generators, condition "A.", p. 54; 1.4.22 Discharge Point: P-296W004 001, Condition Approval 5/21/2003, p. 62; and elsewhere {Footnote 2} "In a sense, a [title v] permit is a source-specific bible for Clean Air Act compliance." Com. of Va. v. Browner, 80 F.3d 869, 873 (4th Cir. 1996)

Ecology Response to I-7-25

Thank you for your comment.

The referenced language is found in two conditions, one each for discharge points 1.4.18 and 1.4.22. Both conditions are consistent with the language in the respective approval order from which the conditions originate.

The Hanford AOP Renewal 3 contains terms and conditions that assure compliance with all applicable requirements at the time of permit issuance in accordance with WAC 173-401-600. With a mega-site like Hanford, Ecology has chosen to streamline the process to reduce the complexity of the permit by using

language from approval orders, including references to conditions, tables, and applications from approval orders, and references to other regulations. The Hanford AOP contains all approval conditions from current NOC approval orders for the associated discharge points, as well as other applicable regulatory requirements.

WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(a) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. This is not the same as saying that the permit itself has to include all applicable requirements, as implied by the comment. The regulations do not prohibit the permit from referencing requirements in NOC approval orders, rather than restating the provisions from the NOC approval orders. Ecology has determined that referencing requirements in the underlying orders complies with the above regulations and, furthermore, is appropriate and effective in streamlining the content for the Hanford AOP. Ecology has chosen to use language consistent with the approval orders to ensure all terms and conditions are contained in the Hanford AOP Renewal 3, even though the language often times reference tables, other conditions, or applications.

The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. The Notice of Construction applications cited in the AOP conditions from discharge points 1.4.18 and 1.4.22 were provided for review during this reopened public comment period, which includes the activities regulated by the approval orders from the referenced conditions.

No change to the AOP is required.

Comment I-7-26

Comment 26: [draft Attachment 1, general: referenced rather than specified terms and conditions]: Attachment 1 is rife with the use of references as a substitute for supplying specific terms and conditions. For example, on page 46 of draft Attachment 1, Ecology identifies the following "Test Method" requirement: "Material assessment, inventory, and calculation as identified in the NOC Approval Condition 3.0." However, Ecology does not include the "[m]aterial assessment, inventory, and calculation as identified in the NOC Approval Condition 3.0". Such a practice seems contrary to the clearly expressed intent of the U.S. Congress when it authored title v of the Clean Air Act: a title v permit is the single permit document containing "all of a source's obligations with respect to each of the air pollutants it is required to control {Footnote 2}". Part 70 seems to allow referencing of EPA-approved test methods, the origin of authority for each term and condition, and referencing under certain other circumstances that are irrelevant here. Beyond these narrow exceptions, there does not appear to be any basis for replacing specific terms and conditions in a title v permit with references to outside documents. Following Ecology's referencing practice to conclusion; an AOP would be little more than a bibliography. Requiring the public to obtain the referenced information in order to affect public review effectively thwarts such a review.

Ecology is hereby asked to replace ALL references to documentation not contained in draft Attachment 1 and not specifically allowed by Part 70, with the actual terms and conditions, even though not all such references are called-out in comments below.

Supply all terms and conditions and re-start public review.

{Footnote 1 [sic]} draft Attachment 1, 1.4.14, Discharge Point: ewe, lines 21 & 22, p. 46

{Footnote 2} The air permit program will ensure that all of a source's obligations with respect to each of

the air pollutants it is required to control will be contained in one permit document. . . . This system will enable the State, EPA, and the public to better determine the requirements to which the source is subject, and whether the source is meeting those requirements." S. Rep. No. 101-228, at 3730 (12-20-89), as reprinted in 1990 U.S.C.C.A.N. 3385.

Ecology Response to I-7-26

Thank you for your comment.

The Hanford AOP Renewal 3 contains terms and conditions that assure compliance with all applicable requirements at the time of permit issuance in accordance with WAC 173-401-600. With a mega-site like Hanford, Ecology has chosen to streamline the process to reduce the complexity of the permit by using language from approval orders, including references to conditions, tables, and applications from approval orders, and references to other regulations. The Hanford AOP contains all approval conditions from current NOC approval orders for the associated discharge points, as well as other applicable regulatory requirements.

WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(a) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. This is not the same as saying that the permit itself has to include all applicable requirements, as implied by the comment. The regulations do not prohibit the permit from referencing requirements in NOC approval orders, rather than restating the provisions from the NOC approval orders. Ecology has determined that referencing requirements in the underlying orders complies with the above regulations and, furthermore, is appropriate and effective in streamlining the content for the Hanford AOP.

The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. Referenced sections, tables, figures and other information cited in AOP discharge point conditions from NOC approval orders were provided for review during this reopened public comment period, including the information from the example in the comment.

Ecology's use of streamlining and online access of the NOC approval orders provides all terms and conditions from the underlying approval orders for Attachment 1.

No change to the AOP is required.

Comment I-7-27

Comment 27: [draft Attachment 1, general: missing information used in the permitting process]: As required by 40 C.F.R. 70.7 (h)(2), provide the public with all information used in the permitting process to justify terms and conditions in Attachment I of draft Renewal 3 for which Ecology references to either a particular regulatory order or to particular portion(s) of the permittee's application, or to both.

In interpreting language in 40 C.F.R. 70.7 (h)(2) EPA determined information that must be provided to support public review consists of all information deemed relevant by being used in the permitting process. EPA's view is captured as a finding in case law. "EPA has determined that the phrase 'materials available to the permitting authority that are relevant to the permit decision,' 40 C.F.R. § 70.7(h)(2), means the information that the permitting authority has deemed to be relevant by using it in the permitting process ... " (emphasis added) Sierra Club v. Johnson, 436 F.3d 1269, 1284, (11th Cir. 2006)

There are no fewer than 14 conditions in draft Renewal 3, Attachment 1 requiring the public obtain a copy of the permittee's NOC application in order to determine just what the condition requires. There are

a minimum of two (2) conditions where specific figures referenced in the condition require obtaining those figures to determine the requirement. There are minimally 18 references to specific tables that are not included in the terms & conditions, about 15 references to portions of the original NOC Order that are not included, and about two (2) conditions requiring use of equations that are referenced, but not included. There are at least two (2) conditions where an outside supporting document must be consulted to learn exactly what the condition requires. Ecology overlooked providing the public with any of this information, contrary to 40 C.F.R. 70.7 (h)(2).

Additionally, there are roughly 10 conditions in Attachment I of draft Renewal 3, that either reference original NOC approval conditions that are not included or that improperly reference to other conditions. Neither the permittee nor the public should have to guess what a particular condition requires. Here also Ecology overlooks its obligation to support public review with all relevant information used in the permitting process.

There is no question the referenced NOC applications, figures, portions of the original orders, and referenced outside supporting documents were used in the permitting process (because they are included in conditions in draft Attachment 1), but do not appear to be included in the review material provided by Ecology, contrary to the requirements of 40 C.F.R. 70.7 (h)(2). There also is no question that many of the terms and conditions containing such references are federally-enforceable [see 40 C.F.R. 70.6 (b) and WAC 173-401-625].

Ecology is provided no shelter from complying with requirements in 40 C.F.R. 70.7 (h)(2) just because those orders referenced were previously subject to public review under WAC 173-400 or an earlier review conducted under WAC 173-401. According to EPA, "[w]hen a title V permit is renewed, all aspects of the title V permit are subject to public comment and petition as part of the process to issue a renewal permit." Ecology also can't seek to avoid compliance with 40 C.F.R. 70.7 (h)(2) by equating a regulatory order that is specific to a single source with a regulation that is generally applicable. While the latter (generally applicable regulation) is exempt from change based on public comments under Part 70, the former (a specific regulatory order implementing requirements of a regulation) is not.

Supply all relevant information used in the permitting process and re-start public review

{Footnote 1} 81 Fed. Reg. 57822, 57826-27, Aug. 15, 2016.

Ecology Response to I-7-27

Thank you for your comment.

The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018.

No change to the AOP is required.

Comment I-7-28

Comment 28: [draft Attachment 1, 1.4.2, Discharge Point: 242-A, Boiler 1, 2, and 3 (>5 mmBTU/hr-Fuel Oil), p. 18): The opacity condition for this boiler "[p]rohibits visible emissions exceeding 20% opacity for more than 3 minutes in any 1 hour . . . ", yet the test frequency is only quarterly. It is not sufficient to measure only once every quarter to assure compliance with an opacity limit based on "3 minutes in any one hour period". In accordance with 40 C.F.R. 70.6 (a)(3)(i)(B), "provide periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with

the opacity limit" {Footnote 1} This is a federally enforceable requirement.

[This comment also applies to the following other emissions units: 1.4.3 Discharge Point: 318 Boiler (

{Footnote 1} "Where the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit, as reported pursuant to paragraph (a)(3)(iii) of this section. Such monitoring requirements shall assure use of terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement." 40 C.F.R. 70.6 (a)(3)(i)(B)

Ecology Response to I-7-28

Thank you for your comment.

Discharge Points 1.4.3, 1.4.5, 1.4.8, and 1.4.9, as referenced in the comment, are unlikely sources of visible emissions and are not expected to exceed applicable opacity limits based on past operating experience and/or expected process behavior. Ecology has determined that quarterly testing of the opacity is sufficient periodic monitoring to yield reliable data from the time period that is representative of the source's compliance with the opacity limit.

Discharge Points 1.4.2, 1.4.10, and 1.4.11, as referenced in the comment, are emission units that might be a source of visible emissions. Based on past operating experience and/or expected process behavior, Ecology has determined that quarterly testing of the opacity is sufficient periodic monitoring to yield reliable data from the time period that is representative of the source's compliance with the opacity limit.

No change to the AOP is required.

Comment I-7-29

Comment 29: [draft Attachment 1, 1.4.14, Discharge Point: CWC, p. 46): Visible emissions are limited 20% pursuant to WAC 173-400-040 (2). However, there is no specified "Frequency" and the "Test Frequency" is limited to "When visible emissions are observed". Without a specific "Test Frequency" there is no enforceable requirement to monitor, and the opacity limit is meaningless. If there is no requirement to look for visible emissions, then none will ever be found. In accordance with 40 C.F.R. 70.6 (a)(3)(i)(B), "provide periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the" opacity limit. This is a federally enforceable requirement. [This comment also applies to 1.4.20 Discharge Point: P-2706T 001, p. 58. lines 6-11.)

Ecology Response to I-7-29

Thank you for your comment.

Discharge Points 1.4.14 and 1.4.20 are emission units with HEPA filtration abatement control technology that are listed in Attachment 2. Opacity monitoring requirements from mixed (radioactive and non-radioactive) airborne effluent streams are not necessary due to the presence of HEPA filtration abatement technology required by Health under WAC 246-247. HEPA filters control particulate emissions to less than visible levels. Because of the particulate control effectiveness provided by HEPA filters, no additional opacity monitoring, beyond visible emissions surveys, would be necessary. Additionally, 40 CFR 60.11(b) allows for the use of alternative methods. Ecology has determined that the presence of HEPA filtration abatement technology required by Health under WAC 246-247 ensures compliance with the visible emissions standards in WAC 173-400-040(2).

Maintenance of the abatement control technology as required in Attachment 2 of the Hanford AOP will maintain particulate emissions to less than visible levels. The license for these units in Attachment 2 requires extensive monitoring of the abatement control technology and identifies the maintenance frequency. As long as the abatement control technology is maintained, it is unnecessary to require the permittee to make visible emissions observations at a specified frequency. If the abatement control technology is not maintained as required by Attachment 2 of the Hanford AOP, the discharge unit no longer qualifies for tier 3 visible emission surveys under Attachment 1, Section 2.1.

Additionally, observance of visible emissions would likely mean the abatement control technology had failed. This would also trigger an emergency response by the facility. If this were to happen and visible emissions were observed, the opacity must then be determined using EPA method 9 of CFR 60, Appendix A. Not specifying a frequency at which to observe for visible emissions does not omit the permittee, USDOE, from the requirement to determine the opacity using EPA Method 9 of 40 CFR 60. Due to the stringent maintenance requirements of Attachment 2 and the emission control of the required HEPA filters, Ecology has determined that the periodic monitoring, test method, frequency, and required records are sufficient to determine compliance with the condition.

No change to the AOP is required.

Comment I-7-30

Comment 30: [draft Attachment 1, 1.4.15, Discharge Point: Concrete Batch Plant, Condition Approval 8/21/2001, p.48, lines 26 & 27]: According to condition "A" for the Bag house, no emission control monitors are required" ... if there are no visible emissions per section I.A. of the APPROVAL CONDITIONS, ... ". "[S]ection I.A. of the APPROVAL CONDITIONS" is not included in draft Attachment 1, nor does it appear "section I.A." was provided by Ecology as required by 40 C.F.R. 70.7 (h)(2). Control of visible emissions is a federally-enforceable requirement.

Provide "section I.A. of the APPROVAL CONDITIONS" and re-start public review.

Ecology Response to I-7-30

Thank you for your comment.

The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. Approval Order DE01NWP-003 was provided for review during this reopened public comment period, which included Section 1.A of the APPROVAL CONDITIONS.

No change to the AOP is required.

Comment I-7-31

Comment 31: [draft Attachment 1, 1.4.16, Discharge Point: E-282ED 001, Condition Approval 4/30/1996, p. 51, Line 4]: The "Frequency" is: "At least once per quarter, IF OPERATES" (emphasis added), therefore, the "Required Records" must include operating logs to show whether this EU operated.

Include "operating logs" as a "Required Record".

Ecology Response to I-7-31

Thank you for your comment.

"Maintain records showing all hours of operation" was added as a required record for the referenced condition on page 51 for discharge point 1.4.16, E-282ED 001.

Comment I-7-32

Comment 32: [draft Attachment 1, 1.4.19, Discharge Point: P-2025E ETF, Condition Approval 6/6/2007 (DE07NWP-003), p. 56; and 1.4.23 1 Discharge Point: P-WTP-001, p.63 & 64]: Opacity is limited to 5%. However, the "Test Frequency" for compliance with the 5% limit is: "When visible emissions are observed."

a) Because 5% opacity is at or below the method detection limit {Footnote 1} (depending upon whether the plume is black or white {Footnote 2}), for an individual, well-qualified to perform a Method 9 opacity test, Ecology should consider requiring a more reliable method, or instrumental monitoring. Monitoring requirements must be consistent with the applicable requirement, in accordance with 40 C.F.R. 70.6.

b) Without a specified "Test Frequency" there is no enforceable requirement to monitor, and the opacity limit is meaningless. If there is no requirement to look for visible emissions, then none will ever be found. In accordance with 40 C.F.R. 70.6 (a)(3)(i)(B), "provide periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with" the opacity limit. This is a federally enforceable requirement.

c) Lines 7 & 19 on p. 56 reference to "Figure 1 of Order DE07NWP-003, Rev. 1". To be consistent with the purpose of an AOP, Ecology must include "Figure 1 of Order DE07NWP-003, Rev.1" rather than just reference to this figure in a document not included in the AOP. "Figure 1 of Order DE07NWP-003, Rev. 1" also does not appear to have been included in the supporting information provided by Ecology, contrary to 40 C.F.R. 70.7 (h)(2).

Supply "Figure 1 of Order DE07NWP-003, Rev. 1" and re-start public review.

{Footnote 1} The method detection limit (MDL) is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence. <https://www.epa.gov/cwa-methods/method-detection-limit-frequent-questions> Last visited 02-07-2018.

{Footnote 2} "Ninety-nine percent of the black plumes and 95 percent of the white plumes were read within 5 percent opacity." Visible Emissions Field Manual EPA Methods 9 and 22, EPA 340/1 -92-004 December 1993, p.6

Ecology Response to I-7-32

Thank you for your comment.

a) Ecology has determined that maintenance of the abatement control technology as required in Attachment 2 and visible emission surveys conducted in accordance with EPA Method 9 is sufficient in determining compliance with the condition. The opacity standards for new stationary sources, found in 40 CFR 60, require the use of reference Method 9 contained in Appendix A of Part 60. Method 9 requires opacity observations shall be recorded to the nearest 5% interval. If any visible emissions are observed, a certified observer would be able to determine if the visible emissions are within the compliance limit. Additionally, proper operation of the abatement control technology as required in Attachment 2 controls particulate emissions to less than visible levels. Maintenance of the abatement control technology is

designed to preserve the particulate control effectiveness. Based on these requirements, Ecology does not believe that instrumental monitoring is necessary to determine compliance.

No change to the AOP is required due to part (a).

b) Discharge Point 1.4.19 is an emission unit with HEPA filtration abatement control technology that is listed in Attachment 2. Opacity monitoring requirements from mixed (radioactive and non-radioactive) airborne effluent streams are not necessary due to the presence of HEPA filtration abatement technology required by Health under WAC 246-247. HEPA filters control particulate emissions to less than visible levels. Because of the particulate control effectiveness provided by HEPA filters, no additional opacity monitoring, beyond visible emissions surveys, would be necessary. Additionally, 40 CFR 60.11(b) allows for the use of alternative methods. Ecology has determined that the presence of HEPA filtration abatement technology required by Health under WAC 246-247 ensures compliance with the visible emissions standards in WAC 173-400-040(2).

Maintenance of the abatement control technology as required in Attachment 2 of the Hanford AOP will maintain particulate emissions to less than visible levels. The license for these units in Attachment 2 requires extensive monitoring of the abatement control technology and identifies the maintenance frequency. As long as the abatement control technology is maintained, it is unnecessary to require the permittee to make visible emissions observations at a specified frequency. If the abatement control technology is not maintained as required by Attachment 2 of the Hanford AOP, the discharge unit no longer qualifies for tier 3 visible emission surveys under Attachment 1, Section 2.1.

Additionally, observance of visible emissions would likely mean the abatement control technology had failed. This would also trigger an emergency response by the facility. If this were to happen and visible emissions were observed, the opacity must then be determined using EPA method 9 of CFR 60, Appendix A. Not specifying a frequency at which to observe for visible emissions does not omit the permittee, USDOE, from the requirement to determine the opacity using EPA Method 9 of 40 CFR 60. Due to the stringent maintenance requirements of Attachment 2 and the emission control of the required HEPA filters, Ecology has determined that the periodic monitoring, test method, frequency, and required records are sufficient to determine compliance with the condition.

No change to the AOP is required due to part (b).

c) The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. Approval Order DE07NWP-003, Revision 1 was provided for review during this reopened public comment period, which included Figure 1.

No change to the AOP is required due to part (c).

Comment I-7-33

Comment 33: [draft Attachment 1, 1.4.23, Discharge Point: P-WTP-001, p.63]: The "Fugitive Dust Control" condition requires preparation of "Construction Phase Fugitive Dust Control Plan(s)". However, there is no date specified by which these plan(s) must be prepared. Absent such a date this condition is both unenforceable and meaningless. Supply a completion date for the plan(s).

ECOLOGY Response to I-7-33

Thank you for your comment.

Specifying a date by which the construction phase fugitive dust control plan(s) must be prepared is not necessary and does not make the condition unenforceable. The fugitive dust control plan must be used during construction or routine/ad hoc dust suppression. Therefore, the fugitive dust control plan must be prepared prior to construction or routine/ad hoc dust suppression. The permittee is required to comply with the condition. Not having specified date for preparation of the plans does not void this requirement.

No change to the AOP is required.

Comment I-7-34

Comment 34: [draft Attachment 1, 1.4.23, Discharge Point: P-WTP-001, p.67, Line 29]: The condition on line 22 on p. 67 reads, in part: "A new NOC also is required if total emissions of any criteria pollutants, ... " Line 29 on p. 67 reflects state-only enforceability for this condition regarding criteria pollutants. Regulation of criteria pollutants is federally enforceable. Change line 29 to reflect federal enforceability for control of criteria pollutants.

Ecology Response to I-7-34

Thank you for your comment.

Line 29 on page 67 will be changed from "State-Only: Yes." to "State-Only: No."

Comment I-7-35

Comment 35: [draft Attachment 1, 1.4.23, Discharge Point: P-WTP-001, p.68, Lines 19 & 30]: a) The 1st condition on page 68 (lines 2-13) appears to be from a PSD permit for the regulation of criteria pollutants ["PSD-02-01, Conditions 3.2 (PM or PM10), 4.2 (NOx), 5.2 (PM or PM10), 6.2 (NOx), and 7.2 (PM or PM10), General Testing Requirements."]. Regulation of criteria pollutants is federally enforceable. Condition 2, (lines 23-25) also appears to be from a PSD permit. Conditions in a PSD permit would seem to remain federally enforceable, even if enforced via a state-issued order. Change lines 19 & 30 to reflect federal enforceability of conditions from a PSD permit. Further, change all conditions from the PSD permit for discharge point P-WTP-001 to reflect that they are federally enforceable. A federally-enforceable requirement implemented in a state-issued order is still federally enforceable.

b) Condition 1 (lines 2-13, p. 68), in particular, references to specific portions of the PSD permit, yet Ecology overlooks including this PSD permit in the material it supplied to support public review. Without access to the overlooked PSD permit it is not possible to determine whether conditions from that permit are accurately represented, or whether monitoring is sufficient to assure continuous compliance with the conditions for discharge point 1.4.23, in general.

Provide the public with all materials deemed relevant by being used in the permitting process, as required by 40 C.F.R. 70.7 (h)(2), and re-start public review.

Ecology Response to I-7-35

Thank you for your comment.

a) The following changes were made to the AOP for discharge point 1.4.23, P-WTP-001, to reflect that conditions from permit PSD-02-01 Amendment 3 are federally enforceable:

- -Page 68, line 19, changed from "State-Only: Yes." to "State-Only: No."
- -Page 68, line 30, changed from "State-Only: Yes." to "State-Only: No."
- -Page 69, line 26, changed from "State-Only: Yes." to "State-Only: No."
- -Page 70, line 14, changed from "State-Only: Yes." to "State-Only: No."

b) The referenced PSD permit, PSD-02-01 Amendment 3, is posted online on the Air Quality Program's Prevention of Significant Deterioration Permits webpage [https://fortress.wa.gov/ecy/ezshare/AQ/PSD/PSD_Permits.htm]. The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. A link to the Air Quality Program's Prevention of Significant Deterioration Permits webpage, which contains PSD-02-01 Amendment 3, was provided for review during this reopened public comment period.

No change to the AOP is required due to part (b).

Comment I-7-36

Comment 36: [draft Attachment 1, 1.4.24, Discharge Point: Integrated Disposal Facility (IDF), p. 77 & 78]: Control of fugitive dust and fugitive emissions [WAC 173- 400-040 (4) & -(9)] are part of Washington's approved SIP and are, therefore, federally enforceable. Change lines 16 & 28 on p. 77 and lines 14 & 29 on p. 78 to reflect federal enforceability.

Ecology Response to I-7-36

Thank you for your comment.

Page 77, Lines 16 and 28, and Page 78, Lines 14 and 29, will be changed from "State-Only: Yes." to "State-Only: No."

Comment I-7-37

Comment 37: [draft Attachment 1, 1.4.25, Discharge Point: Ventilation Systems for 241-AN and 241AW-Tank Farms; monitoring, test method & test frequency; p. 79]:

a) For "Condition Approval 2/18/2005 (DE05NWP-OOI)", the visible emissions condition reads: "Visible emissions from each stack shall not exceed five (5) percent". Periodic monitoring requires use of EPA Method 9 if the "visible emissions are not solely attributable to water condensation", but only if the Method 9 tester is not exposed to "hazard(s) greater than that identified for the general worker." Clearly this "Periodic Monitoring" contemplates a nuclear critically event within the tank(s) being ventilated. The "Periodic Monitoring" also employs a method (EPA Method 9) that cannot distinguish between emissions composed of water vapor and emissions composed of smoke. Nor can EPA Method 9 reliably detect concentrations below the method detection limit {Footnote 1}. Requiring monitoring only under conditions of a criticality event using an inappropriate method will not yield results representative of Hanford's compliance with the 5% visible emissions limit. Ecology should re-write the visible emissions condition, monitoring, and verification requirements with the goal of providing "reliable data from the relevant time period that are representative of the source's compliance with the permit" {Footnote 2}.

b) For "Condition Approval 2/18/2005 (DE05NWP-001)", the "EMISSION LIMITS" condition reads: "Primary tank ventilation exhauster systems shall not exceed 4,000 ft3/min . . . ". "Periodic Monitoring" identifies certain records. Thus, the "Test Method" should be "Recordkeeping" and not "Not specified". Collection of certain flow rate and calibration records is required at the following unspecified frequency

("Test Frequency"): "None specified (as needed for monitoring and compliance)." Failure to specify a frequency with which the required flow rate and calibration measurements will occur renders the entire condition unenforceable. The parenthetical "(as needed for monitoring and compliance)" does not require collection of data from the relevant time period that is representative of Hanford's compliance with the condition {Footnote 2}. This parenthetical is purely filler when preceded by "None specified".

Supply a specific test frequency that assures continuous compliance.

{Footnote 1} The method detection limit (MDL) is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence. <https://www.epa.gov/cwa-methods/method-detection-limit-frequent-questions> Last visited 02-07-2018.

{Footnote 2} "Where the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit, as reported pursuant to paragraph (a)(3)(iii) of this section. Such monitoring requirements shall assure use of terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement." 40 C.F.R. 70.6 (a)(3)(i)(B)

Ecology Response to I-7-37

Thank you for your comment.

a) The referenced condition for discharge point 1.4.25 requires conformance with EPA Reference Method 9 of 40 CFR 60, Appendix A. The method requires a qualified observer to determine the opacity of emissions. To receive certification as a qualified observer, a candidate must follow the method's procedures to demonstrate the ability to assign opacity readings in 5 percent increments to black and white plumes. Procedure required for the method includes "opacity observations shall be made at the point of greatest opacity in that portion of the plume where condensed water vapor is not present" and identifies steps for attached and detached steam plumes (e.g., condensed water vapor). Requiring a certified observer to perform EPA Reference Method 9 is sufficient to determine compliance with a 5% visible emissions limit for emissions not solely attributable to water condensation.

Additionally, compliance with the condition is met by the Tier 3 visible emission survey requirements found in Section 2 of Attachment 1 of the Hanford AOP Renewal 3. The Effluent Management Facility radioactive emission license requires abatement control technology using HEPA filters, which control particulate emissions to less than visible levels. If the abatement control technology is maintained in a manner consistent with the applicable radioactive emission license, the significant monitoring requirements on HEPA filters in the radioactive emission license is sufficient to yield reliable data to determine compliance. If there ever was to be an incident wherein the abatement control technology failed and visible emissions are observed, a Method 9 certified observer would need to determine the opacity of the plume.

The referenced text does not vacate the requirement to conduct opacity monitoring in the event of a nuclear explosion or other such catastrophic event. The language is to ensure that the observer does not subject themselves to an increased risk or hazard, understanding that any visible emissions seen from the discharge point may indicate failure of the radioactive air emissions abatement control technology. The permittee, USDOE, is still required to determine the opacity using 40 CFR 60, Appendix A, Method 9, though the observer must find a safe location to complete their observations following the method's procedures. 40 CFR 60 Appendix A, Method 9, procedures requires the observer to stand at a distance sufficient to provide a clear view of the emissions with the sun oriented in the 140° sector to their back and, as much as possible, make their observations from a position such that their line of vision is

approximately perpendicular to the plume direction. Additionally, observers can also be certified using devices, such as glasses, sunglasses, or binoculars. Following the method and utilizing certification using devices, a certified observer will be able to find a location without increased hazards and determine the opacity of a plume from the discharge point, meeting the requirements of the condition and ensures compliance.

No change to the AOP is required due to part (a).

b) Recordkeeping is not a test method. If the periodic monitoring requires retention of specific records to determine compliance with the conditions, the specific records are listed under 'Required Records' for each condition.

The discharge point 1.4.25 is for ventilation systems for 241-AN and 241-AW Tank Farms. This discharge point also has applicable requirements under 40 CFR 61 Subpart H, which include requirements to measure effluent flow rates measured using reference Method 2 or Reference Method 2A. Temperature is accounted for in these reference methods. In accordance with 40 CFR 61.93(b)(1)(iii), the frequency for these measurements shall depend upon the variability of the effluent flow rate. The Washington Department of Health has been delegated authority to enforce 40 CFR 61 Subpart H and these requirements are included in the FF-01 license for each emission unit. It is appropriate, as well as reduces risk to workers, to require the measurements be collected at the same frequency in both Attachment 1 and Attachment 2.

Line 28 of page 79 will be revised to state "Test Frequency: None specified (as needed for monitoring and compliance with AOP Attachment 2)."

Comment I-7-38

Comment 38: [draft Attachment 1, Condition Approval 7/31/2007 (DE05NWP-1 001[sic] Rev 1) and 3/26/2013 (Amd A), p. 80]: a) Lines 3-5 on p. 80 read: "All TAPs, as shown in Table 2 of Approval Order DE05NWP-001, Rev 1 and Amd A, shall be below their respective ASIL or Screening Level of Table I of Approval Order DE05NWP-001 Rev 1." However, "Table 2 of Approval Order DE05NWP-001, Rev 1 and Amd A, [and] their respective ASIL or Screening Level of Table I of Approval Order DE05NWP-001 Rev. 1" are not included in that portion Approval Order DE05NWP-001 Rev. 1 copied into this approval condition, neither was this information provided by Ecology to support public review. This documentation, while clearly used in the permitting process, cannot be located in the review information provided by Ecology. Failing to provide all information deemed relevant by being used in the permitting process is contrary to 40 C.F.R. 70.7 (h)(2).

All documentation referenced in permit conditions needs to be included in the permit. Provide, rather than reference "Table 2 of Approval Order DE05NWP-001, Rev I and Amd A, [and] their respective ASIL or Screening Level of Table I of Approval Order DE05NWP-001 Rev.I" and re-start public review.

b) In lines 11 & 12 on p. 80, both "Test Method" and "Test Frequency" need to be specified. Specify both a test method and a test frequency sufficient to demonstrate continuous compliance with the condition, and re-start public review.

Ecology Response to I-7-38

Thank you for your comment.

a) WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(a) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. This is

not the same as saying that the permit itself has to include all applicable requirements, as implied by the comment. The regulations do not prohibit the permit from referencing requirements in NOC approval orders, rather than restating the provisions from the NOC approval orders.

With a mega-site like Hanford, Ecology has chosen to streamline the process to reduce the complexity of the permit by using language from approval orders, including references to conditions, tables, and applications from approval orders. The Hanford AOP contains all approval conditions from current NOC approval orders for the associated discharge points. Ecology has determined that referencing requirements in the underlying orders complies with the above regulations and, furthermore, is appropriate and effective in streamlining the content for the Hanford AOP.

The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. Approval Order DE05NWP-001 Revision 1 and Amendment A was provided for review during this reopened public comment period, which included Table 1, "Development of Screening Levels" and Table 2, "Toxic Air Pollutants for DE05NWP-001, Revision 1."

No change to the AOP is required due to part (a)

b) WAC 173-401-615(1)(a) requires each AOP to include all emissions monitoring requirements required by the underlying applicable requirements. If the underlying applicable requirement does not require periodic monitoring, WAC 173-401-615(1)(b) requires the addition of periodic monitoring "sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit." Approval Order DE05NWP-001 Revision 1 and Amendment A identify that compliance and monitoring of the approval condition shall be met by operating the exhauster systems only when in accord with T-BACT emission controls for the project. Required records for this approval condition include documentation and record-keeping of T-BACT compliance of emission control found for this project. Ecology has determined that these requirements in Approval Order DE05NWP-001 Revision 1 and Amendment A satisfy the emissions monitoring requirements of WAC 173-401-615. The addition of a test method and a test frequency is not necessary to demonstrate compliance with approval condition.

No change in the AOP is required due to part (b).

Comment I-7-39

Comment 39: [draft Attachment 1, Condition Approval 3/26/2013 (DE05NWP-001 Amd A); p. 81]: The condition in lines 3 & 4 on p. 81 reads, in part.: "[e]missions of ammonia shall not exceed 2.9 lb/hr". On line 34 (p. 81), this condition is shown, incorrectly, as "State-Only" enforceable. This incorrect designation overlooks that ammonia is both a hazardous air pollutant (HAP) under section 112 of the Clean Air Act (Act) and also as an extremely hazardous air pollutant under the Act. The incorrect designation also overlooks that potential emissions of a single HAP in excess of (10) ten tons per year qualifies the 241-AN and 241-AW Tank Farms as a "major source" as defined in 40 C.F.R. 70.2, and therefore, subjects that source to the full requirements of CAA title v. The emission limit of 2.9 pounds per hour is about 12.7 tons per year, which is well above the 10 ton per year threshold for designation as a "major source". This condition should be federally-enforceable.

Change line 34 to reflect federal enforceability.

Ecology Response to I-7-39

Thank you for your comment.

Text from page 81, line 34 was changed from "State-Only: Yes." to "State-Only: No" to reflect the condition as federally enforceable.

Comment I-7-40

Comment 40: [draft Attachment 1, Condition Approval 3/26/2013 (DE05NWP-001 Amd A); EMISSIONS LIMITS, p. 81]: a) The emissions limits overlook all other T APs/HAPs emitted by the 241-AN and 241-AW Tank Farms ventilation exhauster system. According to the Hanford Tank Vapor Assessment Report {Footnote 1}: "The waste material is radioactive, continually generating heat, continually catalyzing both known and unknown chemical reactions in all layers, and continually generating gases and known and unknown chemical products that are continuously created and destroyed via chemical, thermal, radiocatalytic and radiolytic processes in all layers ., " {Footnote 2}

Ecology also overlooks the marked increase in emissions of regulated air pollutants due to bolus releases {Footnote 3} and the marked increases resulting from tank waste disturbing activities {Footnote 4}.

Address all other TAPs/HAPs emitted by the 241-AN and 241-AW Tank Farms ventilation exhauster system.

b) "Periodic Monitoring:": Periodic monitoring is not sufficient to capture emissions of ammonia, and completely overlooks emissions of all other regulated air pollutants expected from the 241-AN and 241-AW Tank Farms ventilation exhauster system. Whether the 2.9 lb/hr limit (12.7 tpy) is exceeded relies on measurements taken under quiescent conditions {Footnote 5}. Overlooked in the periodic monitoring for ammonia are the huge increases in these emissions under waste-disturbing activities, increases attributable to non-routine operations, and the increases attributable to bolus releases. Also overlooked are the huge increases in emissions of other regulated air pollutants under such conditions. Given these oversights, the periodic monitoring is insufficient to meet requirements of 40 C.F.R. 70.6 (a)(3)(i)(B).

Supply periodic monitoring sufficient to determine continuous compliance with the specified emissions limit.

{Footnote 1} W.R. Wilmarth et al., Hanford Tank Vapor Assessment Report, SRNL-RP-2014-00791, Oct. 30, 2014. (This federally-funded report was prepared for a Hanford Site contractor, by an independent panel of experts, commissioned through the Savannah River National Laboratory. Available at: http://srnl.doe.gov/documents/Hanford_TV_AT_Repo1i_2014-10-30-FINAL.pdf and included as Enclosure 2 to these comments.) Data in this report strongly suggests a causal link between chemical vapor release and subsequent adverse health effects experienced by tank farm workers. Reportedly, this causal link prompted the Washington State Attorney General to take legal action against the Hanford Site contractor. (See <http://www.atg.wa.gov/news/news-releases/ag-sues-federal-government-over-hanford-worker-safety>)

{Footnote 2} Id. at 21

{Footnote 3} "The hypothesis [of bolus releases] was substantiated by computer modeling, which indicated that under certain weather conditions, concentrations approaching 80% of the head space concentration could exist 10 feet downwind from the release point and potentially in workers' breathing zones." Id. at 16

{Footnote 4} The experts examined analyses of samples taken from Tank C-101 before waste transfer, at the start of waste transfer, and mid-way through the waste transfer operation. During these periods, Mercury emissions increased more than 900% of the occupation exposure limit; emissions of N-

Nitrosodimethylamine (NDMA) increased more than 2,900% of the occupational exposure limit; Formaldehyde emissions increased slightly more than 64% of the occupational exposure limit, and Ammonia emissions increased more than 18% of the occupational exposure limit. Id. at 27 {Footnote 5} "It further calls into question any assumption that sampling during quiescent conditions would be reasonably representative of conditions while the waste materials are being disturbed. We understand that the transient spikes were reported to be as much as three orders of magnitude greater than the baseline quiescent levels." Id. at 26

Ecology Response to I-7-40

Thank you for your comment.

a) WAC 173-401-605(1) requires the AOP to contain emission limitation and standards that assure compliance with all applicable requirements at the time of permit issuance. At the time of permit issuance, the TAP emission limits and standards for Discharge Point 1.4.25, Ventilation Systems for 241-AN and 241-AW Tank Farms is determined by Approval Order DE05NWP-001, Revision 1 and Amendment A. The condition referenced in the comment is in regards to emissions of ammonia. Emission limits for other TAPs for this discharge point is discussed on page 80, requiring all TAPs, as shown in Table 2 of the Approval Order, to be below their respective ASIL. The emission limits are required during all time periods and waste disturbing activities, including the event of a bolus release.

Additionally, the Approval Order requires that identification of any TAP not previously identified within the NOC Application emissions estimate shall be submitted to Ecology within 90 days of completion of laboratory analyses (DE05NWP-001, Revision 1, Page 6, Section 2.5 Reporting). Ecology has determined that the DE05NWP-001, Revision 1 and Amendment A sufficiently addresses TAPs emitted by the 241-AN and 241-NW Tank Farms ventilation exhaust system.

No change in the AOP is required due to part (a).

b) The periodic monitoring for emissions of ammonia at Discharge Point 1.4.25 is determined from Approval Order DE05NWP-001 Revision 1 and Amendment A. The emission limit is based on the emission estimate provided to support the project, which used headspace vapor data to estimate emissions during operations for storage, treatment, retrieval, and disposal of waste contained in the tanks as described in the NOC application. 241-AN and 241-AW utilize active ventilation, which limits the ability for headspace gas to accumulate in the tanks, reducing the potential for a bolus release event. Ecology has determined that no additional periodic monitoring requirements above the Approval Order are necessary to meet the condition referenced in the comment.

No change in the AOP is required due to part (b).

Comment I-7-41

Comment 41: [draft Attachment 1, Condition Approval 2/18/2005 (DE05NWP-001), All occurrences of "Test Method:" and "Test Frequency:" on page 82): a) Lines 10 & 11, 25 & 26, and 37 & 38 on p. 82 identify the "Test Method" as 'Not specified' and "Test Frequency" as "Not applicable". Absent a specified "Test Method" and "Test Frequency" both the "Periodic Monitoring" and the condition itself are unenforceable. Supply a specific "Test Method" and a specific "Test Frequency".

b) The condition on lines 18-21 on p.82 requires, in part: "Identification of any TAP not previously identified within the Notice of Construction Application or Supplement emissions estimates shall be submitted to Ecology ...". However, the periodic monitoring does not require analyses for "any TAP not previously identified within the Notice of Construction Application or Supplement". Absent a requirement

to monitor for "any TAP not previously identified within the Notice of Construction Application or Supplement", it is impossible to determine compliance with the condition. Supply periodic monitoring sufficient to determine "any TAP not previously identified within the Notice of Construction Application or Supplement".

Ecology Response to I-7-41

Thank you for your comment.

a) The referenced conditions on page 82 for discharge point 1.4.25 are reporting requirements for visible emission surveys, laboratory analyses for identification of any toxic air pollutants not previously identified, and results of emission assessments. A test method or frequency does not need to be defined in order for the condition to be enforceable. The records required in each condition are adequate to meet the requirements in 40 CFR 70.6(a)(3)(i)(B).

No change to the AOP is required due to part (a).

b) Additional monitoring or laboratory analyses are not necessary to identify any TAP not previously identified. The currently required laboratory analysis result summaries typically provide tentatively identified compounds (TICs) found. These TICs are provided to the the permittee and they can compare the TICs to the list of previously identified compounds. For any TICs that have not been 'previously identified', the Permittee is required to report these in accordance with the permit condition. Additionally, if other samples taken from the tank waste for other purposes than permit compliance have compounds not previously identified, the permittee must evaluate the compounds for compliance with all state and federal regulations.

No change to the AOP is required due to part (b).

Comment I-7-42

Comment 42: [draft Attachment 1, 1.4.26, Discharge Point: 200 Area SST Categorical Waste Retrieval, p. 83]: a) The condition (lines 7 & 8, p.83) limits visible emissions to 5%, as monitored using EPA Method 9, "as applicable" at a frequency of "When visible emissions are observed". Ecology needs to identify what method is applicable when Method 9 is not applicable.

b) Ecology also must identify a specific test frequency. As written, the condition is unenforceable; "When visible emissions are observed" is so unspecific as to require no monitoring. "When visible emissions are observed" creates no realistic obligation for the permittee nor does it impart a frequency that assures compliance with the condition, in accordance with 40 C.F.R. 70.6 (a)(3)(i)(B).

Supply monitoring that assures continuous compliance with the condition.

Ecology Response to I-7-42

Thank you for your comment.

a) The permittee, USDOE, must determine the opacity using 40 CFR, Appendix A, Method 9, when visible emissions are observed. This is iterated in the test method and test frequency for the condition. The test method is identified 'as applicable' because the periodic monitoring also identifies Section 2.1, Tier 3 of Attachment 1, which requires maintenance of the abatement control technology as required in Attachment 2 of the Hanford AOP. It is unnecessary to identify that the test method to determine opacity is not applicable to the maintenance requirements under Attachment 2.

No change to the AOP is required due to part (a).

b) Discharge Points 1.4.26 is an emission unit with HEPA filtration abatement control technology that is listed in Attachment 2. Opacity monitoring requirements from mixed (radioactive and non-radioactive) airborne effluent streams are not necessary due to the presence of HEPA filtration abatement technology required by Health under WAC 246-247. HEPA filters control particulate emissions to less than visible levels. Because of the particulate control effectiveness provided by HEPA filters, no additional opacity monitoring, beyond visible emissions surveys, would be necessary. Additionally, 40 CFR 60.11(b) allows for the use of alternative methods. Ecology has determined that the presence of HEPA filtration abatement technology required by Health under WAC 246-247 ensures compliance with the visible emissions standards in WAC 173-400-040(2).

Maintenance of the abatement control technology as required in Attachment 2 of the Hanford AOP will maintain particulate emissions to less than visible levels. The license for these units in Attachment 2 requires extensive monitoring of the abatement control technology and identifies the maintenance frequency. As long as the abatement control technology is maintained, it is unnecessary to require the permittee to make visible emissions observations at a specified frequency. If the abatement control technology is not maintained as required by Attachment 2 of the Hanford AOP, the discharge unit no longer qualifies for tier 3 visible emission surveys under Attachment 1, Section 2.1.

Additionally, observance of visible emissions would likely mean the abatement control technology had failed. This would also trigger an emergency response by the facility. If this were to happen and visible emissions were observed, the opacity must then be determined using EPA method 9 of CFR 60, Appendix A. Not specifying a frequency at which to observe for visible emissions does not omit the permittee, USDOE, from the requirement to determine the opacity using EPA Method 9 of 40 CFR 60. Due to the stringent maintenance requirements of Attachment 2 and the emission control of the required HEPA filters, Ecology has determined that the periodic monitoring, test method, frequency, and required records are sufficient to determine compliance with the condition.

No change to the AOP is required due to part (b).

Comment I-7-43

Comment 43: [draft Attachment 1, Condition Approval 2/18/2005 (DE05NWP-002), both approval conditions on p. 84]: a) The "Periodic Monitoring" condition in lines 8 & 9 and lines 22 & 23 on p. 84 identify certain records. Thus, the "Test Method" should be "Recordkeeping" and not "Not specified".

b) Collection of stack gas flow and temperature measurement records is required at the following unspecified frequency ("Test Frequency"): "None specified (as needed for monitoring and compliance)." Failure to specify a frequency with which the required flow rate and temperature measurements will occur places no obligation on the permittee and renders the entire condition unenforceable. The parenthetical "(as needed for monitoring and compliance)" does not require collection of data from the relevant time period that is representative of Hanford's compliance with the condition {Footnote 1}. This parenthetical is purely filler when preceded by "None specified".

Supply a specific test method and a specific test frequency that assures continuous compliance with these federally-enforceable conditions.

{Footnote 1} "Where the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring),

periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit, as reported pursuant to paragraph (a)(3)(iii) of this section. Such monitoring requirements shall assure use of terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement." 40 C.F.R. 70.6 (a)(3)(i)(B)

Ecology Response to I-7-43

Thank you for your comment.

a) Recordkeeping is not a test method. If the periodic monitoring requires retention of specific records to determine compliance with the conditions, the specific records are listed under 'Required Records' for each condition. Identifying a test frequency is unnecessary since the required records are already stated on lines 12-13 and 26-28 for each condition. The records would be generated as the activities occur.

No change to the AOP is required due to part (a).

b) The discharge point 1.4.26 is for the single shell tank retrieval operations. This discharge point also has applicable requirements under 40 CFR 61 Subpart H, which include requirements to measure effluent flow rates measured using reference Method 2 or Reference Method 2A. Temperature is accounted for in these reference methods. In accordance with 40 CFR 61.93(b)(1)(iii), the frequency for these measurements shall depend upon the variability of the effluent flow rate. The Washington Department of Health has been delegated authority to enforce 40 CFR 61 Subpart H and these requirements are included in the FF-01 license for each emission unit. It is appropriate, as well as reduces risk to the workers, to require the measurements be collected at the same frequency in both Attachment 1 and Attachment 2.

Lines 11 and 25 of page 84 will be revised to state "Test Frequency: None specified (as needed for monitoring and compliance with AOP Attachment 2)."

Comment I-7-44

Comment 44: [draft Attachment 1, Condition Approval 7/31/2007 (DE05NWP-002, Rev 2), p.85]: a) Both the condition (lines 3-5 on p. 85) and the associated "Periodic Monitoring" (lines 7-20 on p. 85) require compliance with items in the permittee's NOC application and the follow-on approval order. ["All TAPs, as submitted in the permittee's NOC Applications, shall be below their respective ASIL or Screening Level of Table 1 in Approval Order DE05NWP-002, Rev 2.", lines 3-5, p. 85] Those items need to actually appear in the AOP and not included by reference.

b) "Periodic Monitoring" requires, in part, "[d]evelopment and implementation of a sampling and analysis plan (SAP) for each tank retrieval." However, there is no specified date or specified event by which the SAPs must be developed and implemented. Thus, this portion of the periodic monitoring creates no obligation for the permittee and the requirement is meaningless. The "Test Method" should read "operational restrictions and recordkeeping" or something similar, rather than "None specified". A "Test Frequency" consisting of "None specified (as needed for monitoring and compliance)" imparts no obligation on the permittee to comply with the identified monitoring.

Supply a meaningful test method and test frequency, and require a specific date or triggering event by which the SAP must be developed and implemented.

Ecology Response to I-7-44

Thank you for your comment.

a) WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(a) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. This is not the same as saying that the permit itself has to include all applicable requirements, as implied by the comment. The regulations do not prohibit the permit from referencing requirements in NOC approval orders, rather than restating the provisions from the NOC approval orders.

With a mega-site like Hanford, Ecology has chosen to streamline the process to reduce the complexity of the permit by using language from approval orders, including references to conditions, tables, and applications from approval orders. The Hanford AOP contains all approval conditions from current NOC approval orders for the associated discharge points. Ecology has determined that referencing requirements in the underlying orders complies with the above regulations and, furthermore, is appropriate and effective in streamlining the content for the Hanford AOP.

The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. Approval Order DE05NWP-002, Revision 2, was provided for review during this reopened public comment period, which included the information referenced in the comment.

No change to the AOP is required due to part (a).

b) Specifying a date by which the sampling and analysis plans must be prepared is not necessary and does not make the condition unenforceable. The sampling and analysis plans must be used during sampling efforts to comply with the permit. Therefore, the sampling and analysis plan must be prepared prior to initiating sampling for compliance with the permit. The permittee is required to comply with the condition. Additionally, a sampling and analysis plan can be revised and updated for every sampling effort. Not having specified date for preparation of the plans does not void this requirement.

The referenced condition on page 85 for discharge point 1.4.26 is for all toxic air pollutants, as submitted in the permittee's notice of construction applications, shall be below their respective acceptable source impact level or screening level of Table 1 in Approval Order DE05NWP-002, Revision 2. Compliance is determined by operating the exhauster systems in accord with T-BACT emission controls and development and implementation of a sampling and analysis plan for each tank retrieval to address the emission of a minimum of three toxic air pollutants. The language and requirements provided in the referenced condition is consistent with the underlying requirement DE05NWP-002, Revision 2. Recordkeeping and operation restrictions are not a test method. The frequency at which the sampling and analysis plan is already identified in the condition (i.e., each tank retrieval). A frequency for the operation of exhauster systems in accord with T-BACT emission controls is unnecessary as it must be met at all times. Identifying a test method or test frequency, above the current language in the condition, is not necessary.

No change to the AOP is required due to part (b).

Comment I-7-45

Comment 45: [draft Attachment 1, Condition Approval 2/18/2005 (DE05NWP-002); Condition Approval 10/12/2005 (DE05NWP-002, Rev. 1); and Condition Approval 2/18/2005 (DE05NWP-002), p. 86]: a) As written, the "None specified" associated with all "Test Method:" and "Test Frequency:" requirements on page 86 is not adequate to meet the requirements in 40 C.F.R. 70.6 (a)(3)(i)(B).

b) Lines 3 & 4 on p.86 read: "Visible emission surveys, conducted pursuant to Compliance Demonstration requirement 1.3.2, per NOC approval DE05NWP-002, ...". Lines 16-18 read: "Identification of any TAP not previously identified within the Notice of Construction Application or Supplement emissions estimates as defined in Table 2, per NOC approval DE05NWP-002RI, ...". However, "Compliance Demonstration requirement 1.3 .2", "NOC approval DEOSNPW-002', and "Notice of Construction Application or Supplement emissions estimates as defined in Table 2, per NOC approval DE05NWP-002RI" do not appear in draft Attachment 1 nor are they included in the information Ecology provided to support public review.

Re-write the "Conditions" so they don't rely on references.

Ecology Response to I-7-45

Thank you for your comment.

a) The referenced conditions on page 86 for discharge point 1.4.26 are reporting requirements for visible emission surveys, laboratory analyses for identification of any toxic air pollutants not previously identified, and annual schedules of anticipated operations and installation. A test method or frequency does not need to be defined in order for the condition to be enforceable. The records required in each condition are adequate to meet the requirements in 40 CFR 70.6(a)(3)(i)(B).

No change to the AOP is required due to part (a).

b) The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. Approval Order DE05NWP-002, Revision 2, was provided for review during this reopened public comment period, which included the information referenced in the comment.

No change to the AOP is required due to part (b).

Comment I-7-46

Comment 46: [draft Attachment 1, 1.4.27, Discharge Point: E-85 Fuel Station, p. 88]: An enforceable condition cannot exist without a specific "Test Frequency;". Replace the: "Not applicable (maintenance records)" with "1 above) once at completion of construction; 2 above) every fuel delivery" or something similar.

Ecology Response to I-7-46

Thank you for your comment.

The emission limits in Discharge Point 1.4.27 are determined from Approval Order DE06NWP-001. Compliance with the emission limits is demonstrated by installation of BACT and T-BACT emissions controls, creation and retention of fuel storage tank loading records, and application of appropriate air pollution emission factors to normalized, annual fuel throughput. Page 88, line 18 includes the required

records to demonstrate compliance with the emission point. A test frequency is not necessary for this condition to be enforceable as it requires the installation of the BACT and T-BACT controls and records demonstrating use of the BACT and T-BACT controls.

No change to the AOP is required.

Comment I-7-47

Comment 47: [draft Attachment 1, 1.4.27, Discharge Point: E-85 Fuel Station, p. 88]: Lines 10 & 18-19 on p. 88, "Required Records" reference to "records detailed in NOC (DE06NWP-001) Approval Condition 1.6". (Lines 18 & 19, p.88.) However, the "records detailed in NOC (DE06NWP-001) Approval Condition 1.6" are not included. Actually include the referenced records. (A previous comment addresses the inappropriate reference to "All TAPs, as submitted in the Permittee's NOC Application, shall be below their respective ASIL', lines 8 & 9, p.88.)

Ecology Response to I-7-47

Thank you for your comment.

WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(1) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. This is not the same as saying that the permit itself has to include all applicable requirements, as implied by the comment. The regulations do not prohibit the permit from referencing requirements in NOC approval orders, rather than restating the provisions from the NOC approval orders.

With a mega-site like Hanford, Ecology has chosen to streamline the process to reduce the complexity of the permit by using language from approval orders, including references to conditions, tables, and applications from approval orders. The Hanford AOP contains all approval conditions from current NOC approval orders for the associated discharge points. Ecology has determined that referencing requirements in the underlying orders complies with the above regulations and, furthermore, is appropriate and effective in streamlining the content for the Hanford AOP.

The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. Approval Order DE06NWP-001 was provided for review during this reopened public comment period, which included Approval Condition 1.6.

No change to the AOP is required.

Comment I-7-48

Comment 48: [draft Attachment 1, 1.4.28, Discharge Point: HAMMER Training and Education Facility, pp. 87-88 & 90]: a) Lines 22-23, and 29-32 on p. 88 read, in part: "Emission of any TAP exceeding SQERs detailed in Table I of Order DE07NWP-OO I shall be reported to Ecology Identification of any TAP not previously identified within Order DE07NWP-001, shall be ... ". Provide all information needed to specify the requirement rather than just referencing where such information can be located.

b) Also, define all test methods and test frequencies. (See lines 7 & 8, p.87, line 17 p. 88, and lines 15 & 16 and 26 & 27 on p.90.)

c) Lines 22-24 on p. 90 require, in part: "Emissions of all TAPs, as identified in Table I of NOC Order DE07NWP-001 (4/19/2007) and Amd 1 (7/31/2007), or newly identified, shall be below their respective

SQERs. [WAC 173-460-150)]". However, "Table 1" was not included in the material copied from the regulatory order into Attachment 1, nor does "Table 1" appear in the Enclosure 1, Comments: draft Hanford Site AOP, Renewal 3 information provided by Ecology to support public review. Additionally, "Periodic Monitoring" consisting only of "Materials record-keeping" is not sufficient to ascertain "newly identified" TAPs. Some types of laboratory analyses are required to determine "newly identified" TAPs. (Under title v of the CAA there is no distinction between "monitoring" and "measuring".) Furthermore, discovery of "newly identified" TAPs may trigger "modification" requirements specified in WAC 173-400-110(3), and, if more than a de minimis increase is involved, may also qualify as a "modification" under section 112 of the Clean Air Act.

Provide all information referenced in the condition plus periodic monitoring sufficient to assure continuous compliance with the condition, and accurately capture the appropriate requirements for a modification.

Ecology Response to I-7-48

Thank you for your comment.

a) There is no text on lines 22-23 and 29-32 of page 88. The response assumes the commenter meant lines 22-23 and 29-32 on page 90.

WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(1) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. This is not the same as saying that the permit itself has to include all applicable requirements, as implied by the comment. The regulations do not prohibit the permit from referencing requirements in NOC approval orders, rather than restating the provisions from the NOC approval orders.

With a mega-site like Hanford, Ecology has chosen to streamline the process to reduce the complexity of the permit by using language from approval orders, including references to conditions, tables, and applications from approval orders. The Hanford AOP contains all approval conditions from current NOC approval orders for the associated discharge points. Ecology has determined that referencing requirements in the underlying orders complies with the above regulations and, furthermore, is appropriate and effective in streamlining the content for the Hanford AOP.

The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. Approval Order DE07NWP-001 was provided for review during this reopened public comment period and contains information referenced in the draft AOP mentioned in your comment.

Ecology recognizes that Amendment 1 of DE07NWP-001 was absent from the supporting documentation provided from the public comment period in error. The application and permit for Amendment 1 has always been available at our office and has since been posted online at https://fortress.wa.gov/ecy/nwp/permitting/Air/NOC/Current/DE07NWP-001_Hammer.html. It was found that the amendment was not listed as a requirement citation for discharge point 1.4.28, but the conditions for the discharge point did include requirements from the amendment.

Line 4 of page 89 will be changed to read "Requirement Citation (WAC or Order Citation): DE07NWP-001 (4/9/2007) and Amendment 1 (7/31/2007)"

b) The references page lines are not all associated with discharge point 1.4.28, as implied in the comment.

Lines 7-8 of page 87 identify the test method as not specified and the test frequency as not applicable for the operational notice condition required for discharge point 1.4.26, 200 Area SST Categorical Waste Retrieval. The condition is not for emission monitoring, therefore the test method and test frequency is not necessary to ensure compliance with this condition.

Line 17 of page 88 identifies the test frequency as not applicable for discharge point 1.4.27, E-85 Fuel Station. Please see the response to comment I-7-46.

Lines 15-16 and 26-27 on page 90 identify the test method and the test frequency as not applicable for conditions that require materials record keeping for periodic monitoring. The conditions and requirements are consistent with approval order DE07NWP-001 and Amendment 1. Ecology has determined that the requirements of the approval order and amendment are sufficient to assure compliance with the condition. Therefore, a test method or frequency does not need to be defined.

No change to the AOP is required due to part (b).

c) Please see response to part (a).

Additionally, Ecology has determined that materials record keeping is sufficient to ascertain newly identified TAPs for approval order DE07NWP-001 and Amendment 1. This condition and its requirements are consistent with the approval order and amendment. The emissions from the discharge point come from a training activity using chemical props to simulate settings for response efforts and the activities necessary to prepare for and conduct the training. Small quantities of known chemicals are used in the activity. Materials record keeping would identify what materials and chemicals were used in the training activities, as well as the quantities used. The record keeping is sufficient to determine if new materials or chemicals were used and evaluate if it is also a newly identified TAP to the discharge point. Sampling and laboratory analyses are not necessary for the activities permitted in DE07NWP-001 and Amendment 1 to determine newly identified TAPs for the discharge point.

Ecology agrees that the discovery of a newly identified TAP may trigger modification of the approval order. The referenced condition as written in the AOP does not excuse the requirement for obtaining a modification if necessary. Rather, the condition imposes an additional requirement to notify Ecology in the event any new TAP is identified, even if the emissions would be below de minimis values and not trigger a modification.

No change to the AOP is required due to part (c).

Comment I-7-49

Comment 49: [draft Attachment 1, 1.4.22, Discharge Point: 100B-181B/182B, p. 92]: Lines 11 & 26 on p. 92 require records be retained "for a minimum of 36 months". However, both 40 C.F.R. 70.6 (a)(3)(ii)(B) and WAC 713-401-615 (2)(c) require records be retained for 5 years. Provide a records retention requirement consistent with both part 70 and WAC 173-401.

Ecology Response to I-7-49

Thank you for your comment.

The requirement to retain records for 36 months is consistent with approval order DE07NWP-002. However, WAC 173-401-600 requires that every requirement in an operating permit shall be based upon the most stringent of the applicable requirements. WAC 173-401-615(2)(c) requires retention of records

of all required monitoring data and support information for a period of five years.

Lines 11 and 26 of page 92 will be revised to require records be retained for a minimum of 60 months, consistent with WAC 173-401-615(2)(c).

Comment I-7-50

Comment 50: [draft Attachment 1, 1.4.22, Discharge Point: 100B-181B/182B, p. 94]: Line 33 on p. 94 requires records be retained "for a minimum of 36 months". However, both 40 C.F.R. 70.6 (a)(3)(ii)(B) and WAC 713-401-615 (2)(c) require records be retained for 5 years. Provide a records retention requirement consistent with both part 70 and WAC 173-401.

Ecology Response to I-7-50

Thank you for your comment.

The requirement to retain records for 36 months is consistent with approval order DE07NWP-002. However, WAC 173-401-600 requires that every requirement in an operating permit shall be based upon the most stringent of the applicable requirements. WAC 173-401-615(2)(c) requires retention of records of all required monitoring data and support information for a period of five years.

Lines 33 of page 94 will be revised to require records be retained for a minimum of 60 months, consistent with WAC 173-401-615(2)(c).

Comment I-7-51

Comment 51: [draft Attachment 1, 1.4.22, Discharge Point: 100B-181B/182B, p. 95]: Line 20 on p. 95 require records be retained "for a minimum of thirty-six months". However, both 40 C.F.R. 70.6 (a)(3)(ii)(B) and WAC 713-401-615 (2)(c) require records be retained for 5 years.

Provide a records retention requirement consistent with both part 70 and WAC 173-401.

Ecology Response to I-7-51

Thank you for your comment.

The requirement to retain records for 36 months is consistent with approval order DE07NWP-002. However, WAC 173-401-600 requires that every requirement in an operating permit shall be based upon the most stringent of the applicable requirements. WAC 173-401-615(2)(c) requires retention of records of all required monitoring data and support information for a period of five years.

Lines 20 of page 95 will be revised to require records be retained for a minimum of 60 months, consistent with WAC 173-401-615(2)(c).

Comment I-7-52

Comment 52: [draft Attachment 1, 1.4.30, Discharge Point: WTP Heaters and Dehumidifiers, p. 96]: Lines 17 & 18 address "[c]ompliance with visible emissions survey requirements of Approval Condition 3.0 of the Approval Order DE07NWP-004." Supply those "visible emissions survey requirements of Approval Condition 3.0 of the Approval Order DE07NWP-004", and re-start public review.

Ecology Response to I-7-52

Thank you for your comment.

The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. Approval Order DE07NWP-004 was provided for review during this reopened public comment period and contains the information referenced in the Draft AOP mentioned in your comment.

No change to the AOP is required.

Comment I-7-53

Comment 53: [draft Attachment 1, 1.4.31, Discharge Point: 300 Area/339A, p. 99]: a) Lines 24-25 requires retention of records "as defined in Approval Condition 1.6 of the ORDER DE08NWP-001." Provide "Approval Condition 1.6 of the ORDER DE08NWP-001."

b) Lines 26 & 27 define "Test Method" and "Test Frequency" as "Not applicable". Absent a required test method and/or a required test frequency, the permittee is under no obligation to perform the associated periodic monitoring. The periodic monitoring requirement thus is not enforceable. When the periodic monitoring requirement is unenforceable, the condition is also unenforceable.

Supply a test method and a test frequency needed to ensure "periodic monitoring [is] sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit", as required by 40 C.F.R. 70.6 (a)(3)(i)(B).

c) Line 30 on p. 99 requires "Records of cumulative operating hours for the engine (36 months maximum)" be retained. However, both 40 C.F.R. 70.6 (a)(3)(ii)(B) and WAC 713-401-615 (2)(c) require records be retained for 5 years.

Provide a records retention requirement consistent with both part 70 and WAC 173-401.

Ecology Response to I-7-53

Thank you for your comment.

a) The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. Approval Order DE08NWP-001 was provided for review during this reopened public comment period and contains the information referenced in the Draft AOP mentioned in your comment.

No change to the AOP is required due to part (a).

b) Lines 26-27 on page 90 identify the test method and the test frequency as not applicable for a condition that recordkeeping designed to serve as monitoring, specifically manufacturer's engine data, maintenance records, and cumulative operating hours to demonstrate compliance with emissions limits for nitrogen oxides, carbon monoxide, particulate matter and volatile organic compounds for an emergency diesel generator. The condition and requirements are consistent with approval order DE08NWP-001. Ecology has determined that the requirements of the approval order are sufficient to assure compliance with the condition. Therefore, a test method or frequency does not need to be defined in order for the periodic monitoring requirement to be enforceable for the referenced condition.

No change to the AOP is required due to part (b).

c) The requirement to retain records for 36 months is consistent with approval order DE08NWP-001. However, WAC 173-401-600 requires that every requirement in an operating permit shall be based upon the most stringent of the applicable requirements. WAC 173-401-615(2)(c) requires retention of records of all required monitoring data and support information for a period of five years.

Generally, lines 30 of page 99 would be revised to require records be retained for a minimum of 60 months, consistent with WAC 173-401-615(2)(c). However, this specific condition has been removed from the AOP since the discharge point is no longer subject to approval order DE08NWP-001, which was cancelled in 2015. Please see Ecology's response to comment A-2-59 for further details.

Comment I-7-54

Comment 54: [draft Attachment 1, 1.4.31, Discharge Point: 300 Area/339A, p. 102]: Line 21 on p. 102 requires records "be retained for 36 months maximum". However, both 40 C.F.R. 70.6 (a)(3)(ii)(B) and WAC 713-401-615 (2)(c) require records be retained for 5 years. Provide a records retention requirement consistent with both part 70 and WAC 173-401.

Ecology Response to I-7-54

Thank you for your comment.

The requirement to retain records for 36 months is consistent with approval order DE08NWP-001. However, WAC 173-401-600 requires that every requirement in an operating permit shall be based upon the most stringent of the applicable requirements. WAC 173-401-615(2)(c) requires retention of records of all required monitoring data and support information for a period of five years.

Lines 21 of page 102 will be revised to require records be retained for a minimum of 60 months, consistent with WAC 173-401-615(2)(c).

Comment I-7-55

Comment 55: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AZ Ventilation, p. 103to116]: The method used by Ecology in Order DE11NWP-001, Rev. 4 (Order) estimates emissions of dimethyl mercury (and other regulated tank air pollutants) by using measured emissions of ammonia and applying a previously-established ratio between the two {Footnote 1}. While sampling and analysis of dimethyl mercury (DMM) and ammonia do appear to require using EPA protocols and methods, it does not appear EPA has approved that portion of Ecology's method involving the establishment and use of ratios. Nor does it appear the ratio part of the method was vetted by EPA, or by members of the scientific community, or by contractors employed by Ecology, or by other Ecology staff {Footnote 2} before it was imposed by this Order. Absent proper vetting, establishment of method detection limits {Footnote 3} and approval by EPA, Ecology's use of the ratio method to demonstrate compliance with federally-enforceable emissions limits should be discontinued. EPA seems to have never approved use of ratios as an analytical method for measuring any non-radionuclide HAP, including mercury, DMM, N-Nitrosodimethylamine, and chromium hexavalent: soluble, except chromic trioxide. Nor does this use of ratios to infer compliance with emission limits for TAPs seem to appear in Ecology's "Source Test Manual - Procedures for Compliance Testing". [see WAC 173-400-105 (4)].

The ratio method and the use of ammonia as a surrogate for all other TAPs is problematic on several different levels.

- Ecology's establishment and use of ratios is purely mathematical, overlooking molecular structure and associated physical properties that make every compound unique and also ignores any impacts from atmospheric conditions. ("This has nothing to do with molecular structure, associated physical properties, atmospheric conditions, etc. It is strictly the ratio between ammonia and dimethyl mercury in

the 'worse case' tank." {Footnote 4})

- Establishment of the ratios assumes a constant emission rate as long as the tank wastes remain quiescent (at rest). However, tank headspace gases and vapors result from a highly dynamic and radiogenic environment. ("The [tank] waste material is radioactive, continually generating heat, continually catalyzing both known and unknown chemical reactions in all layers, and continually generating gases and known and unknown chemical products that are continuously created and destroyed via chemical, thermal, radiocatalytic and radiolytic processes in all layers." {Footnote 5}) Given this environment it is unlikely sampling results are valid much beyond the point-in-time when the samples were taken.

- The ratios address the huge spikes in emissions when tank wastes are disturbed with untested assumptions rather than with actual measurements. ("Tank head space vapor/gas concentrations can increase several orders of magnitude during tank-disturbing activities." {Footnote 6}) ["[A]n increase of one order of magnitude is the same as multiplying a quantity by 10. An increase of two orders of magnitude is the equivalent of multiplying by 100 or 10^2 ."

(<http://whatis.techtarget.com/definition/order-of-magnitude>)] Conduct of waste disturbing activities is the reason for this Order.

- The ratios use straight-line relationships to model exponential behavior experienced when temperatures increase. ("[V]apor pressure for DMHg [DMM] increases exponentially with temperature. The same relationship holds for other TAPs, including mercury" {Footnote 7})

- The ratios assume ammonia is representative of all other TAPs under all operational temperatures and conditions. "[T]here is little, if any, correlation between ammonia and the other TAP concentrations. Thus, ammonia appears to be a poor surrogate for mercury and other toxic emissions {Footnote 3}."

- The choice of ammonia as the surrogate compound is based solely on ease of measurement (convenience) rather than on scientific evaluation regarding whether ammonia is the most appropriate compound to represent other TAPs. ("Ammonia was selected as a representative compound for [sic] as it: 1 Can be directly measured using monitoring equipment. 2. Is emitted from the tanks in concentrations facilitating measurement with a variety of instruments. 3. Has EPA-established sampling and analysis protocols." {Footnote 9})

- The only apparent independent evaluation of Ecology's ratio method by a recognized scientific expert raises serious concerns about the validity of the ratio method, about the validity of the underlying assumptions and evaluations, and about oversights in the underlying assessment of risk. (See Enclosure 3 to these comments.)

The site-wide emission limits established in this Order are not, in fact, limits, but rather suggestions that can be changed based on sampling results. Tables and associated conditions on pages 106, 107, and 108 seem to establish emission limits for Ammonia, DMM, and N-Nitrosodimethylamine (NDMA). However, lines 7 & 8 on p. 110 reference to a method of updating the emission limits ("a method of updating the limits is established in the following sections"). Lines 34-40 on p. 110 allow these "limits" to be raised with permission and after the "limit" was exceeded, or lowered as needed to accommodate sampling results. Furthermore, the stated "limits" are based on assumptions {Footnote 10} rather than on actual measurements.

Any increase in a specific emission limit would seem to be a "modification" pursuant to WAC 173-400-110(3), WAC 173-400-030, and, if more than a de minimis increase is involved, would also be a "modification" under section 112 of the Clean Air Act. Any modification must be treated as required by regulation and statute. Both WAC 173-400-110(3) and WAC 173-400-030 are included in Washington's SIP, and thus are federally enforceable. Ecology can't use conditions in a regulatory order to change a regulation, to grant an exemption to a regulatory or statutory requirement, or to grant clemency, yet it appears Ecology has defined a method to address increases qualifying as modifications where only Ecology's permission to increase an emission limit is required.

Revise to:

1. provide actual and enforceable emission limits;
2. provide: a) monitoring that is sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirement [40 C.F.R. 70.6 (a)(3)(i)(B), WAC 173-401-615(1)(b)]; b) monitoring that captures all sources of covered emissions including those attributed to bolus events and fugitive emissions; c) monitoring that recognizes and addresses the unstable and dynamic emission-generating environment within the tanks; d) monitoring that addresses the orders of magnitude increases in emissions resulting from waste-disturbing activities; e) monitoring that considers the impact of differing physical and chemical properties among the TAPs of concern; and f) monitoring that is vetted by the scientific community and approved by EPA;
3. provide a method for which there is a method detection limit; and
4. provide monitoring frequencies sufficient to capture emissions of all TAPs under all anticipated project conditions, and re-start public review.

{Footnote 1} "The permit was based upon the highest measured value for each pollutant emitted from all quiescent tank sampling events. Ecology used these values to establish the ratio between the emissions of all tank emission compounds. This ratio was the basis for estimating compound-by-compound emissions values from dispersion modeling... Using this ratio, it is possible to estimate the emissions of any emitted compound if the emissions of just one compound has been measured." (emphasis added) Response to Comments, Air Permit Revision to Facilitate Waste, Retrieval from Hanford Tank AY-102, January 24 - February 23, 2016, Summary of a public comment period and responses to comments, Dept. of Ecology, State of Washington, Pub. No. 16-05-005, Mar. 2016, p.18.

{Footnote 2} Response to Public Records Act (RCW 42.56) request (PDTs 35933) dated Aug. 12, 2016 .

{Footnote 3} The method detection limit (MDL) is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence. <https://www.epa.gov/cwa-methods/method-detection-limit-frequent-questions>

{Footnote 4} Response to Comments, Air Permit Revision to Facilitate Waste, Retrieval from Hanford Tank AY-102, January 24 - February 23, 2016, Summary of a public comment period and responses to comments, Dept. of Ecology, State of Washington, Pub. No. 16-05-005, Mar. 2016, p.18.

{Footnote 5} W.R. Wilmarth et al., Hanford Tank Vapor Assessment Report, SRNL-RP-2014-00791, Oct. 30, 2014. At 2. (This federally-funded report was prepared for a Hanford Site contractor, by an independent panel of experts, commissioned through the Savannah River National Laboratory. Available at: http://srnl.doe.gov/documents/Hanford_TV_AT_Report_2014-10-30-FINAL.pdf and included as Enclosure 2 to these comments.)

{Footnote 6} id. at 52.

{Footnote 7} Review and Comments on Washington State Department of Ecology Requirements for the Measurement and Control of Emissions from Hanford's Nuclear Waste Storage Tanks, Henry S. Cole, Ph.D., Henry S. Cole & Associates, Inc., Feb. 2017, at 21. Included as Enclosure 3 to these comments.

{Footnote 8} Id. at 3-4.

{Footnote 9} Response to Comments, Air Permit Revision to Facilitate Waste, Retrieval from Hanford Tank A Y-102, January 24 - February 23, 2016, Summary of a public comment period and responses to comments, Dept. of Ecology, State of Washington, Pub. No. 16-05-005, Mar. 2016, p.18.

{Footnote 10} "The establishment of ammonia concentrations limit... was calculated from the best currently available data on tank waste characteristics and engineering judgement [sic] on actual tank emission activity compared to theoretical tank emission activity" Lines 1-4, p. 110, draft Renewal 3, Attachment 1

Ecology Response to I-7-55

The Approval Order DE11NWP-001, Revision 4 requires VOC emissions to be assessed quarterly, TAP emissions to be assessed annually, and ammonia emissions to be assessed quarterly. In addition to these

assessments, the approval order requires ammonia monitoring as an indicator compound for TAPs during solids mixing, disturbing bulk tank solids, removal of enough supernatant to potentially create a gas release event, or waste feed delivery operations to the Waste Treatment and Immobilization Plant. This additional monitoring requirement is to verify the safety factors used in the application for these activities are a conservative estimate of the actual emissions. EPA allows monitoring of surrogates as indicators for the pollutant of concern.

Ammonia can be monitored near real time during the activity, whereas TAPs such as dimethyl mercury, n-nitrosodimethylamine, and chromium hexavalent: soluble, except chromic trioxide, cannot be monitored as easily. The method detection limit for ammonia monitoring during waste disturbing activities would be dependent on the device used. The approval order also requires confirmatory samples of ammonia, dimethyl mercury, n-nitrosodimethylamine, and chromium hexavalent: soluble, except chromic trioxide to ensure the permitted ammonia concentration. These samples must be collected following EPA approved procedures, or alternate procedures approved by Ecology, which would identify the method detection limits. The permittee, USDOE, is then required to evaluate this data to determine if the constituents of the ammonia concentration limits provided sufficient indication of emission of other toxic air pollutants during these waste disturbing activities (i.e., the ratio determined from the application material was maintained).

The ammonia monitoring concentrations for these activities was calculated from the best, currently available data at the time, on tank waste characteristics and engineering judgement on actual tank emission activity compared to theoretical tank emission activity. If the sampled ratio would result in an increased emission limit in Table 6 (i.e., more mass of ammonia is emitted per mass of dimethyl mercury than the original ratio), the permittee, USDOE, must specifically request this increase. If the sampled ratio would result in a decreased emission limit in Table 6 (i.e., less mass of ammonia is emitted per mass of dimethyl mercury than the original ratio), this will become the new ammonia limit in Table 6 used during monitoring of waste disturbing activities. This mechanism does not change the emission limits of the discharge point. This mechanism only changes the ammonia monitoring concentration that triggers the operations to stop to ensure the permitted limits for all constituents are not exceeded during the activity.

Monitoring requirements for this and similar discharge points for emissions attributed to bolus events and fugitive emissions, addressing the unstable and dynamic emission-generating environment within the tanks, addressing the orders of magnitude increases in emissions resulting from waste disturbing activities, and considers the impact of differing physical and chemical properties among the TAPs of concern are addressed in comments I-7-40, I-7-56, I-7-61, I-10-1, and I-10-7.

Approval Order DE11NWP-001, Revision 4, as incorporated into the AOP under discharge point 1.4.32, contains enforceable emission limits. Based on the above information and responses to other comments in this document, the AOP provides monitoring that is sufficient to yield reliable data from the relevant time period that is representative of the source's compliance with the applicable requirement, considering the factors identified in the comment.

No change to the AOP is required.

Comment I-7-56

Comment 56: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation, p. 103 to 117, insufficient monitoring for site-wide emission limit]: Ecology Notice of Construction Order (Order) DE11NWP-001, Revision 4 "establishes a maximum emission value for all dimethyl mercury emissions on the site." {Footnote 1} However, Ecology's required monitoring to assess compliance with this site-wide maximum limit overlooks passively ventilated single shell tanks (SS Ts) from most of the 12

(twelve) SST tank farms, and thus accounts for only a relatively small portion of the 149 SSTs at Hanford. The SSTs remain a passively ventilated point-source for vapors and gases until they are permanently sealed, even after wastes have been removed to the extent possible with available technologies. Ecology's required monitoring also overlooks emissions from upsets, bolus events, and from some of the 28 (twenty eight) double shell tanks (DSTs). Additionally overlooked are all fugitive emissions from Hanford's 18 (eighteen) tank farms plus associated piping, valve pits, leaks and spills. Absent accounting for all emissions of dimethyl mercury, Ecology's required monitoring is insufficient to access compliance with the established site-wide maximum emission limit for dimethyl mercury.

Implement monitoring sufficient to assure continuous compliance with the established site-wide maximum emission limit for dimethyl mercury.

{Footnote 1} <http://www.ecy.wa.gov/programs/nwp/Pl/pages/closedcommentperiods.htm>, "Air Permit Revision for 241-AP, 241-SY, and 241-AY/AZ Tank Farms – DE11NWP-001, Rev. 4, What changes are being proposed?"

ECOLOGY Response to I-7-56

Thank you for your comment.

The link provided in the footnote is no longer available. Ecology updated its website in 2018, and subsequently changed many pages. Based on the document title and the discharge point, it is assumed the footnote refers to the introduction text provided on the public comment period page for approval order DE11NWP-001, Revision 4. While this text on the webpage is no longer available, the language is typically pulled from the email listserv notice or the newspaper advertisement issued for the public comment period. The listserv notice and the newspaper advertisement for DE11NWP-001, Revision 4 can be found in the Response to Comments document produced for the public comment period, Publication No. 16-05-005.

The listserv notice, sent January 4, 2016, states "the proposed change incorporates a Health Impact Analysis to determine the maximum allowable limit of dimethyl mercury emissions for double-shell tanks covered under the permit."

The newspaper advertisement, published January 24, 2016, states "The U.S. Department of Energy Office of Ricer Protection the permittee) performed a new analysis (Health Impact Analysis on the emission of dimethyl mercury. Dimethyl mercury emissions on the Hanford site exceed regulatory limits and require an analysis by Ecology to determine that it is not likely to result in increased health risks of any kind for people near Hanford. The analysis evaluate all of the permittee's emission units for the concurrent emission of dimethyl mercury. This establishes a maximum emission value for all dimethyl mercury emissions on site."

The Health Impact Analysis established the maximum emission value for all dimethyl mercury emission on the site, not the approval order DE11NWP-001, Revision 4. The Health Impact Analysis accounts for dimethyl mercury emissions from various units on the Hanford Site, including double shell tanks and single shell tanks. The Health Impact Analysis used multiple conservative factors to determine the emissions, including increasing all source emission rates for dimethyl mercury by an additional factor of 100. Each new project that requires a new source review under WAC 173-460 and emits dimethyl mercury must be evaluated for the appropriate monitoring necessary to ensure compliance with dimethyl mercury emission limits. The monitoring requirements permitted in the underlying approval orders have been incorporated into the Hanford AOP Renewal 3. Ecology has determined that the monitoring requirements found in the underlying approval orders is sufficient to ensure continuous compliance with the AOP.

No change to the AOP is required.

Comment I-7-57

Comment 57: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation, p. 103]: Lines 8-14 on p. 103 require use of EPA Method 9 to verify compliance with the 5% visible emission limit, "[s]hould visible emissions be observed which are not solely attributable to water condensation". Supply the EPA method Ecology requires to distinguish between those visible emissions due to water condensation from those visible emissions that are not. EPA Method 9 cannot identify individual constituents in the emissions. In addition, 5% opacity is at or below the method detection limit {Footnote 1} (depending upon whether the plume is black or white {Footnote 2}), for an individual, well qualified to perform a Method 9 opacity test. Ecology should require a more reliable method or instrumental monitoring that is sufficient to determine continuous compliance with the 5% opacity limit, for visible emissions "not solely attributable to water condensation".

{Footnote 1} The method detection limit (MDL) is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence. <https://www.epa.gov/cwa-methods/method-detection-limit-frequent-questions>

2 "Ninety-nine percent of the black plumes and 95 percent of the white plumes were read within 5 percent opacity." Visible Emissions Field Manual EPA Methods 9 and 22, EPA 340/1-92-004 December 1993, p.6

Ecology Response to I-7-57

Thank you for your comment.

The referenced condition for discharge point 1.4.32 requires conformance with EPA Reference Method 9 of 40 CFR 60, Appendix A. The method requires a qualified observer to determine the opacity of emissions. To receive certification as a qualified observer, a candidate must follow the method's procedures to demonstrate the ability to assign opacity readings in 5 percent increments to black and white plumes. Procedure required for the method includes "opacity observations shall be made at the point of greatest opacity in that portion of the plume where condensed water vapor is not present" and identifies steps for attached and detached steam plumes (e.g., condensed water vapor). Requiring a certified observer to perform EPA Reference Method 9 is sufficient to determine compliance with a 5% visible emissions limit for emissions not solely attributable to water condensation.

Additionally, compliance with the condition is met by the Tier 3 visible emission survey requirements found in Section 2 of Attachment 1 of the Hanford AOP Renewal 3. The Effluent Management Facility radioactive emission license requires abatement control technology using HEPA filters, which control particulate emissions to less than visible levels. If the abatement control technology is maintained in a manner consistent with the applicable radioactive emission license, the significant monitoring requirements on HEPA filters in the radioactive emission license is sufficient to yield reliable data to determine compliance. If there ever was to be an incident wherein the abatement control technology failed and visible emissions are observed, a Method 9 certified observer would need to determine the opacity of the plume. The maintenance requirements of Attachment 2, and required by Section 2.1, Tier 3 of Attachment 1 for the referenced condition, are sufficient to maintain compliance with the condition.

No change to the AOP is required.

Comment I-7-58

Comment 58: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation, p. 103]: Line 16 on p. 103 reads: "Test Frequency: Not specified except when visible emissions are observed." As written the "Test Frequency" requirement imposes no obligation on the permittee. Suggest borrowing from the Clean Water Act by requiring the Tank Farms daily log include an entry specific to the presence or absence of visible emissions.

Ecology Response to I-7-58

Thank you for your comment.

Section 2.1 requires a record indicating if visible emissions were or were not observed when any visible emission survey is performed. This condition is analogous to your suggestion of borrowing language from the Clean Water Act.

No change in the permit is required.

Discharge Point 1.4.32 is emission units with HEPA filtration abatement control technology that are listed in Attachment 2. Opacity monitoring requirements from mixed (radioactive and non-radioactive) airborne effluent streams are not necessary due to the presence of HEPA filtration abatement technology required by Health under WAC 246-247. HEPA filters control particulate emissions to less than visible levels. Because of the particulate control effectiveness provided by HEPA filters, no additional opacity monitoring, beyond visible emissions surveys, would be necessary. Additionally, 40 CFR 60.11(b) allows for the use of alternative methods. Ecology has determined that the presence of HEPA filtration abatement technology required by Health under WAC 246-247 ensures compliance with the visible emissions standards in WAC 173-400-040(2).

Maintenance of the abatement control technology as required in Attachment 2 of the Hanford AOP will maintain particulate emissions to less than visible levels. The license for these units in Attachment 2 requires extensive monitoring of the abatement control technology and identifies the maintenance frequency. As long as the abatement control technology is maintained, it is unnecessary to require the permittee to make visible emissions observations at a specified frequency. If the abatement control technology is not maintained as required by Attachment 2 of the Hanford AOP, the discharge unit no longer qualifies for tier 3 visible emission surveys under Attachment 1, Section 2.1.

Additionally, observance of visible emissions would likely mean the abatement control technology had failed. This would also trigger an emergency response by the facility. If this were to happen and visible emissions were observed, the opacity must then be determined using EPA method 9 of CFR 60, Appendix A. Not specifying a frequency at which to observe for visible emissions does not omit the permittee, USDOE, from the requirement to determine the opacity using EPA Method 9 of 40 CFR 60. Due to the stringent maintenance requirements of Attachment 2 and the emission control of the required HEPA filters, Ecology has determined that the periodic monitoring, test method, frequency, and required records are sufficient to determine compliance with the condition.

No change to the AOP is required.

Comment I-7-59

Comment 59: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation, p. 104-107]: Line 9 on p. 104, line 6 on p. 106, and line 2 on p. 107 reference to "Section 3.0" of Order DE11NWP-001, Rev. 4 (Order), yet "Section 3.0" of the Order is not included in that portion of the Order

reproduced in draft Attachment 1. Nor is "Section 3.0" of the Order included in the material Ecology made available to the public to support public review of draft Renewal 3.

Include "Section 3.0" in the permit and re-start public review.

Ecology Response to I-7-59

Thank you for your comment.

The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. Approval Order DE11NWP-001 Revision 4 was provided for review during this reopened public comment period and contains the information referenced in the Draft AOP mentioned in your comment.

No change to the AOP is required.

Comment I-7-60

Comment 60: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AZ Ventilation, p. 104]: Lines 8-16 on p. 104 describe periodic monitoring required to determine compliance with VOC emission limits. Lines 15 & 16 on p. 104 state: "... compliance with Approval Condition [for VOCs] shall be demonstrated by monitoring emissions of all TAP emission limits". However, not all TAPs are VOCs. Please correct.

Ecology Response to I-7-60

Thank you for your comment.

The condition and requirements are consistent with approval order DE11NWP-001 Revision 4. Ecology acknowledges that the condition is for VOC emission limits, the periodic monitoring during solids mixing, disturbing bulk tank solids, removal of enough supernatant to potentially create a gas release event, or Waste Feed Delivery operations requires compliance by monitoring emissions of all TAP emission limits, and that not all TAPs are VOCs. In approval order DE11NWP-001 Revision 4, the VOC emission limits were determined by summing all the VOCs from the provided TAPs emissions respective to each tank farm.

During solids mixing, disturbing bulk tank solids, removal of enough supernatant to potentially create a gas release event, or Waste Feed Delivery operations, as the referenced periodic monitoring requirement is addressing, ammonia monitoring is used as an indicator compound to determine the TAPs emissions. Determining the TAPs emissions would allow for the permittee to determine VOC emissions in the same manner as how the VOC emission limits were developed. A separate emission monitoring assessment was not necessary to ensure compliance with the VOC emission limits.

Additionally, the condition and requirements are consistent with the language of approval order DE11NWP-001 Revision 4. Changing the language from TAPs to VOCs would not benefit the public or permittee, but would add confusion in the discrepancy between the AOP and the approval order.

No change to the AOP is required.

Comment I-7-61

Comment 61: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation, p.104]: Line 9 on p. 104 specifies a "Test Frequency: Quarterly". However, quarterly is not sufficient to evaluate compliance during waste disturbing operations as stated in "(2)" of the periodic monitoring requirement (lines 12-16). Because of the huge increases in emissions known to result from waste disturbing activities {Footnote 1}, monitoring should occur, minimally: 1) at the beginning; 2) mid-way through; and 3) at conclusion of such activities.

{Footnote 1} "Tank head space vapor/gas concentrations can increase several orders of magnitude during tank disturbing activities." W.R. Wilmarth et al., Hanford Tank Vapor Assessment Report, SRNL-RP-2014-00791, Rev.0, Oct. 30, 2014, at 52. Included with these comments as Enclosure 2.

Ecology Response to I-7-61

Thank you for your comment.

The referenced requirement for quarterly VOC emissions testing is consistent with the language found in the approval order DE11NWP-001, Revision 4. Additionally, lines 12 through 16 of page 104 identify that during solids mixing, disturbing bulk tank solids, removal of enough supernatant to potentially create a gas release event, or Waste Feed Delivery operations compliance with the Approval Condition shall be demonstrated by monitoring emissions of all TAP emission limits as described in Section 3.5 of the approval order. Section 3.5 of the approval order details how ammonia emissions will be monitored as an indicator compound. Section 3.5.3 identifies the reading collection frequency of at least hourly during the activities described above. This monitoring method and frequency is sufficient to evaluate compliance during waste disturbing operations for the referenced condition.

Lines 17 through 19 of page 104 will be revised to state the following:

"Test Method: (1) VOC emissions shall be assessed quarterly in accord with EPA approved procedures for each exhauster system.

(2) As described in Section 3.5 during solids mixing, disturbing bulk tank solids, removal of enough supernatant to potentially create a gas release event, or Waste Feed Delivery operations to the Hanford Waste Treatment and Immobilization Plant.

Test Frequency: (1) Quarterly.

(2) As described in Section 3.5 during solids mixing, disturbing bulk tank solids, removal of enough supernatant to potentially create a gas release event, or Waste Feed Delivery operations to the Hanford Waste Treatment and Immobilization Plant.."

Comment I-7-62

Comment 62: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation, p.104]: Line 26 on p. 104 states the "Calculation Model" is "Not applicable". However, line 11 requires determination of "the mass release rate of VOCs in pounds per year" while the condition emission limits are in tons per year (tpy). The "Calculation Model" is the calculation(s) required to affect such a conversion (from lb/yr to tpy).

Ecology Response to I-7-62

Thank you for your comment.

A calculation is required to convert the mass release rate from pounds per year to tons per year. A calculation is not the same as a calculation model. Calculation models utilized in the Hanford AOP Renewal 3 are found in Section 3.1 of the Statement of Basis for Attachment 1.

No change to the AOP is required.

Comment I-7-63

Comment 63: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation, p. 105]: There are several references to Tables 7, 8, and 9 of Approval Order DE11NWP-001, Rev. 4 (Order). [See for example, lines 3, 5-7, 15-16, 28-29, and elsewhere, on p. 105.] However, none of these tables are included in that portion of the Order reproduced in draft Attachment 1. Nor are these tables included in the material Ecology made available to the public to support public review of draft Renewal 3. Include Tables 7, 8, and 9 in the permit and re-start public review.

Ecology Response to I-7-63

Thank you for your comment.

The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. Approval Order DE11NWP-001 Revision 4 was provided for review during this reopened public comment period and contains the information referenced in the Draft AOP mentioned in your comment.

No change to the AOP is required.

Comment I-7-64

Comment 64: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation, p. 105]: Lines 9 through 19 address a periodic monitoring requirement regarding "Development and implementation of an annual sampling and analysis plan (SAP) for each exhauster system". There is no mention of when the SAP must be developed and implemented. Absent a specific date or a specific event by which the SAP will be prepared and implemented, this periodic monitoring condition is both meaningless and unenforceable. Revise the periodic monitoring condition to state a specific date or a specific event by which the SAP will be developed and implemented, for example:

- *"By June 1, 2016, the permittee will develop and implement an annual sampling and analysis plan ...", or*
- *"Before actions approved by this NOC Order can occur, the permittee will develop and implement an annual sampling and analysis plan ... " While the "Test Frequency" (line 45, p. 105) does state "annually" (yearly), without a specific starting date or event to anchor when the first SAP is to be developed and implemented, this periodic monitoring condition is both meaningless and unenforceable.*

Supply a specific date or a specific event by which the SAP will be developed and implemented.

Ecology Response to I-7-64

Thank you for your comment.

Specifying a date by which the sampling and analysis plans must be prepared is not necessary and does not make the condition unenforceable. The sampling and analysis plans must be used during sampling efforts to comply with the permit. Therefore, the sampling and analysis plan must be prepared prior to initiating sampling for compliance with the permit. The permittee is required to comply with the condition. Additionally, a sampling and analysis plan can be revised and updated for every sampling effort. Not having specified date for preparation of the plans does not void this requirement.

No change to the AOP is required.

Comment I-7-65

Comment 65: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation, p. 105]: a) Lines 41 -43 on p. 105 require that "Identification of any TAP not previously identified within the Notice of Construction Application Emission Limits shall be submitted to Ecology within 90 days of identification." However, in lines 11-14 on p. 105 the SAP only requires 6 compounds be addressed: "Each SAP shall address the emission of a minimum of three T APs with the highest potential ambient concentration relative to their ASILs of WAC 173-460-150 in addition to dimethyl mercury, n-nitrosodimethylamine, and chromium hexavalent..."

Please correct this inconsistency (6 TAPs vs. all previously unidentified TAPs). Which is it?

b) Lines 24-26 on p. 105 state, in part: "Identification of any TAP not previously identified shall be submitted to Ecology within ninety (90) days of laboratory analyses which verify emissions of that TAP." Lines 41-43 on p. 105 contain a similar "Periodic Monitoring" requirement. However, there does not appear to be any required monitoring and laboratory analyses sufficient to determine "any TAP not previously identified".

Specify sufficient monitoring and analyses needed to discover "any TAP not previously identified" and re-start public review.

c) Discovery of "any TAP not previously identified" may trigger "modification" requirements specified in WAC 173-400-110(3), and, if more than a de minimis increase is involved, may also qualify as a "modification" under section 112 of the Clean Air Act. Specify the appropriate requirements for any modification resulting from discovery of "any TAP not previously identified".

Ecology Response to I-7-65

Thank you for your comment.

a) The sampling and analysis plan only requires 6 compounds to be addressed annually for the toxic air pollutants (TAPs) emission assessment. The analytical methods for the analyses in the sampling and analysis plans must be the EPA, Occupation Safety and Health Administration, or National Institute for Occupational Safety and Health approved, or by approved equivalent method. Analytical reports also provide tentatively identified compounds that can be reviewed to determine if any TAP not previously identified within the Notice of Construction was found.

Additionally, this discharge point is for 3 tank farms. The tank waste at Hanford is sampled throughout the year. If new compounds are found in any tank waste samples collected, even if the sample is not for compliance with the AOP or an approval order, the permittee is obligated to determine if it is a TAP. The tank waste stored in the farms identified in discharge point 1.4.32 must be consistent with the constituents provided in the notice of construction application. The onus is on the permittee, USDOE, to ensure that application adequately defines the project and that they are in compliance with all state and federal regulations.

No change to the AOP is required due to part (a).

b) Additional monitoring or laboratory analyses are not necessary to identify any TAP not previously identified. The required laboratory analysis result summaries would provide tentatively identified compounds for the permittee, USDOE, to identify any not previously identified TAPs. Additionally, other samples taken from the tank waste can be used to determine if there have been compounds not previously identified and the permittee, USDOE, must evaluate the compounds for compliance with all state and federal regulations.

No change to the AOP is required due to part (b).

c) Ecology agrees that discovery of a TAP that was not previously identified may trigger modification requirements for the approval order and the AOP. This is why the permittee, USDOE, must submit the

information to Ecology within 90 days of laboratory analyses. Discovery of a not previously identified TAP would change the project as it was submitted in the notice of construction application. General conditions: the potential to trigger a modification is not required to be explicitly stated in the AOP.

No change to the AOP is required due to part (c).

Comment I-7-66

Comment 66: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation, p. 105-106]: Line 33 on p. 105 and line 8 on p. 106 reference to "Approval Condition 1.1.3" of Order DE11NWP-001, Rev. 4 (Order), yet "Approval Condition 1.1.3" of the Order is not included in that portion of the Order reproduced in draft Attachment 1. Nor is "Approval Condition 1.1.3" of the Order included in the material Ecology made available to the public to support public review of draft Renewal 3. Include "Approval Condition 1.1.3" in the permit and re-start public review.

Ecology Response to I-7-66

Thank you for your comment.

The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. Approval Order DE11NWP-001 Revision 4 was provided for review during this reopened public comment period and contains the information referenced in the Draft AOP mentioned in your comment.

No change to the AOP is required.

Comment I-7-67

Comment 67: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation, p.105]: a) Line 38 on p. 105 references to "Table 5" of Order DE11NWP-001, Rev. 4 (Order), yet "Table 5" of the Order is not included in that portion of the Order reproduced in draft Attachment 1. Nor is "Table 5" of the Order included in the material Ecology made available to the public to support public review of draft Renewal 3.

Include "Table 5" in the permit and re-start public review.

b) Lines 38-40 describe BACT/tBACT requirements. The primary components required by BACT/tBACT to control emissions are identified as a "moisture de-entrainer, heater, prefilters, and a two-stage high Efficiency Particulate Air (HEPA) filtration system ... ". However, BACT/tBACT requirements overlook control of toxic vapors and gases. These toxic vapors and gases freely pass through the required HEP A filtration, but would be controlled by other technologies, such as carbon absorption {Footnote 1}. Control of toxic vapors and gases "simplifies compliance and provides assurance that tank remediation can proceed with greater protection of public health and the environment {Footnote 2}".

Provide BACT/tBACT that affords some measure of control over toxic vapors and gases.

{Footnote 1} Review and Comments on Washington State Department of Ecology Requirements for the Measurement and Control of Emissions from Hanford's Nuclear Waste Storage Tanks, Henry S. Cole, Ph.D., Henry S. Cole & Associates, Inc., Feb. 2017, at 4, 27-28. Included as Enclosure 3 to these comments.

{Footnote 2} Id at 4

Ecology Response to I-7-67

Thank you for your comment.

a) The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. Approval Order DE11NWP-001 Revision 4 was provided for review during this reopened public comment period and contains the information referenced in the Draft AOP mentioned in your comment.

No change to the AOP is required due to part (a).

b) The best available control technology for toxics (tBACT) was evaluated in document RPP-ENV-46679. The tBACT evaluation followed Ecology and EPA five-step process to determine best available control technologies (BACT). The tBACT evaluation addressed the 41 TAPs that exceeded de minimis emission rates in four separate groups: ammonia, toxic organic compounds, mercury and mercury related compounds, and particulate metal compounds. The evaluation found that for feasible control technologies identified, the cost of removal per ton of pollutant exceeded the cost ceiling effectiveness threshold, making the control technologies economically unjustifiable for ammonia, toxic organic compounds, and mercury and mercury related compounds.

Particulate metal compounds are removed by the required particulate filtration train for removal of radionuclides at a 99.99% removal rate. WAC 173-480-060 and WAC 246-247-040 states that best available radionuclide control technology is required and that, at a minimum, a filter train consisting of prefilters, mist eliminators, and dual HEPA filters must be employed. The technologies have already been evaluated and are effective to control emissions of particulate metal compounds.

Therefore, the evaluation proposed tBACT control technology for the discharge point to consist of a moisture de-entrainer, pre-heater, pre-filters, and HEPA filtration system in the treatment train. While Ecology acknowledges that this treatment train is not effective in controlling ammonia or other vapor compounds, the evaluation determined that additional control technologies were economically unjustifiable. Ecology agrees with the documentation and rationale provided in tBACT analysis used in development of the approval order for this discharge point.

Additionally, for this discharge point, all TAPs meet the unabated acceptable source impact level (ASIL) except for dimethyl mercury and chromium hexavalent: soluble, except chromic trioxide. However, chromium hexavalent: soluble, except chromic trioxide meets the abated ASIL and dimethyl mercury emissions from the discharge point are within the risk limits defined in WAC 173-460-090(7), as evaluated in a health impact analysis and approved through a Second Tier Petition. Therefore, the project, as proposed, will have no significant impact on ambient air quality. No additional BACT or tBACT is required by the regulations.

No change to the AOP is required due to part (b).

Comment I-7-68

Comment 68: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation, p. 106]: The emission limit table for ammonia shows units of "pounds per 24 hours". Please ADD a column to report these limits in tons per year (tpy). Both part 70 and WAC 173-401 require emissions be reported in tpy.

Ecology Response to I-7-68

Thank you for your comment.

The emission limit for ammonia at discharge point 1.4.32 are identified in units of pounds per 24 hours. The emission levels in WAC 173-460-150 for ammonia are listed in pounds per 24 hours. The condition for ammonia emission limits at this discharge point stem from the approval order DE11NWP-001, Revision 4, which is pursuant to the Washington State Department of Ecology Controls for New Sources of Toxic Air Pollutants, Chapter 173-460 WAC.

While part 70 and WAC 173-401 use emissions of hazardous air pollutants in tons per year for major source determinations and insignificant emission thresholds, the regulations do not have a specific requirement to report emissions in tons per year. Additionally, the regulations do not define that the emission limits within the AOP must be provided in tons per year. It is acceptable to identify the limits for ammonia in units consistent with the underlying requirements, the approval order and WAC 173-460-150.

No change to the AOP is required.

Comment I-7-69

Comment 69: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation, p. 106 - 112]: Line 14 on p. 106, line 29 on p. 107, line 21 on p. 108, line 16 on p. 109, and line 13 on p. 112 indicate a calculation model is not applicable. However, the establishment of a ratio between ammonia and other TAPs of interest does involve use of a calculation model. Specify the calculation required to arrive at the specific ratio(s).

Ecology Response to I-7-69

Thank you for your comment.

A calculation is required to convert the mass release rate from pounds per year to tons per year. A calculation is not the same as a calculation model. Calculation models utilized in the Hanford AOP Renewal 3 are found in Section 3.1 of the Statement of Basis for Attachment 1.

No change to the AOP is required.

Comment I-7-70

Comment 70: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation, p.107]: Line 1 on p. 107 for periodic monitoring, references to "Approval Condition 1.1.4" of Order DE11NWP-001, Rev. 4 (Order), yet "Approval Condition I. I. 4" of the Order is not included in that portion of the Order reproduced in draft Attachment 1. Nor is "Approval Condition 1.1.4" of the Order included in the material Ecology made available to the public to support public review of draft Renewal 3. Absent this information the need for gap-fill monitoring [40 C.F.R. 70.6 (a)(3)(i)(B)] can't be assessed. Include "Approval Condition 1.1.4" in the permit and re-start public review.

Ecology Response to I-7-70

Thank you for your comment.

WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(1) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. This is not the same as saying that the permit itself has to include all applicable requirements, as implied by the

comment. The regulations do not prohibit the permit from referencing requirements in NOC approval orders, rather than restating the provisions from the NOC approval orders. Therefore, approval condition 1.1.4 of the approval order is not required to be included in the permit since it is referenced in the condition requirements.

The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. Approval Order DE11NWP-001 Revision 4 was provided for review during this reopened public comment period and contains the information referenced in the Draft AOP mentioned in your comment.

No change to the AOP is required.

Comment I-7-71

Comment 71: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation, p. 107]: Line 8 on p. 107 for periodic monitoring, references to "approval condition 1.4" of Order DE11NWP-001, Rev. 4 (Order), yet "approval condition 1.4" of the Order is not included in that portion of the Order reproduced in draft Attachment 1. Nor is "approval condition 1.4" of the Order included in the material Ecology made available to the public to support public review of draft Renewal 3. Absent this information the need for gap-fill monitoring [40 C.F.R. 70.6 (a)(3)(i)(B)] can't be assessed. Include "approval condition 1.4" in the permit and re-start public review.

Ecology Response to I-7-71

Thank you for your comment.

WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(1) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. This is not the same as saying that the permit itself has to include all applicable requirements, as implied by the comment. The regulations do not prohibit the permit from referencing requirements in NOC approval orders, rather than restating the provisions from the NOC approval orders. Therefore, approval condition 1.4 of the approval order is not required to be included in the permit since it is referenced in the condition requirements.

The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. Approval Order DE11NWP-001 Revision 4 was provided for review during this reopened public comment period and contains the information referenced in the Draft AOP mentioned in your comment.

No change to the AOP is required.

Comment I-7-72

Comment 72: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation, p. 107]: Line 15 on p. 107 requires reporting of ammonia emissions in pounds per day. Add "and tons per year" so this line reads "... in terms of pounds per day and tons per year." Both part 70 and WAC 173-401 require emissions be reported in tpy.

Ecology Response to I-7-72

Thank you for your comment.

The emission limit for ammonia at discharge point 1.4.32 is identified in units of pounds per 24 hours. The emission levels in WAC 173-460-150 for ammonia are listed in pounds per 24 hours. The condition for ammonia emission limits at this discharge point stem from the approval order DE11NWP-001, Revision 4, which is pursuant to the Washington State Department of Ecology Controls for New Sources of Toxic Air Pollutants, Chapter 173-460 WAC.

While part 70 and WAC 173-401 use emissions of hazardous air pollutants in tons per year for major source determinations and insignificant emission thresholds, the regulations do not have a specific requirement to report emissions in tons per year. Additionally, the regulations do not define that the emission limits within the AOP must be provided in tons per year. It is acceptable to identify the limits for ammonia in units consistent with the underlying requirements, the approval order and WAC 173-460-150. Therefore, there is no need to require the permittee, USDOE, to report ammonia emissions in terms of pounds per day and tons per year, as requested in the comment.

No change to the AOP is required.

Comment I-7-73

Comment 73: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation, p. 107]: Lines 22 and 23 on p. 107 contains the following text associated with the "Test Frequency" condition: "... ammonia stack emissions will be conducted according to DE11NWP-001, Rev. 4, Section 3.1.1 and 3.4." However, neither "Section 3.1.1" nor section "3.4" of Order DE11NWP-001, Rev. 4 (Order) is included in that portion of the Order reproduced in draft Attachment I. Nor are sections 3.1.1 and 3.4 included in material Ecology made available to the public to support public review of draft Renewal 3. Absent this information the need for gap-fill monitoring [40 C.F.R. 70.6 (a)(3)(i)(B)] can't be assessed.

Include sections 3.1.1 and 3.4 in the permit and re-stall public review.

Ecology Response to I-7-73

Thank you for your comment.

WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(1) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. This is not the same as saying that the permit itself has to include all applicable requirements, as implied by the comment. The regulations do not prohibit the permit from referencing requirements in NOC approval orders, rather than restating the provisions from the NOC approval orders. Therefore, section 3.1.1 and 3.4 of the approval order are not required to be included in the permit since it is referenced in the condition requirements.

The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. Approval Order DE11NWP-001 Revision 4 was provided for review during this reopened public comment period and contains the information referenced in the Draft AOP mentioned in your comment.

No change to the AOP is required.

Comment I-7-74

Comment 74: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation, p.108]: Periodic Monitoring beginning on line 1 on p. 108 for "Approval Condition 1.1.4" (line 1) relies, at least in part, on "sampling as described in Section 3.0" (line 2). Compliance with this stated periodic monitoring requirement for "approval condition 1.4 shall be demonstrated by monitoring emissions of all TAP emission limits as described in Section 3.5." (Lines 8 & 9, p. 108) However, approval conditions 1.1.4, 1.4 and "Section 3.0" do not appear in either that portion of Order DE11NWP-001, Rev. 4 copied into draft Attachment 1 or in the material Ecology made available to the public to support public review of draft Renewal 3. Absent approval conditions 1.1.4, 1.4 and "Section 3 .O" the need for gap-fill monitoring [40 C.F.R. 70.6 (a)(3)(i)(B)] can't be assessed.

Include approval conditions 1.1.4, 1.4 and "Section 3.0" in the permit and re-start public review.

Ecology Response to I-7-74

Thank you for your comment.

WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(1) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. This is not the same as saying that the permit itself has to include all applicable requirements, as implied by the comment. The regulations do not prohibit the permit from referencing requirements in NOC approval orders, rather than restating the provisions from the NOC approval orders. Therefore, conditions 1.1.4, 1.4 and section 3.0 of the approval order are not required to be included in the permit since it is referenced in the condition requirements.

The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. Approval Order DE11NWP-001 Revision 4 was provided for review during this reopened public comment period and contains the information referenced in the Draft AOP mentioned in your comment.

No change to the AOP is required.

Comment I-7-75

Comment 75: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation, p. 108]: The emission limit table for NDMA shows units in "pounds per 24 hours". Please ADD a column to also report these limits in tons per year (tpy). Both part 70 and WAC 173-401 require emissions be reported in tpy.

Ecology Response to I-7-75

Thank you for your comment.

The table on page 108 lists the maximum amount of n-nitrosodimethylamine (NDMA) emissions in pounds per year, not pounds per 24 hours as stated in the comment. The emission levels in WAC 173-460-150 for (NDMA) are listed in pounds per year. The condition for NDMA emission limits at this discharge point stem from the approval order DE11NWP-001, Revision 4, which is pursuant to the Washington State Department of Ecology Controls for New Sources of Toxic Air Pollutants, Chapter 173-460 WAC.

While part 70 and WAC 173-401 use emissions of hazardous air pollutants in tons per year for major

source determinations and insignificant emission thresholds, the regulations do not have a specific requirement to report emissions in tons per year. Additionally, the regulations do not define that the emission limits within the AOP must be provided in tons per year. It is acceptable to identify the limits for NDMA in units consistent with the underlying requirements, the approval order and WAC 173-460-150.

No change to the AOP is required.

Comment I-7-76

Comment 76: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation, p. 109]: Lines 11 & 112 on p. 109 read: "The permittee will evaluate the data to determine, (3.5.2.2.1) if n-Nitrosodimethylamine have remained below permit conditions." However, "(3.5.2.2.1)" does not appear in either that portion of Order DE11NWP-001, Rev. 4 copied into draft Attachment 1 or in the material Ecology made available to the public to support public review of draft Renewal 3. Absent "(3.5.2.2.1)" the associated "Test Frequency" and thus the need for gap-fill monitoring [40 C.F.R. 70.6 (a)(3)(i)(B)] can't be assessed.

Include "(3.5.2.2.1)" in the permit and re-start public review.

Ecology Response to I-7-76

Thank you for your comment.

WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(1) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. This is not the same as saying that the permit itself has to include all applicable requirements, as implied by the comment. The regulations do not prohibit the permit from referencing requirements in NOC approval orders, rather than restating the provisions from the NOC approval orders. Therefore, section 3.5.2.2.1 of the approval order is not required to be included in the permit since it is referenced in the condition requirements.

The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. Approval Order DE11NWP-001 Revision 4 was provided for review during this reopened public comment period and contains the information referenced in the Draft AOP mentioned in your comment.

No change to the AOP is required.

Comment I-7-77

Comment 77: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation, p.109 & 110]: a) Lines 37 & 38 on p. 109 and line 43 on p. 110 state that "Table 6 values will be kept current and available for public viewing on Ecology's website." Ecology's new website contains so much information it is highly unlikely Table 6 can be located absent a specific uniform resource locator (URL). Provide a URL for viewing Table 6 on Ecology's website. b) There is no Table 6 in either that portion of Order DE11NWP-001, Rev. 4 copied into draft Attachment 1 or in the material Ecology made available to the public to support public review of draft Renewal 3. Include Table 6 and re-start public review.

Ecology Response to I-7-77

Thank you for your comment.

a) A new webpage has been created to host the current NOCs issued by Ecology's Nuclear Waste Program (https://fortress.wa.gov/ecy/nwp/permitting/air/noc/current/current_noc.html). This website contains approval order DE11NWP-001 Revision 4 and the most current Table 6 values for public viewing. While the above website address may change in the future, it is unlikely that the Ecology Nuclear Waste Program Hanford Federal Facility Permits website address, <https://fortress.wa.gov/ecy/nwp/permitting/>, will change. A link to the NOC page is posted under the Hanford Site Air Operating Permit information on this webpage.

The website address <https://fortress.wa.gov/ecy/nwp/permitting/> will be added to the end of line 38 on page 109. Lines 41 through 43 on page 110 have been removed from the AOP. Please see Ecology's response to comment A-2-61 for further details.

b) WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(1) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. This is not the same as saying that the permit itself has to include all applicable requirements, as implied by the comment. The regulations do not prohibit the permit from referencing requirements in NOC approval orders, rather than restating the provisions from the NOC approval orders. Therefore, Table 6 of the approval order is not required to be included in the permit since it is referenced in the condition requirements.

The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. Approval Order DE11NWP-001 Revision 4 was provided for review during this reopened public comment period and contains the information referenced in the Draft AOP mentioned in your comment.

No change to the AOP is required due to part (b).

Comment I-7-78

Comment 78: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation, p. 112]: Lines 6-11 on p. 112 specify "Required Records", so do lines 22 & 23 on p. 105, and lines 1-22 on p. 113: To be consistent with required records from lines 22 & 23 on p. 105, and lines 1-22 on p. 113 add the following to the "Required Records": "contemporaneous stack flow rates and temperatures to determine the mass release rates of these TAPs and their respective release rate averaging times".

Ecology Response to I-7-78

Thank you for your comment.

The condition referenced does not require contemporaneous stack flow rates and temperatures to determine the mass release rates of the toxic air pollutants and their respective release rate averaging times. The condition uses the maximum flow rate of the discharge point and a temperature of 0 degrees Celsius to bound the equation to the least favorable concentration of ammonia in parts per million by volume emitted as an indicator for compliance with the release rates of toxic air pollutants. This method of using an indicator compound does not require stack flow rates and temperatures to determine compliance with the condition.

No change to the AOP is required.

Comment I-7-79

Comment 79: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation, p. 113]: Lines 7-9 on p. 113 reference "Stack gas flow and temperature measurement at the same intervals as required by RAELs" for periodic monitoring and "Same intervals as required by RAELs" for "Frequency". According to Attachment 2 of draft Renewal 3, there is only one RAEL and that is RAEL FF-01 (the entire Attachment 2). Provide the actual intervals Ecology requires, rather than reference to such intervals contained in some unspecified portion of Attachment 2. The public should not have to guess what periodic monitoring is required or at what frequency this monitoring is to be conducted.

Ecology Response to I-7-79

Thank you for your comment.

The RAELs referenced in the condition is directed at the emission unit specific license found within the FF-01 license. This language is consistent with the approval order DE11NWP-001, Revision 4. The requirement to take stack gas flow and temperature measurements at the same interval as required by RAELs is to reduce potential exposure risks to the workers gathering the measurements. The RAELs already require this data and Ecology does not feel that any additional measurements would provide value.

Additionally, the Washington Department of Health maintains the FF-01 license and has the ability to modify the license as frequently as needed, including revising the intervals for taking stack gas flow and temperature measurements. Identifying the actual intervals could increase the exposure risk to workers gathering the measurements if the AOP requires more data taken per year than the FF-01 license, should the emission unit specific license change.

The public can determine the test frequency for this condition by reviewing the FF-01 license in Attachment 2. Each emission unit license identifies project information that can be used to correlate it to the toxics discharge point.

No change to the AOP is required.

Comment I-7-80

Comment 80: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation, p. 113]: Line 15 on p. 113 states the "Calculation Model" is "Not applicable". However compliance with the condition (lines 2-7) requires conversion of any measurements to standard cubic feet per minute (scfm) at "1 atmosphere pressure" at "20 degrees Celsius". Associate the calculation(s) required to affect such a conversion with "Calculation Model".

Ecology Response to I-7-80

Thank you for your comment.

A calculation is required to convert ventilation rates to standard cubic feet per minute at 1 atmosphere pressure at 20 degrees Celsius. A calculation is not the same as a calculation model. Calculation models utilized in the Hanford AOP Renewal 3 are found in Section 3.1 of the Statement of Basis for Attachment 1.

No change to the AOP is required.

Comment I-7-81

Comment 81: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation, p. 114]: Condition (1), line 12 on p. 114 states: "(1) VOC emissions from each exhauster system will be performed." However, no "Periodic Monitoring", no "Test Method" and no "Required Records" are specified for VOC emissions.

Supply "Periodic Monitoring", "Test Method" and "Required Records" specific to VOC emissions.

Ecology Response to I-7-81

Thank you for your comment.

The referenced condition will be removed from the Hanford AOP Renewal 3. Volatile organic constituent (VOC) emission assessments for discharge point 1.4.32 are identified under the VOC emission limit condition found on page 104. The condition on page 104 identifies the periodic monitoring, test method, and required records required for the VOC emission assessments. Dimethyl mercury emission assessments for discharge point 1.4.32 are identified under the dimethyl mercury emission limit condition found on pages 107 and 108.

Comment I-7-82

Comment 82: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation, pp.103-116, flawed risk assessment]: The Tier 2 risk assessment already underestimates the risk to the public from Waste Feed Delivery operations. Overlooked are the "potential additive and synergistic effects of radioactive and nonradioactive releases {Footnote 1}", the "buildup of mercury compounds and other persistent TAPs over time {Footnote 2}", and the inclusion of all forms of mercury emitted. In particular, "elemental mercury (Hg) is not included in the risk assessment despite its tendency to form methyl mercury (MHg) which bioaccumulates, biomagnifies and is also a potent neurotoxin... focus[ing] exclusively on DMHg [dimethyl mercury] and not on other forms of mercury is a significant oversight. {Footnote 3}... Moreover, model concentration estimates are for 24 hours rather than an annual period, which would be more appropriate for long-term accumulations of mercury and its compounds. {Footnote 4}". Because the risk assessment is used, in large part, to establish project emission limits, Ecology should implement a policy to consider ALL risks associated with the particular activity under consideration.

Redo the risk assessment focusing on all risks to the public associated with this project, including from exposure to radionuclides, and establish new emission limits accordingly. See Enclosure 3 to these comments.

{Footnote 1} Review and Comments on Washington State Department of Ecology Requirements for the Measurement and Control of Emissions from Hanford's Nuclear Waste Storage Tanks, Henry S. Cole, Ph.D., Henry S. Cole & Associates, Inc., Feb. 2017, at 2. Included as Enclosure 3 to these comments.

{Footnote 2} Id.

{Footnote 3} Id. at 25

{Footnote 4} Id.

Ecology Response to I-7-82

Thank you for your comment.

Radiological components that would create any synergistic effects are only present together with chemicals in the tanks and batch processes at the Waste Treatment Plant. Approval orders for discharge

points emitting Hanford tank waste have utilized tank head space samples for determining the source term. Thus, the samples collected and used in the permitting process have already accounted for these potential interactions. Additionally, once toxic and radioactive emissions leave the discharge point (i.e., the stack), the vast majority of contamination that releases radiation to synergistically interact with vapors is captured on the HEPA filters required by the FF-01 license. The Waste Treatment Plant uses the tank data and HEPA filters in a similar manner.

Additionally, the regulations allow for emissions of pollutants that are beneath the acceptable source impact level. The regulations consider each pollutant on its own and does not include provisions for the effects caused by the presence of multiple pollutants. Under WAC 173-460-090, the Health Impact Assessment reviews emission increases of toxic air pollutants that cannot demonstrate compliance with WAC 173-460-070 using acceptable source impact levels, which is only dimethyl mercury at this discharge point. The permittee, USDOE, and Ecology have followed appropriate state and federal regulations to determine acceptable risks from dimethyl mercury emissions in the project evaluated by the Health Impact Assessment, which includes emissions from this discharge point. Other air pollutants from the project, including radionuclides, are covered by established regulations and do not require additional risk evaluation.

No change to the AOP is required.

Comment I-7-83

Comment 83: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation, pp. 114-116]: Lines 34 - 36 on p. 114 specify that "[n]o more than two of the three tanks in the 241-SY Tank Farm (241-SY-101 through 241-SY-103) shall be under active mixing and Waste Feed Delivery operations at any one time." Lines 9-11 on p. 115 specify that "[n]o more than two of the three tanks in the 241-SY Tank Farm (241-SY- 101 through 241-SY- 103) shall be under active mixing and Waste Feed Delivery operations at any one time." While lines 3-5 on p. 116 require that "[n]o more than two of the eight tanks in the 241-AP Tank Farm (241-AP-101 through 241-AP-108) shall be under active mixing and Waste Feed Delivery operations at any one time." Thus, as many as two (2) tanks per farm can be involved in waste disturbing activities at any one time. "However, as detailed in Section 4.1, the Tier 2 report bases emissions and the subsequent risk assessment on limiting disturbances to a single tank per each DST farm at any one time. The permit conditions are likely to allow for greater emissions than those on which Tier 2 model concentrations and risk assessments are based. {Footnote 1}"
Limit the number of tanks under active mixing and Waste Feed Delivery operations at any one time to one per farm to be consistent with the Tier 2 model concentrations and risk assessment.

{Footnote 1} Review and Comments on Washington State Department of Ecology Requirements for the Measurement and Control of Emissions from Hanford's Nuclear Waste Storage Tanks, Henry S. Cole, Ph.D., Henry S. Cole & Associates, Inc., Feb. 2017, at 30. Included as Enclosure 3 to these comments.

Ecology Response to I-7-83

Thank you for your comment.

The Second Tier Review Petition for Hanford Tank Farm and Waste Treatment Plant Dimethyl Mercury Emissions, document RPP-ENV-59016 Revision 1, is the Health Impact Assessment (HIA) submitted to support the notice of construction (NOC) application that was permitted as approval order DE11NWP-001 Revision 4. This project is the first project scoped in the HIA. The project in the NOC application proposed that no more than two tanks in a tank farm will have waste disturbing activities occurring simultaneously. It was assumed that the headspace concentrations increased by a factor of 25 during waste disturbing activities.

The HIA assumed that one of the tanks will be mixed and the headspace concentrations increased by a factor of 100 during waste disturbing activities. All source emission rates for dimethyl mercury were then increased by an additional factor of 100 for atmospheric modeling.

The Washington Department of Ecology Air Quality Program (AQP) reviewed the tier 2 petition and supports the HIA in accordance with WAC 173-460-100. It was determined that the toxic air pollutant emissions from the operations defined in the HIA will have no significant impact on air quality. AQP accepted the review team's recommendation to allow the risks evaluated in the HIA and its accompanying documents. Acceptance of the petition and the HIA shows that HIA was sufficient to evaluate the risks posed by the proposed project. The HIA was submitted to support the project requesting waste disturbing activities occurring in two tanks simultaneously per tank farm. Therefore, the risk for two tanks per farm having waste disturbing activities occurring simultaneously was adequately assessed through the HIA and AQP's tier 2 process.

Additionally, the HIA overestimated dimethyl mercury concentrations to provide strong precautions against uncertainty. The dimethyl mercury emissions modeled and evaluated exceed any likely potential emissions of all planned activities on the Hanford Site. The proposed emissions from each tank farm in the project performing waste disturbing activities in two tanks is two orders of magnitude less than the emissions evaluated in the HIA for the tanks farms.

Assuming the ventilation rate, stack parameters, and number of tanks for a specific tank farm is the same in both the HIA and NOC application, the difference in the emission rates is based on the total pollutant concentration in the tank farm evaluated. The total pollutant concentration for a specific farm would be the summed headspace concentration of quiescent tanks and headspace concentration of waste disturbing tanks. Headspace concentration of quiescent tanks is increased by a factor of 25 in the NOC application and by a factor of 100 in the HIA to account for the headspace concentration of waste disturbing tanks. The entire source term in the HIA (the summed total of all tanks in the specific tank farm) is also increased by a factor of 100 to account for any uncertainty.

If x equals the maximum headspace concentration per tank [mass per volume] and T equals the number of tanks, the total pollutant concentration for a specific farm evaluated in the NOC application, which proposed two tanks being disturbed, would be:

$$x(T-2) + 2(25x)$$
$$Tx + 48x$$

The total pollutant concentration for a specific farm evaluated in the HIA, which proposes one tank being disturbed, would be:

$$100[x(T-1) + 100x]$$
$$100[Tx + 99x]$$
$$100Tx + 9900x$$

Therefore, the emission limits for dimethyl mercury in approval order DE11NWP-001, Revision 4, are significantly less than emissions evaluated in HIA.

No change to the AOP is required.

Comment I-7-84

Comment 84: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation, p. 115]: a) Lines 3 & 4, and 20 & 21 on p. 115 require "Operational records sufficient to determine the onset and cessation of Waste Feed Delivery operations for each tank subject to this Order." Specify what records are deemed "sufficient to determine the onset and cessation of Waste Feed Delivery operations for each tank subject to this Order".

b) Lines 1 & 2 and 18 & 19 on p. 115 identify test frequencies as "Not applicable" and test methods as "Not specified". Because the associated periodic monitoring requirements specify recordkeeping, the test methods are also recordkeeping. The test frequencies should be "onset and cessation of such operations", or something similar. Absent either a "Test Frequency" or a "Test Method" the periodic monitoring requirement is unenforceable and so is the entire condition.

Specify a "Test Frequency" and a "Test Method" sufficient to demonstrate continuous compliance with the condition.

Ecology Response to I-7-84

Thank you for your comment.

a) The referenced language is consistent with the approval order DE11NWP-001 Revision 4. The name of the specific record used to determine the onset and cessation of Waste Feed Delivery operations for each tank is not identified because multiple types of records could be used in this determination. The requirement is broad in order to ensure the permittee, USDOE, meets the intent of the condition, rather than providing a specific record that may not sufficiently determine the onset and cessation of Waste Feed Delivery operations.

No change to the AOP is required due to part (a).

b) Recordkeeping is not a test method. If the periodic monitoring requires retention of specific records to determine compliance with the conditions, the specific records are listed under 'Required Records' for each condition. Identifying a test frequency is unnecessary since the required records already state that there must be operational records sufficient to determine the onset and cessation of Waste Feed Delivery operations for each tank subject to this Order. The records would be generated as the activities occur.

No change to the AOP is required due to part (b).

Comment I-7-85

Comment 85: [draft Attachment 1, 1.4.34, Discharge Point: SST Retrieval Direct Fired Water Heaters, p. 118]: Lines 11 & 14 on p. 118 require use of "Table 1 of the Approval Order" to assess periodic monitoring and required records. However, "Table 1 of the Approval Order" is not included in that portion of the Order reproduced in draft Attachment 1. Nor is "Table I of the Approval Order" included in the material Ecology made available to the public to support public review of draft Renewal 3.

Include "Table 1 of the Approval Order" in the permit and re-start public review.

Ecology Response to I-7-85

Thank you for your comment.

WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(1) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. This is not the same as saying that the permit itself has to include all applicable requirements, as implied by the comment. The regulations do not prohibit the permit from referencing requirements in NOC approval orders, rather than restating the provisions from the NOC approval orders. Therefore, Table 1 of the approval order is not required to be included in the permit since it is referenced in the condition requirements.

The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. Approval Order DE12NWP-003 was provided for review during this reopened public comment period and contains the information referenced in the Draft AOP mentioned in your comment.

No change to the AOP is required.

Comment I-7-86

Comment 86: [draft Attachment 1, 1.4.34, Discharge Point: SST Retrieval Direct Fired Water Heaters, p. 118]: Line 17 on p. 118 states the "Calculation Model" is "Not applicable". However, line 7 on p. 118 requires determination of the "maximum accumulated heating capacity". The "Calculation Model" is the calculation(s) required to determine the "maximum accumulated heating capacity".

Associate the calculation(s) required to determine the "maximum accumulated heating capacity" with "Calculation Model".

Ecology Response to I-7-86

Thank you for your comment.

A calculation is required to determine the maximum accumulated heating capacity. A calculation is not the same as a calculation model. Calculation models utilized in the Hanford AOP Renewal 3 are found in Section 3.1 of the Statement of Basis for Attachment 1.

No change to the AOP is required.

Comment I-7-87

Comment 87: [draft Attachment 1, 1.4.34, Discharge Point: SST Retrieval Direct Fired Water Heaters, p. 118): Lines 24 & 25 on p. 118 state the test method and test frequency are "Not applicable". Because the periodic monitoring requirement is recordkeeping, the test method is also recordkeeping. The test frequency should be "every fuel delivers", or something similar, to be consistent with the remainder of the condition. Absent either a "Test Frequency" or a "Test Method" the periodic monitoring requirement is unenforceable. Absent periodic monitoring the entire condition is unenforceable.

Specify a "Test Frequency" and a "Test Method" sufficient to demonstrate continuous compliance with the condition.

Ecology Response to I-7-87

Thank you for your comment.

Recordkeeping is not a test method. If the periodic monitoring requires retention of specific records to determine compliance with the conditions, the specific records are listed under 'Required Records' for each condition. Identifying a test frequency is unnecessary since the required records already state that there must be vendor certification for diesel fuel sulfur content for all purchases.

No change to the AOP is required.

Comment I-7-88

Comment 88: [draft Attachment 1, 1.4.34, Discharge Point: SST Retrieval Direct Fired Water Heaters, p. 119]: Lines 13, 14, & 15 on p. 119 require use of "Equation 1 in the Approval Order" for "Periodic Monitoring" and "Test Method". However, "Equation 1 in the Approval Order" is not included in that portion of the Order reproduced in draft Attachment 1. Nor is "Equation 1 in the Approval Order" included in the material Ecology made available to the public to support public review of draft Renewal 3.

Include "Equation 1 in the Approval Order" in the permit and re-start public review.

Ecology Response to I-7-88

Thank you for your comment.

WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(1) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. This is not the same as saying that the permit itself has to include all applicable requirements, as implied by the comment. The regulations do not prohibit the permit from referencing requirements in NOC approval orders, rather than restating the provisions from the NOC approval orders. Therefore, equation 1 of the approval order is not required to be included in the permit since it is referenced in the condition requirements.

The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. Approval Order DE12NWP-003 was provided for review during this reopened public comment period and contains the information referenced in the Draft AOP mentioned in your comment.

No change to the AOP is required.

Comment I-7-89

Comment 89: [draft Attachment 1, 1.4.34, Discharge Point: SST Retrieval Direct Fired Water Heaters, p. 119]: Line 19 on p. 119 requires "Twelve-month cumulative operating hours for each engine". Specify these records will be retained for 5 years as required by both 40 C.F.R. 70.6 (a)(3)(ii)(B) and WAC 713-401-615 (2)(c).

Ecology Response to I-7-89

Thank you for your comment.

The referenced text "twelve-month cumulative operating hours for each engine, calculated monthly" is not a record retention requirement. It is the required record from the approval order DE12NWP-003. The permittee, USDOE, must generate a record with the cumulative operating hours of each engine for the most recent 12 months. The cumulative operating hours must be calculated, and therefore a record generated, every month. The condition does not identify a specific record retention requirement, thereby defaulting to Section 3.0 of Attachment 1, requiring the permittee to maintain records of all required monitoring data and support information for 5 years.

No change to the AOP is required.

Comment I-7-90

Comment 90: [draft Attachment 1, 1.4.34, Discharge Point: SST Retrieval Direct Fired Water Heaters, p. 119]: Line 22 on p. 119 states the "Calculation Model" is "Not applicable". However, lines 3-6 and lines 13-15 on p. 119 require determination of emission limits for NOx, CO, VOC, & PM and use of "Equation 1 in the Approval Order". The "Calculation Model" is the calculations required to determine emission limits for NOx, CO, VOC, & PM plus "Equation 1 in the Approval Order". Associate the calculations required to determine NOx, CO, VOC & PM emission limits in addition to "Equation 1 in the Approval Order" with "Calculation Model".

Ecology Response to I-7-90

Thank you for your comment.

The emission limit condition listed on page 119 for discharge point 1.3.34 requires compliance to be demonstrated by the use of high efficiency burners, operation of no more than 10 diesel fueled water heaters at any time, operating and maintaining the heater in accordance with manufacturer's specifications, installation and use of non-resettable hour meter, and limiting operating hours equal to or less than 1.0 as calculated by Equation 1 in Approval Order DE12NWP-003. If the water heaters are operated accordingly, the emission limits will be met and do not require the permittee, USDOE, to determine the actual emissions.

A calculation is required to determine the operating hours ratio, which is provided in Approval Order DE12NWP-003. A calculation is not the same as a calculation model. Calculation models utilized in the Hanford AOP Renewal 3 are found in Section 3.1 of the Statement of Basis for Attachment 1.

No change to the AOP is required.

Comment I-7-91

Comment 91: [draft Attachment 1, 1.4.34, Discharge Point: SST Retrieval Direct Fired Water Heaters, p. 120): "Required Records" on line 11 of p. 120 specifies retention of records for "Twelve-month cumulative operating hours for each engine". State these records will be retained for 5 years as required by both 40 C.F.R. 70.6 (a)(3)(ii)(B) and WAC 713-401-615 (2)(c).

Ecology Response to I-7-91

Thank you for your comment.

The referenced text "twelve-month cumulative operating hours for each heater" is not a record retention requirement. It is the required record from the approval order DE12NWP-003. The permittee, USDOE, must generate a record with the cumulative operating hours of each heater for the most recent 12 months. The condition does not identify a specific record retention requirement, thereby defaulting to Section 3.0 of Attachment 1, requiring the permittee to maintain records of all required monitoring data and support information for 5 years.

No change to the AOP is required.

Comment I-7-92

Comment 92: [draft Attachment 1, 1.4.34, Discharge Point: SST Retrieval Direct Fired Water Heaters, p. 120]: Lines 9 & 10 on p. 120 state the test method and test frequency are "Not applicable". Because the periodic monitoring requirement is recordkeeping, the test method is also recordkeeping. The test frequency should be "monthly", or something similar, to be consistent with the remainder of the condition. Absent either a "Test Frequency" or a "Test Method" the periodic monitoring requirement is unenforceable and so is the entire condition. Specify a "Test Frequency" and a "Test Method" sufficient to demonstrate continuous compliance with the condition.

Ecology Response to I-7-92

Thank you for your comment.

Recordkeeping is not a test method. If the periodic monitoring requires retention of specific records to determine compliance with the conditions, the specific records are listed under 'Required Records' for each condition. Requiring recordkeeping on an annual frequency would make the AOP less stringent by requiring the records only be generated once a year. All records should be generated continuously (e.g., hours of operation logged) or as specified in the condition requirements (e.g., monthly records of fuel use).

No change to the AOP is required.

Comment I-7-93

Comment 93: [draft Attachment 1, 1.4.35, Discharge Point: Hanford Site Asbestos Landfill, p. 121]: Lines 21-24 and lines 37-40 require no "Periodic Monitoring", no "Test Method", no "Test Frequency", and no "Required Records". Supply requirements "sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with" the federally-enforceable conditions in this Order as required by 40 C.F.R. 70.6 (a)(3)(i)(B) and 40 C.F.R. 70.6 in general.

Ecology Response to I-7-93

Thank you for your comment.

The first condition on page 121 requires no visible emission to the outside air or a covering over the asbestos-containing waste material. The Hanford Site Asbestos Landfill has a soil covering over the trenches. This can be observed during an inspection to determine compliance with the condition. No further periodic monitoring, test method, test frequency, or required records are required to ensure compliance with this condition.

The second condition on page 121 requires notification at least 45 days prior to excavation. No periodic monitoring, test method, test frequency, or required records are required to ensure compliance with this condition.

No change to the AOP is required.

Comment I-7-94

Comment 94: [draft Attachment 1, 1.4.35, Discharge Point: Hanford Site Asbestos Landfill, p. 122]: a) Line 2 on p. 122 cites to WAC 173-400-040(2) the paragraph that regulates visible emissions. Regulation of visible emissions is federally-enforceable. Change line 9 on p. 122 to reflect that regulation of visible emissions is federally-enforceable.

b) Line 13 on p. 122 cites to WAC 173-400-040 (7), the paragraph that regulates sulfur dioxide. Regulation of sulfur dioxide on line 13 on p. 122 is also federally-enforceable. Change line 20 on p. 122 to reflect conditions regulating sulfur dioxide are federally-enforceable.

c) Supply "Periodic Monitoring", "Test Method", "Test Frequency", and "Required Records" sufficient to ensure continuous compliance with the conditions.

Ecology Response to I-7-94

Thank you for your comment.

a) Line 9 on page 122 will be changed from "State-Only: Yes." to "State-Only: No." to reflect that the condition is federally enforceable.

b) Line 20 on page 122 will be changed from "State-Only: Yes." to "State-Only: No." to reflect that the condition is federally enforceable.

c) Discharge point 1.4.35 is for the Hanford Site Asbestos Landfill, which is an inactive waste disposal site. The conditions on page 122 are for WAC 173-400-040(2) (visible emissions general standards for maximum emissions) and WAC 173-400-040(7) (sulfur dioxide general standards for maximum emissions). For both conditions, the permittee is considered to be in compliance if no complaints are forwarded or generated by Ecology.

Visible emissions from this emission unit can only be generated from wind eroding the landfill cover. The landfill cover must contain a layer of compacted non-asbestos-containing material and maintain a cover of vegetation, crushed rock, or a thicker layer of compacted non-asbestos-containing material (40 CFR 61.151(a), identified as a condition on page 121). This cover must be maintained to prevent emissions or exposure. Due to this design and condition, it is unlikely for visible emissions to from the emission unit to exceed 20 percent opacity, as required by WAC 173-400-040(2). Complaints forwarded or generated by Ecology will be investigated to determine if the permittee, USDOE, is not in compliance with the condition. No further periodic monitoring, test method, test frequency, or required records are necessary to ensure compliance with the condition.

Based on process knowledge, this emission unit does not emit significant levels of sulfur dioxide. Under Attachment 1, Section 2.7, Tier 2, as identified as periodic monitoring, the permittee, USDOE, shall annually certify that the processes have not been modified to increase sulfur dioxide emissions. No further periodic monitoring, test method, test frequency, or required records are necessary to ensure compliance with the condition.

No change to the AOP is required due to part (c).

Comment I-7-95

Comment 95: [draft Attachment 1, 1.4.36, Discharge Point: 600 Area Gas Distribution, p. 123]: Lines 11-14 and lines 25-27 on p. 123 require no "Periodic Monitoring", no "Test Method", no "Test Frequency", and no "Required Records". Supply "Periodic Monitoring", "Test Method", "Test Frequency", and "Required Records" sufficient to ensure continuous compliance with the federally-enforceable conditions.

Ecology Response to I-7-95

Thank you for your comment.

The first condition in the referenced text is for the gasoline storage tanks to be equipped with submerged or bottom fill lines and fittings to vapor balance gasoline vapors with the delivery transport tank. The gasoline storage tanks under this condition have been installed to meet this condition. The second condition in the referenced text is for the gasoline dispensing facility to prohibit the loading of gasoline into a storage tank equipped with vapor balance fittings from a transport tank equipped with vapor balance fittings unless the vapor balance system is attached to the transport tank and operated satisfactorily. Inspections can observe the facility to determine if the associated lines and fittings are installed and used correctly during loading from transport tanks. These conditions are enforceable as stated and do not require periodic monitoring, test methods, test frequencies, or records to determine compliance.

No change to the AOP is required.

Comment I-7-96

Comment 96: [draft Attachment 1, 1.4.36, Discharge Point: 600 Area Gas Distribution, p. 124]: a) Lines 20-23 on p. 124 specify "Periodic Monitoring" as "Annually", do not specify a "Test Method", do not specify a "Test Frequency" and call for "Required Records" to be "As established by the condition".

Supply specific "Periodic Monitoring", "Test Method", "Test Frequency", and "Required Records" requirements sufficient to ensure continuous compliance with these federally-enforceable conditions.

b) Lines 31-34 on p. 124 require no "Periodic Monitoring", no "Test Method", no "Test Frequency", and no "Required Records".

Supply "Periodic Monitoring", "Test Method", "Test Frequency", and "Required Records" sufficient to ensure continuous compliance with these federally-enforceable conditions.

Ecology Response to I-7-96

Thank you for your comment.

a) The referenced condition is for WAC 173-491-040(6)(d), which identify the recordkeeping requirements for equipment or system failures under the gasoline vapor control requirements. Periodic monitoring, test methods, test frequencies, or required records beyond those identified in the condition as written on page 124 are not necessary to ensure compliance with the condition.

Line 20 of page 124 will be revised to state "Periodic Monitoring: As established by the condition." to be consistent with the condition as it is written.

b) Discharge point 1.4.36 is for gasoline distribution in the 600 Area. As stated in lines 29 and 30 of page

124, the permittee is considered to be in compliance with the condition, WAC 173-400-040(2), visible emissions, if no complaints are forwarded or generated by Ecology. It is unlikely for visible emissions to form the emission unit to exceed 20 percent opacity, as required by WAC 173-400-040(2). Complaints forwarded or generated by Ecology will be investigated to determine if the permittee, USDOE, is not in compliance with the condition. No further periodic monitoring, test method, test frequency, or required records are necessary to ensure compliance with the condition.

No change to the AOP is required due to part (b).

Comment I-7-97

Comment 97: [draft Attachment 1, 1.4.36, Discharge Point: 600 Area Gas Distribution, p. 125]: a) Line 2 on p. 125 specifies "WAC 173-400-040(6)" and associated that paragraph with emissions of sulfur dioxide. It appears Ecology has incorrectly cited to a version of WAC 173-400-040 that is no longer current. [The current edition of 040(6) addresses "Emissions detrimental to persons or property".] When referencing an version of a regulation that is no longer current, the rules of citation dictate the year of the code edition appear in parentheses after the citation, such as WAC 173-400 (2002) {Footnote 1}. In accordance with Washington Court Rules "[d]o not add the year in parentheses after a citation to a presently effective version of a statute or code". [See: https://www.courts.wa.gov/appellate_trial_courts/supreme/?fa=atc_supreme.style, Exceptions to Bluebook, No. 13]

Provide a correct citation to the condition.

b) Lines 5-7 on p. 124 require no "Periodic Monitoring", no "Test Method", and no "Test Frequency". Additionally, the "Required Records" on lines 8 & 9 ("The Permittee shall annually certify that the processes have not been modified to increase S02 emissions and no S02 monitoring is required") does not identify specific records needed to comply with the condition.

Supply "Periodic Monitoring", "Test Method", "Test Frequency", and "Required Records" sufficient to ensure continuous compliance with the federally-enforceable condition.

[SUGGESTION] As a suggestion, Ecology may wish to actually copy the implicated portion of the WAC into the condition rather than just reference the particular paragraph(s).

{Footnote 1} The Bluebook: A Uniform System of Citation, R. 12.3.2 at 124-25 (Columbia Law Review Ass'n et al. eds., 20th ed. 2015).

Ecology Response to I-7-97

Thank you for your comment.

a) This was a typographical error. WAC 173-400-040(7) is the correct citation for the condition.

Line 4 of page 123 and line 2 of page 125 will be revised to correct the reference from WAC 173-400-040(6) to WAC 173-400-040(7).

b) Lines 5-9 on page 124 are part of the condition for WAC 173-491-040(6)(d). Ecology assumes that the commenter meant lines 5-9 on page 125, which identify the periodic monitoring, test method, test frequency, and required records for the condition for WAC 173-400-040(6) [sic]. Based on process knowledge, this emission unit does not emit significant levels of sulfur dioxide. The condition requires

the permittee, USDOE, shall annually certify that the processes have not been modified to increase sulfur dioxide emissions. No further periodic monitoring, test method, test frequency, or required records are necessary to ensure compliance with the condition.

No change to the AOP is required due to part (b).

Comment I-7-98

Comment 98: [draft Attachment 1, 1.4.37, Discharge Point: 6120 Tent (200 East), p. 126]: a) Line 16 on p. 126 identifies the "Calculation Model" as "Not Applicable". However, lines 6-8 identify conditions that require a calculation. Provide the required calculations and associate those calculations with "Calculation Model" on line 16.

b) Provide the actual condition on line 19, p. 126, rather than a reference to a particular paragraph in a regulation that may have been superseded or could be superseded in the future.

c) Absent a "Test Method" and "Test Frequency" (lines 22 & 23, p. 126) the periodic monitoring requirement is unenforceable and so is the entire condition.

Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with this federally-enforceable condition.

Ecology Response to I-7-98

Thank you for your comment.

Discharge point 1.4.37 has been removed from the AOP per the request of the permittee, USDOE. USDOE notified Ecology on August 30, 2017, in letter 17-ESQ-0096 that this discharge point was removed from service.

Line 1 of page 126 will be changed to read "1.4.37 Reserved" and all text contained in lines 2-26 of page 126 will be removed.

Comment I-7-99

Comment 99: [draft Attachment 1, 1.4.38, Discharge Point: 100K Water Treatment Plant, p. 127]: a) Line 16 on p. 127 identifies the "Calculation Model" as "Not Applicable". However, lines 6-8 identify conditions that require a calculation.

Provide the required calculations and associate those calculations with "Calculation Model" on line 16.

b) Provide the actual condition on line 19, p. 127, rather than a reference to a particular paragraph in a regulation that may have been superseded or could be superseded in the future.

c) Absent a "Test Method" and "Test Frequency" (lines 22 & 23, p. 127) the periodic monitoring requirement is unenforceable and so is the entire condition.

Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with this federally-enforceable condition.

Ecology Response to I-7-99

Thank you for your comment.

a) Discharge point 1.4.38 is a NSPS Subpart III stationary compression ignition internal combustion engine. The referenced condition on page 127 is for the emission limit of hydrocarbons, nitrogen oxides, and carbon monoxide. Compliance with the condition is demonstrated by operating and maintaining the engine and control device according to the manufacturer's written instructions. Records of the manufacturer's maintenance or operation manual, documentation of maintenance performed, and hours of operation are adequate to demonstrate compliance. The condition and requirements are consistent with NSPS Subpart III. A calculation model is not necessary to ensure compliance with the condition.

No change to the AOP is required due to part (a).

b) The condition found on line 19, page 127 is for use of fuel per 40 CFR 60.4207(b), which states "Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted." This regulation has not been superseded. All of the conditions for this discharge unit stem from the NSPS Subpart III stationary compression ignition internal combustion engines regulations. If the regulation is superseded in the future, the condition is no longer applicable to discharge point. The new applicable regulations would require amendments to the AOP.

WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(1) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. The regulations do not prohibit the permit from referencing requirements from federal or state regulations, rather than restating the regulations. Ecology has chosen to streamline the process to reduce the complexity of the permit by referencing the federal regulation for this condition. This complies with the above regulations and, furthermore, is appropriate and effective in streamlining the content for the Hanford AOP.

No change to the AOP is required due to part (b).

c) Lines 22 and 23 of page 127 identify the test method test frequency as not applicable for the condition of use of fuel per 40 CFR 60.4207(b). The periodic monitoring requirement is that compliance is demonstrated by the use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight). Required records include vendor certification for diesel fuel sulfur content for all purchases. These requirements are consistent with the NSPS Subpart III regulations. Therefore, the test method and test frequency are not necessary to ensure compliance with this condition. Furthermore, not identifying a test method or test frequency does not make the periodic monitoring requirement unenforceable. The condition approval as written, absent a test method and test frequency is sufficient to ensure continuous compliance with the federally enforceable condition.

No change to the AOP is required due to part (c).

Comment I-7-100

Comment 100: [draft Attachment 1, 1.4.39, Discharge Point: 385 Building, p. 128]: a) Line 15 on p. 128 identifies the "Calculation Model" as "Not Applicable". However, lines 6-8 identify conditions that require a calculation. Provide the required calculations and associate those calculations with "Calculation Model" on line 15. b) Provide the actual condition on line 18, p. 128, rather than a

reference to a particular paragraph in a regulation that may have been superseded or could be superseded in the future. c) Absent a "Test Method" and "Test Frequency" (lines 21 & 22, p. 128) the periodic monitoring requirement is unenforceable and so is the entire condition. Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with this federally-enforceable condition.

Ecology Response to I-7-100

Thank you for your comment.

a) Discharge point 1.4.39 is a NSPS Subpart III stationary compression ignition internal combustion engine. The referenced condition on page 128 is for the emission limit of hydrocarbons, nitrogen oxides, and carbon monoxide. Compliance with the condition is demonstrated by operating and maintaining the engine and control device according to the manufacturer's written instructions. Records of the manufacturer's maintenance or operation manual, documentation of maintenance performed, and hours of operation is adequate to demonstrate compliance. The condition and requirements are consistent with NSPS Subpart III. A calculation model is not necessary to ensure compliance with the condition.

No change to the AOP is required due to part (a).

b) The condition found on line 19, page 128 is for use of fuel per 40 CFR 60.4207(b), which states "Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted." This regulation has not been superseded. All of the conditions for this discharge unit stem from the NSPS Subpart III stationary compression ignition internal combustion engines regulations. If the regulation is superseded in the future, the condition is no longer applicable to discharge point. The new applicable regulations would require amendments to the AOP.

WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(1) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. The regulations do not prohibit the permit from referencing requirements from federal or state regulations, rather than restating the regulations. Ecology has chosen to streamline the process to reduce the complexity of the permit by referencing the federal regulation for this condition. This complies with the above regulations and, furthermore, is appropriate and effective in streamlining the content for the Hanford AOP.

No change to the AOP is required due to part (b).

c) Lines 21 and 22 of page 128 identify the test method test frequency as not applicable for the condition of use of fuel per 40 CFR 60.4207(b). The periodic monitoring requirement is that compliance is demonstrated by the use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight). Required records include vendor certification for diesel fuel sulfur content for all purchases. These requirements are consistent with the NSPS Subpart III regulations. Therefore, the test method and test frequency are not necessary to ensure compliance with this condition. Furthermore, not identifying a test method or test frequency does not make the periodic monitoring requirement unenforceable. The condition approval as written, absent a test method and test frequency is sufficient to ensure continuous compliance with the federally enforceable condition.

No change to the AOP is required due to part (c).

Comment I-7-101

Comment 101: [draft Attachment 1, 1.4.40, Discharge Point: 219H Tent and MO-414 (200 east), p. 129]: a) Line 15 on p. 129 identifies the "Calculation Model" as "Not Applicable". However, lines 5-8 identify conditions that require a calculation. Provide the required calculations and associate those calculations with "Calculation Model" on line 15. b) Provide the actual condition on line 18, p. 129, rather than a reference to a particular paragraph in a regulation that may have been superseded or could be superseded in the future. c) Absent a "Test Method" and "Test Frequency" (lines 21 & 22, p. 129) the periodic monitoring requirement is unenforceable and so is the entire condition. Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with this federally-enforceable condition.

Ecology Response to I-7-101

Thank you for your comment.

Discharge point 1.4.40 has been removed from the AOP per the request of the permittee, USDOE. USDOE notified Ecology on January 16, 2018, in letter 18-ESQ-0024 that this discharge point was removed from service.

Line 1 of page 129 will be changed to read "1.4.40 Reserved" and all text contained in lines 2-25 of page 129 will be removed.

Comment I-7-102

Comment 102: [draft Attachment 1, 1.4.41, Discharge Point: 219H North of MO-414 (200 East) 1 of 2, p.130]: a) Line 15 on p. 130 identifies the "Calculation Model" as "Not Applicable". However, lines 5-8 identify conditions that require a calculation.

Provide the required calculations and associate those calculations with "Calculation Model" on line 15.

b) Provide the actual condition on line 18, p. 130, rather than a reference to a particular paragraph in a regulation that may have been superseded or could be superseded in the future.

c) Absent a "Test Method" and "Test Frequency" (lines 21 & 22, p. 130) the periodic monitoring requirement is unenforceable and so is the entire condition.

Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with this federally-enforceable condition.

Ecology Response to I-7-102

Thank you for your comment.

Discharge point 1.4.41 has been removed from the AOP per the request of the permittee, USDOE. USDOE notified Ecology on July 24, 2018, in letter 18-ESQ-0086 that this discharge point was removed from service.

Line 1 of page 130 will be changed to read "1.4.41 Reserved" and all text contained in lines 2-25 of page 130 will be removed.

Comment I-7-103

Comment 103: [draft Attachment 1, 1.4.42, Discharge Point: 219H North of MO-414 (200 East) 2 of 2, p. 131]: a) Line 15 on p. 131 identifies the "Calculation Model" as "Not Applicable". However, lines 5-8 identify conditions that require a calculation. Provide the required calculations and associate those calculations with "Calculation Model" on line 15. b) Provide the actual condition on line 18, p. 131, rather than a reference to a particular paragraph in a regulation that may have been superseded or could be superseded in the future. c) Absent a "Test Method" and "Test Frequency" (lines 21 & 22, p. 131) the periodic monitoring requirement is unenforceable and so is the entire condition. Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with this federally-enforceable condition.

Ecology Response to I-7-103

Thank you for your comment.

Discharge point 1.4.42 has been removed from the AOP per the request of the permittee, USDOE. USDOE notified Ecology on July 24, 2018, in letter 18-ESQ-0086 that this discharge point was removed from service.

Line 1 of page 131 will be changed to read "1.4.2 Reserved" and all text contained in lines 2-25 of page 131 will be removed.

Comment I-7-104

Comment 104: [draft Attachment 1, 1.4.43, Discharge Point: WTP MHF South-40 Laydown Critical Equipment Storage, p. 132]: a) Line 17 on p. 132 identifies the "Calculation Model" as "Not Applicable". However, lines 7-10 identify conditions that require a calculation. Provide the required calculations and associate those calculations with "Calculation Model" on line 15. b) Provide the actual condition on line 20, p. 132, rather than a reference to a particular paragraph in a regulation that may have been superseded or could be superseded in the future. c) Absent a "Test Method" and "Test Frequency" (lines 23 & 24, p. 132) the periodic monitoring requirement is unenforceable and so is the entire condition. Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with this federally-enforceable condition.

Ecology Response to I-7-104

Thank you for your comment.

a) Discharge point 1.4.43 is a NSPS Subpart III stationary compression ignition internal combustion engine. The referenced condition on page 132 is for the emission limit of hydrocarbons, nitrogen oxides, and carbon monoxide. Compliance with the condition is demonstrated by operating and maintaining the engine and control device according to the manufacturer's written instructions. Records of the manufacturer's maintenance or operation manual, documentation of maintenance performed, and hours of operation is adequate to demonstrate compliance. The condition and requirements are consistent with NSPS Subpart III. A calculation model is not necessary to ensure compliance with the condition.

No change to the AOP is required due to part (a).

b) The condition found on line 20, page 132 is for use of fuel per 40 CFR 60.4207(b), which states "Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased

(or otherwise obtained) prior to October 1, 2010, may be used until depleted." This regulation has not been superseded. All of the conditions for this discharge unit stem from the NSPS Subpart IIII stationary compression ignition internal combustion engines regulations. If the regulation is superseded in the future, the condition is no longer applicable to discharge point. The new applicable regulations would require amendments to the AOP.

WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(1) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. The regulations do not prohibit the permit from referencing requirements from federal or state regulations, rather than restating the regulations. Ecology has chosen to streamline the process to reduce the complexity of the permit by referencing the federal regulation for this condition. This complies with the above regulations and, furthermore, is appropriate and effective in streamlining the content for the Hanford AOP.

No change to the AOP is required due to part (b).

c) Lines 23 and 24 of page 132 identify the test method test frequency as not applicable for the condition of use of fuel per 40 CFR 60.4207(b). The periodic monitoring requirement is that compliance is demonstrated by the use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight). Required records include vendor certification for diesel fuel sulfur content for all purchases. These requirements are consistent with the NSPS Subpart IIII regulations. Therefore, the test method and test frequency are not necessary to ensure compliance with this condition. Furthermore, not identifying a test method or test frequency does not make the periodic monitoring requirement unenforceable. The condition approval as written, absent a test method and test frequency is sufficient to ensure continuous compliance with the federally enforceable condition.

No change to the AOP is required due to part (c).

Comment I-7-105

Comment 105: [draft Attachment 1, 1.4.44, Discharge Point: 2720EA, p. 133]: Line 15 on p. 133 identifies the "Calculation Model" as "Not Applicable". However, lines 6-8 identify conditions that require a calculation. Provide the required calculations and associate those calculations with "Calculation Model" on line 15. This is a federally-enforceable condition.

Ecology Response to I-7-105

Thank you for your comment.

Discharge point 1.4.44 is a NSPS Subpart JJJJ stationary spark ignition internal combustion engine that was constructed in 2011, has 40 horsepower and 2.4 liter cylinder displacement, and uses propane. The referenced condition on page 133 is for the emission limit of hydrocarbons, nitrogen oxides, and carbon monoxide. Compliance with the condition is demonstrated by operating and maintaining the engine and control device according to the manufacturer's written instructions. Records of the manufacturer's maintenance or operation manual, document of maintenance performed, and hours of operation are adequate to demonstrate compliance. The condition and requirements is consistent with NSPS Subpart JJJJ. A calculation model is not necessary to ensure compliance with the condition.

No change to the AOP is required.

Comment I-7-106

Comment 106: [draft Attachment 1, 1.4.45, Discharge Point: Rattle Snake Barricade, p. 134]: Line 14 on p. 134 identifies the "Calculation Model" as "Not Applicable". However, lines 6 & 7 identify conditions that require a calculation. Provide the required calculations and associate those calculations with "Calculation Model" on line 14. This is a federally-enforceable condition.

Ecology Response to I-7-106

Thank you for your comment.

Discharge point 1.4.45 is a NSPS Subpart JJJJ stationary spark ignition internal combustion engine that was constructed in 2008, has 18 horsepower and 0.72 liter cylinder displacement, and uses propane. The referenced condition on page 134 is for the emission limit of hydrocarbons, nitrogen oxides, and carbon monoxide. Compliance with the condition is demonstrated by operating and maintaining the engine and control device according to the manufacturer's written instructions. Records of the manufacturer's maintenance or operation manual, document of maintenance performed, and hours of operation are adequate to demonstrate compliance. The condition and requirements is consistent with NSPS Subpart JJJJ. A calculation model is not necessary to ensure compliance with the condition.

No change to the AOP is required.

Comment I-7-107

Comment 107: [draft Attachment 1, Sections 1.4.47 through & including, 1.4.53; Sections 1.4.56 & 1.4.57; Sections 1.4.60 through and including 1.4.63, pgs. 136 - 152]: None of these emissions units require a "Test Method" or "Test Frequency". Absent a test method and a test frequency the periodic monitoring requirement is unenforceable and so is the entire condition. Because the periodic monitoring specifies recordkeeping, the "Test Method" should also be recordkeeping. "Test Frequency" should probably be "annually". Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with these federally-enforceable conditions.

Ecology Response to I-7-107

Thank you for your comment.

Recordkeeping is not a test method. If the periodic monitoring requires retention of specific records to determine compliance with the conditions, the specific records are listed under 'Required Records' for each condition. Requiring recordkeeping on an annual frequency would make the AOP less stringent by requiring the records only be generated once a year. All records should be generated continuously (e.g., hours of operation logged) or as specified in the condition requirements (e.g., monthly records of fuel use).

No change to the AOP is required.

Comment I-7-108

Comment 108: [draft Attachment 1, 1.4.64, Discharge Point: Light Towers Waste Transfer Corridor East, p. 153]: a) Line 16 on p. 153 identifies the "Calculation Model" as "Not Applicable". However, lines 6-9 identify conditions that require a calculation.

Provide the required calculations and associate those calculations with "Calculation Model" on line 16.

b) Provide the actual condition on line 19, p. 153, rather than a reference to a particular paragraph in a regulation that may have been superseded or could be superseded in the future.

c) Absent a "Test Method" and "Test Frequency" (lines 22 & 23, p. 153) the periodic monitoring requirement is unenforceable and so is the entire condition.

Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with this federally-enforceable condition.

d) Lines 34 & 35 specify "Test Method" and "Test Frequency" as "Not applicable". Absent a test method and a test frequency the periodic monitoring requirement is unenforceable and so is the entire condition. Because the periodic monitoring specifies recordkeeping, the "Test Method" should also be recordkeeping. "Test Frequency" should probably be "annually".

Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with this federally-enforceable condition.

Ecology Response to I-7-108

Thank you for your comment.

a) Discharge point 1.4.64 is a group of NSPS Subpart IIII stationary compression ignition internal combustion engines that were constructed in 2008, or later with about 16.9 horsepower. The group of engines have about 1.1 liters cylinder displacement. The referenced condition on page 153 is for the emission limit of non-methane hydrocarbons, nitrogen oxides, carbon monoxide, and particulate matter. Compliance with the condition is demonstrated by operating and maintaining the engine and control device according to the manufacturer's written instructions. Records of the manufacturer's maintenance or operation manual, document of maintenance performed, and hours of operation are adequate to demonstrate compliance. The condition and requirements are consistent with NSPS Subpart IIII. A calculation model is not necessary to ensure compliance with the condition.

No change to the AOP is required due to part (a).

b) The condition found on line 19, page 153 is for use of fuel per 40 CFR 60.4207(b), which states "Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted." This regulation has not been superseded. All of the conditions for this discharge unit stem from the NSPS Subpart IIII stationary compression ignition internal combustion engines regulations. If the regulation is superseded in the future, the condition is no longer applicable to discharge point. The new applicable regulations would require amendments to the AOP.

WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(1) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. The regulations do not prohibit the permit from referencing requirements from federal or state regulations, rather than restating the regulations. Ecology has chosen to streamline the process to reduce the complexity of the permit by referencing the federal regulation for this condition. This complies with the above regulations and, furthermore, is appropriate and effective in streamlining the content for the Hanford AOP.

No change to the AOP is required due to part (b).

c) Lines 22 and 23 of page 153 identify the test method test frequency as not applicable for the condition of use of fuel per 40 CFR 60.4207(b). The periodic monitoring requirement is that compliance is demonstrated by the use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight). Required records include vendor certification for diesel fuel sulfur content for all purchases. These requirements are consistent with the NSPS Subpart III regulations. Therefore the test method and test frequency are not necessary to ensure compliance with this condition. Furthermore, not identifying a test method or test frequency does not make the periodic monitoring requirement unenforceable. The condition approval as written, absent a test method and test frequency, is sufficient to ensure continuous compliance with the federally enforceable condition.

No change to the AOP is required due to part (c).

d) Lines 34 and 35 of page 153 identify the test method test frequency as not applicable for the condition to maintain no more than eight Waste Transfer Corridor East engines. Periodic monitoring requires inventory of engines used to power the Waste Transfer Corridor East light plants and at a minimum, record the current and past engines in the Corridor with the date the engine was located in the Corridor and the date it was removed from the Corridor. Required records include engine inventory. The condition approval already identifies record-keeping requirements, which are not test methods and do not need a test frequency. Therefore, the test method and test frequency are not necessary to ensure compliance with this condition and the required periodic monitoring. Furthermore, not identifying a test method or test frequency does not make the periodic monitoring requirement unenforceable. The condition approval as written, absent a test method and test frequency is sufficient to ensure continuous compliance with the federally enforceable condition.

No change to the AOP is required due to part (d).

Comment I-7-109

Comment 109: [draft Attachment 1, 1.4.65, Discharge Point: Light Towers Waste Transfer Corridor West, p. 154]: a) Line 16 on p. 154 identifies the "Calculation Model" as "Not Applicable". However, lines 6-9 identify conditions that require a calculation. Provide the required calculations and associate those calculations with "Calculation Model" on line 16. b) Provide the actual condition on line 19, p. 154, rather than a reference to a particular paragraph in a regulation that may have been superseded or could be superseded in the future. c) Absent a "Test Method" and "Test Frequency" (lines 22 & 23, p. 154) the periodic monitoring requirement is unenforceable and so is the entire condition. Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with this federally-enforceable condition. d) Lines 34 & 35 specify "Test Method" and "Test Frequency" as "Not applicable". Absent a test method and a test frequency the periodic monitoring requirement is unenforceable and so is the entire condition. Because the periodic monitoring specifies recordkeeping, the "Test Method" should also be recordkeeping. "Test Frequency" should probably be "annually". Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with this federally-enforceable condition.

Ecology Response to I-7-109

Thank you for your comment.

a) Discharge point 1.4.65 is a group of NSPS Subpart III stationary compression ignition internal combustion engines that were constructed in 2008, or later with about 16.9 horsepower. The group of engines have about 1.1 liters cylinder displacement. The referenced condition on page 154 is for the emission limit of non-methane hydrocarbons, nitrogen oxides, carbon monoxide, and particulate matter. Compliance with the condition is demonstrated by operating and maintaining the engine and control

device according to the manufacturer's written instructions. Records of the manufacturer's maintenance or operation manual, document of maintenance performed, and hours of operation is adequate to demonstrate compliance. The condition and requirements is consistent with NSPS Subpart IIII. A calculation model is not necessary to ensure compliance with the condition.

No change to the AOP is required due to part (a).

b) The condition found on line 19, page 154 is for use of fuel per 40 CFR 60.4207(b), which states "Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted." This regulation has not been superseded. All of the conditions for this discharge unit stem from the NSPS Subpart IIII stationary compression ignition internal combustion engines regulations. If the regulation is superseded in the future, the condition is no longer applicable to discharge point. The new applicable regulations would require amendments to the AOP.

WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(1) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. The regulations do not prohibit the permit from referencing requirements from federal or state regulations, rather than restating the regulations. Ecology has chosen to streamline the process to reduce the complexity of the permit by referencing the federal regulation for this condition. This complies with the above regulations and, furthermore, is appropriate and effective in streamlining the content for the Hanford AOP.

No change to the AOP is required due to part (b).

c) Lines 22 and 23 of page 154 identify the test method test frequency as not applicable for the condition of use of fuel per 40 CFR 60.4207(b). The periodic monitoring requirement is that compliance is demonstrated by the use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight). Required records include vendor certification for diesel fuel sulfur content for all purchases. These requirements are consistent with the NSPS Subpart IIII regulations. Therefore the test method and test frequency is not necessary to ensure compliance with this condition. Furthermore, not identifying a test method or test frequency does not make the periodic monitoring requirement unenforceable. The condition approval as written, absent a test method and test frequency is sufficient to ensure continuous compliance with the federally enforceable condition.

No change to the AOP is required due to part (c).

d) Lines 34 and 35 of page 154 identify the test method test frequency as not applicable for the condition to maintain no more than eight Waste Transfer Corridor West engines. Periodic monitoring requires inventory of engines used to power the Waste Transfer Corridor West light plants and at a minimum, record the current and past engines in the Corridor with the date the engine was located in the Corridor and the date it was removed from the Corridor. Required records include engine inventory. The condition approval already identifies record-keeping requirements, which are not test methods and do not need a test frequency. Therefore the test method and test frequency is not necessary to ensure compliance with this condition and the required periodic monitoring. Furthermore, not identifying a test method or test frequency does not make the periodic monitoring requirement unenforceable. The condition approval as written, absent a test method and test frequency is sufficient to ensure continuous compliance with the federally enforceable condition.

No change to the AOP is required due to part (d).

Comment I-7-110

Comment 110: [draft Attachment 1, 1.4.66, Discharge Point: Light Towers C Farm Trailer Area, p. 155]:

a) Line 17 on p. 155 identifies the "Calculation Model" as "Not Applicable". However, lines 7-10 identify conditions that require a calculation. Provide the required calculations and associate those calculations with "Calculation Model" on line 16. b) Provide the actual condition on line 20, p. 155, rather than a reference to a particular paragraph in a regulation that may have been superseded or could be superseded in the future. c) Absent a "Test Method" and "Test Frequency" (lines 23 & 24, p. 155) the periodic monitoring requirement is unenforceable and so is the entire condition. Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with this federally-enforceable condition. d) Lines 35 & 36 specify "Test Method" and "Test Frequency" as "Not applicable". Absent a test method and a test frequency the periodic monitoring requirement is unenforceable and so is the entire condition. Because the periodic monitoring specifies recordkeeping, the "Test Method" should also be recordkeeping. "Test Frequency" should probably be "annually". Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with this federally-enforceable condition.

Ecology Response to I-7-110

Thank you for your comment.

a) Discharge point 1.4.66 is a group of NSPS Subpart III stationary compression ignition internal combustion engines that were constructed in 2008, or later with about 16.9 horsepower. The group of engines have about 1.1 liters cylinder displacement. The referenced condition on page 155 is for the emission limit of non-methane hydrocarbons, nitrogen oxides, carbon monoxide, and particulate matter. Compliance with the condition is demonstrated by operating and maintaining the engine and control device according to the manufacturer's written instructions. Records of the manufacturer's maintenance or operation manual, document of maintenance performed, and hours of operation is adequate to demonstrate compliance. The condition and requirements are consistent with NSPS Subpart III. A calculation model is not necessary to ensure compliance with the condition.

No change to the AOP is required due to part (a).

b) The condition found on line 20, page 155 is for use of fuel per 40 CFR 60.4207(b), which states "Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted." This regulation has not been superseded. All of the conditions for this discharge unit stem from the NSPS Subpart III stationary compression ignition internal combustion engines regulations. If the regulation is superseded in the future, the condition is no longer applicable to the discharge point. The new applicable regulations would require amendments to the AOP.

WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(1) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. The regulations do not prohibit the permit from referencing requirements from federal or state regulations, rather than restating the regulations. Ecology has chosen to streamline the process to reduce the complexity of the permit by referencing the federal regulation for this condition. This complies with the above regulations and, furthermore, is appropriate and effective in streamlining the content for the Hanford AOP.

No change to the AOP is required due to part (b).

c) Lines 23 and 24 of page 155 identify the test method test frequency as not applicable for the condition of use of fuel per 40 CFR 60.4207(b). The periodic monitoring requirement is that compliance is demonstrated by the use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight). Required records include vendor certification for diesel fuel sulfur content for all purchases. These requirements are consistent with the NSPS Subpart III regulations. Therefore the test method and test frequency are not necessary to ensure compliance with this condition. Furthermore, not identifying a test method or test frequency does not make the periodic monitoring requirement unenforceable. The condition approval as written, absent a test method and test frequency is sufficient to ensure continuous compliance with the federally enforceable condition.

No change to the AOP is required due to part (c).

d) Lines 35 and 36 of page 155 identify the test method test frequency as not applicable for the condition to maintain no more than eight C Farm Trailer Area engines. Periodic monitoring requires inventory of engines used to power the C Farm Trailer Area light plants and at a minimum, record the current and past engines in the trailer area with the date the engine was located in the trailer area and the date it was removed from the trailer area. Required records include engine inventory. The condition approval already identifies record-keeping requirements, which are not test methods and do not need a test frequency. Therefore the test method and test frequency is not necessary to ensure compliance with this condition and the required periodic monitoring. Furthermore, not identifying a test method or test frequency does not make the periodic monitoring requirement unenforceable. The condition approval as written, absent a test method and test frequency is sufficient to ensure continuous compliance with the federally enforceable condition.

No change to the AOP is required due to part (d).

Comment I-7-111

Comment 111: [draft Attachment 1, 1.4.67, Discharge Point: Light Towers C Farm, p. 156]: a) Line 16 on p. 156 identifies the "Calculation Model" as "Not Applicable". However, lines 6-9 identify conditions that require a calculation. Provide the required calculations and associate those calculations with "Calculation Model" on line 16. b) Provide the actual condition on line 19, p. 156, rather than a reference to a particular paragraph in a regulation that may have been superseded or could be superseded in the future. c) Absent a "Test Method" and "Test Frequency" (lines 22 & 23, p. 156) the periodic monitoring requirement is unenforceable and so is the entire condition. Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with this federally-enforceable condition. d) Lines 34 & 35 specify "Test Method" and "Test Frequency" as "Not applicable". Absent a test method and a test frequency the periodic monitoring requirement is unenforceable and so is the entire condition. Because the periodic monitoring specifies recordkeeping, the "Test Method" should also be recordkeeping. "Test Frequency" should probably be "annually". Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with this federally-enforceable condition.

Ecology Response to I-7-111

Thank you for your comment.

a) Discharge point 1.4.67 is a group of NSPS Subpart III stationary compression ignition internal combustion engines that were constructed in 2008, or later with about 16.9 horsepower. The group of engines have about 1.1 liters cylinder displacement. The referenced condition on page 156 is for the emission limit of non-methane hydrocarbons, nitrogen oxides, carbon monoxide, and particulate matter.

Compliance with the condition is demonstrated by operating and maintaining the engine and control device according to the manufacturer's written instructions. Records of the manufacturer's maintenance or operation manual, document of maintenance performed, and hours of operation is adequate to demonstrate compliance. The condition and requirements is consistent with NSPS Subpart IIII. A calculation model is not necessary to ensure compliance with the condition.

No change to the AOP is required due to part (a).

b) The condition found on line 19, page 156 is for use of fuel per 40 CFR 60.4207(b), which states "Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted." This regulation has not been superseded. All of the conditions for this discharge unit stem from the NSPS Subpart IIII stationary compression ignition internal combustion engines regulations. If the regulation is superseded in the future, the condition is no longer applicable to discharge point. The new applicable regulations would require amendments to the AOP.

WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(1) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. The regulations do not prohibit the permit from referencing requirements from federal or state regulations, rather than restating the regulations. Ecology has chosen to streamline the process to reduce the complexity of the permit by referencing the federal regulation for this condition. This complies with the above regulations and, furthermore, is appropriate and effective in streamlining the content for the Hanford AOP.

No change to the AOP is required due to part (b).

c) Lines 22 and 23 of page 156 identify the test method test frequency as not applicable for the condition of use of fuel per 40 CFR 60.4207(b). The periodic monitoring requirement is that compliance is demonstrated by the use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight). Required records include vendor certification for diesel fuel sulfur content for all purchases. These requirements are consistent with the NSPS Subpart IIII regulations. Therefore, the test method and test frequency is not necessary to ensure compliance with this condition. Furthermore, not identifying a test method or test frequency does not make the periodic monitoring requirement unenforceable. The condition approval as written, absent a test method and test frequency is sufficient to ensure continuous compliance with the federally enforceable condition.

No change to the AOP is required due to part (c).

d) Lines 34 and 35 of page 156 identify the test method test frequency as not applicable for the condition to maintain no more than eight C Farm engines. Periodic monitoring requires inventory of engines used to power the C Farm light plants and at a minimum, record the current and past engines in the trailer area with the date the engine was located in the C Farm and the date it was removed from the C Farm. Required records include engine inventory. The condition approval already identifies record-keeping requirements, which are not test methods and do not need a test frequency. Therefore the test method and test frequency is not necessary to ensure compliance with this condition and the required periodic monitoring. Furthermore, not identifying a test method or test frequency does not make the periodic monitoring requirement unenforceable. The condition approval as written, absent a test method and test frequency is sufficient to ensure continuous compliance with the federally enforceable condition.

While no change to the AOP is required due to part (d) of this comment, it is noted that the language for the periodic monitoring should only pertain to the C Farm Engines. Line 31 of page 156 will be changed from "... Record the current and past engines in the trailer area..." to "... record the current and past engines in the C Farm..."

Comment I-7-112

Comment 112: [draft Attachment 1, 1.4.68, Discharge Point: AY/AZ Farm DMI-LT Light Tower, p. 157]:

a) Line 15 on p. 157 identifies the "Calculation Model" as "Not Applicable". However, lines 5-8 identify conditions that require a calculation. Provide the required calculations and associate those calculations with "Calculation Model" on line 16. b) Provide the actual condition on line 18, p. 157, rather than a reference to a particular paragraph in a regulation that may have been superseded or could be superseded in the future. c) Absent a "Test Method" and "Test Frequency" (lines 21 & 22, p. 157) the periodic monitoring requirement is unenforceable and so is the entire condition. Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with this federally-enforceable condition.

Ecology Response to I-7-112

Thank you for your comment.

a) Discharge point 1.4.68 is a NSPS Subpart III stationary compression ignition internal combustion engine that was constructed in 2012, with 62 HP and 3.6 liters cylinder displacement. The referenced condition on page 157 is for the emission limit of non-methane hydrocarbons, nitrogen oxides, carbon monoxide, and particulate matter. Compliance with the condition is demonstrated by operating and maintaining the engine and control device according to the manufacturer's written instructions. Records of the manufacturer's maintenance or operation manual, document of maintenance performed, and hours of operation are adequate to demonstrate compliance. The condition and requirements is consistent with NSPS Subpart III. A calculation model is not necessary to ensure compliance with the condition.

No change to the AOP is required due to part (a).

b) The condition found on line 18, page 157 is for use of fuel per 40 CFR 60.4207(b), which states "Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted." This regulation has not been superseded. All of the conditions for this discharge unit stem from the NSPS Subpart III stationary compression ignition internal combustion engines regulations. If the regulation is superseded in the future, the condition is no longer applicable to the discharge point. The new applicable regulations would require amendments to the AOP.

WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(1) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. The regulations do not prohibit the permit from referencing requirements from federal or state regulations, rather than restating the regulations. Ecology has chosen to streamline the process to reduce the complexity of the permit by referencing the federal regulation for this condition. This complies with the above regulations and, furthermore, is appropriate and effective in streamlining the content for the Hanford AOP.

No change to the AOP is required due to part (b).

c) Lines 21 and 22 of page 157 identify the test method test frequency as not applicable for the condition of use of fuel per 40 CFR 60.4207(b). The periodic monitoring requirement is that compliance is demonstrated by the use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight). Required records include vendor certification for diesel fuel sulfur content for all purchases. These requirements are consistent with the NSPS Subpart IIII regulations. Therefore, the test method and test frequency are not necessary to ensure compliance with this condition. Furthermore, not identifying a test method or test frequency does not make the periodic monitoring requirement unenforceable. The condition approval as written, absent a test method and test frequency is sufficient to ensure continuous compliance with the federally enforceable condition.

No change to the AOP is required due to part (c).

Comment I-7-113

Comment 113: [draft Attachment 1, 1.4.69, Discharge Point: C and AN Farm Compressors, p. 158]: a) Line 16 on p. 158 identifies the "Calculation Model" as "Not Applicable". However, lines 6-9 identify conditions that require a calculation.

Provide the required calculations and associate those calculations with "Calculation Model" on line 16.

b) Provide the actual condition on line 19, p. 158, rather than a reference to a particular paragraph in a regulation that may have been superseded or could be superseded in the future.

c) Absent a "Test Method" and "Test Frequency" (lines 22 & 23, p. 158) the periodic monitoring requirement is unenforceable and so is the entire condition.

Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with this federally-enforceable condition.

d) Lines 34 & 35 specify "Test Method" and "Test Frequency" as "Not applicable". Absent a test method and a test frequency the periodic monitoring requirement is unenforceable and so is the entire condition. Because the periodic monitoring specifies recordkeeping, the "Test Method" should also be recordkeeping. "Test Frequency" should probably be "annually".

Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with this federally-enforceable condition.

Ecology Response to I-7-113

Thank you for your comment.

Discharge point 1.4.69 has been removed from the AOP per the request of the permittee, USDOE. USDOE notified Ecology on July 6, 2018, in letter 17-ECD-0046 that the engines associated with this discharge point are being managed as nonroad engines.

Line 1 of page 158 will be changed to read "1.4.69 Reserved" and all text contained in lines 2-38 of page 158 will be removed.

Comment I-7-114

Comment 114: [draft Attachment 1, 1.4.70, Discharge Point: Light Towers AN Farm, p. 159]: a) Line 16 on p. 159 identifies the "Calculation Model" as "Not Applicable". However, lines 6-9 identify conditions

that require a calculation. Provide the required calculations and associate those calculations with "Calculation Model" on line 16. b) Provide the actual condition on line 19, p. 159, rather than a reference to a particular paragraph in a regulation that may have been superseded or could be superseded in the future. c) Absent a "Test Method" and "Test Frequency" (lines 22 & 23, p. 159) the periodic monitoring requirement is unenforceable and so is the entire condition. Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with this federally-enforceable condition. d) Lines 34 & 35 specify "Test Method" and "Test Frequency" as "Not applicable". Absent a test method and a test frequency the periodic monitoring requirement is unenforceable and so is the entire condition. Because the periodic monitoring specifies recordkeeping, the "Test Method" should also be recordkeeping. "Test Frequency" should probably be "annually". Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with this federally-enforceable condition.

Ecology Response to I-7-114

Thank you for your comment.

a) Discharge point 1.4.70 is a group of NSPS Subpart III stationary compression ignition internal combustion engines that were constructed in 2008, or later with about 16.9 horsepower. The group of engines have about 1.1 liters cylinder displacement. The referenced condition on page 159 is for the emission limit of non-methane hydrocarbons, nitrogen oxides, carbon monoxide, and particulate matter. Compliance with the condition is demonstrated by operating and maintaining the engine and control device according to the manufacturer's written instructions. Records of the manufacturer's maintenance or operation manual, document of maintenance performed, and hours of operation is adequate to demonstrate compliance. The condition and requirements is consistent with NSPS Subpart III. A calculation model is not necessary to ensure compliance with the condition.

No change to the AOP is required due to part (a).

b) The condition found on line 19, page 159 is for use of fuel per 40 CFR 60.4207(b), which states "Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted." This regulation has not been superseded. All of the conditions for this discharge unit stem from the NSPS Subpart III stationary compression ignition internal combustion engines regulations. If the regulation is superseded in the future, the condition is no longer applicable to discharge point. The new applicable regulations would require amendments to the AOP.

WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(1) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. The regulations do not prohibit the permit from referencing requirements from federal or state regulations, rather than restating the regulations. Ecology has chosen to streamline the process to reduce the complexity of the permit by referencing the federal regulation for this condition. This complies with the above regulations and, furthermore, is appropriate and effective in streamlining the content for the Hanford AOP.

No change to the AOP is required due to part (b).

c) Lines 22 and 23 of page 159 identify the test method test frequency as not applicable for the condition of use of fuel per 40 CFR 60.4207(b). The periodic monitoring requirement is that compliance is

demonstrated by the use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight). Required records include vendor certification for diesel fuel sulfur content for all purchases. These requirements are consistent with the NSPS Subpart IIII regulations. Therefore, the test method and test frequency is not necessary to ensure compliance with this condition. Furthermore, not identifying a test method or test frequency does not make the periodic monitoring requirement unenforceable. The condition approval as written, absent a test method and test frequency is sufficient to ensure continuous compliance with the federally enforceable condition.

No change to the AOP is required due to part (c).

d) Lines 34 and 35 of page 159 identify the test method test frequency as not applicable for the condition to maintain no more than eight AN Farm engines. Periodic monitoring requires inventory of engines used to power the AN Farm light plants and at a minimum, record the current and past engines in the trailer area with the date the engine was located in the AN Farm and the date it was removed from the AN Farm. Required records include engine inventory. The condition approval already identifies record-keeping requirements, which are not test methods and do not need a test frequency. Therefore, the test method and test frequency is not necessary to ensure compliance with this condition and the required periodic monitoring. Furthermore, not identifying a test method or test frequency does not make the periodic monitoring requirement unenforceable. The condition approval as written, absent a test method and test frequency is sufficient to ensure continuous compliance with the federally enforceable condition.

While no change to the AOP is required due to part (d) of this comment, it is noted that the language for the periodic monitoring should only pertain to the AN Farm Engines. Line 31 of page 159 will be changed from "... Record the current and past engines in the trailer area..." to "... record the current and past engines in the AN Farm..."

Comment I-7-115

Comment 115: [draft Attachment 1, 1.4.71, Discharge Point: 200E Effluent Treatment Facility Engine, p. 160]: a) Line 16 on p. 160 identifies the "Calculation Model" as "Not Applicable". However, lines 6-9 identify conditions that require a calculation. Provide the required calculations and associate those calculations with "Calculation Model" on line 16. b) Provide the actual condition on line 18, p. 160, rather than a reference to a particular paragraph in a regulation that may have been superseded or could be superseded in the future. c) Absent a "Test Method" and "Test Frequency" (lines 21 & 22, p. 160) the periodic monitoring requirement is unenforceable and so is the entire condition. Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with this federally-enforceable condition.

Ecology Response to I-7-115

Thank you for your comment.

a) Discharge point 1.4.71 is a NSPS Subpart IIII stationary compression ignition internal combustion engine that was constructed in 2013, with 73.7 HP and less than 10 liters cylinder displacement. The referenced condition on page 160 is for the emission limit of non-methane hydrocarbons, nitrogen oxides, carbon monoxide, and particulate matter. Compliance with the condition is demonstrated by operating and maintaining the engine and control device according to the manufacturer's written instructions. Records of the manufacturer's maintenance or operation manual, document of maintenance performed, and hours of operation are adequate to demonstrate compliance. The condition and requirements is consistent with NSPS Subpart IIII. A calculation model is not necessary to ensure compliance with the condition.

No change to the AOP is required due to part (a).

b) The condition found on line 18, page 160 is for use of fuel per 40 CFR 60.4207 (a) and (b), which state "Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a)" and "Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted." These regulations have not been superseded. All of the conditions for this discharge unit stem from the NSPS Subpart IIII stationary compression ignition internal combustion engines regulations. If the regulations are superseded in the future, the condition is no longer applicable to the discharge point. The new applicable regulations would require amendments to the AOP.

WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(1) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. The regulations do not prohibit the permit from referencing requirements from federal or state regulations, rather than restating the regulations. Ecology has chosen to streamline the process to reduce the complexity of the permit by referencing the federal regulation for this condition. This complies with the above regulations and, furthermore, is appropriate and effective in streamlining the content for the Hanford AOP.

No change to the AOP is required due to part (b).

c) Lines 21 and 22 of page 160 identify the test method test frequency as not applicable for the condition of use of fuel per 40 CFR 60.4207 (a) and (b). The periodic monitoring requirement is that compliance is demonstrated by the use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight). Required records include vendor certification for diesel fuel sulfur content for all purchases. These requirements are consistent with the NSPS Subpart IIII regulations. Therefore, the test method and test frequency are not necessary to ensure compliance with this condition. Furthermore, not identifying a test method or test frequency does not make the periodic monitoring requirement unenforceable. The condition approval as written, absent a test method and test frequency is sufficient to ensure continuous compliance with the federally enforceable condition.

No change to the AOP is required due to part (c).

Comment I-7-116

Comment 116: [draft Attachment 1, 1.4.72, Discharge Point: 251W Substation Emergency Backup Engine, p. 161]: a) Line 14 on p. 161 identifies the "Calculation Model" as "Not Applicable". However, lines 5-7 identify conditions that require a calculation. Provide the required calculations and associate those calculations with "Calculation Model" on line 14. b) Missing from this emissions unit is a required "Test Method" and a required "Test Frequency". Absent a test method and a test frequency the periodic monitoring requirement is unenforceable and so is the entire condition. Because the periodic monitoring specifies recordkeeping, the "Test Method" should also be recordkeeping. "Test Frequency" should probably be "annually". Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with this federally-enforceable condition.

Ecology Response to I-7-116

Thank you for your comment.

a) Discharge point 1.4.72 is a NSPS Subpart JJJJ stationary spark ignition internal combustion engine that was constructed in 2010, with 97.7 horsepower and 6.8 liters cylinder displacement. The referenced condition on page 161 is for the emission limit of hydrocarbons, nitrogen oxides, and carbon monoxide. Compliance with the condition is demonstrated by operating and maintaining the engine and control device according to the manufacturer's written instructions. Records of the manufacturer's maintenance or operation manual, documentation of maintenance performed, and hours of operation is adequate to demonstrate compliance. The condition and requirements is consistent with NSPS Subpart JJJJ. A calculation model is not necessary to ensure compliance with the condition.

No change to the AOP is required due to part (a).

b) A test method test frequency is not listed for the condition of use of fuel per 40 CFR 60.4207 (a) and (b). Compliance with the condition is demonstrated by operating and maintaining the engine and control device according to the manufacturer's written instructions. Records of the manufacturer's maintenance or operation manual, documentation of maintenance performed, and hours of operation is adequate to demonstrate compliance. The condition and requirements is consistent with NSPS Subpart JJJJ. Therefore, the test method and test frequency is not necessary to ensure compliance with this condition. Furthermore, not identifying a test method or test frequency does not make the condition unenforceable. The condition approval as written, absent a test method and test frequency is sufficient to ensure continuous compliance with the federally enforceable condition.

No change to the AOP is required due to part (b).

Comment I-7-117

Comment 117: [draft Attachment 1, 1.4.73, Discharge Point: WTP MHF South-40 Laydown Yard Laborers Tent, p. 162]: a) Both lines 20 & 21 on p. 162 specify "Calculation Model". Only one "Calculation Model" is needed. b) Missing from this emissions unit is a required "Test Method" and a required "Test Frequency". Absent a test method and a test frequency the periodic monitoring requirement is unenforceable and so is the entire condition. Because the periodic monitoring specifies recordkeeping, the "Test Method" should also be recordkeeping. "Test Frequency" should probably be "annually". Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with this federally-enforceable condition.

Ecology Response to I-7-117

Thank you for your comment.

a) Discharge point 1.4.73 is a NESHAP Subpart ZZZZ stationary reciprocating internal combustion engine that was constructed in 2002, with 15.5 horsepower. The referenced condition on page 162 is for engine operation and maintenance requirements. Compliance with the condition is demonstrated by operating and maintaining the engine and control device according to the manufacturer's written instructions. Records of the manufacturer's maintenance or operation manual, documentation of maintenance performed, and hours of operation are adequate to demonstrate compliance. The condition and requirements is consistent with NESHAP Subpart ZZZZ. A calculation model is not necessary to ensure compliance with the condition.

Line 21 of page 162 is a duplicate of line 20 and will be removed.

b) A test method test frequency is not listed for the condition for engine operation and maintenance requirements. Compliance with the condition is demonstrated by operating and maintaining the engine and control device according to the manufacturer's written instructions. Records of the manufacturer's maintenance or operation manual, documentation of maintenance performed, and hours of operation are adequate to demonstrate compliance. The condition and requirements are consistent with NESHAP Subpart ZZZZ. Therefore, the test method and test frequency is not necessary to ensure compliance with this condition. Furthermore, not identifying a test method or test frequency does not make the condition unenforceable. The condition approval as written, absent a test method and test frequency is sufficient to ensure continuous compliance with the federally enforceable condition.

No change to the AOP is required due to part (b).

Comment I-7-118

Comment 118: [draft Attachment 1, 1.4.74, Discharge Point: WTP MHF South-40 Laydown Yard Warm-up/Cool-down Tent, p. 163]: Missing from this emissions unit is a required "Test Method" and a required "Test Frequency". Absent a test method and a test frequency the periodic monitoring requirement is unenforceable and so is the entire condition. Because the periodic monitoring specifies recordkeeping, the "Test Method" should also be recordkeeping. "Test Frequency" should probably be "annually". Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with this federally-enforceable condition.

Ecology Response to I-7-118

Thank you for your comment.

Discharge point 1.4.74 is a NESHAP Subpart ZZZZ stationary reciprocating internal combustion engine that was constructed in 2004, with 12 horsepower. A test method test frequency is not listed for the condition for engine operation and maintenance requirements. Compliance with the condition is demonstrated by operating and maintaining the engine and control device according to the manufacturer's written instructions. Records of the manufacturer's maintenance or operation manual, documentation of maintenance performed, and hours of operation is adequate to demonstrate compliance. The condition and requirements is consistent with NESHAP Subpart ZZZZ. Therefore, the test method and test frequency is not necessary to ensure compliance with this condition. Furthermore, not identifying a test method or test frequency does not make the condition unenforceable. The condition approval as written, absent a test method and test frequency is sufficient to ensure continuous compliance with the federally enforceable condition.

No change to the AOP is required.

Comment I-7-119

Comment 119: [draft Attachment 1, 1.4.75, Discharge Point: 400 Area Water Treatment System Engines, p. 164]: a) Line 19 on p. 164 identifies the "Calculation Model" as "Not Applicable". However, lines 9-12 identify conditions that require a calculation. Provide the required calculations and associate those calculations with "Calculation Model" on line 19. b) Provide the actual condition on line 21, p. 164, rather than a reference to a particular paragraph in a regulation that may have been superseded or could be superseded in the future. c) Absent a "Test Method" and "Test Frequency" (lines 24 & 25, p. 164) the periodic monitoring requirement is unenforceable and so is the entire condition. Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with this federally-enforceable condition.

Ecology Response to I-7-119

Thank you for your comment.

a) Discharge point 1.4.75 is a group of NSPS Subpart IIII stationary compression ignition internal combustion engines that were constructed in 2008 or later with power ratings between $8 \leq kW \leq 19$ ($11 \leq HP \leq 25$ HP) or $19 \leq kW \leq 37$ ($25 \leq HP \leq 50$), not to exceed an aggregate power rating of 142.7 HP, may be used. The group of engines have less than 10 liters cylinder displacement. The referenced condition on page 164 is for the emission limit of non-methane hydrocarbons, nitrogen oxides, carbon monoxide, and particulate matter. Compliance with the condition is demonstrated by operating and maintaining the engines in accordance to the manufacturer's written instructions. Records of the manufacturer's maintenance or operation manual, document of maintenance performed, and hours of operation are adequate to demonstrate compliance. The condition and requirements is consistent with NSPS Subpart IIII. A calculation model is not necessary to ensure compliance with the condition.

While no change to the AOP is required due to part (a), it is noted that that line 2 of page 164 incorrectly identifies the requirement citation as a NESHAP Subpart IIII. Line 2 of page 164 will be changed to state "Requirement Citation: NSPS Subpart IIII.."

b) The condition found on line 21, page 164 is for use of fuel per 40 CFR 60.4207(b), which states "Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted." This regulation has not been superseded. All of the conditions for this discharge unit stem from the NSPS Subpart IIII stationary compression ignition internal combustion engines regulations. If the regulation is superseded in the future, the condition is no longer applicable to discharge point. The new applicable regulations would require amendments to the AOP.

WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(1) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. The regulations do not prohibit the permit from referencing requirements from federal or state regulations, rather than restating the regulations. Ecology has chosen to streamline the process to reduce the complexity of the permit by referencing the federal regulation for this condition. This complies with the above regulations and, furthermore, is appropriate and effective in streamlining the content for the Hanford AOP.

No change to the AOP is required due to part (b).

c) Lines 24 and 25 of page 164 identify the test method test frequency as not applicable for the condition of use of fuel per 40 CFR 60.4207(b). The periodic monitoring requirement is that compliance is demonstrated by the use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight). Required records include vendor certification for diesel fuel sulfur content for all purchases. These requirements are consistent with the NSPS Subpart IIII regulations. Therefore the test method and test frequency are not necessary to ensure compliance with this condition. Furthermore, not identifying a test method or test frequency does not make the periodic monitoring requirement unenforceable. The condition approval as written, absent a test method and test frequency is sufficient to ensure continuous compliance with the federally enforceable condition.

No change to the AOP is required due to part (c).

Comment I-7-120

Comment 120: [draft Attachment 1, 1.4.75, Discharge Point: 400 Area Water Treatment System Engines, p. 165]: Lines 8 & 9 on p. 165 specify "Test Method" and "Test Frequency" as "Not applicable". Absent a test method and a test frequency the periodic monitoring requirement is unenforceable and so is the entire condition. Because the periodic monitoring specifies recordkeeping, the "Test Method" should also be recordkeeping. "Test Frequency" should probably be "annually". Supply "Test Method" and "Test Frequency"

Ecology Response to I-7-120

Thank you for your comment.

Discharge point 1.4.75 is a group of NSPS Subpart IIII stationary compression ignition internal combustion engines that were constructed in 2008 or later with power ratings between $8 \leq \text{kW} \leq 19$ ($11 \leq \text{HP} \leq 25 \text{ HP}$) or $19 \leq \text{kW} \leq 37$ ($25 \leq \text{HP} \leq 50$), not to exceed an aggregate power rating of 142.7 HP, may be used. The group of engines have less than 10 liters cylinder displacement. The referenced condition on page 165 is to maintain an engine inventory of 8 engines or less with any engine not to exceed 50 HP with a combine aggregate horsepower not to exceed 142.7 horsepower.

Lines 8 and 9 of page 165 identify the test method test frequency as not applicable for this condition. Periodic monitoring requires inventory of engines used seasonally to support the 400 Area WS operations and, at a minimum, record the current and past engines used with the date and hour readings the engine was located in the 400 Area and the date it was removed from the 400 Area. Required records include engine inventory. The condition approval already identifies recordkeeping requirements, which are not test methods and do not need a test frequency. Therefore the test method and test frequency are not necessary to ensure compliance with this condition and the required periodic monitoring. Furthermore, not identifying a test method or test frequency does not make the periodic monitoring requirement unenforceable. The condition approval as written, absent a test method and test frequency is sufficient to ensure continuous compliance with the federally enforceable condition.

No change to the AOP is required.

Comment I-7-121

Comment 121: [draft Attachment 1, 1.4.76, Discharge Point: CWC Facility Existing Light Plant Engines, p. 166]: a) Line 20 on p. 166 identifies the "Calculation Model" as "Not Applicable". However, lines 6-13 identify conditions that require a calculation. Provide the required calculations and associate those calculations with "Calculation Model" on line 20. b) Provide the actual condition on line 23, p. 166, rather than a reference to a particular paragraph in a regulation that may have been superseded or could be superseded in the future. c) Absent a "Test Method" and "Test Frequency" (lines 26 & 27, p. 166) the periodic monitoring requirement is unenforceable and so is the entire condition. Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with this federally-enforceable condition.

Ecology Response to I-7-121

Thank you for your comment.

a) Discharge point 1.4.76 is a NESHAP Subpart ZZZZ stationary reciprocating internal combustion engine that was constructed prior to 7/11/2005, with less than 10 liters cylinder displacement. The referenced condition on page 166 is for engine operation and maintenance requirements. Compliance with the condition is demonstrated by operating and maintaining the engine and control device according to the

manufacturer's written instructions. Records of the manufacturer's maintenance or operation manual, documentation of maintenance performed, and hours of operation are adequate to demonstrate compliance. The condition and requirements are consistent with NESHAP Subpart ZZZZ. A calculation model is not necessary to ensure compliance with the condition.

No change to the AOP is required due to part (a).

b) The condition found on line 23, page 166 is for use of fuel per 40 CFR 60.4207(b), which states "Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted." This regulation has not been superseded. All of the conditions for this discharge unit stem from the NSPS Subpart IIII stationary compression ignition internal combustion engines regulations. If the regulation is superseded in the future, the condition is no longer applicable to discharge point. The new applicable regulations would require amendments to the AOP.

WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(1) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. The regulations do not prohibit the permit from referencing requirements from federal or state regulations, rather than restating the regulations. Ecology has chosen to streamline the process to reduce the complexity of the permit by referencing the federal regulation for this condition. This complies with the above regulations and, furthermore, is appropriate and effective in streamlining the content for the Hanford AOP.

No change to the AOP is required due to part (b).

c) Lines 26 and 27 of page 166 identify the test method test frequency as not applicable for the condition of use of fuel per 40 CFR 60.4207(b). The periodic monitoring requirement is that compliance is demonstrated by the use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight). Required records include vendor certification for diesel fuel sulfur content for all purchases. These requirements are consistent with the NSPS Subpart IIII regulations. Therefore, the test method and test frequency are not necessary to ensure compliance with this condition. Furthermore, not identifying a test method or test frequency does not make the periodic monitoring requirement unenforceable. The condition approval as written, absent a test method and test frequency is sufficient to ensure continuous compliance with the federally enforceable condition.

No change to the AOP is required due to part (c).

Comment I-7-122

Comment 122: [draft Attachment 1, 1.4.76, Discharge Point: CWC Facility Existing Light Plant Engines, p. 167]: Lines & 9 on p. 167 specify "Test Method" and "Test Frequency" as "Not applicable". Absent a test method and a test frequency the periodic monitoring requirement is unenforceable and so is the entire condition. Because the periodic monitoring specifies recordkeeping, the "Test Method" should also be recordkeeping. "Test Frequency" should probably be "annually". Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with the condition.

Ecology Response to I-7-122

Thank you for your comment.

Discharge point 1.4.76 is a NESHAP Subpart ZZZZ stationary reciprocating internal combustion engine that was constructed prior to 7/11/2005, with less than 10 liters cylinder displacement. The referenced condition on page 167 is to maintain an engine inventory of no more than two engines not to exceed an aggregate total of 20 horsepower.

Lines 8 and 9 of page 165 identify the test method test frequency as not applicable for this condition. Periodic monitoring requires inventory of engines used seasonally to support the CWC operations and, at a minimum, record the current and past engines used with the date and hour readings the engine was located in the CWC Area and the date it was removed from the CWC Area. Required records include engine inventory. The condition approval already identifies record-keeping requirements, which are not test methods and do not need a test frequency. Therefore, the test method and test frequency is not necessary to ensure compliance with this condition and the required periodic monitoring. Furthermore, not identifying a test method or test frequency does not make the periodic monitoring requirement unenforceable. The condition approval as written, absent a test method and test frequency is sufficient to ensure continuous compliance with the federally enforceable condition.

No change to the AOP is required.

Comment I-7-123

Comment 123: [draft Attachment 1, 1.4.77, Discharge Point: CWC Facility New Light Plant Engines, p. 168]: a) Line 18 on p. 168 identifies the "Calculation Model" as "Not Applicable". However, lines 7-10 identify conditions that require a calculation. Provide the required calculations and associate those calculations with "Calculation Model" on line 18. b) Provide the actual condition on line 20, p. 168, rather than a reference to a particular paragraph in a regulation that may have been superseded or could be superseded in the future. c) Absent a "Test Method" and "Test Frequency" (lines 23 & 24, p. 168) the periodic monitoring requirement is unenforceable and so is the entire condition. Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with this federally-enforceable condition.

Ecology Response to I-7-123

Thank you for your comment.

a) Discharge point 1.4.77 is a group of NSPS Subpart IIII stationary compression ignition internal combustion engines that were constructed in 2005, or later with a maximum power output less than 25 horsepower with no more than an aggregate power rating of 122.7 horsepower. The group of engines have less than 10 liters cylinder displacement. The referenced condition on page 168 is for the emission limit of non-methane hydrocarbons, nitrogen oxides, carbon monoxide, and particulate matter. Compliance with the condition is demonstrated by operating and maintaining the engines in accordance with the manufacturer's recommendations or instructions. Records of the manufacturer's maintenance or operation manual, documentation of maintenance performed, and hour meter readings are adequate to demonstrate compliance. The condition and requirements are consistent with NSPS Subpart IIII. A calculation model is not necessary to ensure compliance with the condition.

While no change to the AOP is required due to part (a), it is noted that that line 2 of page 168 incorrectly identifies the requirement citation as a NESHAP Subpart IIII. Line 2 of page 168 will be changed to state "Requirement Citation: NSPS Subpart IIII..."

b) The condition found on line 20, page 168 is for use of fuel per 40 CFR 60.4207(b), which states "Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted." This regulation has not been superseded. All of the conditions for this discharge unit stem from the NSPS Subpart IIII stationary compression ignition internal combustion engines regulations. If the regulation is superseded in the future, the condition is no longer applicable to discharge point. The new applicable regulations would require amendments to the AOP.

WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(1) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. The regulations do not prohibit the permit from referencing requirements from federal or state regulations, rather than restating the regulations. Ecology has chosen to streamline the process to reduce the complexity of the permit by referencing the federal regulation for this condition. This complies with the above regulations and, furthermore, is appropriate and effective in streamlining the content for the Hanford AOP.

No change to the AOP is required due to part (b).

c) Lines 23 and 24 of page 168 identify the test method test frequency as not applicable for the condition of use of fuel per 40 CFR 60.4207(b). The periodic monitoring requirement is that compliance is demonstrated by the use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight). Required records include vendor certification for diesel fuel sulfur content for all purchases. These requirements are consistent with the NSPS Subpart IIII regulations. Therefore, the test method and test frequency are not necessary to ensure compliance with this condition. Furthermore, not identifying a test method or test frequency does not make the periodic monitoring requirement unenforceable. The condition approval as written, absent a test method and test frequency is sufficient to ensure continuous compliance with the federally enforceable condition.

No change to the AOP is required due to part (c).

Comment I-7-124

Comment 124: [draft Attachment 1, 1.4.77, Discharge Point: CWC Facility New Light Plant Engines, p. 169]: Lines 8 & 9 on p. 169 specify "Test Method" and "Test Frequency" as "Not applicable". Absent a test method and a test frequency the periodic monitoring requirement is unenforceable and so is the entire condition. Because the periodic monitoring specifies recordkeeping, the "Test Method" should also be recordkeeping. "Test Frequency" should probably be "annually". Supply "Test Method" and "Test Frequency"

Ecology Response to I-7-124

Thank you for your comment.

Discharge point 1.4.77 is a group of NSPS Subpart IIII stationary compression ignition internal combustion engines that were constructed in 2005, or later with a maximum power output less than 25 horsepower with no more than an aggregate power rating of 122.7 horsepower. The group of engines have less than 10 liters cylinder displacement. The referenced condition on page 169 is to maintain an engine inventory of 8 engines or less with any engine not to exceed 25 HP with a combined aggregate horsepower not to exceed 122.7 horsepower.

Lines 8 and 9 of page 169 identify the test method test frequency as not applicable for this condition. Periodic monitoring requires inventory of engines used seasonally to support the CWC operations and, at a minimum, record the current and past engines used with the date and hour readings the engine was located in the CWC Area and the date it was removed from the CWC Area. Required records include engine inventory. The condition approval already identifies record-keeping requirements, which are not test methods and do not need a test frequency. Therefore, the test method and test frequency is not necessary to ensure compliance with this condition and the required periodic monitoring. Furthermore, not identifying a test method or test frequency does not make the periodic monitoring requirement unenforceable. The condition approval as written, absent a test method and test frequency is sufficient to ensure continuous compliance with the federally enforceable condition.

No change to the AOP is required.

Comment I-7-125

Comment 125: [draft Attachment 1, 1.4.78, Discharge Point: 200 W SWOC Administrative Offices Engines, p. 170]: a) Line 20 on p. 170 identifies the "Calculation Model" as "Not Applicable". However, lines 8-11 identify conditions that require a calculation. Provide the required calculations and associate those calculations with "Calculation Model" on line 20. b) Provide the actual condition on line 22, p. 170, rather than a reference to a particular paragraph in a regulation that may have been superseded or could be superseded in the future. c) Absent a "Test Method" and "Test Frequency" (lines 25 & 26, p. 170) the periodic monitoring requirement is unenforceable and so is the entire condition. Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with this federally-enforceable condition.

Ecology Response to I-7-125

Thank you for your comment.

a) Discharge point 1.4.78 is a group of NSPS Subpart III stationary compression ignition internal combustion engines that were constructed in 2005, or later with a maximum power output less than 25 horsepower with no more than an aggregate power rating of 142.7 horsepower. The group of engines have less than 10 liters cylinder displacement. The referenced condition on page 170 is for the emission limit of non-methane hydrocarbons, nitrogen oxides, carbon monoxide, and particulate matter. Compliance with the condition is demonstrated by operating and maintaining the engines in accordance with the manufacturer's recommendations or instructions. Records of the manufacturer's maintenance or operation manual, documentation of maintenance performed, and hour meter readings is adequate to demonstrate compliance. The condition and requirements is consistent with NSPS Subpart III. A calculation model is not necessary to ensure compliance with the condition.

While no change to the AOP is required due to part (a), it is noted that that line 2 of page 170 incorrectly identifies the requirement citation as a NESHAP Subpart III. Line 2 of page 170 will be changed to state "Requirement Citation: NSPS Subpart III..."

b) The condition found on line 22, page 170 is for use of fuel per 40 CFR 60.4207(b), which states "Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted." This regulation has not been superseded. All of the conditions for this discharge unit stem from the NSPS Subpart III stationary compression ignition internal combustion engines regulations. If the regulation is superseded in the

future, the condition is no longer applicable to this discharge point. The new applicable regulations would require amendments to the AOP.

WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(1) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. The regulations do not prohibit the permit from referencing requirements from federal or state regulations, rather than restating the regulations. Ecology has chosen to streamline the process to reduce the complexity of the permit by referencing the federal regulation for this condition. This complies with the above regulations and, furthermore, is appropriate and effective in streamlining the content for the Hanford AOP.

No change to the AOP is required due to part (b).

c) Lines 25 and 26 of page 170 identify the test method test frequency as not applicable for the condition of use of fuel per 40 CFR 60.4207(b). The periodic monitoring requirement is that compliance is demonstrated by the use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight). Required records include vendor certification for diesel fuel sulfur content for all purchases. These requirements are consistent with the NSPS Subpart IIII regulations. Therefore, the test method and test frequency is not necessary to ensure compliance with this condition. Furthermore, not identifying a test method or test frequency does not make the periodic monitoring requirement unenforceable. The condition approval as written, absent a test method and test frequency is sufficient to ensure continuous compliance with the federally enforceable condition.

No change to the AOP is required due to part (c).

Comment I-7-126

Comment 126: [draft Attachment 1, 1.4.78, Discharge Point: 200 W SWOC Administrative Offices Engines, p. 171]: Lines 9 & 10 on p. 171 specify "Test Method" and "Test Frequency" as "Not applicable". Absent a test method and a test frequency the periodic monitoring requirement is unenforceable and so is the entire condition. Because the periodic monitoring specifies recordkeeping, the "Test Method" should also be recordkeeping. "Test Frequency" should probably be "annually". Supply "Test Method" and "Test Frequency" requirements sufficient to ensure continuous compliance with this condition.

Ecology Response to I-7-126

Thank you for your comment.

Discharge point 1.4.78 is a group of NSPS Subpart IIII stationary compression ignition internal combustion engines that were constructed in 2005, or later with a maximum power output less than 25 horsepower with no more than an aggregate power rating of 142.7 horsepower. The group of engines have less than 10 liters cylinder displacement. The referenced condition on page 171 is to maintain an inventory with no more than an aggregate of 142.7 horsepower, with a single engine not to exceed 25 horsepower may be used.

Lines 9 and 10 of page 171 identify the test method test frequency as not applicable for this condition. Periodic monitoring requires inventory of engines used seasonally to support the 200W SWOC Administrative office operations and, at a minimum, record the current and past engines used with the date and hour readings the engine was located in the 200W SWOC Administrative office area and the date it was removed from the 200W SWOC Administrative office area. Required records include engine inventory and hour meter readings. The condition approval already identifies record-keeping

requirements, which are not test methods and do not need a test frequency. Therefore, the test method and test frequency is not necessary to ensure compliance with this condition and the required periodic monitoring. Furthermore, not identifying a test method or test frequency does not make the periodic monitoring requirement unenforceable. The condition approval as written, absent a test method and test frequency is sufficient to ensure continuous compliance with the federally enforceable condition.

No change to the AOP is required.

Comment I-7-127

Comment 127: [draft Attachment 1, 1.4.79, Discharge Point: 222S Engine for Direct Drive Ventilation, p. 172]: a) Line 35 on p. 172 identifies the "Calculation Model" as "Not Applicable". However, lines 6-13 identify conditions that require a calculation. Provide the required calculations and associate those calculations with "Calculation Model" on line 35. b) Lines 26 & 27 on p. 172 specify "Test Method" and "Test Frequency" as "Not applicable". Absent a test method and a test frequency the periodic monitoring requirement is unenforceable and so is the entire condition. Because the periodic monitoring specifies recordkeeping, the "Test Method" should also be recordkeeping. "Test Frequency" should probably be "annually". Supply a "Test Method" and a "Test Frequency" c) Lines 31 & 32 require records be retained "for a minimum of thirty-six months", however, both part 70 and WAC 173-401 require records be retained for 5 years. [See 40 C.F.R. 70.6 (a)(3)(ii)(B); WAC 713-401-615 (2)(c)] Provide a records retention requirement consistent with both part 70 and WAC 173-401.

Ecology Response to I-7-127

Thank you for your comment.

a) Discharge point 1.4.79 is for an engine directly powering the 222-S Facility exhaust system. Requirements for the discharge point are from approval order DE15NWP-001, Revision 1. The referenced condition on page 172 is for the emission limits of nitrogen oxides, carbon monoxide, particulate matter, total unburned hydrocarbons, and diesel engine particulate matter. Compliance with the condition is demonstrated by installing an engine to meet emission limitations of 40 CFR Part 89, maintaining in a current condition all recommended operation and equipment maintenance provisions supplied by the manufacturer, operation of a non-resettable hour meter, operating and maintaining the stationary compression ignition internal combustion engines and control devices according to the manufacturer's emission-related instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, and installing and configuring the engine according to manufacturer specifications. Records of the manufacturer's engine certifications, maintenance records, and cumulative operating hours are adequate to demonstrate compliance. The condition and requirements are cloned from NSPS Subpart III requirements. A calculation model is not necessary to ensure compliance with the condition.

No change to the AOP is required due to part (a).

b) Lines 26 and 27 of page 172 identify the test method and test frequency as not specified and not applicable, respectively, for the condition listed above in part (a). The periodic monitoring requirements, as listed above in part (a), are installation, operation, and maintenance requirements, which compliance can be demonstrated through the use of recordkeeping. Recordkeeping requirements for this condition are listed on lines 28 through 32 of page 172. Therefore, the test method and test frequency is not necessary to ensure compliance with this condition. Furthermore, not identifying a test method or test frequency does not make the periodic monitoring requirement unenforceable. The condition approval as written, absent a test method and test frequency is sufficient to ensure continuous compliance with the federally enforceable condition.

No change to the AOP is required due to part (b).

c) The requirement to retain records for 36 months is consistent with approval order DE15NWP-001, Revision 1. However, WAC 173-401-600 requires that every requirement in an operating permit shall be based upon the most stringent of the applicable requirements. WAC 173-401-615(2)(c) requires retention of records of all required monitoring data and support information for a period of five years.

Line 32 of page 172 will be revised to require records be retained for a minimum of 60 months, consistent with WAC 173-401-615(2)(c).

Comment I-7-128

Comment 128: [draft Attachment 1, 1.4.79, Discharge Point: 222S Engine for Direct Drive Ventilation, p. 173]: a) Line 5 on p. 173 specifies "Test Method" as "Not applicable". Absent a test method the periodic monitoring requirement is unenforceable and so is the entire condition. Because the periodic monitoring specifies recordkeeping, the "Test Method" should also be recordkeeping. Supply a "Test Method" requirement sufficient to ensure continuous compliance with this condition. b) Line 9 on p. 173 identifies the "Calculation Model" as "Not Applicable". However, line 3 identifies a condition that requires a calculation. Provide the required calculation(s) and associate it with "Calculation Model" on line 9.

Ecology Response to I-7-128

Thank you for your comment.

a) Discharge point 1.4.79 is for an engine directly powering the 222-S Facility exhaust system. Requirements for the discharge point are from approval order DE15NWP-001, Revision 1. The referenced condition on page 173 is for the emission limit of sulfur dioxide. Compliance with the condition is demonstrated by recordkeeping of vendor documentation or fuel analysis showing sulfur content of less than 0.015%. While recordkeeping of vendor documentation does not require a test method or test frequency to determine compliance, if the permittee opts to use fuel analysis to determine diesel fuel quality and compliance with the condition, a test method and frequency should be identified.

Line 5 of page 173 will be changed to state "Test Method: ASTM D2622 or any test method approved under 40 CFR 80.585, if performing a fuel analysis."

Line 6 of page 173 will be changed to state "Test Frequency: Annually, if performing a fuel analysis" to be consistent with Section 1.6 of approval order DE15NWP-001, Revision 1."

b) The referenced condition on page 173 is for sulfur dioxide emissions. Compliance is demonstrated through the use of fuel containing less than 0.015 weight percent sulfur content. This is adequately demonstrated by vendor documentation of fuel purchases from retail outlets or by an annual fuel analysis to determine the sulfur content. The condition and requirements is consistent with the approval order and NSPS Subpart IIII. A calculation model is not necessary to ensure compliance with the condition.

No change to the AOP is required due to part (b).

Comment I-7-129

Comment 129: [draft Attachment 1, 1.4.80, Discharge Point: Effluent Management Facility, p. 174): a) Lines 8 & 9 on p. 174 require use of EPA Method 9 to verify compliance with the 5% visible emission limit, "[s]hould visible emissions be observed which are not solely attributable to water condensation".

Supply the EPA method Ecology requires to distinguish between those visible emissions due to water condensation from those visible emissions that are not.

EPA Method 9 cannot determine individual constituents comprising the emissions. In addition, 5% opacity is at or below the method detection limit {Footnote 1} (depending upon whether the plume is black or white {Footnote 2}), for an individual, well-qualified to perform a Method 9 opacity test.

Require a more reliable method or instrumental monitoring that is sufficient to determine continuous compliance with the 5% opacity requirement, for visible emissions "not solely attributable to water condensation".

b) Line 15 on p. 174 reads: "Test Frequency: Not specified except when visible emissions are observed." As written the "Test Frequency" requirement imposes no obligation on the permittee. Suggest borrowing from the Clean Water Act by requiring the Tank Farms daily log include an entry specific to the presence or absence of visible emissions.

Require the Tank Farms daily log include an entry specific to the presence or absence of visible emissions.

{Footnote 1} The method detection limit (MDL) is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence. <https://www.epa.gov/cwa-methods/method-detection-limit-frequent-questions>

{Footnote 2} "Ninety-nine percent of the black plumes and 95 percent of the white plumes were read within 5 percent opacity." Visible Emissions Field Manual EPA Methods 9 and 22, EPA 340/I-92-004 December 1993, p.6

Ecology Response to I-7-129

Thank you for your comment.

a) The referenced condition for discharge point 1.4.80 requires conformance with EPA Reference Method 9 of 40 CFR 60, Appendix A. The method requires a qualified observer to determine the opacity of emissions. To receive certification as a qualified observer, a candidate must follow the method's procedures to demonstrate the ability to assign opacity readings in 5 percent increments to black and white plumes. Procedure required for the method includes "opacity observations shall be made at the point of greatest opacity in that portion of the plume where condensed water vapor is not present" and identifies steps for attached and detached steam plumes (e.g., condensed water vapor). Requiring a certified observer to perform EPA Reference Method 9 is sufficient to determine compliance with a 5% visible emissions limit for emissions not solely attributable to water condensation.

Additionally, compliance with the condition is met by the Tier 3 visible emission survey requirements found in Section 2 of Attachment 1 of the Hanford AOP Renewal 3. The Effluent Management Facility radioactive emission license requires abatement control technology using HEPA filters, which control particulate emissions to less than visible levels. If the abatement control technology is maintained in a manner consistent with the applicable radioactive emission license, the significant monitoring requirements on HEPA filters in the radioactive emission license is sufficient to yield reliable data to determine compliance. If there ever was to be an incident wherein the abatement control technology failed and visible emissions are observed, a Method 9 certified observer would need to determine the opacity of the plume. The maintenance requirements of Attachment 2, and required by Section 2.1, Tier 3 of Attachment 1 for the referenced condition, are sufficient to maintain compliance with the condition.

No change to the AOP is required due to part (a).

b) Discharge Point 1.4.80 is an emission unit with HEPA filtration abatement control technology that is listed in Attachment 2. Opacity monitoring requirements from mixed (radioactive and non-radioactive) airborne effluent streams are not necessary due to the presence of HEPA filtration abatement technology required by Health under WAC 246-247. HEPA filters control particulate emissions to less than visible levels. Because of the particulate control effectiveness provided by HEPA filters, no additional opacity monitoring, beyond visible emissions surveys, would be necessary. Additionally, 40 CFR 60.11(b) allows for the use of alternative methods. Ecology has determined that the presence of HEPA filtration abatement technology required by Health under WAC 246-247 ensures compliance with the visible emissions standards in WAC 173-400-040(2).

Maintenance of the abatement control technology as required in Attachment 2 of the Hanford AOP will maintain particulate emissions to less than visible levels. The license for these units in Attachment 2 requires extensive monitoring of the abatement control technology and identifies the maintenance frequency. As long as the abatement control technology is maintained, it is unnecessary to require the permittee to make visible emissions observations at a specified frequency. If the abatement control technology is not maintained as required by Attachment 2 of the Hanford AOP, the discharge unit no longer qualifies for tier 3 visible emission surveys under Attachment 1, Section 2.1.

Additionally, observance of visible emissions would likely mean the abatement control technology had failed. This would also trigger an emergency response by the facility. If this were to happen and visible emissions were observed, the opacity must then be determined using EPA method 9 of CFR 60, Appendix A. Not specifying a frequency at which to observe for visible emissions does not omit the permittee, USDOE, from the requirement to determine the opacity using EPA Method 9 of 40 CFR 60. Due to the stringent maintenance requirements of Attachment 2 and the emission control of the required HEPA filters, Ecology has determined that the periodic monitoring, test method, frequency, and required records are sufficient to determine compliance with the condition.

No change to the AOP is required due to part (b).

Comment I-7-130

Comment 130: [draft Attachment 1, 1.4.80, Discharge Point: Effluent Management Facility, p. 174-75]: The Effluent Management Facility (EMF) is a part of the Waste Treatment Plant (WTP) where low-level wastes will be processed {Footnote 1}. The EMF is currently under construction. When completed, the EMF will have one new emission unit with the potential for both radioactive and non-radioactive air emissions. In the future, high-level radioactive mixed liquid wastes from Hanford's double-shelled tanks will be vitrified to form a solid borosilicate glass for final long-term disposal in a portion of the WTP now under construction. Air emissions from the WTP are regulated under a PSD permit, a permit which is federally-enforceable. Because a portion of the emissions from the WTP will originate from the EMF, those emissions should also be regulated pursuant to the PSD permit. If emissions originating from EMF are not yet regulated pursuant to the PSD permit, the PSD permit needs to be modified. {Footnote 1} "The EMF will treat liquid effluent from the WTP Low-Activity Waste Facility (LAW), which will be used to begin treating Hanford's tank waste as soon as 2022." <https://energy.gov/em/articles/hanford-makes-progress-toward-vitrifying-waste-facility-s-groundbreaking>, last visited 02/09/2018

Ecology Response to I-7-130

Thank you for your comment.

Prevention of Significant Deterioration (PSD) Permit Number PSD-02-01 Amendment 3 authorizes the construction and operation of a pretreatment plant, a Low Activity Waste vitrification plant, a High Activity Waste vitrification plant, steam generating boilers, hot water boilers, diesel fire pumps, and

emergency diesel generators. The Effluent Management Facility (EMF) was not part of the initial project considered for the PSD permit. When the EMF project was submitted to Ecology in a notice of construction permit application, the emissions increase from the project were not greater than or equal to the PSD significant emission rate thresholds. Therefore, the project is not subject to the PSD requirements. While EMF is part of the overall Waste Treatment and Immobilization Plant (WTP), there are multiple facilities involved with WTP operating different projects, not all of which are subject to PSD permitting.

Additionally, the WTP project is regulated under a PSD permit due to nitrogen oxides and particulate matter finer than 10 microns in diameter. The EMF project application reports emission estimates of 0.00 tons per year of both of these pollutants, while total particulate matter is estimated at 0.03 tons per year. The EMF will not generate criteria pollutant gases because the Direct Feed Low Activity Waste Effluent Management Facility Process System does not contain the necessary thermal or kinetic conditions to produce measureable amounts of inorganic constituents of potential concern, minimizing any potential source for nitrogen oxides.

No change to the AOP is required.

Comment I-7-131

Comment 131: [draft Attachment 1, 1.4.80, Discharge Point: Effluent Management Facility, p. 175]: a) Line 2 on p. 175 reads, in part: "All TAPs, as submitted in the Permittee's NOC Application as Table 1. ..", yet Table 1 of the Permittee's NOC Application is not included in that portion of DE16NWP-003 (2/17/2017) reproduced in draft Attachment 1. Nor is Table 1 of the Permittee's NOC Application included in the material Ecology made available to the public to support public review of draft Renewal 3. Include Table 1 of the Permittee's NOC Application in the permit. b) Line 20 on p.175 reads: "Emission monitoring results required in Section 3.0". However, "Section 3.0" is not included in that portion of Order DE16NWP-003 (2/17/2017) reproduced in draft Attachment 1, nor is "Section 3.0" of this Order provided in the information Ecology supplied to support public review. Public review is obstructed when information referenced in the condition is missing. Include all information referenced in the condition and re-start public review.

Ecology Response to I-7-131

Thank you for your comment.

a) The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. Approval Orders DE16NWP-003 was provided for review during this reopened public comment period, which included the information referenced in the comment.

No change to the AOP is required due to part (a).

b) The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. Approval Orders DE16NWP-003 was provided for review during this reopened public comment period, which included the information referenced in the comment.

No change to the AOP is required due to part (b).

Comment I-7-132

Comment 132: [draft Attachment 1, 1.4.80, Discharge Point: Effluent Management Facility, p. 175]: Lines 12 - 16 on p. 175 require that the "Permittee will develop and implement an annual sampling and analysis plan (SAP)". While the "Test Frequency" (line 11) is "Annual" (yearly), without a specific starting date or event to anchor when the first SAP is to be developed and implemented, this condition is both meaningless and unenforceable. Revise the "Required Records" to state a specific date or a specific event by which the SAP will be developed, for example: • "By June 1, 2016, the permittee will develop an annual sampling and analysis plan . . . ", or • "Before actions approved by this NOC Order can occur, the permittee will develop an annual sampling and analysis plan ... ". Supply a specific date or triggering event for preparation of the SAP sufficient to demonstrate compliance with the condition.

Ecology Response to I-7-132

Thank you for your comment.

Specifying a date by which the sampling and analysis plans must be prepared is not necessary and does not make the condition unenforceable. The sampling and analysis plans must be used during sampling efforts to comply with the permit. Therefore, the sampling and analysis plan must be prepared prior to initiating sampling for compliance with the permit. The permittee is required to comply with the condition. Additionally, a sampling and analysis plan can be revised and updated for every sampling effort. Not having a specified date for preparation of the plans does not void this requirement.

No change to the AOP is required.

Comment I-7-133

Comment 133: [draft Attachment 1, 1.4.80, Discharge Point: Effluent Management Facility, p. 175]: Line 22 on p. 175 indicates the "Calculation Model" is "Not applicable". However, lines 5-7 require determination of "mass release rate of these TAPs in pounds and their respective release rate averaging times in WAC 173-460-150." Provide the calculations needed to determine "mass release rate of these TAPs in pounds and their respective release rate averaging times in WAC 173-460-150" as the "Calculation Model".

Ecology Response to I-7-133

Thank you for your comment.

A calculation is required to convert the laboratory analysis results into mass release rate in pounds and the respective release rate averaging times. A calculation is not the same as a calculation model. Calculation models utilized in the Hanford AOP Renewal 3 are found in Section 3.1 of the Statement of Basis for Attachment 1.

No change to the AOP is required.

Comment I-7-134

Comment 134: [draft Attachment 1, 1.4.80, Discharge Point: Effluent Management Facility, p.175]: The Condition on line 25 on p. 175 regulates mercury as a TAP. However, mercury is also regulated as a Hazardous Air Pollutant (HAP) under section 112 (b) of the federal Clean Air Act. The Effluent Management Facility (EMF) is a part of the Waste Treatment Plant (WTP) where low-level wastes will be processed. Thus, the WTP could not complete its designed mission absent the EMF {Footnote 1}. The WTP is regulated pursuant to a PSD permit. It therefore seems conditions regulating a HAP for an emission-emitting portion of a facility covered by a PSD permit should also be federally-enforceable.

Change line 35 to reflect federally-enforceability. {Footnote 1} "The Effluent Management Facility is critical for WTP to support DFLAW [Direct-Feed Low-Activity Waste]," explained Jason Young, federal project director for the WTP balance of facilities and Analytical Laboratory.' AND "The EMF will provide four major functions for DFLAW: serve as a low-point drain for waste transfer line flushing; concentrate fluids containing low levels of radioactive material from the low-activity waste off-gas treatment system via an evaporator; transport the condensate from the evaporator to the off-site Effluent Treatment Facility via existing transport piping; and recycle the evaporator concentrate into the low-activity waste vitrification process." (emphasis added) <https://energy.gov/em/articles/hanford-makes-progress-toward-vitrifying-waste-facility-s-groundbreaking>, last visited 02/09/2018

Ecology Response to I-7-134

Thank you for your comment.

Prevention of Significant Deterioration (PSD) Permit Number PSD-02-01 Amendment 3 does not cover the Effluent Management Facility (EMF). The PSD permit authorizes the construction and operation of a pretreatment plant, a Low Activity Waste vitrification plant, a High Activity Waste vitrification plant, steam generating boilers, hot water boilers, diesel fire pumps, and emergency diesel generators. EMF was not part of the initial project considered for the PSD permit. When the EMF project was submitted to Ecology in a notice of construction permit application, the emissions increase from the project were not greater than or equal to the PSD significant emission rate thresholds. Therefore, the project is not subject to the PSD requirements. While EMF is part of the overall Waste Treatment and Immobilization Plant (WTP), there are multiple facilities involved with WTP operating different projects, not all of which are subject to PSD permitting.

WAC 173-401-600 requires that the permit contain terms and conditions that assure compliance with all applicable requirements at the time of permit issuance, based upon the most stringent of the requirements from the Federal Clean Air Act, Chapter 70.94 Revised Code of Washington (RCW), permits and regulations by a local air pollution control authority, Chapter 70.98 RCW, and Chapter 80.50 RCW. The emission limit for EMF is from the applicable approval order, DE16NWP-003, pursuant to Controls for New Sources of Toxic Air Pollutants, Chapter 173-460 Washington Administrative Code. The emission levels for toxic air pollutants found in WAC 173-460 are more stringent than the emission levels for hazardous air pollutants under the Federal Clean Air Act. Consequently, compliance with a toxic air pollutant emission level would be compliance with a hazardous air pollutant level.

No change to the AOP is required.

Comment I-7-135

Comment 135: [draft Attachment 2, Renewal 3, general: information used in the permitting process but not provided to the public]: As required by 40 C.F.R. 70.7 (h)(2), provide the public with all information used in the permitting process to justify terms and conditions in Attachment 2 (License FF-01), implementing requirements of 40 C.F.R. 61 subpart H.

On September 1, 2016, the Administrator of EPA received a petition {Footnote 1} under Clean Air Act (CAA)§ 505 (b)(2) [42 U.S.C. 7661d (b)(2)] and 40 Code of Federal Regulations (C.F.R.) 70.8(d) alleging Ecology did not comply with requirements of 40 C.F.R. 70.7 (h)(2) when it issued Renewal 2, Revision B, of Hanford's AOP. Specifically, the petition alleges contrary to 40 C.F.R. 70.7 (h)(2), Ecology failed to provide the public with all information used in the permitting process to justify adding six (6) new emissions units (EUs), removing nine (9) EUs, and replacing about twenty-eight (28) Notice of Construction (NOC) orders of approval from the previous final version of Attachment 2. Such information is required by 40 C.F.R. 70.7 (h)(2). Resolution of that petition is outstanding.

Two (2) of the six (6) new EUs noted above that are still in Attachment 2 of draft Renewal 3, lack applications containing information required by WAC 246-24 7-110 Appendix A. (EUs 1371 & 1384.) Because the initiating requests and justifications for the addition of EUs were used in the permitting process, such information would seem to be included under EPA's interpretation of language in 40 C.F.R. 70.7 (h)(2). EPA's interpretation is captured in a ruling by the 11th Circuit Court of Appeals [See *Sierra Club v. Johnson*, 436 F.3d 1269, 1284, (11th Cir. 2006)]. Absent such documentation it is highly unlikely, if not impossible, these additions could have occurred. Absent such documentation, it is also extremely difficult, if not impossible, for the public to conduct a meaningful public review.

Several of the terms and conditions governing operation of these two (2) EUs implement requirements of 40 C.F.R. 61, Subpart H. Thus, these terms and conditions are federally-enforceable under the CAA, and are subject to public review requirements of 40 C.F.R. 70.

For EU 1371:

Letter 13-ECD-0068 (8/14/2013) requests addition of two radial filters to the new MARS Vacuum, and transmits a "Notification of Off-Permit Change" form and a certification for that form. About twelve (12) days later, on 8/26/2013, Health issued letter AIR 13-822 in response. Health's response, in AIR 13-822, requests additional information in 4 bulleted items. The additional information requested is:

- "Provide information on emission unit (EU) name, nomenclature or AEI-ID, EU diameter, exhaust temperature, flow rates, and EU height for the new MARS vacuum HEP A filters.
- Validate that the U.S. Department of Energy FF-01 license EU numbers associated with the current air approval letter number AIR 12-343 are correct.
- Provide current individual process descriptions for each of the EUs associated with the NOC.
- Provide all information required in WAC 246-24 7-110 Appendix A - Application information requirements."

Apparently information transmitted by letter 13-ECD-0068, dated 8/14/2013, was deemed insufficient by Health's request for additional information (see bulleted items above) in letter AIR 13-822, dated 8/26/2013, or about 12 days after the date of letter 13-ECD-0068.

Additional information was supplied in the form of a mark-up of NOC 899. This marked-up information was transmitted via an email dated 9/19/2013. NOC 899 could only have originated from Health based on information provided by the permittee, information that was not located. The date on this version of NOC 899 is shown as "Not Approved". NOC 899 was issued as final on 10/31/2013 via AIR 13-1107 after consideration of the marked-up information transmitted via an email dated 9/19/2013. Letter AIR 13-1003 (10/17/2013) states "... your modified application to include two new emission units (EU's) for the activity described in Notice of Construction (NOC) 825 will be approved according to the enclosed license". No application or modified application was located.

Also, letter AIR 13-1104 (11-07-2013) from Health to the permittee notes the application for EU's 1371 & 1384 were approved. However no such application was included. EU 1371 is in Attachment 2 of the draft AOP as active. NOC 899 has been replaced by NOC 1254, per letter AIR 17-710, 7/27/2017.

For EU 1384:

Letter AIR 13-1104 (11-07-2013) from Health to the permittee notes the application for EU's 1371 & 1384 were approved. However, there was no such application included.

NOC 908 was replaced by NOC 1255 pursuant to AIR 17-710, dated 7/27/2017. EU 1384 is in Attachment 2 of the draft AOP as active, as is NOC 1255.

Additionally, for one (1) of the above-mentioned EUs, EU 141, there does not appear to be any documentation required to close the EU and remove this EU from Hanford's AOP. Section 5.8.2.1.2 of the Standard Terms & General Conditions portion of Hanford's draft AOP requires that "[t]he facility shall file a report of closure with Health whenever operations producing emissions of radioactive material are permanently ceased ... The closure report shall indicate whether, despite cessation of operations, there is still a potential for radioactive air emissions and a need for an active or passive ventilation system with emission control and/or monitoring devices.". The required report of closure appears to be missing.

{Footnote 1} Available at: https://www.epa.gov/sites/production/files/2016-09/documents/hanford_petition2016.pdf

Ecology Response to I-7-135

This comment was addressed in letter 18-NWP-073, from Alexandra Smith, Ecology, to Tim Hamlin, EPA, dated May 4, 2018. The Ecology's response to this comment in letter 18-NWP-073 is provided below.

The Washington Department of Health (Health) provided all the relevant supporting material for EU 1371 and EU 1384 that was in their possession when the Hanford Site Air Operating Permit Renewal 3 went out for public comment. Health is responsible for enforcing the standards for radioactive air emissions and maintains the records related to these air emissions.

After receiving this comment, Health went back through the license file, emails, electronic files, and database and did not discover any additional information related to the change to EU 1371 or to EU 1384. Because no additional records were found, that means that all relevant supporting material was provided at the start of the comment period.

Your comment indicates in particular that you could not find applications or modified applications in the materials for EUs 1371 and 1384. The Permittee used letter 13-ECD-0068 as the application for both EU 1371 and EU 1384. This is reconfirmed in the first paragraph of letter AIR 13-822 stating "[a]dditional information is required in order for us to process reference application..." The reference in the letter is "Letter 13-ECD-0068."

Letter 13-ECD-0068 was provided in the supporting materials at the start of the public comment period.

You also raise questions about the additional information requested in AIR 13-822. The license writer recalls that the additional information requested in AIR 13-822 was communicated to Health by the Permittee verbally (e.g. in a meeting, on the phone, etc.) and this information was used to mark up NOC 899 that was sent to the Permittee.

The final point in your comment is on EU 141, namely that "there does not appear to be any documentation required to close the EU and remove this EU from the Hanford's AOP." This is because EU 141 was removed from the Hanford AOP in a previous version of the permit under Renewal 2, Revision B. The Closure of EU 141 was documented in that permitting action in the Statement of Basis for Attachment 2 of the Hanford Air Operating Permit, Renewal 2, Revision B, at page 24, which states "[R]emoved EU 141. EU closed, remaining diffusive/fugitive emissions accounted for in EU 486." Renewal 2, Revision B is the Hanford AOP version immediately preceding Renewal 3. Renewal 3 is the current version that was provided for public comment.

With the removal of EU 141 in a previous version of the Hanford AOP, the closure document was not considered a relevant supporting document for the current permitting action. This decision was made because EU 141 is not in the Permit provided to the public for comment.

As the commenter has expressed a desire to see the closure document for EU 141, it is being provided as Reference XX [in letter 18-NWP-073].

The Department of Health provided all documents in their possession related to EU 1371 and 1384. EU 141 does not exist in the AOP Renewal 3 (it was removed in AOP Renewal 2, Revision B) and no relevant documents are required, however since the closure documentation for EU 141 was requested in this comment it is being provided with the response to comments. No change to the permit is required.

In addition to the response found in letter 18-NWP-073, the public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. The closure report for EU 141 was included in the additional supporting and relevant documentation provided during this reopening of the public comment period.

No change to the AOP is required.

Comment I-7-136

Comment 136: [draft Attachment 2, Renewal 3, general: information used in the permitting process but not provided to the public]: Contrary to 40 C.F.R. 70.7 (h)(2) Ecology did not provide all material used in the permitting process when it overlooked providing the public with material supplied to the permittee, to aid the permittee in pre-reviewing portions of what would become Attachment 2 of draft Renewal 3. Attachment 2 is that portion of Renewal 3 implementing requirements of 40 C.F.R. 61 subpart H as terms and conditions for individual emissions units. Ecology also overlooked providing the public with any changes to this table identified by the permittee resulting from its review. These changes directly impact the contents of the version of Attachment 2 supplied to the public for review.

Specifically, the permittee was provided with a summary of changes table for License FF-01 (Attachment 2) sometime before August 9, 2017.

Periodically, the Washington State Department of Ecology (Ecology), the Washington State Department of Health (Health), certain Hanford Site Contractors, and perhaps others meet to discuss air emission issues. This meeting is called the "Radioactive/ Air Toxics Schedule Interface Meeting" (RATSI). The summary for the August 9, 2017, RATSI meeting contains the following statement under item 4a: "Reed Kaldor noted that he received an updated version of the FF-01 license and a summary of changes table for review and comment by the Hanford Site contractors." [In this meeting summary, Mr. Kaldor's company affiliation is shown as "MSA".] The Statement of Basis for the version of Hanford's AOP now enforce (Renewal 2, Revision B) contains a such table ["Table of Changes from FF-01 12-10-14", Statement of Basis, Hanford Site Air Operating Permit, No. 00-05-006 Renewal 2, Revision B, Attachment 2, Department Of Health License, pp. 23-33].

In interpreting language in 40 C.F.R. 70.7 (h)(2) EPA determined information that must be provided to support public review consists of all information deemed relevant by being used in the permitting process. EPA's view is captured as a finding in case law. "EPA has determined that the phrase 'materials available to the permitting authority that are relevant to the permit decision,' 40 C.F.R. § 70.7(h)(2), means the information that the permitting authority has deemed to be relevant by using it in the

permitting process . . . "(emphasis added) *Sierra Club v. Johnson*, 436 F.3d 1269, 1284, (11th Cir. 2006)

A "summary of changes table" for an updated version of License FF-01, a version that would become Attachment 2 of draft Renewal 3, does exist; the table was provided to the permittee for review; thus, the table was used in the permitting process. Pursuant to 40 C.F.R. 70.7 (h)(2), this table should have been provided to the public to support public review of draft Renewal 3. After all, a similar table is contained in the permitting documentation for both the draft and final versions of Hanford's AOP now enforce.

Provide the public with all relevant material used in the permitting process, as required by 40 C.F.R. 70.7 (h)(2) and re-start public review.

Ecology Response to I-7-136

Thank you for your comment.

The "summary of change table" is used in the AOP processes by the Washington Department of Ecology and the Washington Department of Health to indicate what has changed in the AOP. This delineation of change is used to limit comments during public comment periods to the parts of the permit that have changed. Any comments received by Ecology or Health to sections of the AOP that have not changed are considered out-of-scope and not responded to. A renewal of an AOP is considered as similar to getting a new permit. With a new permit and a renewal, the entire permit is open to comment. As the whole permit is open to comment, no change table was provided as a relevant document.

Additionally, in and of itself, a summary of change table is not a relevant document as it has no permit requirements in it. It is just a record of what changed, it does not show why or how the permit changed. The permittee's, USDOE's, application DOE/RL-2017-31 contained air operating permit revisions and off-permit changes that occurred during the Hanford AOP Renewal 2 permit term. Requested permit changes are also contained in the application. This application and other documents, such as approval orders, are materials relevant to the permitting decision and used in the permitting process.

With the summary of change table not being a relevant document and not utilized by either Ecology or Health during this AOP renewal, no permit change or re-starting of the public comment period is required.

Comment I-7-137

Comment 137: [draft Attachment 2, Renewal 3, Sections 3.3 -3.9, general: improperly-identified State-Only enforceable requirements]: Address federally enforceable requirements as specified in WAC 173-401-625 and 40 C.F.R. 70.6 (b). Ecology must ensure the final title V permit appropriately characterizes federally enforceable requirements {Footnote 1}. In issuing License FF-01, Ecology has adopted Health's, sometimes incorrect, definition of "state-only enforceable" as this definition relates to the Clean Air Act. Ecology needs to change the following requirements to federally enforceable to be consistent with EPA's instruction (see footnote 1):

- draft Attachment 2, Section 3.3 National standards adopted by reference for sources of radionuclide emissions, WAC 246-247-035 (1) & (3) {Footnote 2}*
- draft Attachment 2, those federal requirements listed in Section 3.4 General Standards, addressed by WAC 246-247-040(1);*
- draft Attachment 2, Section 3.7 Monitoring, testing and quality assurance, 1) reference methods 1, IA, 2, 2A, 2C, 2D,, 5, and 17 of 40 CFR Part 60, Appendix A, 40 CFR Part 52, Appendix E, [WAC 246-247-075(2)]; and*
- draft Attachment 2, Section 3.9 Compliance determination for existing emission units and facilities, WAC 246-247-085(1); WAC 246-247-085(2); WAC 246-247-085(3).*

{Footnote 1} "If, after considering the comments, Ecology concludes that Attachment 2 incorrectly characterizes a certain requirement as "state-only," Ecology must ensure that the final title V permit appropriately characterizes that requirement as federally enforceable prior to issuing the final title V permit." U.S. Department of Energy-Hanford Operations, Benton County, Washington, Order on Petitions X-2014-01 and X-2013-01 (May 29, 2015). p. 13, n. 11

{Footnote 2} "... W.A.C. 246-247-035, [is an] "applicable requirements" under the EPA-approved title V program for Washington because they are standards or other requirements under CAA§ 112. See 40 C.F.R. § 70.2 (EPA 's definition of applicable requirement)." (footnote omitted) . Id. at 14

Ecology Response to I-7-137

Thank you for your comment.

The header statement of Section 3.0 of the FF-01 license has been revised to state "State Enforceable ONLY (Except when 40CFR referenced)." This revised page will be added to a newly created Addendum to Attachment 2.

Comment I-7-138

Comment 138: [Statement of Basis (SOB), draft Attachment 1, Renewal 3, Page iii, general: inaccurate statement]: Citing to legal authority provided by WAC 173-401-700 (8), lines 9-12 on Page iii of the SOB for Attachment 1, draft Renewal 3, reads: "The Statement of Basis (Statement) is issued by Washington State Department of Ecology (Ecology), Washington State Department of Health (Health), and Benton Clean Air Agency (BCAA), collectively referred to as the permitting agencies, as a separate supporting reference document to the Hanford Air Operating Permit (AOP) Attachment 1." This statement is inaccurate because this SOB, as well as the entire AOP, is issued solely by Ecology, the permitting authority. WAC 173-401-700 (8) requires, in part, that "the permitting authority shall provide a statement that sets forth the legal and factual basis for the draft permit conditions". Ecology, the sole permitting authority for Hanford's AOP, cannot use a permit to change a regulatory requirement.

Please edit to accurately reflect the regulatory requirement that only Ecology has authority to issue the SOB.

Ecology Response to I-7-138

Thank you for your comment.

The statement of basis is not an enforceable document, however Ecology is the sole permitting authority.

Lines 9 through 11 of page iii will be revised to state "The Statement of Basis (Statement) is issued by Washington State Department of Ecology as a separate supporting reference document..."

Comment I-7-139

Comment 139: [SOB, draft Attachment 1, Renewal 3, Section 1.2, p.8, inaccurate statement]: Lines 10 & 11 on p. 8 read, in part: "... Ecology sued EPA in the 9th District Court of Appeals ... "Ecology sued EPA before the 9th Circuit Court of Appeals. (Circuit rather than District.) Please correct.

Ecology Response to I-7-139

Thank you for your comment.

The Statement of Basis is not an enforceable document, however Ecology agrees that lines 10 and 11 on page 8 are inaccurate. Lines 10 and 11 of page 8 will be changed to "...9th Circuit Court of Appeals..." as suggested.

Comment I-7-140

Comment 140: [SOB, draft Attachment 1, Renewal 3, Section 1.3, p. 9, gap-fill monitoring]: Section 1.3 on p. 9, lines 33 & 34 addresses monitoring, etc., needed "to assure compliance with the terms and conditions of the permit". However, WAC 173-401-615 (b) addresses monitoring in situations where the "applicable requirement" does not require sufficient monitoring to demonstrate continuous compliance with that requirement. Where such monitoring is lacking, additional periodic monitoring is required "...sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit,". WAC 173-401-615 also addresses reporting and recordkeeping.

Add WAC 173-401-615 to the current citation [WAC 173-401-630] on line 36.

Ecology Response to I-7-140

Thank you for your comment.

The Statement of Basis is not an enforceable document. Lines 33 and 34 of page 9 are restatements of WAC 173-401-630. The regulation requires the permittee, USDOE, to annually certify compliance with the terms and conditions of the Hanford AOP Renewal 3. Citing WAC 173-401-615 would not be appropriate for this section.

No change to the AOP is required.

Comment I-7-141

Comment 141: [SOB, draft Attachment 1, Renewal 3, Section 3.2, p. 11, missing discussion regarding overlooked conditions to control fugitive dust and fugitive emissions]: Section 2.3 starting on line 39, p. 11, is titled "Measures to Control Fugitive Emissions and Fugitive Dust". However, conditions for controlling fugitive dust and fugitive emissions also exist in a dust control plan required by active Administrative Order of Correction, No. 20030006, issued by the Benton Clean Air Agency. Missing from the Statements of Basis is a discussion of the factual and legal basis for not including the Bechtel National, Inc., dust control plan in the draft Hanford Site AOP. This dust control plan for the Marshalling Yard (renamed as the Material Handling Facility), and the federal applicable requirements contained therein, is required by Administrative Order (AO) of Correction, No. 20030006, issued by the Benton Clean Air Agency on March 12, 2003.

EPA has concluded CAA applicable requirements include conditions resulting from a judicial or administrative process resulting from the enforcement of "applicable requirements" under the CAA. Such conditions must be included in title V permits.

"EPA believes that, because CDs [consent decrees] and AOs [administrative orders] reflect the conclusion of a judicial or administrative process resulting from the enforcement of "applicable requirements" under the Act, all CAA-related requirements in such CDs and AOs are appropriately treated as "applicable requirements" and must be included in title V permits, regardless of whether the applicability issues have been resolved in the CD." In the Matter of CITGO Refining and Chemicals

Company L.P., Petition Number VI-2007-01, at 12 (May 28, 2009). Available at: http://www.epa.gov/region07/air/title5/petitiondb/petitions/citgo_corpuschristi_west_response2007.pdf

In accordance with 40 C.F.R. 70.7 (a)(5) and WAC 173-401-700 (8), provide the factual and legal basis for omitting applicable federal requirements contained in the AO from this draft AOP.

Ecology Response to I-7-141

Thank you for your comment.

The Administrative Order (AO) is not in effect and is not an applicable requirement for the Hanford AOP. The AO was closed and disposed of, but the dust control requirements from that AO that remain in effect are found in the terms of the underlying requirement in Approval Order DE02NWP-002, Revision 2. Ecology offers the following history of the AO for control of fugitive dust from the Material Handling Facility (formerly the Marshalling Yard).

- The Dust Control Plan for the Waste Treatment Plant (WTP) Construction Site (24590-WTP-GPP-SENV-015) was originally prepared December 23, 2002, to meet DE02NWP-002, Condition 8.1. The original DE02NWP-002 did not include the WTP Marshalling Yard.
- On March 21, 2003, a separate WTP Marshalling Yard Dust Control Plan was developed in response to a BCAA Order of Correction 20030006.
- -On October 16, 2003, BCAA's case involving Order of Correction 20030006 was closed.
- In 2006, Ecology incorporated the requirement for the WTP Marshalling Yard dust control plan into DE02NWP-002 via Amendment 4 in response to a public comment made during review of AOP 00-05-006, Renewal 1. The separate dust control plans for the Marshalling Yard and the remaining WTP locations continued to be implemented.
- On March 3, 2010, the above implemented and compliant Dust Control Plans were consolidated into one plan with issuance of 24590-WTP-GPP-SENV-015, Revision 1, Fugitive Dust Control.
- The Material Handling Facility dust control plan is a requirement of DE02NWP-002, Revision 2. DE02NWP-002, Revision 2 states the Construction Phase Fugitive Dust Control Plan(s) "shall address fugitive dust control at the WTP construction site adjacent to the Hanford 200 Area and the Material Handling Facility." Additionally, the dust control plan "shall be made available to Ecology upon request."
- The fugitive dust control plan addressing the Material Handling Facility is a requirement in the permit which is issued under the authority of Ecology.

The fugitive dust control condition from DE02NWP-002, Revision 2, which requires a dust control plan addressing the Material Handling Facility, is found in discharge point 1.4.23 on page 63 of the draft Hanford AOP Renewal 3. Therefore, the draft Hanford AOP Renewal 3 contains the applicable requirements in regards to the control of fugitive dust at the Material Handling Facility.

No change to the AOP is required.

Comment I-7-142

Comment 142: [SOB, draft Attachment 1, Renewal 3, Appendix C, p. 34, overlooked updating]: Lines 2 - 4 on p. 34 regarding "APPENDIX C" read: "This appendix documents the substantive changes that occurred in Attachment 1 of the Hanford Air Operating Permit Renewal 2, Revision B. Minor typographical corrections, formatting changes, or grammatical corrections are not captured". This SOB was submitted to support public review of Renewal 3, not public review of Renewal 2, Revision B. Please

update APPENDIX C accordingly and provide the public an opportunity to conduct review using current information.

Ecology Response to I-7-142

Thank you for your comment.

The Statement of Basis is not an enforceable document. This appendix is used to track the changes in AOP revisions. As this is a renewal deemed as a new permit, the entire AOP "has changed" and all parts are subject to comment. If AOP Renewal 3 is revised in the future, then any changes will be documented in this appendix and in-scope comments will be limited to only these changes. All other comments will be deemed as out-of-scope.

To clarify this, Appendix C will have all the text deleted and the section marked as reserved.

Comment I-7-143

Comment 143: [SOB, draft Attachment 1, Renewal 3, Discharge Points Removed, p. 35, overlooked information used in the permitting process but not provided to support public review, p. 35]: The eight (8) discharge points listed on p. 35 are shown as being removed from Attachment 1 of draft Renewal 3. Several paragraphs associated with the discharge points removed reference specific letters from the permittee. These specific letters and other documentation justifying removal of these discharge points resulted in changes to draft Attachment 1; thus they were clearly used in the permitting process. Information used in the permitting process must be supplied to support public review, pursuant to 40 C.F.R. 70.7 (h)(2). It does not appear Ecology included these letters and other documentation in review material it supplied to support public review of draft Renewal 3, Attachment 1.

Required information may also be lacking for certain of the "Discharge Points Revised" appearing on pages 36 & 37 of Ecology's Statement of Basis for Attachment 1 of draft Renewal 3.

Provide the public with all materials deemed relevant by being used in the permitting process, as required by 40 C.F.R. 70.7 (h)(2), and re-start public review.

Ecology Response to I-7-143

Thank you for your comment.

The statement of basis is not an enforceable document. The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. Documentation justifying the removal and revision of the referenced discharge points was provided for review during this reopened public comment period.

No change to the AOP is required.

LETTER I-8: BILL GREEN, 3/20/18 5:27 AM PT

Comment I-8-1

Comment 144: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation, NOC Approval Order DE11NWP-001, Rev. 4 (03/03/2016), p. 109, lines 25-27 & 33-37] Lines 33-37 on p. 109 require that "Ecology must be notified within 24 hours of any readings exceeding Table 6 values. This notification can be performed electronically (e.g. email) and shall include, at a

minimum, the reading(s) in exceedance, the exhauster system involved, and the elapsed time between compliant readings. . ."

a) This notification requirement via email overlooks the certification requirements of WAC 173-401 and 40 C.F.R. 70 for monitoring required to determine compliance with an applicable requirement.

Require certification of information in any notification regarding "any readings exceeding Table 6 values" or other emissions limit.

b) It appears the 24 hour notification requirement for "any readings exceeding Table 6 values" is not being enforced. A version of Table 6 (attached) obtained from Ecology's website [https://fortress.wa.gov/ecy/nwp/permitting/Air/NOC/DE11NWP-001_Rev4/PDF/Permit.pdf] {Footnote 1} shows an exceedance of 75 ppm (75%) of the 100 ppm "Ammonia Concentration Limits (ppm)" [Table 6 heading] from the 241-AP Exhauster Upgraded System. The date of this entry is shown as October 26, 2016, or more than 6 months after the regulatory order was issued by Ecology. However, in response to a request under the Public Records Act (RCW 42.56) (PDS 46149) the permitting authority that authored this regulatory order was not able to locate any notification of this exceedance. This missing notification is ample grounds for mandatory enforcement under federally-enforceable provisions of Washington's SIP. While information regarding this exceedance, or the lack thereof, was apparently available on or about October 26, 2016, such information was not provided to the public to support review of draft Renewal 3. A notification required by an AOP applicable requirement showing exceedance of an emission limit, or the failure to provide such notice, must be made available to the public, in accordance with 40 C.F.R. 70.7 (h)(2).

Enforce the CAA for failure to provide the required 24 hour notification, provide the public with all such notifications or failures to notify, and re-start public review.

c) Lines 25-27 on p. 109 read: "A maximum concentration of ammonia in parts per million (ppm) by volume of ammonia emitted will be used as an indicator for compliance with release rates of TAPs". These TAPs include Dimethyl mercury (DMM), N-Nitrosodimethylamine (NDMA), and Chromium hexavalent: soluble, except chromic trioxide. Because Ecology uses a radio based on ammonia emissions to infer compliance with emission limits for other TAPs, the 75% exceedance of the "Ammonia Concentration Limit" represents an equal percentage exceedance in the emission limits for DMM, NDMA, and all other impacted TAPs. An exceedance of 75% of the emissions limits for DMM, NDMA, and all other impacted TAPs from the 241-AP Exhauster Upgraded System meets the definition of "modification" under WAC 173-400-030 (48) and triggers requirements for a modification under WAC 173-400-110 (3). Yet, Ecology overlooked requiring a modification of its regulatory order (DE11NWP-001, Rev. 4) as a response to the reported exceedances. It also appears such an exceedance triggers a modification under section 112 of the CAA [42 U.S.C. 7412] for at least (sic) DMM, NDMA, and Chromium hexavalent: soluble, except chromic trioxide. Enforce all emission limits and comply with all applicable modification requirements, re-issue a revised order, and re-start public review.

{Footnote 1} URL obtained via Public Records Act request PDS 45995 dated March 1, 2018

Ecology Response to I-8-1

Thank you for your comment.

a) The referenced language is consistent with the approval order DE11NWP-001, Revision 4. Compliance certification requirements found in WAC 173-401-630 and 40 CFR 70.6 require any document required

by the permit shall contain a certification by a responsible official. A notification requirement via email for this condition is not a document, but rather the laboratory analytical results, supporting calculations, operational records, and the semi-annual and annual compliance certification would be documents that require certification by a responsible official.

Ecology determined that requiring a notification within 24 hours of an exceedance, which could be completed via email, was the most efficient method to ensure emission limits are met during waste disturbing activities. A prompt notification of exceedances for near real time measurements of ammonia during waste disturbing activities is preferred for Ecology to ensure that tank operations ceased and the permittee, USDOE, met the requirements in order to resume operations. This also gives Ecology the ability to inspect any incidents near the time of the infraction to ensure future waste disturbing activities are able to comply with the permit.

No change to the AOP is required due to part (a).

b) The changes to Table 6 of the approval order DE11NPW-001, Revision 4, were not made because of an exceedance during operations. At the request of the permittee, USDOE, Table 6 was updated on October 26, 2016, to revise the ventilation flow rate for the 241-AP exhauster flow rate from 3,000 standard cubic feet per minute (scfm) to 1,750 scfm. The maximum ammonia concentration limit increased from 100 parts per million (ppm) to 175 ppm. The changes were driven by the permittee, USDOE, as an operational need to decrease the maximum 241-AP exhauster flow rate, not because an exceedance was observed. The ammonia concentration limit subsequently increased to retain the same mass release rate of ammonia. Since no exceedance of the ammonia concentration limit in Table 6 was observed, no notification of an exceedance was required.

No change to the AOP is required due to part (b).

c) The changes to Table 6 of the approval order DE11NWP-001, Revision 4, were not made because of an exceedance during operations. At the request of the permittee, USDOE, Table 6 was updated on October 26, 2016, to revise the ventilation flow rate for the 241-AP exhauster flow rate from 3,000 standard cubic feet per minute (scfm) to 1,750 scfm. The maximum ammonia concentration limit increased from 100 parts per million (ppm) to 175 ppm. The changes were driven by the permittee, USDOE, as an operational need to decrease the maximum 241-AP exhauster flow rate, not because an exceedance was observed. The ammonia concentration limit subsequently increased to retain the same mass release rate of ammonia. Since no exceedance of the ammonia concentration limit in Table 6 was observed, there was no exceedance of other TAPs from the discharge point. Additionally, the changes to Table 6 did not increase the mass release rate. Therefore, the changes did not trigger a permit modification. As a result, all emission limits were compliant and a permit modification was not required due to the October 26, 2016, update to Table 6 of approval order DE11NWP-001, Revision 4.

No change to the AOP is required due to part (c).

LETTER I-9: NANCY KROENING, 8/16/18 1:19 PM PT

Comment I-9-1

Dear People: We appreciate all your hard work to contain and treat all the dangerous materials at the Hanford Nuclear Reservation. I'm wondering if using non-diesel machines would further decrease the 250 tons of regulated pollutants. That seems like a lot going out over fields of peas and wheat and people's homes. I appreciated having all the supporting documents available. The detail is amazing and I'm hoping and trusting that it means that the management of all the details of treating and managing such toxic materials is being done well and carefully. It is important to not further pollute the

downwinders as the Reservation's toxics are being cleaned up! The dimethyl mercury was of interest to me because of its toxicity, especially to children. Where does it come from and how can it be fully contained? We have a personal interest in this so we appreciate being able to comment. Thank you.

ECOLOGY Response to I-9-1

Thank you for your comment.

The Hanford Air Operating Permit (AOP) Renewal 3 was created under rules and regulations to implement both the Federal Clean Air Act and the Washington Clean Air Act. While using non-diesel machines could reduce certain emissions of regulated air pollutants, both Acts allow the use of diesel machines. Under the Hanford AOP Renewal, USDOE is required to operate and maintain applicable diesel machines in a manner consistent with both Acts. While the Hanford Site is a major source under Title V regulations due to their potential-to-emit over 100 tons of a single regulated air pollutant, nitrogen oxides, the actual emissions for calendar year 2017 were 23 tons of nitrogen oxides.

The Hanford AOP, with the underlying approval orders and regulations, ensures that regulated pollutant concentrations in ambient air from applicable emissions on the Hanford Site are within acceptable source impact levels or has been demonstrated that the emissions are not likely to result in an increased cancer risk of more than one in one hundred thousand and the noncancer hazard was acceptable.

Dimethyl mercury (DMM) is an organomercury compound that is volatile and very toxic to humans. Several studies report measured levels of DMM in natural waters. DMM has also been found in municipal waste landfill gas samples. Mercury compounds are commonly disposed of in municipal landfills, which can have anaerobic environments that allows for the transformation inorganic mercury into methylated forms. DMM has been found in measurements collected in Antarctica, demonstration of an atmospheric background concentration of the compound. On the Hanford Site, DMM is formed within the tanks of nuclear waste. The tanks contain a number of constituents, including mercury, solvents, and radiological compounds. The chemical reaction between the mercury, solvents, and energy provided from the radiation can produce DMM. Hanford tank head space samples have also indicated the presence of DMM.

There is no air emission abatement control technology that provides 100% capture efficiency for mercury compounds. USDOE and Ecology have completed a health impact assessment to evaluate DMM emissions from the Hanford Site. The assessment and Ecology's evaluation have bounded the emissions of DMM from the Hanford Site, that if emitted in the manner assessed is not likely to result in an increased cancer risk of more than one in one hundred thousand and that the noncancer hazard is acceptable.

No change to the AOP is required.

LETTER I-10: BILL GREEN, 9/13/18 12:00 PM PT

Comment I-10-1

Comments include any associated endnote(s) or any associated footnote(s). Comment 145: [draft Attachment 1, 1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation, pp. 103 to 116; also refer to comments 55 and 144; baseline assessments pp. 107 & 113 of draft Attachment 1]:

a) Comment 55 addresses, in part, the use of ratios to estimate the quantity of various regulated air pollutants in emissions from Hanford's tank farm tanks. The ratio method uses the measured amount of ammonia in the emissions from quiescent tanks, then applies a preestablished ratio between ammonia and the other pollutant of concern to estimate the quantity of that other pollutant in the tank emissions.

"The permit was based upon the highest measured value for each pollutant emitted from all quiescent tank sampling events. Ecology used these values to establish the ratio between the emissions of all tank emission compounds. This ratio was the basis for estimating compound-by-compound emissions values from dispersion modeling. ... Using this ratio, it is possible to estimate the emissions of any emitted compound if the emissions of just one compound has been measured" (emphasis added), "Response to Comments, Air Permit Revision to Facilitate Waste, Retrieval from Hanford Tank A Y-102, January 24-February 23, 2016, Summary of a public comment period and responses to comments", Dept. of Ecology, State of Washington, Pub. No. 16-05-005, Mar. 2016, p.18.

Part of Comment 144 addresses creation of new operating limits whereby the ammonia emission limit is maintained by a combination of decreasing the exhaust fan rate (in scfm) and increasing the ammonia concentration limit (in ppm). Both the establishment and use of ratios and maintaining ammonia emission limits by adjusting only fan exhaust rates and headspace concentration rely on headspace gases being homogeneous. However, there is no such requirement.

Require tank headspace gases be homogenous and require monitoring sufficient to verify these tank headspace gases remain homogenous over time.

b) Baseline assessments for the subject discharge points are addressed on pages 107 and 113 of draft Attachment 1. The concept of a baseline and the establishment of a baseline for tank emissions rely on those emissions being homogenous, in addition to an emission formation environment within tanks that is in steady state. [The term "steady state" is defined as: "a system, operation, mixture, rate, etc. that does not change with time or that maintains a state of relative equilibrium even after undergoing fluctuations or transformations" (see: <http://www.yourdictionary.com/steady-state>).] Even though a reliable baseline cannot be established absent a homogenous mixture of headspace gases and a steady state emission formation environment within the tanks, there is no requirement for either.

Require the emission formation environment within the tanks be in steady state and that the gases within the tank headspace be homogenous. Also, provide monitoring sufficient to demonstrate continuous compliance with these requirements.

c) Comment 144 is based, in part, on Ecology's response to a March 19, 2018, request submitted under the Public Records Act, RCW 42.56. (Request POTS 46149.) This request was for "[t]he information supplied to Ecology requesting the 10/26/2016 updated [sic] to Table 6 from regulatory order DEI INWP-001, Rev. 4". Ecology's response reflects that no such records exist. There are no documents requesting the change to operating limits; no information supporting or justifying such a request; and no existing documents to support public participation. Additionally, calculations plus the values used to populate the variables in calculations employed by Ecology to establish the new exhaust fan rates (in scfm) and ammonia concentration limits (in ppm) were performed on a white board which was subsequently erased; thus, these records also do not exist to support public participation. While Ecology is apparently free under the Public Records Act to conduct a meeting where emissions potentially affecting public health without generating any records, and while Ecology is apparently free under state law to change operating conditions codified in an Order issued under a federally approved program without maintaining records, neither Ecology nor the Permittee have the requisite authority to overlook federal regulation, namely 40 C.F.R. 70. At the very least, this oversight by both Ecology and the Permittee implicates those paragraphs of 40 C.F.R. 70 regarding significant records deemed relevant by being used in the permitting process [40 C.F.R. 70.7 (h)(2)2], those records needed to ascertain whether monitoring is sufficient to assure continuous compliance [40 C.F.R. 70.6 (a)(3)(i)(B)3], and records sufficient to allow the Administrator of EPA to discharge its duty under section 505(b)(2) of the federal Clean Air Act (CAA) [40 C.F.R. 70.7 (h)(5)4]. After all, Part 70 contains a regulatory mechanism for

Ecology to obtain additional information needed to comply with requirements of Part 70. Part 70 also provides that Ecology cannot issue an AOP until it "has complied with the requirements for public participation under paragraph (h) [40 C.F.R. 70.7 (h)]". [40 C.F.R. 70.7 (a)(1)(ii); WAC 173-401-700 (l)(c).] Ecology can't comply with public participation requirements of 40 C.F.R. 70.7 (h) when relevant records were unavailable to the public because Ecology received them verbally, or because Ecology erased them. These records should have been easily reproduced to support public participation under Part 70. It is uncertain why Ecology chose not to do so.

Part 70 also specifies that "[a]ll terms and conditions in a part 70 permit, including any provisions designed to limit a source's potential to emit, are enforceable by the Administrator and citizens under the Act." [40 C.F.R. 70.6 (b)(1).] Citizen enforcement under the CAA is frustrated when Ecology and the Permittee act to make unavailable, records needed by the public to evaluate options for enforcement of terms and conditions in an AOP.

Provide the public with all records required by 40 C.F.R. 70 that are deemed relevant by being used in the permitting process. Absent such records it is not possible for the public to evaluate the calculation(s) Ecology used to arrive at the new and higher concentration limits, the new lower fan rates, and the appropriateness of monitoring requirements. Also, provide those records needed to allow the Administrator of EPA to discharge its duty under section 505(b)(2) of the CAA, and re-start public review.

*1 "The calculation was performed on a white board by NWP Air personnel while USDOE was present using the original calculation formulas used with the permit. All parties were and are in agreement with the change calculated on the white board and an update was made to Table 6 of the permit. The board was erased and no calculation sheets were generated by NWP. As such, no records exist." (emphasis added) Email from P. Gent, Ecology NWP, to T. Booth, Ecology NWP, "Subject: FW: REQUEST: Public Records Act", Mar. 19, 2018, 2:13 PM 2 " ••• additional information, including copies of the permit draft, the application, all relevant supporting materials, including those set forth in § 70.4(b)(3)(viii) of this part, and all other materials available to the permitting authority that are relevant to the permit decision; ... "40 C.F.R. 70.7 (h)(2): "EPA has determined that the phrase 'materials available to the permitting authority that are relevant to the permit decision,' 40 C.F.R. § 70.7(1)(2), means the information that the permitting authority has deemed to be relevant by using it in the permitting process ... " (emphasis added) *Sierra Club v. Johnson*, 436 F.3d 1269, 1284, (11th Cir. 2006); see also WAC 173-401-800 (l)(d)(iv)*

3 "Where the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit, as reported pursuant to paragraph (a)(3)(iii) of this section. Such monitoring requirements shall assure use of terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement. Recordkeeping provisions may be sufficient to meet the requirements of this paragraph (a)(3)(i)(B) of this section" 40 C.F.R. 70.6 (a)(3)(i)(B); see also WAC 173- 401-615 (l)(b)

4 "The permitting authority shall keep a record of the commenters and also of the issues raised during the public participation process so that the Administrator may fulfill his obligation under section 505(b)(2) of the Act to determine whether a citizen petition may be granted, and such records shall be available to the public." 40 C.F.R. 70.7 (h)(5); ; see also WAC 173-401-800 (5) & -810 (2)

Ecology Response to I-10-1

Thank you for your comment.

a) The approval order DE11NWP-001, Revision 4, uses ammonia as an indicator compound to determine compliance during solids mixing, disturbing bulk tank solids, removal of enough supernatant to potentially create a gas release event, or Waste Feed Delivery operations to the Waste Treatment and Immobilization Plant as it can be measured near real time. The ratio between ammonia and other toxic air pollutants (TAPs) must be verified during these activities. The method to verify the ratio is identified in the approval order and in the draft AOP under discharge point 1.4.32, starting on page 109. Ammonia, dimethyl mercury, and chromium hexavalent: soluble, except chromic trioxide samples must be collected during the above operations. The permittee, USDOE, must evaluate the data to calculate the sampled ratio of the pollutants to determine if the ammonia limits provided a sufficient indication of other TAPs emissions. Ecology has determined that this method is adequate to verify the use of ammonia as an indicator compound and evaluate compliance with emission rates of other TAPs.

The commenter's comment number 144 mistakes that the increased ammonia concentration in parts per million increased the emission limit. In fact, the decreased ventilation rate and increased ammonia concentration maintained the same mass release rate. Permitted emission limits for this discharge point is based on the mass release rate of the pollutant, not the concentration of the pollutant in the gas being released. Therefore, the emission limit was not changed. Adjusting the ventilation rate and ammonia concentration is adequate to ensure compliance with the emission limit. If the ratio of ammonia to other TAPs were to change from the process noted above, new values may be required to ensure compliance with the emission limit. The process for changing the ratio is also identified in the approval order and in the draft AOP under discharge point 1.4.32, starting on page 109.

The Hanford Site tank waste is not a homogenous waste form. It is a mixture of solids, sludges, liquids, vapor pockets, solvents, radioactive isotopes, metals, and other chemicals. The source term for this discharge point was determined using the highest measured value for each of the pollutants emitted from all quiescent tank sampling events, as coined the 'worst case tank.' As part of the conservative 'worst case tank' data evaluation, it was even assumed that compounds below laboratory detection limits were actually present and were at the detection limit. This 'worst case tank' approach is not based on a homogenous system, but is a collection of non-homogenous sample results. The 'worst case tank' is a conservative approach that uses the worst-case scenario to determine emissions from each tank farm, even though sampling results from a specific tank farm, may not be as high as the 'worst case tank.' Therefore, the conservative factors used in permitting the discharge point do not require the system be homogeneous.

No change to the AOP is required due to part (a).

b) The baseline assessments required for discharge point 1.4.32 on pages 107 and 113 require the permittee, USDOE to sample for the respective pollutants within 90 days of commencement of operations of each exhaust system. The baseline assessments are used as a starting point for when samples must be collected, and not as a benchmark against which future samples will be compared for compliance. All samples collected are compared against the emission limits for compliance.

The Hanford Site tank waste is not a homogenous waste form. It is a mixture of solids, sludges, liquids, vapor pockets, solvents, radioactive isotopes, metals, and other chemicals. It is impractical to require tank headspace gasses be homogenous. The source term for this discharge point was determined using the highest measured value for each pollutants emitted from all quiescent tank sampling events, as coined the 'worst case tank.' This 'worst case tank' approach is not based on a homogenous system, but is a collection of non-homogenous sample results. The 'worst case tank' is a conservative approach that uses the worst-

case scenario to determine emissions from each tank farm, even though sampling results from a specific tank farm may not be as high as the 'worst case tank.' Therefore, the conservative factors used in permitting the discharge point do not require the system be homogeneous, nor at steady state.

No change to the AOP is required due to part (b).

c) Ecology has previously addressed this concern in a letter from Alexandra Smith, Ecology's Nuclear Waste Program Manager, to the commenter dated April 25, 2018. The records requested in the comment are calculations that were performed on a whiteboard during a meeting between Ecology staff and the permittee, USDOE, discussing the operation change in exhauster flow rate. The calculation written on the whiteboard was a transitory record that falls within the "Brainstorming and Collaborating" category (Disposition Authority Number GS 50006) under the State Government General Records Retention Schedule. Notably, the retention schedule specifically calls out "notes written on whiteboards" as being part of that category. As a transitory record, that was to be retained until no longer needed for agency business and then destroyed. Accordingly, Ecology staff erased the whiteboard at the end of the meeting. Ecology and the permittee, USDOE, were in agreement with the change calculated on the whiteboard, and therefore Ecology did not see a need for an additional request. Therefore, Ecology has provided the public with all records that are deemed significant and relevant in the permitting process.

Additionally, the changes made to Table 6 of DE11NWP-001 Revision 4 did not result in an increase in emissions or an authorization of a future increase in emissions. The changes were driven by the permittee's, USDOE, operational need to decrease the maximum 241-AP exhauster flow rate from 3,000 standard cubic feet per minute (scfm) to 1,750 scfm. The change in ammonia concentration at the specified flow rate from 100 parts per million (ppm) to 175 ppm retains the same mass release rate in grams per second with the decreased ventilation rate. This is shown by the calculations below.

mass release rate = [(ammonia concentration in ppm x molecular weight of ammonia) / (molar volume at standard temperature and pressure)] x (ventilation rate)

(1) 100 ppm ammonia at 3,000 scfm ventilation rate

$$[(100 \text{ parts} / 1,000,000 \text{ parts}) \times 17.031 \text{ g/mol}] / (24.45 \text{ L/mol}) \times [3,000 \text{ scfm} \times (28.32 \text{ L/scf}) \times (1 \text{ min} / 60 \text{ sec})] = 0.10 \text{ g/sec ammonia release rate}$$

(2) 175 ppm ammonia at 1,750 scfm ventilation rate

$$[(175 \text{ parts} / 1,000,000 \text{ parts}) \times 17.031 \text{ g/mol}] / (24.45 \text{ L/mol}) \times [1,750 \text{ scfm} \times (28.32 \text{ L/scf}) \times (1 \text{ min} / 60 \text{ sec})] = 0.10 \text{ g/sec ammonia release rate}$$

Furthermore, the maximum allowable ammonia reading in ppm during solids mixing, disturbing bulk tank solids, removal of enough supernatant to potentially create a gas release event, or Waste Feed Delivery operations listed in Table 6 is at 91% of the permitted ammonia emission limit. This is shown by the following conversion of the ammonia emission limit from pounds per 24 hours to grams per second and comparing the mass release rate during the above operations to the emission limit.

$$(21.1 \text{ lbs}/24\text{-hrs}) \times (453.6 \text{ g/lb}) \times (1 \text{ hr}/ 3600 \text{ sec}) = 0.11 \text{ g/sec ammonia}$$

$$[(0.10 \text{ g/sec}) / (0.11 \text{ g/sec})] \times 100 = 91\%$$

The changes to Table 6 did not result in an emissions increase and, therefore, would not result in changes to the monitoring requirements. The permittee, USDOE, is required to monitor the ventilation rates and the emissions of ammonia during the activities described above. This requirement is detailed in several conditions listed under discharge point 1.4.32 and in approval order DE11NWP-001 Revision 4. The

public was able review the appropriateness of monitoring requirements regarding the conditions from approval order DE11NWP-001 Revision 4 with the records that were provided to support the draft AOP.

No change to the AOP is required due to part (c).

Comment I-10-2

Comment 146: [draft Attachment 1, Statement of Basis; Fugitive Source Insignificant Emission Unit Processes/Activities, pp. 23 & 24]: Line 36 on p. 24 of the Statement of Basis for draft Attachment 1 shows "Radiological contamination abatement" as an insignificant source of fugitive emissions. Because EPA never set a de-minimis for emissions of radionuclides, Ecology exceeds its authority when it creates a de-minimis or insignificant designation for radionuclide emissions. Emissions of all radionuclides need to be measured (monitored), tracked, and reported.

Ecology Response to I-10-2

Thank you for your comment.

The statement of basis is not an enforceable document. The activities listed are examples of fugitive source insignificant emission unit processes/activities. Lines 24 and 25 of page 23 of the Attachment 1 Statement of Basis states "Projects utilizing the functions or categories listed below will be evaluated on a case-by-case basis to determine applicable general requirements, new source review, and the definition of a new source." Therefore, each site will be evaluated independently to determine if a Notice of Construction is required before the activity starts. If a Notice of Construction is required and an Approval Order issued, then that Approval Order will be added to the AOP.

No change to the AOP is required.

Comment I-10-3

Comment 147: [draft Attachment 1, Statement of Basis; Fugitive Source Insignificant Emission Unit Processes/Activities, pp. 23-25]: Line 2 on p. 25 of the Statement of Basis for draft Attachment 1 shows "Asbestos abatement methods" as an insignificant source of fugitive emissions from "Abatement Activities". According to Table 2-2, page 2-16 of the Permittee's application (DOE/RL-2017-31, Rev. 0), 40 C.F.R. 61 Subpart M is an applicable requirement. However, it appears terms and conditions implementing this applicable requirement have been overlooked in draft Renewal 3. One specific requirement is 40 C.F.R. 61.145 (b) regarding notifications for demolition or renovations where asbestos is implicated. This requirement is in addition to those regulating the actual conduct of any asbestos abatement activities.

Ecology exceeds its authority when it uses an AOP to declare, as insignificant, pre-work notifications and the prescribed conduct of removal activities required by the asbestos NESHAP.

According to page 11 of The Standard Terms and General Conditions portion of the Hanford AOP, the Hanford Major Source is composed of 5 operational areas (100 Area, 200 Area, 300 Area, 400 Area, and 600 Area). If abatement of asbestos occurs in any of these areas and is not regulated under CERCLA, then applicable requirements addressing these activities must be included in Hanford's AOP, along with appropriate monitoring, reporting, and recordkeeping.

Ecology Response to I-10-3

Thank you for your comment.

The statement of basis is not an enforceable document. The activities listed are examples of fugitive source insignificant emission unit processes/activities. Lines 24 to 25 of page 23 of the Attachment 1 Statement of Basis states "Projects utilizing the functions or categories listed below will be evaluated on a case-by-case basis to determine applicable general requirements, new source review, and the definition of a new source."

Therefore, each project will be evaluated independently to determine applicable general requirements, including any requirements of 40 CFR 61 Subpart M, National Emissions Standard for Asbestos. Inapplicable Requirements are listed in Table 5-1 of the Standard Terms and General Conditions document, which does not identify 40 CFR 61 Subpart M as an inapplicable requirement. If the provisions of 40 CFR 61 Subpart M are found to be applicable to the project, then applicable requirements addressing the project must be followed.

No change to the AOP is required.

Comment I-10-4

Comment 148: [draft Attachments 1 & 2; reference comments 4, 19, and 55; regulating most HAPs as TAPs, segmenting assessed risks by segmenting emissions of HAPs]: Comment 4 regards the overlooked potential additive or synergistic effects from the cumulative combination of both radioactive and non-radioactive air pollutants. Comment 19 points out, in footnote 1, that Hanford was determined to be a "major source" under Title V of the Clean Air Act, in part, because the "cumulated emissions of hazardous air pollutants exceed 25 tons per year." (Thus, the "major source" determination is based, in part, on actual emissions of HAPs, not potential emissions.) The vast majority of these HAPs occur in emissions from Hanford's tanks. The "major source" determination is based on information provided by the Permittee that was certified as true, accurate and complete, in accordance with WAC 173-401 & 40 C.F.R. 70 (Part 70). Comment 55 addresses conditions contained in regulatory order DE11NWP-001, Rev. 4 created pursuant to WAC 173-400. Ecology has acknowledged the only public reviews completed for Order DE11NWP-001, Rev. 4 (Rev. 4) and its predecessor, revision 3 (Rev. 3), were conducted using a process that doesn't satisfy requirements for public reviews under WAC 173-401 and Part 70. [For Rev. 4: "The US Department of Energy is the "person" seeking approval, and they did not request integration of this notice of Construction with the Hanford AOP. It is not a requirement to process and issue a Notice of Construction concurrently with an AOP.", Dept. of Ecology, State of Washington, Response to Comments, Air Permit Revision to Facilitate Waste Retrieval from Hanford Tank AY-102 January 24 - February 23, 2016, Pub.# 16-05-005, Mar. 2016, p.9. For Rev. 3 see identical text on p. IO of Pub.# 15-05-016, dated Dec. 2015.]

a) In Rev. 4, a major portion of the hazardous air pollutants (HAPs) that qualify Hanford as a "major source" are regulated as toxic air pollutants (TAPs). The exception is radionuclides. While radionuclides are HAPs, they aren't TAPs. Thus, when Ecology regulates emissions from Hanford's tanks as TAPs, Ecology is not required to address that portion of the emissions that are radioactive, even though it is functionally impossible to isotopically separate radioactive and non-radioactive pollutants in tank emissions.

The Washington State Department of Health (Health) regulates only radionuclides, including the radioactive portion of tank emissions. This regulatory dichotomy results in Ecology assessing risk to the public from only the non-radioactive portion of the emissions and Health separately determining public risk from only radionuclides. Segmenting the public risk from non-radioactive pollutants and the public

risk associated with only radionuclides overlooks that the public is being exposed to the combined risk from both non-radioactive pollutants plus the risk from radionuclides.

Re-assess terms and conditions for emissions units where radionuclides are implicated based upon additive or synergistic effects to the public from the cumulative combination of both non-radioactive air pollutants and radionuclides.

b) Because regulation of pollutants under WAC 173-460 as toxic air pollutants (TAPs) is expressly excluded from Washington's S/P, and thus not enforceable under federal law, and because most TAPs, if not all, are also hazardous air pollutants (HAPs), Ecology's needs to mention that violation of a TAP limit may also be a violation of a HAP limit. This oversight gives the erroneous impression that federal law doesn't apply to such portions of orders issued pursuant to WAC 173-400. An order issued under WAC 173-400 is an "applicable requirement" under WAC 173-401 and must be included in a source's 401 permit. Thus, when Ecology overlooks regulation of a HAP or HAPs in a regulatory order, Ecology also overlooks this HAP or these HAPs in the source's AOP. This applies even if one of the limits is more stringent than the other. When both a TAP limit and a HAP limit apply, Ecology must regulate the anticipated air pollutants as both a HAP and as a TAP. Violation of two such limits would seem to be more onerous than violation of just one limit.

c) Part 70 requires the permittee's application contain information regarding "[a]ll emissions of pollutants for which the source is major". [40 C.F.R. 70.5 (c)(3)(i).] Hanford was determined to be a "major source" under Title V of the Clean Air Act, in part, because the "cumulated emissions of hazardous air pollutants exceed 25 tons per year." (See Comment 19.) However, Permittee's application overlooks emissions of all the HAPs which qualify Hanford as a "major source".

Require the Permittee submit an application that fully complies with requirements of 40 C.F.R. 70.5, including 40 C.F.R. 70.5 (c)(3)(i); capture all such implicated HAPs in Hanford's AOP, and; re-start public review.

Ecology Response to I-10-4

Thank you for your comment.

a) Synergistic effects are not part of the federal or state Clean Air Acts, which relies on compound specific limits. Also radiological components that would create any synergistic effects are only present together with chemicals in the tanks. Approval orders for discharge points emitting Hanford tank waste have utilized tank head space samples for determining the source term. Thus the samples collected and used in the permitting process have already accounted for these potential interactions. Additionally, once toxic and radioactive emissions leave the discharge point (i.e., the stack), the contamination released simultaneously with vapors is significantly reduced by being captured on the HEPA filters required by the FF-01 license.

No change to the AOP is required due to part (a).

b) WAC 173-401-600 requires that the permit contain terms and conditions that assure compliance with all applicable requirements at the time of permit issuance, based upon the most stringent of the requirements from the Federal Clean Air Act, Chapter 70.94 Revised Code of Washington (RCW), permits and regulations by a local air pollution control authority, Chapter 70.98 RCW, and Chapter 80.50 RCW. The emission levels for toxic air pollutants found in WAC 173-460 are at least (or more stringent than the emission levels for hazardous air pollutants under the Federal Clean Air Act. Consequently, Compliance with a toxic air pollutant emission level would be compliance with a hazardous air pollutant level.

No change to the AOP is required due to part (b).

c) The Hanford Site is not a major source due to its potential-to-emit hazardous air pollutants. The Hanford Site is a major source due to its potential-to-emit over 100 tons per year of nitrogen oxides.

No change to the AOP is required due to part (c).

Comment I-10-5

Comment 149: [draft Attachment 1, 1.4.23 Discharge Point: P-WTP-001; Condition Approval 11/24/2003; p. 64; Ins. 2-4 and 15 & 16; see also comments 32a, 57, and 129; all 5% opacity requirements in draft Attachment 1]: Lines 2-4 and lines 15 & 16 on p. 64 of draft Attachment 1 require, in part, "[that] [o]pacity from each (Pretreatment, HLW, and LAW) process off-gas stack shall not exceed 5%. . . . as measured by EPA Reference Method 9 . . . ". As noted in the referenced comments (32a, 57 & 129), 5% opacity as measured by Method 9 is below EPA's method detection limit, unless the plume is black. However, Ecology does not require the plume be black.

Require the plume be black. This comment also applies to all other 5% opacity limits requiring use of EPA Reference Method 9, where black plumes are not specified.

Ecology Response to I-10-5

Thank you for your comment.

The referenced conditions for discharge point 1.4.23 require conformance with EPA Reference Method 9 of 40 CFR 60, Appendix A. The method requires a qualified observer to determine the opacity of emissions. To receive certification as a qualified observer, a candidate must demonstrate the ability to assign opacity readings appropriately for both black and white plumes. It is not necessary to require a specific plume color in the permit since the observer must be certified to perform the method correctly for both black and white plumes.

No change to the AOP is required.

Comment I-10-6

Comment 150: [draft Attachment 2, Renewal 3, reference comment 135, information used in the permitting process but not provided to the public]: Comment 135 advises information required by 40 C.F.R. 70. 7 (h)(2) [see also WAC 173- 401-800 (l)(d)(iv)] regarding two emissions units (EU 1371 and EU 1384) and one Report of Closure for EU 141 were not included in supporting information provided by Ecology. This oversight, as it regards Renewal 2, Revision B of Hanford's Air Operating Permit (hereafter Renewal 2), is addressed in a petition filed pursuant to 40 C.F.R. 70.8 and CAA§ 505 (b)(2). Renewal 2 is the version of Hanford's Air Operating Permit (AOP) currently enforced. Renewal 2 will remain the enforceable version until Ecology issues Renewal 3 as final. Overlooked for EUs 1371 and 1384 were completed notice of construction (NOC) applications. Without such applications, even the existence of these emissions units (EUs) is unknowable by the public, as is the potential-to-emit regulated air pollutants and, thus, appropriate monitoring, appropriate operating conditions, and appropriate controls. The Washington State Department of Health (DOH) acknowledges the Permittee failed to submit the required NOC applications for EUs 1371 and 1384.

"Okay, well, as far as the missing application for addition of the two radial filters (EU I 371 and I 3 84) ... it appears to be correct that we didn't receive an actual application." Email from S.D. Berven, DOH to P.J. Martell, DOH, and P. Gent, Ecology, subject: "AOP Comments", dated Mar. 23, 2018, 1:37 PM.

However, DOH has no obligations under Part 70. Furthermore, DOH can't grant waivers for compliance with Part 70. It is Ecology and the Permittee that must comply. Ecology's obligations include the requirement to issue an AOP in accordance Part 70. Thus, under Part 70, it is the Permittee and Ecology that are responsible for the Permittee's failure to provide the required NOC applications, applications that were requested in writing. (See letter AIR 13-822, 8/26/2013.)

Ecology provides an additional explanation regarding the two missing NOC applications. "The license writer recalls that the additional information requested in AIR 13-822 was [sic] communicated to Health by the Permittee verbally (e.g. in a meeting, on the phone, etc.) and this information was used to mark up NOC 899 that was sent to the permittee." Letter from A.K. Smith, Ecology, to T. Hamlin, EPA Region 10, "Re: Updated Plan for Renewal of Title V Operating Permit (AOP) No. 00-05-006", 18-NWP-073, May, 4, 2018, Enclosure I, p. 3 of 3

One of the requested NOC application requirements specified in WAC 246-247-110, Appendix A, is: "Provide conceptual drawings showing all applicable control technology components from the point of entry of radionuclides into the vapor space to release to the environment." WAC 246-247-110 (7). It is difficult to imagine how the required "conceptual drawings" could have been communicated verbally, "in a meeting or on the phone", absent any physical records. Again, though, it is Ecology and the Permittee that are obligated to follow requirements in Part 70. Whether DOH required written NOC applications is not germane. Ecology, as the sole permitting authority, is obligated to issue Hanford's AOP in accordance with Part 70. If DOH and the Permittee failed to supply NOC applications that will withstand requirements of Part 70, for EUs 1371 & 1384, then it is Ecology's obligation to require the Permittee supply such applications. Neither DOH or the Permittee can absolve Ecology of this duty. According to 40 C.F.R. 70.7 (a)(1)(ii), Ecology cannot issue an AOP until Ecology "has complied with the requirements for public participation under paragraph (h) [40 C.F.R. 70.7 (h)]". [See also WAC 173-401-700 (1)(c).] Ecology can't comply with public participation requirements of 40 C.F.R. 70.7 (h) with verbal NOC applications created "in a meeting or on the phone". Absent suitable NOC applications, the Permittee should not be allowed to operate EUs 1371 & 1384, nor should these EUs appear in the AOP.

Part 70 also specifies that "[a]ll terms and conditions in a part 70 permit, including any provisions designed to limit a source's potential to emit, are enforceable by the Administrator and citizens under the Act." [40 C.F.R. 70.6 (b)(1).] Citizen enforcement under the CAA is frustrated when Ecology and the Permittee act to make unavailable, records, such as NOC applications, needed by the public to evaluate options for enforcement of terms and conditions in an AOP. Both EUs 1371 and 1384 are shown as active in draft Renewal 3.

Under WAC 173-400 Ecology has authority to require NOC applications from the Permittee that include requirements implementing the radionuclide NESHAP codified in 40 C.F.R. 61 Subpart H. Additionally, Part 70 contains a process for Ecology, the sole permitting authority, to require additional information needed to act on an AOP application that was previously determined to be complete. [See 40 C.F.R. 70.5 (a)(2) 1] The Permittee must timely respond to any such request. [See 40 C.F.R. 70.5 (a)(2).] Part 70 also imposes a duty upon the Permittee to supplement or correct its AOP application. [See 40 C.F.R. 70.5 (b)2; see also WAC 173-401-500 (6).] What Part 70 does not provide is the ability of the permitting authority or the Permittee to overlook codified requirements impacting public participation, such as 40 C.F.R. 70.7 (h)(2) [see also WAC 173-401-800 (1)(d)(iv)] and-70.7 (h)(5), and information needed to determine the sufficiency of any AOP conditions regarding monitoring, reorting, and recordkeeping for EUs 1371 & 1384. [See 40 C.F.R. 70.6 (a).]

Ecology's letter 18-NWP-073 (cited above) also does not appear to be cognizant of EPA's position with regard to documents withheld from the public during the Renewal 2 issuance process. In a filing before a U.S. district court, EPA states Ecology committed to providing the information missing from the issuance

process for Renewal 2 as part of the public review process for Renewal 3 of Hanford's AOP (Renewal 3).

"During the public comment period on that permit [Renewal 3], which is expected to begin before October 31, 2017, Ecology has committed to make available to the public, on request, the documents Plaintiff contends Ecology had unlawfully withheld " Green v. Pruitt, "Reply in Support of Motion to Hold Case in Abeyance", case 4:17-cv-5034, 8/22/17 at 2

The contended "unlawfully withheld" documents include NOC applications for EUs 1371 and 1384, as well as a Report of Closure for EU 141. For this comment, it is not relevant whether EPA misrepresented Ecology's commitment to the court, whether EPA's representation to the court is also direction to Ecology, or whether Ecology overlooked its commitment to EPA. What is important is that EPA maintains oversight authority for implementation of Part 70, thus, a representation regarding Part 70 to a federal court by EPA imparts an obligation. Furthermore, Ecology's failure to process Renewal 2 in accordance with WAC 173-401 provides EPA with grounds for objection to its issuance. ("Failure of the permitting authority to do any of the following also shall constitute grounds for an objection: ... (iii) Process the permit under the procedures approved to meet § 70.7(h) of this part"). [40 C.F.R. 70.8 (c)(3)(iii).] Both EUs 1371 and 1384 are shown as active in draft Renewal 3.

With regard to the Report of Closure for EU 141 missing from the information required by 40 C.F.R. 70.7 (h)(2): Section 5.8.2.1.2 of the Standard Terms & General Conditions portion of both Renewal 2, the version now in force, and draft Renewal 3, requires that "[t]he facility shall file a report of closure with Health [DOH] whenever operations producing emissions of radioactive material are permanently ceased . . . The closure report shall indicate whether, despite cessation of operations, there is still a potential for radioactive air emissions and a need for an active or passive ventilation system with emission control and/or monitoring devices."

In effect, a Report of Closure is a certified assessment of any residual risk from emissions of radionuclides, a HAP with no de-minimis. Section 5.8.2.1.2 is a "federally-enforceable" condition pursuant to 40 C.F.R. 70.6 (b)(2)3 in both Renewal 2 and in draft Renewal 3. The required Report of Closure for EU 141 still appears to be missing from the information Ecology provided to support public review of Renewal 3. While Ecology did provide a copy of this Report of Closure to this commenter, it appears Ecology did not provide a copy to support the public review process as required by 40 C.F.R. 70.7 (h)(2).

Provide all documentation required by Part 70, and re-start public review. Additionally, appropriately sanction the Permittee for failing its duty to provide all application material required by federal regulation [40 C.F.R. 70.5 (b)] which was also requested in writing well in advance of the public comment period. (See letter AIR 13-822, 8/26/2013.)

1 " ... If, while processing an application that has been determined or deemed to be complete, the permitting authority determines that additional information is necessary to evaluate or take final action on that application, it may request such information in writing and set a reasonable deadline for a response. The source's ability to operate without a permit, as set forth in § 70.7(b) of this part, shall be in effect from the date the application is determined or deemed to be complete until the final permit is issued, provided that the applicant submits any requested additional information by the deadline specified by the permitting authority." 40 C.F.R. 70.5 (a)(2); see also WAC 173-401-500 (4).

2 "Duty to supplement or correct application. Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, an applicant shall provide additional information as necessary to address any requirements that become

applicable to the source after the date it filed a complete application but prior to release of a draft permit." 40 C.F.R. 70.5 (b)

3 "Notwithstanding paragraph (b)(1) of this section, the permitting authority shall specifically designate as not being federally enforceable under the Act any terms and conditions included in the permit that are not required under the Act or under any of its applicable requirements. Terms and conditions so designated are not subject to the requirements of §§ 70.7, 70.8, or of this part, other than those contained in this paragraph (b) of this section." 40 C.F.R. 70.6 (b)(2); See also WAC 173-401-625 (2) & RCW 70.94.161 (10).

Ecology Response to I-10-6

Thank you for your comment.

Please see the response to comment I-7-135, as referenced in this comment I-10-6, regarding the applications for emission units (EUs) 1371 and 1384 and the report of closure for EU 141.

Your comment indicates that the report of closure for EU 141 was missing from the information provided to the public. Ecology agrees the report of closure for EU 141 was not provided during the December 17, 2017 to March 16, 2018 public comment period. However, the public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. The closure report for EU 141 was uploaded online for review on July 31, 2018 and provided to the information repositories for review on August 10, 2018 at the start of the extension of this reopened public comment period. Therefore, re-starting public review, as requested in the comment, is not required.

Your comment also indicates completed notice of construction (NOC) applications were not submitted for EUs 1371 and 1384. The permittee, USDOE, submitted an application to the Washington Department of Health (DOH) for both EU 1371 and EU 1384 under letter 13-ECD-0068. This letter was provided to the public in the supporting materials at the start of the public comment period. DOH requested additional information in letter AIR 13-822. USDOE communicated the additional information requested in letter AIR 13-822 orally and DOH used the information to mark up the requirements for EUs 1371 and 1384 in NOC 899, which was then sent to the permittee.

Revised Code of Washington (RCW) 70.98.080(1)(a) does not require DOH to require a licensee to submit additional information in writing following submittal of a written application for modification. The word "may" used in the start of the sentence suggests that DOH has some discretion in deciding whether or not to require further written statements. Additionally, Washington Administrative Code (WAC) 246-247-060(1)(b) supports this interpretation because the rule does not expressly require written follow-up information.

Based on letter AIR 13-822 and the additional information provided orally by USDOE, DOH issued licenses for EUs 1371 and 1384. These licenses were submitted to Ecology as part of the FF-01 license to be incorporated into the Hanford AOP Renewal 3. Ecology accepted the FF-01 license, which included requirements to ensure compliance with 40 CFR Part 61 Subparts A and H, and included the FF-01 license in the AOP, as Attachment 2, as an underlying requirement. When an omission or error is found in the FF-01 license concerning the application of 40 CFR Part 61 Subpart H to a source, Ecology (i.e., Renewal 2, Revision B) attaches an addendum with corrections to the AOP until the corrections can be added to the FF-01 license and incorporated into a future AOP renewal or revision. This ensures that the Hanford AOP is revised as necessary in response to any significant comments on federal applicable requirements related to 40 CFR Part 61 Subpart H, consistent with EPA's response to Claim 3B in the

Order Granting in Part and Denying in Part Two Petitions for Objection to Permits from Petition Numbers X-2014-01 and X-2013-01.

40 CFR 70.7(h)(2) requires the permitting authority to make available to the public, among other things, all relevant materials supporting changes to an AOP and all other materials available to the permitting authority that are relevant to the permitting decision. In the Order Granting a Petition for Objection to Permit for Petition Number X-2016-13, EPA determined that information that DOH materially considered in implementing 40 CFR Part 61 Subpart H in the license is relevant information for purposes of issuance of the Hanford AOP. EPA directed Ecology to make available for public review all information used by DOH to implement 40 CFR Part 61 Subpart H. DOH is responsible for writing radioactive air emission licenses and maintains the records related to these licenses. DOH provided all the relevant supporting materials for EUs 1371 and 1384 that was in its possession when the Hanford AOP Renewal 3 went out for public comment. DOH has since reviewed the license file, emails, electronic files, and databases and has not discovered any additional information related to the changes to EUs 1371 or 1384.

The written application submitted to DOH was provided to the public during the public comment period. The regulations do not require the licensee to submit additional information in writing after a written application has been received. Finally, no additional records were discovered in subsequent searches. Therefore, Ecology has verified that all relevant material supporting the changes to EUs 1371 and 1384 was provided to the public at the start of the public comment period.

Ecology reviewed NOC 899 and determined requirements for compliance with 40 CFR Part 61 Subparts A and H were present. Ecology therefore accepted the FF-01 license, which includes NOC 899, into the Hanford AOP as an underlying requirement. In the Order Denying a Petition for Objection to Permit for Petition Number VI-2013-10 EPA states "Title V contains no language that says that this consolidation process must involve a review of the substantive adequacy of any "applicable requirements" or a reconsideration of whether the "applicable requirements" were properly derived." The Order continues to state "the Act does not say that "applicable requirements" with these characteristics must be checked in the title V process to determine if they were properly derived before they can be consolidated into an operating permit" and "neither does the Act demand that these "applicable requirements" be re-checked each time the operating permit is renewed."

Questions concerning the process by which DOH receives and reviews information when issuing a license must be addressed under the appropriate DOH licensing mechanism, not through the Hanford AOP public comment process. As the permitting authority, Ecology has met its obligations under Title V by incorporating all applicable underlying requirements into the Hanford AOP and providing for public review all the relevant supporting information available. Therefore, it is not necessary to re-start public review, as requested in the comment. Additionally, since USDOE provided sufficient information for DOH to issue the license there is no justification for Ecology to sanction USDOE for failing its duty to provide all application material, as requested in the comment.

Comment I-10-7

Comment 151: (draft Attachment 1; 1.4.80 Effluent Management Facility; NOC Order of Approval DE16NWP-003; pp. 174 & 175; comments 129 - 134]: Ecology acknowledges NOC Order of Approval DE16NWP-003 (Order) was not previously the subject of public review requirements compatible with those imposed by Part 70 and WAC 173-40 I, nor was this Order previously issued in accordance with either Part 70 or WAC 173-401:

'This permit [Order DE16NWP-003] is being issued under the authority of WAC 173-400, not WAC 173-401. . . . This permit will be incorporated into the Hanford Title V program at a future date. At that time,

the requirements of WAC 173-401 will be applicable." Dept. of Ecology, State of Washington, Response to Comments, Air Permit to Construct the Effluent Management Facility of the Waste Treatment Plant on the Hanford Site, October 30 - December 2, 2016', Pub. # 17-05-2017, p. 6.

a) Line 5 on page 174 and lines 1 and 24 on page 175 reference "Condition Approval 9/08/2017". However, Ecology did not supply any information regarding approval conditions issued on or associated with 9/08/2017. Order DE16NWP-003 was issued as final on 2/17/2017. There doesn't appear to be any record of any actions creating, revising, changing, or modifying conditions regulating operations at the Effluent Management Facility (EMF) that occurred on, or within several months of 9/08/2017.

As required by 40 C.F.R. 70.7 (h)(2), provide the public with all information used in the permitting process to develop terms and conditions in draft Attachment 1 associated with "Condition Approval 9/08/2017", and re-start public review.

b) Reference Comment 129 a). Lines 6- 13 on page 174 of draft Attachment 1 require, in part, that visible emissions "not solely attributable to water condensation" will not exceed 5% opacity as measured by EPA Method 9.

According to the Visible Emissions Field Manual EPA Methods 9 and 22, EPA 340/1 -92- 004 December 1993, p.6, a 5% opacity requirement for a black plume is at the method detection limit (MDL) for Method 9. If the plume is white, the 5% opacity requirement is below the MDL.

Either require that all visible emissions be black, or use an appropriate EPA-approved method or methods, or instrumental monitoring, capable of determining continuous compliance with the 5% opacity requirement regardless of the color of the plume.

Also, Method 9 is not capable of quantifying those visible emissions "not solely attributable to water condensation".

Supply an EPA-approved method that can distinguish between visible emissions that are solely attributable to water condensation and those visible emissions "not solely attributable to water condensation".

c) Lines 14 and 15 on page 174 require use of EPA test method 9 at a frequency of "when visible emissions are observed" to verify continuous compliance with a 5% opacity limit. However, if the plume is white, the 5% opacity requirement is already below the method detection limit (MDL). Thus, for a white plume, any visible smoke is already above the 5% limit. For a black plume, 5% opacity is at the MDL. Any visible black smoke is already at the 5% limit. Also, an unspecified test frequency that doesn't require the Permittee to even look for stack emissions is insufficient to assure continuous compliance with the 5% limit.

Require a test frequency "sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit" [40 C.F.R. 70.6 (a)(3)(i)(B)]. Additionally, require all visible emissions from the EMF to be black, or require use of a different EPA method, one that is approved to accurately verify compliance with the 5% limit regardless of the color of the plume.

d) Lines 11, 12, & 13 on page 174 contain the following text:

" . . . providing that such determination shall not place the visible emission observer in hazard greater than that identified for the general worker." Draft Attachment I, lines 11, 12, & 13, p. 174

This text vacates the requirement to conduct opacity monitoring in the event of a nuclear explosion or other such catastrophic event. Thus, Ecology has included a condition in this Order that contemplates the possibility of a nuclear criticality or other catastrophic event occurring at the Effluent Management Facility (EMF). Conditioning this Order to protect only the visible emission observer from a nuclear explosion or the like and the aftermath from such occurrences, overlooks Ecology's statutory responsibility to also protect human health and the environment. This responsibility obligates Ecology use its authority to require the EMF to continuously evaluate its feed and processes, ceasing operations if there is ever a remote possibility of a nuclear explosion or other catastrophic event. Ecology has all necessary authority to regulate potential emissions of all HAPs under both the CAA and Washington Clean Air Act (RCW 70.94), and the mandate to do so. Plus, a nuclear explosion or other catastrophe will produce massive amounts air pollutants, pollutants that include HAPs, TAPs, and other regulated air contaminants present anywhere within the EMF and, possibly within near-by facilities. Eliminating the possibility of a nuclear explosion or other such catastrophe will allow Ecology to delete the clause "providing that such determination shall not place the visible emission observer in hazard greater than that identified for the general worker".

This Order should be conditioned to show the same level of concern for eliminating catastrophe and protecting the public and the environment as it does for the welfare of the visible emission observer.

e) Lines 2-4 and 11 on page 175 require identified TAPs be below their respective ASIL, or approved through a 2nd tier review, using a test frequency of once per year (annual). Using an annual test frequency to determine continuous compliance requires the process be in steady state and the emissions be homogenous. Any change in either the operation of the process, the composition of the feed, or the composition of the emissions would render, as meaningless, a once-per-year sample.

Require the process be in steady state, the emissions be homogenous, and impose monitoring sufficient to "yield reliable data from the relevant time period that are representative of the source's compliance with the permit" (40 C.F.R. 70.6 (a)(3)(i)(B)).

f) The 1st condition on page 175 (lines 2 through 4) requires "[a]ll TAPs, as submitted in the Permittee's NOC Application as Table I and subsequent follow-on informational email, shall be below their respective ASIL. .. ", yet there is no requirement to actually sample for these TAPs. Furthermore, in lines 12 through 15 (p. 175) the required SAP shall only address "a minimum of the three analytes with the highest potential ambient concentration ... in addition to dimethyl mercury and elemental mercury" rather than "[a]II TAPs, as submitted in the Permittee's NOC Application as Table I and subsequent follow-on informational email, shall be below their respective ASIL ... ".

Require sampling for all TAPs identified in Table 1 and also require the SAP to address such identified TAPs in addition to dimethylmercury and elemental mercury. It should be noted that TAPs identified in Permittee's Table 1 result from dated samples from a highly variable formation environment, so conclude experts hired by a Hanford Site contractor, rather than from any sampling of the actual effluent stream providing feed to the EMF. As such, exclusion of any particular TAP or HAP from analyses should only be based upon actual sampling results of the EMF feed rather than on dated and suspect sampling of anticipated feed to an untested facility (the WTP).

g) The periodic monitoring requirement on lines 5 through 7 on page 175 specifies "the mass release rate of these TAPs in pounds and their respective release rate averaging times". When this condition is incorporated into Hanford's AOP, "the mass release rate of these TAPs in pounds and their respective release rate averaging times" must also be included to be consistent with the congressionally-specified purpose of an operating permit. ["The air permit program will ensure that all of a source's obligations with respect to each of the air pollutants it is required to control will be contained in one permit document." S. Rep. No. 1 01-228, at 3730 (12-20-89), as reprinted in 1990 U.S.C.C.A.N. 33 85 .]

h) Lines 18 & 19 on page 175 require laboratory analysis result summaries for "mercury or other TAPs". (Emphasis is mine.) The approval condition should require recordkeeping of laboratory analysis result summaries for all TAPs, including mercury and not just for either "mercury or [for] other TAPs".

) Reference lines 21 and 35 on page 175, and Comment 130. The feed processed by the EMF ultimately originates from Hanford's waste tanks. Ecology regulates emissions from these tanks with federally-enforceable requirements. The EMF treats liquid effluent from the Waste Treatment Plant (WTP), which is subject to a PSD permit, a federally-enforceable permit. Yet, conditions regulating emissions from these very same tank waste materials and "treated" in a facility subject to a PSD permit, are considered as not federally-enforceable (state-only enforceable) once such effluents arrive at EMF. Ecology limits enforceability of requirements in the EMF approval order by regulating emissions as only toxic air pollutants (TAPs) when these emissions are both TAPs and listed as hazardous air pollutants (HAPs) in section 112 (b) of the CAA. While HAPs are subject to the full requirements of Part 70, TAPs are not. Ecology's position that there will be no emissions of HAPs from EMF is complicated by the fact that feed material to EMF and unabated emissions from EMF will, almost certainly, be radioactive. Radionuclides are a listed HAP. This Order neither provides, or requires, a mechanism for separating any TAP from its associated radioactive isotope(s) or other listed HAP. Ecology regulates on the erroneous assumption that neither the feed material from the WTP or the emissions from EMF will contain any HAPs.

Require all feed material to the EMF and all emissions from EMF be free of any HAPs, or change lines 21 & 35 on page 175 to reflect federal -enforceability.

Ecology Response to I-10-7

Thank you for your comment.

a) This was a typographical error. The conditions for discharge point 1.4.80 are from approval order DE16NWP-003, which was issued on February 17, 2017. The public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. Approval Order DE16NWP-003 was provided for review during this reopened public comment period.

Line 5 on page 174 and lines 1 and 24 on page 175 will be revised to identify the correct condition approval date of February 17, 2017.

b) The referenced condition for discharge point 1.4.80 requires conformance with EPA Reference Method 9 of 40 CFR 60, Appendix A. The method requires a qualified observer to determine the opacity of emissions. To receive certification as a qualified observer, a candidate must follow the method's procedures to demonstrate the ability to assign opacity readings in 5 percent increments to black and white plumes. Procedure required for the method includes "opacity observations shall be made at the point of greatest opacity in that portion of the plume where condensed water vapor is not present" and identifies steps for attached and detached steam plumes (e.g., condensed water vapor). It is not necessary to require a different EPA-approved method since the observer must be certified to perform the method correctly, which includes procedures for plumes containing steam.

No change to the AOP is required due to part (b).

c) The referenced condition for discharge point 1.4.80 requires conformance with EPA Reference Method 9 of 40 CFR 60, Appendix A. The method requires a qualified observer to determine the opacity of emissions. To receive certification as a qualified observer, a candidate must demonstrate the ability to

assign opacity readings in 5 percent increments to black and white plumes. It is not necessary to require a specific plume color in the permit since the observer must be certified to perform the method correctly for both black and white plumes.

Compliance with the condition is met by the Tier 3 visible emission survey requirements found in Section 2 of Attachment 1 of the Hanford AOP Renewal 3. The Effluent Management Facility radioactive emission license requires abatement control technology using HEPA filters, which control particulate emissions to less than visible levels. If the abatement control technology is maintained in a manner consistent with the applicable radioactive emission license, the significant monitoring requirements on HEPA filters in the radioactive emission license is sufficient to yield reliable data to determine compliance. If there ever was to be an incident wherein the abatement control technology failed and visible emissions are observed, a Method 9 certified observer would need to determine the opacity of the plume.

No change to the AOP is required due to part (c).

d) The referenced text does not vacate the requirement to conduct opacity monitoring in the event of a nuclear explosion or other such catastrophic event. The language is to ensure that the observer does not subject themselves to an increased risk or hazard, understanding that any visible emissions seen from the discharge point may indicate failure of the radioactive air emissions abatement control technology. The permittee, USDOE, is still required to determine the opacity using 40 CFR 60, Appendix A, Method 9, though the observer must find a safe location to complete their observations following the method's procedures. 40 CFR 60 Appendix A, Method 9, procedures requires the observer to stand at a distance sufficient to provide a clear view of the emissions with the sun oriented in the 140° sector to their back and, as much as possible, make their observations from a position such that their line of vision is approximately perpendicular to the plume direction. Additionally, observers can also be certified using devices, such as glasses, sunglasses, or binoculars. Following the method and utilizing certification using devices, a certified observer will be able to find a location without increased hazards and determine the opacity of a plume from the discharge point, meeting the requirements of the condition.

No change to the AOP is required due to part (d).

e) The referenced condition is from approval order DE16NWP-003. The condition requires that all TAPs shall be below their respective ASIL or approved through a Second Tier review. Compliance is determined by annual sampling of the emission unit for three analytes with the highest potential ambient concentration relative to their ASILs in addition to dimethyl mercury and elemental mercury. The calculations used to determine the TAP emission rates used conservative assumptions, including maximum known tank headspace concentrations and significant safety factors, bounding the potential inputs so that a steady state homogenous feed is not necessary. Annual sampling for TAPs is sufficient to verify the assumptions in the application calculations to determine compliance with the condition. Additionally, this condition and requirements as written in the draft AOP is consistent with the approval order. Ecology has determined that no additional periodic monitoring requirements above the Approval Order are necessary to meet the condition referenced in the comment.

It was identified during Ecology review that the requirement to conduct baseline assessments for dimethyl mercury and mercury from the approval order was not included in the conditions for discharge point 1.4.80. Baseline assessments for dimethyl mercury and mercury shall be conducted within 90 days after commencement of operations with actual tank waste. Language for the baseline assessment requirements will be added into the referenced condition on page 175. This additional condition to the AOP does not increase emissions or impact any emission requirements.

f) The referenced condition is from approval order DE16NWP-003. The condition requires that all TAPs shall be below their respective ASIL or approved through a Second Tier review. Compliance is determined by annual sampling of the emission unit for three analytes with the highest potential ambient concentration relative to their ASILs in addition to dimethyl mercury and elemental mercury. The calculations used to determine the TAP emission rates used conservative assumptions, including maximum known tank headspace concentrations and significant safety factors, bounding the potential inputs. It is impractical and unnecessary to sample for every potential TAP (a total of 173 compounds) that may be emitted from the project. Sampling for three analytes plus dimethyl mercury and elemental mercury allows for verification of the calculations used in determining the emission rate of the application. This is sufficient to determine compliance with the condition. Additionally, this condition and requirements as written in the draft AOP is consistent with the approval order. Ecology has determined that no additional sampling requirements above the Approval Order are necessary to meet the condition referenced in the comment.

No change in the AOP is required due to part (f).

g) The complete sentence of the referenced text states "Apply readings to determine the mass release rate of these TAPs in pounds and their respective release rate averaging times in WAC 173-460-150." The release rate averaging times are found in WAC 173-460-150, Table of ASIL, SQER and de minimis emission values. The condition for TAP emissions requires periodic monitoring of emission unit sampling. The referenced language is supplemental text describing how the sampled readings must be reported.

With a mega-site like Hanford, Ecology has chosen to streamline the process to reduce the complexity of the permit by references to state or federal regulations. WAC 173-401-600(1), WAC 173-401-605(1), and 40 CFR 70.6(a)(1) each require that the operating permit shall contain terms and conditions that assure compliance with all applicable requirements. This is not the same as saying that the permit itself has to include all applicable requirements, as implied by the comment. The regulations do not prohibit the permit from referencing state regulations rather than restating regulation. Ecology has determined that referencing WAC 173-460-160 complies with the above regulations and, furthermore, is appropriate and effective in streamlining the content for the Hanford AOP.

Additionally, the public comment period was reopened on July 22, 2018, and extended on August 10, 2018, to supply additional supporting and relevant documentation used in the permitting process. The reopened public comment period ended September 14, 2018. Approval Order DE16NWP-003 was provided for review during this reopened public comment period, which included the list of TAPs emitted from the project, their estimated release rates, and their respective release rate averaging times at the time of application.

No change to the AOP is required due to part (g).

h) Approval Order DE16NWP-003 requires laboratory analysis result summaries taken in accordance with the approval conditions of any samples undertaken after the effective date of the order which are examined for mercury or other TAPs. Sampling requirements for the discharge point consist of annual sampling of a minimum of three analytes with the highest potential ambient concentration relative to their ASILs in addition to dimethyl mercury and elemental mercury. Dimethyl mercury is further assessed using a mercury monitor to measure emission values of total mercury. Records of laboratory analysis result summaries are required for any samples taken in accordance with the emission monitoring and sampling requirements of approval order DE16NWP-003. The phrasing of the text is consistent with the approval order and is inclusive of any sample taken, whether the sample results include mercury or other TAPs. However not all TAPs are required to be sampled, as implied in the comment and, therefore, the proposed change would not be consistent with the underlying requirement.

To be more consistent with the language from the approval order, lines 18 and 19 of page 175 will be revised to state "Laboratory analysis result summaries taken in accordance with this approval condition."

i) Ecology does not have the position that there will be no emissions of hazardous air pollutants from the Effluent Management Facility (EMF). Approval Order DE16NWP-003 identifies the estimated emission rates for toxic air pollutants at discharge point 1.4.80, Effluent Management Facility. The toxic air pollutants regulated under WAC 173-460 include the hazardous air pollutants from the Federal Clean Air Act and other additional pollutants, with the exception of radionuclides. Additionally, the emission levels for toxic air pollutants found in WAC 173-460 are at least as stringent or are more stringent than the emission levels for hazardous air pollutants under the Federal Clean Air Act. Therefore, evaluation of emissions from toxic air pollutants emission level considers emissions of hazardous air pollutants.

The Washington Department of Health regulates radionuclide air emissions, a hazardous air pollutant. Radionuclide emissions from EMF are regulated in the FF-01 license, which is incorporated into the Hanford Site AOP Renewal 3 in Attachment 2. Radiological components are only present together with the toxics in the waste stream entering EMF.

The emissions increase for EMF are below the Prevention of Significant Deterioration (PSD) Significant Emission Rate Increases thresholds and, therefore, did not trigger PSD permitting. While Ecology agrees that the feed stream to EMF ultimately derived from Hanford tank waste, in the case of the Waste Treatment Plant and EMF, having similar waste streams does not dictate whether the two projects are applicable to the same regulations. EMF is regulated under the more stringent criteria of WAC 173-460, which is a state-only regulation.

No change to the AOP is required due to part (i).

LETTER A-1: UNITED STATE DEPARTMENT OF ENERGY, 2/06/18 8:50 AM PT

Comment A-1-1

Information dealing with details of stationary engines was provided to Ecology

Ecology Response to A-1-1

Thank you for this information.

Ecology acknowledges the Permittee submitted details of stationary engines. This data will be used by Ecology when responding to other comments submitted about NSPS engines (Subparts IIII, JJJJ, and ZZZZ).

This comment on its own does not require a change to the AOP.

LETTER A-2: UNITED STATES DEPARTMENT OF ENERGY, 3/07/18 2:36 PM PT

Comment A-2-1

ST&C, 2.0, Page 11, Line 26

The 712 Building has been demolished.

Remove 712 Building from text.

Ecology Response to A-2-1

Thank you for your comment.

Reference to the 712 Building will be removed from page 11, lines 26 of the Standard Terms and Conditions as requested.

Comment A-2-2

ST&C, 2.0, Page, 11, Lines 31-37

The North American Industry Classification System (NAICS) categories were updated in the Hanford Site AOP Renewal Application (DOE/RL-2017-31).

*Update NAICS categories as provided in DOE/RL-2017-31.
541715 Research and Development in the Engineering and Life Sciences
562211 Hazardous Waste Treatment and Disposal
562910 Remediation Services
924110 administration of Air and Water Resource and Solid Waste Management Program*

Ecology Response to A-2-2

Thank you for your comment.

The NAICS categories will be updated to be consistent with current numbering and naming conventions as is provided in comment. Additionally, the Statement of Basis will reflect that the codes were updated in the application submitted by the permittee, U.S. Department of Energy to the 2017 NAICS codes.

Comment A-2-3

ST&C, 2.0, Page 11, Line 40

We believe a typo exists. "Examples of facilities excluded at the time of permit renewal in are....."

Please correct the text to: "Examples of facilities excluded at the time of permit renewal {Strikeout} in are {Strikeout}{Shaded} are in {Shaded}...."

Ecology Response to A-2-3

Thank you for your comment.

This is a typo. The referenced sentence will be modified as is provided in comment.

Comment A-2-4

ST&C, 2.0, Page 11, Line 38 – Page 12, Line 14

This appears to be an incomplete list of facilities excluded from the permit. Note: This comment is closely related to Comment Number 22.

Please review and update as appropriate.

Ecology Response to A-2-4

Thank you for your comment.

The references section is an example of facilities excluded at the time of permit renewal and is not an exhaustive list.

No change to the AOP is required.

Comment A-2-5

ST&C, 2.0, Page 12, Line 1

Please update the formal name of Battelle in the bullet.

Change to read:

Pacific Northwest National Laboratory operated by Battelle Memorial Institute.

Ecology Response to A-2-5

Thank you for your comment.

The formal name of Battelle will be updated to read: Pacific Northwest National Laboratory operated by Battelle Memorial Institute, as is provided in comment.

Comment A-2-6

ST&C, 2.0, Page 12, Line 13

The Corporate Health Facility is no longer located at Stevens Center.

Remove the Corporate Health Facility from list of excluded facilities.

Ecology Response to A-2-6

Thank you for your comment.

The permit will be modified to remove the Corporate Health Facility from the list of excluded facilities as requested.

Comment A-2-7

SST&C, 5.3, Page 15, Lines 34-35

There appears to be an inconsistent use of the regulatory citation summation at the end of the paragraph. This may be systemic throughout the document.

Example: "WAC 246-254-160" found on line 29 (set in bold type in the copied text below) does not appear in the bracketed regulations at the end of the paragraph.

Per WAC 246-247-065, fees for all non-AOP airborne emissions of radioactive materials shall be submitted in accordance with WAC 246-254-160. The permittee shall pay costs associated with direct staff time of the air emissions program in accordance with WAC 246-254-120(1)(e). In any case where the permittee fails to pay a prescribed fee or actual costs incurred during a calendar quarter, Health (1)

shall not process an application and (2) may suspend or revoke any license of approved involved; or (3) may issue any order with respect to licensed activities as Health determines appropriate or necessary to carry out the provisions of WAC 246-254-170. [WAC 246-247-065 (State only); WAC 246-254-120 (1)(e) (State only); and WAC 246-254-170 (State only)]

Please review the use of the regulatory citation summation at the end of paragraphs and update as appropriate.

Ecology Response to A-2-7

Thank you for your comment.

The permit will be modified to include the regulatory citation WAC 246-254-160 in the brackets at the end of the paragraph.

Comment A-2-8

ST&C, 5.6.2, c., Page, 17, Line 20

Please confirm reference to Section 1.4. It is believed that this item should be making reference to Table 1.1. This would be consistent with the nomenclature for this item in Renewal 2, Revision A. It is believed that a wrong reference was incorporated into Renewal 2, Revision B and has been carried over into Renewal 3.

Change 5.6.2, c., to read:

c. A summary of any substantiated air emission complaint investigation(s) required in ~~Section 1.4~~~~Table 1.1~~ of Attachment 1 and issued during the reporting period.

Ecology Response to A-2-8

Thank you for your comment.

The permit will be modified as suggested to add reference to Table 1.1 and remove reference to Section 1.4.

Comment A-2-9

ST&C, 5.9, Page, 19, Line 17

This section states that the "annual emission inventory shall be submitted to Ecology on forms provided by Ecology." Given recent changes to the reporting process, it is recommended that this language be modified to "the annual emissions inventory shall be submitted to Ecology in the format specified by Ecology."

Change Section 5.9 to read:

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

a. For emission unit composites, as requested and listed in the permit Attachment 1, Section 2.4 and,
b. For other emission units as directed by Ecology ~~on forms provided~~ ~~in the format specified by Ecology~~ to the permittee. [WAC 173-400-105(1)]

Ecology Response to A-2-9

Thank you for your comment.

The permit will be modified to read as proposed.

Comment A-2-10

ST&C, 5.10.3, Page, 20, Line 6

This Section references Table 2.1 of Attachment 1. It appears it should reference Table 2.1 of Attachment 2.

Change 5.10.3, to read:

Submittal of the information required in Section 5.11 Annual NESHAPs Report will meet the annual compliance certification requirements of diffuse and fugitive sources in Table 2.1 of Attachment ~~1~~ ~~2~~ and point source emission unit specific information (i.e.; height, diameter, velocity, temperature, and operational status) of the FF-01 License.

Ecology Response to A-2-10

Thank you for the comment.

The permit will change the reference from Attachment 1 to Attachment 2.

Comment A-2-11

ST&C, 5.13, Page, 21, Line 30

The word "counties" needs to be added to the first sentence. Also, Section 2.4 in Attachment 1, is "Reserved" so it is unclear what this statement is referring to.

Change 5.13, to read:

Stage 1 requirements are applicable to 20 eastern Washington ~~counties~~ with new gasoline dispensing facilities greater than 10,000 gallons storage capacity (Section 2.4 in Attachment 1).

Ecology Response to A-2-11

Thank you for your comment.

The word "counties" will be added to the first sentence as referenced. Reference to Section 2.4 of Attachment 1 will be removed as it is "reserved" in Section 2.4 of Attachment 1.

Comment A-2-12

ST&C, 5.17.1, Page 25, Line 1

There appears to be a "." placed inappropriately after CFR in the sentence:

"Facilities required to report GHG emissions to the EPA under 40 CFR. Part 98 must...."

*Please correct the text to remove the period following "CFR":
"Facilities required to report GHG emissions to the EPA under 40 CFR Part 98 must...."*

Ecology Response to A-2-12

Thank you for your comment.

The permit will be modified to remove the period after 40 CFR as referenced.

Comment A-2-13

ST&C, 5.17.2, Page 25, Line 5

There appears to be a "." placed inappropriately after CFR in the sentence: "Facilities which are not anticipated to be required to report GHG emissions to the EPA under 40 CFR. Part 98 must....."

*Please correct the text to remove the period following "CFR":
"Facilities which are not anticipated to be required to report GHG emissions to the EPA under 40 CFR Part 98 must....."*

Ecology Response to A-2-13

Thank you for your comment.

The permit will be modified to remove the period after 40 CFR as referenced.

Comment A-2-14

ST&C, 5.18.1, Page 25, Line 17

Ecology has modified the WAC requirement for submittal of a renewal application to at least 8 months before the date of the permit expiration. It is requested that the 6 month time frame be reinstated to remain consistent with the regulatory requirement. DOE will certainly consider any request to submit a renewal application within 8 months as identified on Page iv, Lines 10-12 of the draft ST&C.

Change 5.18.1, to read:

The permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least ~~8~~~~8~~~~6~~~~6~~ months, but no earlier than 18 months, before the date of permit expiration.

Ecology Response to A-2-14

Thank you for your comment.

The permit will be modified as requested from 8 to 6 months to be consistent with WAC 173-401-710(1).

However it is important to note that submitting a request at the 6 month point provides the Permittee no time to address any 'completeness' issues with the application. If a 'complete' application is not received at 6 months, then the ability to issue a permit shield for the Air Operating Permit is impacted. It is for this reason that a change to 8 months was in the proposed language for this Draft AOP Permit to allow Ecology to work with the Permittee to correct any completeness issues with the application before they impact the ability to use the AOP permit shield.

Comment A-2-15

ST&C, 5.26.1, Pages 29 and 30

The requirements in 40 CFR 82 were updated in Federal Register/Vol. 81, No. 223, November 18, 2016 and became effective January 1, 2017. This section should be updated to reflect these changes. For example, 40 CFR 82.156 is replaced by 40 CFR 82.157 effective January 1, 2019 and 40 CFR 162 has been eliminated.

Update ST&C, 5.26.1 to reflect changes in 40 CFR 82.

Ecology Response to A-2-15

Thank you for your comment.

Reference 40 CFR 82.156 will be replaced by 40 CFR 82.157 and reference to 40 CFR 162 will be eliminated.

Comment A-2-16

ST&C, Table 5.1, Page 31, First Row, First Column

*Incorrect reference to the inapplicable requirements for BCAA. Article 5 refers to Outdoor burning and Article 8 refers to Asbestos. They currently read:
"BCAA, Regulation 1 Articles 1,2,3,5,4,6,7,9"*

*Please remove "5" and add "8" into the text:
"BCAA, Regulation 1 Articles 1,2,3,4,6,7,8,9"*

Ecology Response to A-2-16

Thank you for your comment.

The permit will be modified to remove reference to Article 5 and modified to include reference to Article 8.

Comment A-2-17

ST&C, Table 5.1, Page 31, First Row, Second Column

*Incorrect reference to Asbestos (BCAA Article 8) Should refer to Open Burning (BCAA Article 5).
Currently reads: "Authority to regulate Hanford Site air emissions pre-empted by Ecology except for Article 8"*

*Please remove "8" and add"5" into the text:
"Authority to regulate Hanford Site air emissions pre-empted by Ecology except for Article 5"*

Ecology Response to A-2-17

Thank you for your comment.

The permit will be modified to remove reference to Article 8 in the first row, second column and replaced with reference to Article 5.

Comment A-2-18

ST&C, Table 5-1, Page 42

40 CFR 63 Subpart NN, "National Emission Standards for Hazardous Air Pollutants for Wool Fiberglass Manufacturing at Area Sources" should be added to Table 5-1 with a reason for inapplicability that notes that there is no affected sources on the Hanford Site.

Add 40 CFR 63 Subpart NN to Table 5-1 with a reason for inapplicability that notes that there is no affected sources on the Hanford Site.

Ecology Response to A-2-18

Thank you for your comment.

The permit will be modified as referenced to include 40 CFR 63 Subpart NN, "National Emission Standards for Hazardous Air Pollutants for Wool Fiberglass Manufacturing at Area Sources" in Table 5-1 with the reason for inapplicability being that there are no affected sources on the Hanford Site.

Comment A-2-19

ST&C, Table 5.1, Page 48

DOE/RL-2017-31, Rev 0 requested the addition of "40 CFR 63 Subpart UUUUU, "National Emission Standards for Hazardous Air Pollutants: Coal-and Oil-Fired Electric Utility Steam Generating Units"

Please add this to the Inapplicable Requirements table: "40 CFR 63 Subpart UUUUU, "National Emission Standards for Hazardous Air Pollutants: Coal-and Oil-Fired Electric Utility Steam Generating Units"

Ecology Response to A-2-19

Thank you for your comment.

The permit will be modified to include 40 CFR 63 Subpart UUUUU, "National Emission Standards for Hazardous Air Pollutants: Coal-and Oil-Fired Electric Utility Steam Generating Units" in Table 5-1 with the reason for inapplicability being there are no affected sources on the Hanford Site.

Comment A-2-20

ST&C Statement of Basis, Background, Page iii, Line 41-42

Recommend the references to the Benton County regulations be added to this paragraph as they are for WDOH and Ecology.

Please add the Benton County regulatory references.

Ecology Response to A-2-20

Thank you for your comment.

The permit will be modified to include references to Benton Clean Air Authority (BCAA) regulations as is provided for WDOH and Ecology. The applicable regulations of BCAA at Hanford are RCW 70.94, WAC 173-425, and BCAA Regulation 1, Article 5.

Comment A-2-21

ST&C Statement of Basis, 2.0, Page 10, Line 7

Text has been changed and adds ambiguity: "The following have been reviewed to not be part of the Hanford major source." The sentence previously read: "The following have been determined to not be part of the Hanford major source."

*Please restore the text by replacing the word "reviewed" with the word "determined"
"The following have been determined to not be part of the Hanford major source."*

Ecology Response to A-2-21

Thank you for the comment.

The permit will not be modified to replace "determined" with "reviewed" as requested.

Comment A-2-22

ST&C Statement of Basis, 2.0, Page 10, Lines 8-24

Text has been omitted in this revision that provided detail for each facility. Consider reinstating the facility definitions.

Note: This comment is closely related to Comment Number 4.

Please reinstate the facility definitions as they are found in AOP Revision 2-B.

Ecology Response to A-2-22

Thank you for your comment.

The facility definitions were removed as it was possible the details could change over time and would not be properly reflected. No change to the permit is needed.

Comment A-2-23

ST&C Statement of Basis, 2.0, Page 10, Line 23.

The Corporate Health Facility is no longer located at Stevens Center.

Remove the Corporate Health Facility from list of excluded facilities.

Ecology Response to A-2-23

Thank you for your comment.

The permit will be modified to remove the Corporate Health Facility from the list of excluded facilities as requested.

Comment A-2-24

ST&C Statement of Basis, 4.0, Page 12, Line 17.

The parenthetical reference to the DOE Renewal Application is missing part of the document number. It should be DOE/RL-2017-31.

*Change ST&C Statement of Basis, 4.0, Page 12, Line 17. to read:
...(DOE/RL-2017-31, Section 2.4).*

Ecology Response to A-2-24

Thank you for your comment.

The STGC SOB will be modified to include the whole document number (DOE/RL-2017-31) as referenced.

Comment A-2-25

ST&C Statement of Basis, 4.0, Page 12, Line 24.

This paragraph refers to Attachment 1 of AOP, Section 2.4, "Discharge Points." Section 2.4 of Attachment 1 is reserved. It is believed that the reference should be to Section 1.4.

Change all reference to Section 2.4 in this paragraph to Section 1.4.

Ecology Response to A-2-25

Thank you for your comment.

The ST&C SOB will be modified to change references from Section 2.4 to Section 1.4 on lines 24, 28, and 29 of page 12.

Comment A-2-26

Standard Terms and Conditions - Statement of Basis, Page 12, Line 26

Typo-capitalization: "...Hazardous air Pollutants...."

*Please correct the text by capitalizing "Air".
"...Hazardous Air Pollutants...."*

Ecology Response to A-2-26

Thank you for your comment.

The ST&C SOB will be modified to correct for the capitalization error of "Air" as referenced.

Comment A-2-27

ST&C Statement of Basis, 5.0, Page 14, Line 27.

The discussion of Subsection 5.17 states that Hanford's potential greenhouse gas emissions are approximately 285,768 metric tons of carbon dioxide equivalents per year. This value was based on early estimates. The reported greenhouse gas emission for calendar years 2012 -2016 is about 15,000 tons of carbon dioxide equivalents per year. No significant change is expected to this value until Waste Treatment Plant facilities begin operation. The Statement of Basis should be updated to reflect the reported emissions.

Update Statement of Basis to reflect reported greenhouse gas emissions.

Ecology Response to A-2-27

Thank you for your comment

The ST&C SOB will be modified to state: "Hanford's greenhouse gas emissions for calendar years 2012 - 2016 were about 15,000 tons. Hanford's potential GHG emissions will be approximately 285,768 metric tons of CO₂e per year when the Waste Treatment Plant facilities begin operations."

Comment A-2-28

ST&C Statement of Basis, 5.0, Page 15, Line 25.

The Statement of Basis notes that the next renewal application will be submitted by DOE no later than 8 months before the date of the permit expiration. It is requested that the 6 month time frame be reflected to remain consistent with the regulatory requirement. DOE will certainly consider any request to submit a renewal application within 8 months as identified on Page iv, Lines 10-12 of the draft ST&C.

Change the Statement of Basis to read:

The next renewal application will be submitted by DOE no later than 6 months prior to the AOP expiration date.

Ecology Response to A-2-28

The permit will be modified as requested from 8 to 6 months.

It is important to note that WAC 173-401-710 (1) states, "[t]he source shall submit a complete permit renewal application to the permitting authority no later than the date established in the permit. This date shall be no less than six months prior to the expiration of the permit. The permit authority may require that a permit renewal application must be submitted earlier. ... In no event shall the application due date be earlier than eighteen months prior to the expiration of the permit."

The WAC citation states that the permit authority (e.g. Ecology) can establish any date between 6 and 18 months for the submission of an AOP renewal application. WAC 173-401-710 (3) "Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with subsection (1) of this section and WAC 173-401-500." Ecology moved the renewal date to 8 months to facilitate the ability to evaluate a renewal permit with enough time to correct any non-completeness issues and grant a permit shield to the source. With the source request to move the renewal application submission date back to six months, and Ecology agreeing to the change, the source has no excess time to correct any non-completeness issues with their renewal application. As a result, if the renewal application is deemed to be non-complete, the source will be required to terminate all air emission operations at the date of permit expiration.

Comment A-2-29

ST&C Statement of Basis, 8.0, Page 20, Lines 1-2

Appendix A table, Ecology, Obsolete, Completed or Closed NOC Approvals, Terms and Conditions or Emission Units, has been omitted from Revision 3. Please reinstate the table as it is a useful tool for maintaining NOC history and for use in preparation of future permitting activities.

Please reinstate the table previously found in Appendix A: Ecology, Obsolete, Completed or Closed NOC Approvals, Terms and Conditions or Emission Units

Ecology Response to A-2-29

Thank you for your comment

When an Air Operating Permit (AOP) is renewed, it is considered a new permit. As a result, obsolete, closed, and completed items don't exist. Likewise, Appendix A will not be included to track NOC history as the proposed changes and new NOC's were included in the Renewal Application (DOE/RL-2017-31) and subsequently incorporated in the DRAFT Renewal 3 AOP. After issuing Renewal 3, Appendix A will be added back into the AOP to track NOC's which will be incorporated into subsequent AOP revisions.

No change in the permit is required

Comment A-2-30

ST&C Statement of Basis, 9.0, Pages 17-38

Observation: The boxes of information in this section are numbered inconsistently. For example, on page 23 the numbers are followed by a period whereas on page 24 the numbers are enclosed in parenthesis; on page 32 there are only bullets and no numbers.

Recommended action is to make the numbering (or bullets) consistent throughout the SOB document in the text boxes (e.g., pages 21, 23, 24, 26, 27, and 32) or to provide an explanation as to the differing format approaches.

Ecology Response to A-2-30

Thank you for your comment.

The numbering format will be modified in the text boxes of the permit to be consistent as recommended.

Comment A-2-31

ST&C Statement of Basis, B-4, page 24, Lines 11 and 12

Please update the numbering sequence from (1), (2), (4), and (6), to (1), (2), (3), and (4).

Change to read:

(3) The change shall not qualify for the permit shield under WAC 173-401-640.

(4) A source making a change under this section shall comply with applicable preconstruction review requirements established pursuant to RCW 70.94.152.

Ecology Response to A-2-31

Thank you for your comment.

The numbering matches the associated WAC 173-401-724 citations for the text, as is referenced in lines 2-3 of page 24. To remain consistent with the citations, the numbering will not be revised to a sequential order.

Comment A-2-32

Attachment 1, 1.0, Table 1.1, WAC 173-400-040(2), Page 9

Test Method specifies 40 CFR 60 Appendix A Method 9 as the compliance verification method. Based on

the periodic monitoring provisions of Section 2.1 Tier 1, Method 9 is used when visible emissions are observed as an alternative compliance method to avoiding or completing corrective maintenance that eliminates visible emissions. Section 2.1 Tier 2, Method 9 is used when visible emissions are observed and the event is likely to reoccur after corrective actions are performed. Section 2.1 Tier 3 appropriately contains no reference to Method 9. The use of an approved alternate method is more appropriate and aligns with the language contained in Section 2.1 and the intent provided in Section 2.1 of the Statement of Basis. 40 CFR 60.11(b) allows for the use of an approved alternative method.

Change to read:

Alternative method to EPA Method 9 of 40 CFR 60, Appendix A as detailed in Section 2.1

Ecology Response to A-2-32

The test method specified for Opacity is listed as Method 9 in Table 1.1. Discharge points in Section 1.4 of Attachment 1 specifies various periodic monitoring, frequency and test methods for visible emissions/opacity conditions. The discharge points equipped with HEPA Filers as abatement control specifies Tier 3 which requires to maintain abatement control technology as required in Attachment 2. Additional language was added to Tier 3 in section 2.1 and also to various discharge points in section 1.4 of Attachment 1 with Tier 3 conditions.

The Tier 3 conditions now specifies visible emissions surveys also be performed at no specified frequency. A visible emission survey is a simple 'yes or no' as to whether emissions are visibly observable and do not necessarily require certification of Method 9 to make this determination. However, if visible emissions are observed, Ecology expects personnel certified in Method 9 to determine the actual percent opacity. More importantly, the visible survey requirement was added as a secondary method for validating the opacity assumptions of the HEPA filters functioning correctly (i.e. no breakthrough, no observable drop in differential pressure). In 40 CFR 60.11(b) it states "Compliance with opacity standards in this part shall be determined by conducting observations in accordance with Method 9 in appendix A of this part, any alternative method that is approved by the Administrator, or as provided in paragraph (e)(5) of this section." In order for an alternative method to be approved and written into the permit, the permittee would have to first propose which alternative method they wish to use.

No change to the permit is required.

Comment A-2-33

Attachment 1, 1.0, Table 1.1, WAC 173-400-040(7), Page 11

Periodic Monitoring Column: Please restore the verbiage found in AOP Renewal 2, Revision B to Renewal 3 as it was more descriptive and correct.

Rev 3 states: "For fossil-fuel combustion units: Record keeping or certification."

- Rev 2B stated: "For fossil-fuel combustion units: Recordkeeping of the certification that Ultra Low Sulfur Fuel was used."

Please return the text in the Periodic Monitoring column for WAC 173-400-040(7) as it was in Renewal 2, Revision B:

"For fossil-fuel combustion units: Record keeping of the certification that Ultra Low Sulfur Fuel was used."

Ecology Response to A-2-33

The language used in Renewal 3 is adequate to ensure compliance with the permit conditions. The Permittee can still use certification that Ultra Low Sulfur Fuel was used to meet the condition.

No change in the permit is required.

Comment A-2-34

Attachment 1, 1.4, Page 13, Lines 6 -8

Please add clarifying language that while the emission units identified in this Section are subject to the general requirements listed in Table 1.1, the general requirements are not considered an emission unit-specific term or condition and would not require certification per Standard Term and Condition 5.10.

Add clarifying language per the comment. Proposed language is provided below.

All emission units identified in this Section are subject to the general requirements listed in Table 1.1. While the emission units identified in this Section are subject to the general requirements listed in Table 1.1, the general requirements are not considered an emission unit-specific term or condition and would not require certification per Standard Term and Condition 5.10. More stringent conditions listed for specific discharge points in this Section are used in lieu of the general requirements.

Ecology Response to A-2-34

Thank you for your comment.

In section 5.10.1 of the Standard Terms and General Conditions on line 34 states: "The compliance certification will consist of the following: a) each emission unit-specific term or condition listed in Attachment 1, 2, and 3..." The permit will be modified as proposed.

Comment A-2-35

Attachment 1, Discharge Point 1.4.2, Page 20

Remove ellipsis and replace with a period. Use of an ellipsis is grammatically incorrect.

Please update text to eliminate the ellipsis: E. Check for unusual noise, vibrations, etc.

Ecology Response to A-2-35

Thank you for your comment.

The permit will be modified to replace the ellipsis with a period.

Comment A-2-36

Attachment 1, Discharge Point 1.4.10, Page 42

The opacity periodic monitoring requirement (Section 2.1 Tier 1) contains a graded approach to opacity monitoring with stepped methodology while the test method specifies a single method (EPA Method 9) to be used. Which test method is required to meet compliance with the Permit condition? 40 CFR 60.11(b) allows for the use of an approved alternative method.

Change to read:

Periodic Monitoring: Visible emission surveys

Test Method: Alternative method to EPA Method 9 of 40 CFR 60, Appendix A as detailed in Section 2.1, Tier 1

Ecology Response to A-2-36

Thank you for your comment.

The test method will be changed to "Section 2.1, Tier 1"

Comment A-2-37

Attachment 1, Discharge Point 1.4.11, Page 43

The opacity periodic monitoring requirement (Section 2.1 Tier 1) contains a graded approach to opacity monitoring with stepped methodology while the test method specifies a single method (EPA Method 9) to be used. Which test method is required to meet compliance with the Permit condition? 40 CFR 60.11(b) allows for the use of an approved alternative method

Change to read:

Periodic Monitoring: Visible emission surveys

Test Method: Alternative method to EPA Method 9 of 40 CFR 60, Appendix A as detailed in Section 2.1, Tier 1

Ecology Response to A-2-37

Thank you for your comment.

The test method will be changed to "Section 2.1, Tier 1"

Comment A-2-38

Attachment 1, Discharge Point 1.4.14, Page 46

The visible emission periodic monitoring requirement (Section 2.1 Tier 3) is an alternate test method. The visible emission survey should be the only periodic monitoring required. The test method specified (EPA Method 9) is inappropriate for non-combustion radionuclide emitting stationary sources. 40 CFR 60.11(b) allows for the use of an approved alternative method.

The visible emission survey frequency requirement is indeterminate. Compliance with this language is open ended and subject to interpretation for both the regulated party and the regulatory agency.

Change to read:

Periodic Monitoring:

(1) Section 2.1, Tier 3.

(2) Visible emission surveys Frequency: Quarterly.

Test Method: Alternative method to EPA Method 9 of 40 CFR 60, Appendix A as detailed in Section 2.1, Tier 3

Test Frequency: Annually.

Ecology Response to A-2-38

Thank you for your comment.

Visible emission survey requirements indicating if emissions are visible or not were added as a condition to the permit as a way of checking emission control equipment specified for other purposes are meeting the opacity requirements. The test frequency specified for visible emission surveys is not specified, only the requirement that when it is performed a record of what is observed is recorded (e.g., visible emissions observed - Yes or No). If visible emissions are observed, a person certified in Method 9 shall record the opacity and keep the records.

No change to the permit is required.

Comment A-2-39

Attachment 1, Discharge Point 1.4.19, Page 56

*Please reformat and standardize Emission Limit Condition for this discharge point.
There are multiple reasons why visible emission checks are not needed on these stacks:*

- 2 HEPA filters in series*
- HEPA filter performance testing requirements*
- Redundant systems that allow for continued operation (i.e.: multiple trains)*
- Hi/Low differential pressures detected will initiate auto shutdown*
- Most stacks have continuous record samplers*
- If visible emissions were detected, the response would be addressed through our abnormal operating procedures which would trigger an emergency response resulting in shutdown of the train and evacuation. In that event, personnel would not be able to perform a Method 9 Opacity Test when visible emissions are occurring.*
- Near field monitors are in continuous operation*

Note: Comment numbers 39, 56, 57, 60, 112, 113, and 117 are closely related.

Reformat and standardize Emission Limit Condition:

Condition:

Shutdown of the train, if visible emissions are observed

Upon restart following a visible emissions event, perform a Method 9 Opacity Test.

Stack Visible Emissions will not exceed 5%

Periodic Monitoring:

(1) Section 2.1, Tier 3

Test Method:

40 CFR 60, Appendix A, Method 9, as applicable

Test Frequency:

Upon restart following a visible emissions event

Required Records:

(1) Maintenance records required in AOP Attachment 2 for maintaining abatement control technology.

(2) Records of Method 9 surveys, as applicable

Ecology Response to A-2-39

Thank you for comment.

Visible emission conditions are incorporated into the permit as a requirements WAC 173-400-040(2). Required shall be maintained if visible emissions surveys are performed.

No change to the AOP is required.

Comment A-2-40

Attachment 1, Discharge Point 1.4.20, Page 58

The visible emission periodic monitoring requirement (Section 2.1 Tier 3) is an alternate test method. The visible emission survey should be the only periodic monitoring required. The test method specified (EPA Method 9) is inappropriate for non-combustion radionuclide emitting stationary sources. 40 CFR 60.11(b) allows for the use of an approved alternative method.

The visible emission survey frequency requirement is indeterminate. Compliance with this language is open ended and subject to interpretation for both the regulated party and the regulatory agency.

Change to read:

Periodic Monitoring:

(2) Visible emission surveys

Frequency: Quarterly.

Test Method: Alternative method to EPA Method 9 of 40 CFR 60, Appendix A as detailed in Section 2.1, Tier 3

Test Frequency: When visible emissions are Annually.

Ecology Response to A-2-40

Thank you for your comment.

Visible emission survey requirements indicating if emissions are visible or not were added as a condition to the permit as a way of checking emission control equipment specified for other purposes are meeting the opacity requirements. The test frequency specified for visible emission surveys is not specified, only the requirement that when it is performed a record of what is observed is recorded (e.g., visible emissions observed - Yes or No). If visible emissions are observed, a person certified in Method 9 shall record the opacity and keep the records.

No change to the permit is required.

Comment A-2-41

Attachment 1, Discharge Point 1.4.22, Page 60

A typographical error is suspected for line 15 page 60. The acronym DNE is unknown. The use of the acronym NDE (non-destructive examination) aligns with the use of the acronym NDE/NDA found previously in line 9.

Change to read:

...the drum storage and NDE/NDA areas. As such, no additional sampling or...

Ecology Response to A-2-41

Thank you for your comment.

The permit will be modified to correct the typographical error.

Comment A-2-42

Attachment 1, Discharge Point 1.4.23, Page 64, Condition 1.3

The Conditions on page 64 relating to opacity contain incorrect reference to the permit DE02NWP-002 Condition number.

The condition number should be revised as follows:

2.1.1.1 Opacity from each ...

Ecology Response to A-2-42

Thank you for your comment.

The number reference to specific NOC conditions in the AOP has no bearing on condition enforcement. To streamline the permit, the number references to DE02NWP-002 for discharge point 1.4.23 will be removed.

Comment A-2-43

Attachment 1, Discharge Point 1.4.23, Page 64, Condition 1.3

The second opacity related condition on page 64 is redundant with the first.

Recommend deleting the second opacity condition on page 64.

Ecology Response to A-2-43

The opacity conditions are not redundant as they have different periodic monitoring requirements.

No change to the permit is required.

Comment A-2-44

Attachment 1, Discharge Point 1.4.23, Page 65, Condition 2.3

Condition 2.3; PSD-02-01, Condition 8 related to Steam Plant Boiler fuel consumption limit of 13,400,000 gallons/yr is redundant with the same condition on page 72.

Propose deletion of the redundant condition on either page 65 or 72.

Ecology Response to A-2-44

Thank you for your comment.

The conditions for fuel consumption found on page 65 and 72 of Attachment 1 have slight differences and both will remain in Attachment 1.

No change to the permit is required.

Comment A-2-45

Attachment 1, Discharge Point 1.4.23, Page 67, Condition 2.3

Condition 2.3 was superseded by Condition 3.2 on the same page in Rev. 2 of DE02NWP-002.

Condition 2.3 should be deleted since it is redundant with Condition 3.2 on the same page.

Ecology Response to A-2-45

Condition 2.3 of page 67 is not redundant with condition 3.2 of the same page.

No change to the permit is required.

Comment A-2-46

Attachment 1, Discharge Point 1.4.23, Page 68, Condition 3.2

Condition 3.2 should be changed to condition 4.2 and 3.1 should be changed to 4.1 for consistency with Rev. 2 of DE02NWP-002.

Please revise condition numbers as identified in comment.

Ecology Response to A-2-46

Thank you for your comment.

The number reference to specific NOC conditions in the AOP has no bearing on condition enforcement. To streamline the permit, the number references to DE02NWP-002 for discharge point 1.4.23 will be removed.

Comment A-2-47

Attachment 1, Discharge Point 1.4.23, Page 69, Condition 3.6

Condition 3.6 should be changed to 4.6 for consistency with Rev. 2 of DE02NWP-002.

Please revise condition numbers as identified in comment.

Ecology Response to A-2-47

Thank you for your comment.

As the number reference to specific NOC conditions in the AOP has no bearing on condition enforcement, the permit will be modified to remove number references to DE02NWP-002 for discharge point 1.4.23.

Comment A-2-48

Attachment 1, Discharge Point 1.4.23, Page 70, Condition 4

Condition 4 should be changed to 5 for consistency with Rev. 2 of DE02NWP-002.

Please revise condition numbers as identified in comment.

*Also, revise condition as follows for consistency with Rev. 2 of DE02NWP-002:
"Emissions from boilers shall be monitored for CO...."*

Ecology Response to A-2-48

Thank you for your comment.

As the number reference to specific NOC conditions in the AOP has no bearing on condition enforcement, the permit will be modified to remove number references to DE02NWP-002 for discharge point 1.4.23. Additionally, Line 2 of Page 70 will be revised to state "Emissions from boilers shall be monitored..." to be consistent with DE02NWP-002, Revision 2.

Comment A-2-49

Attachment 1, Discharge Point 1.4.23, Page 70, Condition 2

Condition 2 should be revised to refer to 0.0015 % by wt. instead of 0.003% for consistency with Rev. 2 of DE02NWP-002.

Please revise condition numbers as identified in comment.

Ecology Response to A-2-49

Thank you for the comment.

The permit will be modified for the condition on use of ultra-low sulfur fuel from 0.003% to 0.0015% to be consistent with DE02NWP-002, Rev. 2 condition 2.2.1.2.

Comment A-2-50

Attachment 1, Discharge Point 1.4.23, Page 73, Condition 9

Condition 9, Required Records should be updated for consistency with Rev. 2 of DE02NWP-002.

Condition 9, Required Records should be updated as follows for consistency with Rev. 2 of DE02NWP-002.

Calculations based on testing results and gallons of fuel.

Ecology Response to A-2-50

Thank you for your comment.

The permit will be modified for Required Records to state, "Calculations based on source testing results and gallons of fuel" consistent with the requirements for PSD permit No. PSD-02-01 Amendment 3, Approval Condition 9.

Comment A-2-51

Attachment 1, Discharge Point 1.4.23, Page 73, Condition 2

Please see Comment BNI-8 above related to sulfur content of fuel.

Please revise condition numbers as identified in comment.

Ecology Response to A-2-51

Thank you for your comment.

As the reference to any NOC numbering found in the AOP has no bearing on respective AOP condition or enforceability, the condition numbers in the permit will be removed. The concentration of Ultra-low sulfur fuel found on page 73 will be modified to correct for the concentration of ultra-low sulfur fuel, which should be less than or equal to 0.0015%.

Comment A-2-52

Attachment 1, Discharge Point 1.4.23, Page 74, Condition 11 and 13

The Condition currently refers to Type I and Type II emergency generators which is not consistent with Rev. 2 of DE02NWP-002. Type II Emergency Turbine Generators replaced the Type II Emergency Diesel Generators in design during a 2013 permit modification.

Please revise the Condition as follows:

Each Type I or Type II emergency turbine generator shall not exceed 164 hours per year when averaged over 12 consecutive months, calculated once per month.

Ecology Response to A-2-52

Thank you for your comment.

The word 'turbine' will be added to the condition.

Comment A-2-53

Attachment 1, Discharge Point 1.4.23, Page 74, Condition 14

Condition 14 currently refers to Emergency Generators and Type II Generators which is not consistent with Rev. 2 of DE02NWP-002. Emergency Turbine Generators Replaced the Type II Emergency Diesel Generators in 2013.

Please revise Condition 14 title as follows for consistency with Rev 2 of DE02NWP-002:

Emergency Turbine Generators

Emissions of NOx from the Type II Emergency Turbine Generators shall not exceed 547.5 lb/day (each), when averaged over 24 consecutive hours.

Ecology Response to A-2-53

Thank you for your comment.

The permit will be modified to include the wording 'Emergency Turbine Generators'. Additionally, the condition will be revised to state "Emissions of NOX from the Emergency Turbine Generators shall not exceed 69.8 lb/hr (each), when averaged over 1 hour and 164 hours per year averaged over 12 consecutive months," consistent with PSD permit No. PSD-02-01, Amendment 3.

Comment A-2-54

Attachment 1, Discharge Point 1.4.23, Page 75, Condition 2

Please see Comment BNI-8 above related to sulfur content of fuel.

Please revise condition numbers as identified in comment.

Ecology Response to A-2-54

Thank you for your comment.

As the reference to Notice of Construction conditions numbers found in some areas of the AOP have no bearing or effect on the enforceability of the permit or respective condition found in the AOP, The permit will be modified to remove references to NOC numbering carried over to the AOP. Where necessary, AOP-specific numbering has been added for readability.

The permit will be modified for the condition on use of ultra-low sulfur fuel from 0.003% to 0.0015% to be consistent with DE02NWP-002, Rev. 2 condition 2.2.1.2.

Comment A-2-55

Attachment 1, Discharge Point 1.4.23, Page 75, Condition 15

The fire pump hour restriction is not correct and needs to be revised for consistency with Permit PSD-02-01, Condition 15

Please revise Condition 15 as follows:

Hours of operation of each emergency fire pump shall not operate for more than 230 hours per year averaged over 12 consecutive months.

Ecology Response to A-2-55

Thank you for your comment.

The permit currently reads as proposed on page 66 of the AOP.

The condition on page 75 will be deleted.

Comment A-2-56

Attachment 1, Discharge Point 1.4.25, Page 79

Please reformat and standardize Emission Limit Condition for this discharge point.

There are multiple reasons why visible emission checks are not needed on these stacks:

- 2 HEPA filters in series*
- HEPA filter performance testing requirements*
- Redundant systems that allow for continued operation (i.e.: multiple trains)*
- Hi/Low differential pressures detected will initiate auto shutdown*
- Most stacks have continuous record samplers*
- If visible emissions were detected, the response would be addressed through our abnormal operating procedures which would trigger an emergency response resulting in shutdown of the train and evacuation. In that event, personnel would not be able to perform a Method 9 Opacity Test when visible emissions are occurring.*
- Near field monitors are in continuous operation*

Note: Comment numbers 39, 56, 57, 60, 112, 113, and 117 are closely related.

Reformat and standardize Emission Limit Condition:

Condition:

Shutdown of the train, if visible emissions are observed

Upon restart following a visible emissions event, perform a Method 9 Opacity Test.

Stack Visible Emissions will not exceed 5%

Periodic Monitoring:

(1) Section 2.1, Tier 3

Test Method:

40 CFR 60, Appendix A, Method 9, as applicable

Test Frequency:

Upon restart following a visible emissions event

Required Records:

(1) Maintenance records required in AOP Attachment 2 for maintaining abatement control technology.

(2) Records of Method 9 surveys, as applicable

Ecology Response to A-2-56

Thank you for comment.

Visible emission conditions are incorporated into the permit as a requirements WAC 173-400-040(2). Required shall be maintained if visible emissions surveys are performed.

No change to the AOP is required.

Comment A-2-57

Attachment 1, Discharge Point 1.4.26, Page 83

Please reformat and standardize Emission Limit Condition for this discharge point.

There are multiple reasons why visible emission checks are not needed on these stacks:

2 HEPA filters in series

HEPA filter performance testing requirements

Redundant systems that allow for continued operation (i.e.: multiple trains)

Hi/Low differential pressures detected will initiate auto shutdown

Most stacks have continuous record samplers

If visible emissions were detected, the response would be addressed through our abnormal operating procedures which would trigger an emergency response resulting in shutdown of the train and evacuation. In that event, personnel would not be able to perform a Method 9 Opacity Test when visible emissions are occurring.

Near field monitors are in continuous operation

Note: Comment numbers 39, 56, 57, 60, 112, 113, and 117 are closely related.

Reformat and standardize Emission Limit Condition:

Condition:

Shutdown of the train, if visible emissions are observed

Upon restart following a visible emissions event, perform a Method 9 Opacity Test.

Stack Visible Emissions will not exceed 5%

Periodic Monitoring:

(1) Section 2.1, Tier 3

Test Method: 40 CFR 60, Appendix A, Method 9, as applicable

Test Frequency: Upon restart following a visible emissions event

Required Records:

- (1) Maintenance records required in AOP Attachment 2 for maintaining abatement control technology.*
- (2) Records of Method 9 surveys, as applicable*

Ecology Response to A-2-57

Thank you for comment.

Visible emission conditions are incorporated into the permit as a requirements WAC 173-400-040(2). Required shall be maintained if visible emissions surveys are performed.

No change to the AOP is required.

Comment A-2-58

Attachment 1, Discharge Point 1.4.29, Page 91

The information for this discharge point should be updated to reflect Approval Order DE07NWP-002, Revision 2 (Ecology letter 15-NWP-213). This will affect the Requirement Citation, Condition Approval dates, and conditions addressing polyaromatic hydrocarbon emissions and toxic air pollutant emissions.

Change the Discharge Point information to read:

*Requirement Citation (WAC or Order Citation): DE07NWP-002, Revision 2
Condition Approval 12/2/2015 (All instances)*

Condition: Emissions of Polyaromatic Hydrocarbons (PAHs) will not result in ambient concentrations exceeding 4.8E-04 µg/m³ [WAC 173-460-080(2)].

Required Records: Calculations and dispersion analyses prepared semiannually in concert with cumulative operating hour calculations, retained for a minimum of 12 months. AP 42, fifth edition, shall be used for the calculation. Dispersion analysis only needs to be performed if the calculated emissions exceed the SQERs. [WAC 173-460-080(2)(b)]

Condition: Emissions of Toxic Air Pollutants (TAPs), as identified in the table below, will not exceed SQERs of WAC 173-460-080(2)(e).

Required Records: Calculations prepared semiannually in concert with cumulative operating hour calculations, retained for a minimum of 12 months. AP 42, fifth edition, shall be used for the calculation. Table 3.4-3 of AP-42 does not estimate emissions of 1,3-Butadiene for larger engines. An emission factor of zero shall be applied to 1,3-Butadiene for engines 600 HP or larger.

Condition: Emissions of sulfur dioxide will not exceed two tons per year [WAC 173-400-110(5)(b)].

Periodic Monitoring: Compliance will be demonstrated by use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight) on and after June 1, 2010 [40 CFR §60.4207(b), 40 CFR §80.510(b)].

Ecology Response to A-2-58

Thank you for your comment.

First, AOP record retention requirement is 5 years (60 months) in accordance with WAC 173-401-615(2)(c). All record retention time frames in the AOP will be changed to at least 60 months.

Second, the other requested changes match the current underlying requirement, DE07NWP-002 Revision 2, and will be accepted as stated in the comment.

Third, the change in fuel sulfur requirements will be streamlined from DE07NWP-002 Revision 2 to reflect the only ultra low sulfur fuel is currently permitted.

Comment A-2-59

Attachment 1, Discharge Point 1.4.31, Page 98

The information for this discharge point should be updated to reflect that Approval Order DE08NWP-001, was cancelled on September 30, 2015 (Ecology letter 15-NWP-194) and the engine became subject to the requirements of 40 CFR 60, Subpart IIII on October 1, 2015. The existing conditions should be replaced with conditions appropriate to regulation of the engine under 40 CFR 60, Subpart IIII as proposed to Ecology in the Off Permit Change request transmitted to Ecology in DOE letter 15-ESQ-0099).

Replaced existing conditions with conditions appropriate to regulation of the engine under 40 CFR 60, Subpart IIII.

Ecology Response to A-2-59

Thank you for your comment.

The condition will be updated to remove requirements which are no longer applicable from DE08NWP-001. The requirements from 40 CFR 60 Subpart IIII will be retained for Discharge Point 1.4.31. Any further changes requested in 15-ESQ-0099 will be reviewed for incorporation into the next AOP revision.

Discharge Point 1.4.31 will change to:

Requirement Citation: NSPS Subpart IIII (Emergency diesel, Cylinder Displacement ,Äi 6.8 L, 347 horsepower (259 kW))

Condition Approval

Condition: Use of fuel per 40 CFR –ß60.4207.

Periodic Monitoring: Compliance will be demonstrated by use of fuel containing (1) no greater than 0.05 weight percent sulfur (500 parts per million by weight) from installation to May 31, 2010 [40 CFR –ß60.4207(a), 40 CFR –ß80.510(a)], and (2) no greater than 0.0015 weight percent sulfur (15 parts per million by weight) on and after June 1, 2010 [40 CFR –ß60.4207(b), 40 CFR –ß80.510(b)].

Test Method: Not applicable.

Test Frequency: Not applicable.

Required Records: Diesel fuel quality shall be documented by annual fuel analysis or vendor documentation of fuel purchases from retail outlet(s) that demonstrate compliance with diesel fuel quality standards of 40 CFR –ß80.510 for all purchases.

State-Only: No.

Calculation Model: Not applicable.

Condition Approval

Condition: Emission rates of installed engine shall not exceed values identified in the table below [40 CFR –β60.4205(a), NSPS III Table 1].

Pollutant Engine Rating Gram/kilowatt-hour (g/kW-hr) Pound/horsepower-hour (lb/HP-hr)

Hydrocarbons 225<kW

Carbon Monoxide (300<HP

Particulate Matter 0.54 8.82E-04

Nitrogen Oxides 9.2 1.52E-02

Periodic Monitoring: Compliance shall be demonstrated by:

(1) Procuring and installing an engine compliant with emission standards of 40 CFR –β60.4205(a) for the same model year and maximum engine rating [40 CFR –β60.4211(b)(3) with emission standards expressed in Table 1 to NSPS III].

(2) Operating and maintaining the stationary compression ignition internal combustion engines and control devices according to the manufacturer's emission-related written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer [40 CFR –β60.4211(a)].

(3) Maintaining records of engine manufacturing data as detailed in the Required Records below.

Test Method: Not applicable.

Test Frequency: Not applicable.

Required Records: (1) Manufacturer's engine data will be retained through the life of the engine.

(2) Maintenance records for Periodic Monitoring (2) above shall be retained for 60 months minimum.

(3) Records of cumulative operating hours for the engine, recorded annually, will be retained for 60 months minimum.

(4) Records of emergency use operational duration and the basis of the emergency.

State-Only: No.

Calculation Model: Not applicable.

Comment A-2-60

Attachment 1, Discharge Point 1.4.32, Page 103

Please reformat and standardize Emission Limit Condition for this discharge point.

There are multiple reasons why visible emission checks are not needed on these stacks:

2 HEPA filters in series

HEPA filter performance testing requirements

Redundant systems that allow for continued operation (i.e.: multiple trains)

Hi/Low differential pressures detected will initiate auto shutdown

Most stacks have continuous record samplers

If visible emissions were detected, the response would be addressed through our abnormal operating procedures which would trigger an emergency response resulting in shutdown of the train and evacuation. In that event, personnel would not be able to perform a Method 9 Opacity Test when visible emissions are occurring.

Near field monitors are in continuous operation

Note: Comment numbers 39, 56, 57, 60, 112, 113, and 117 are closely related.

Reformat and standardize Emission Limit Condition:

Condition:

Shutdown of the train, if visible emissions are observed

Upon restart following a visible emissions event, perform a Method 9 Opacity Test.

Stack Visible Emissions will not exceed 5%

Periodic Monitoring:

(1) Section 2.1, Tier 3

Test Method:

40 CFR 60, Appendix A, Method 9, as applicable

Test Frequency:

Upon restart following a visible emissions event

Required Records:

(1) Maintenance records required in AOP Attachment 2 for maintaining abatement control technology.

(2) Records of Method 9 surveys, as applicable

Ecology Response to A-2-60

Thank you for comment.

Visible emission conditions are incorporated into the permit as a requirements WAC 173-400-040(2). Required shall be maintained if visible emissions surveys are performed.

No change to the AOP is required.

Comment A-2-61

Attachment 1, Discharge Point 1.4.32, Page 103

The wording in this discharge point does not match the NOC (DE11NWP-001, Rev 4). Compliance with this discharge point as it is currently written cannot be accomplished. Due to the significant comments for this discharge point, all comments have been made directly on a Microsoft Word generated copy of the discharge point.

Please see attached document: 1.4.32 Discharge Point: 241-AP, 241-SY and 241-AY/AZ Ventilation

Please rewrite Discharge Point 1.4.32 to match the NOC (DE11NWP-001, Rev 4).

Due to the extensive comments for this discharge point, DOE proposes a meeting with Ecology to discuss the comments provided and path forward.

Ecology Response to A-2-61

Thank you for your comment.

As the comments for this part were presented as a separate document appended to the Department of Energy's comments, Ecology responded on the document. This document is in the references.

The changes identified in Reference 1 will be incorporated into the AOP.

Comment A-2-62

Attachment 1, Discharge Point 1.4.34, Page 118

The unit of measurement used (mmBtu) is not indicated in Approval Order DE12NWP-003.

Please replace with the appropriate unit of measurement:

Maximum number of units is 10 and maximum accumulated heating capacity is 25 MBtu/hr.

Ecology Response to A-2-62

Thank you for your comment.

The permit will be modified to correct for the appropriate unit of measure that is consistent with the corresponding NOC.

Comment A-2-63

Attachment 1, Discharge Point 1.4.37, Page 126

This discharge point should be removed from the AOP. DOE notified Ecology on August 30, 2017 (DOE letter 17-ESQ-0096) that this discharge point (a portable diesel fueled generator/light plant) was removed from service.

Remove discharge point from AOP.

Ecology Response to A-2-63

Thank you for your comment.

It was confirmed during an inspection performed by Ecology on September 25, 2018, that discharge point 1.4.37 was physically removed from that location. Discharge point 1.4.37 will be removed from the AOP and changed to "reserved".

Comment A-2-64

Attachment 1, Discharge Point 1.4.38, Page 127

The compliance requirement and required records for the first condition should be updated as requested in the Hanford Site AOP Renewal Application (DOE/RL-2017-31) to better reflect the requirements in 40 CFR 60, Subpart IIII. The proposed language is directly from Section 60. 4211 which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR and will ensure a clear understanding of the requirement and its implementation. Update the compliance requirement and required records for alignment with the regulatory requirements.

Change to read:

Compliance Requirement: Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's emission-related written instructions or keeping a maintenance plan and records of conducted maintenance to demonstrate compliance and, to the extent practicable, maintaining and operating the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Required Records:

- (1) Manufacturer's maintenance or operation manual.*
- (2) Documentation of maintenance performed.*
- (3) Hours of operation. (4) Developed maintenance plan, if applicable.*

Ecology Response to A-2-64

Thank you for your comment.

The permit will be modified to read:

Compliance Requirement

1. Compliance will be demonstrated by (A) operating and maintaining the engine and control devices according to the manufacturer's emission-related written instructions and (B) change only those emission-related settings that are permitted by the manufacturer.
2. If you do not install, configure, operate or maintain your engine and control device according to manufacturer's emission related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance by keeping a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Required Records

1. Manufacturer's maintenance or operation manual
2. Developed maintenance plan, if applicable
3. Performance test, if applicable
4. Documentation of maintenance performed
5. Hours of operation

Comment A-2-65

Attachment 1, Discharge Point 1.4.39, Page 128

Discharge Point 1.4.39, 385 Building has been replaced by a new diesel-fueled emergency fire pump engine (DOE Letter 18-ESQ-0007). This Discharge Point should be deleted.

Delete Discharge Point 1.4.39, 385 Building.

Ecology Response to A-2-65

Thank you for your comment

Letter 18-ESQ-0007 includes an Off-Permit Change request, which addresses the replacement of the existing emergency fire pump in the 385 Building with a certified National Fire Protection Association fire pump engine. On September 25, 2018, Ecology performed an inspection of the discharge point 1.4.39 engine which is housed in the 385 Building. It was observed the old fire pump engine was physically removed and replaced with a new fire pump. It is not necessary to delete the existing discharge point and create a new discharge point.

The applicable requirements for the new engine were not incorporated into the AOP as Ecology received letter 18-ESQ-0007 after the renewal 3 was drafted. The new requirements will be incorporated upon subsequent revision of the AOP. No changes to the permit is required.

Comment A-2-66

Attachment 1, Discharge Point 1.4.40, Page 129

This discharge point should be removed from the AOP. DOE notified Ecology on January 16, 2018 (DOE letter 18-ESQ-0024) that this discharge point (a portable diesel fueled generator/light plant) was removed from service.

Remove discharge point from AOP.

Ecology Response to A-2-66

Thank you for your comment.

During an inspection that was performed on September 25, 2018 of AOP discharge point 1.4.40, it was observed that the engine(s) were removed from location. Modification to the AOP will be made to remove discharge point 1.4.40, and mark it as reserved.

Comment A-2-67

Attachment 1, Discharge Point 1.4.41, Page 130

The compliance requirement and required records for the first condition should be updated as requested in DOE/RL-2017-31 to better reflect the requirements in 40 CFR 60, Subpart III. The proposed language is directly from Section 60.4211 which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR will ensure a clear understanding of the requirement and its implementation.

Update the compliance requirement and required records to align with the regulatory requirements.

Ecology Response to A-2-67

Thank you for your comment.

Based upon the information provided in DOE letter 18-ESQ-0086, the generators associated with this discharge point have been replaced with permanent power. Ecology verified this information during an inspection on 4/11/2019. The discharge point will be removed from the AOP and designated as "Reserved." Please see public comment A-3-2.

Comment A-2-68

Attachment 1, Discharge Point 1.4.42, Page 131

The compliance requirement and required records for the first condition should be updated as requested in DOE/RL-2017-31 to better reflect the requirements in 40 CFR 60, Subpart III. The proposed language is directly from Section 60.4211 which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR will ensure a clear understanding of the requirement and its implementation.

Update the compliance requirement and required records to align with the regulatory requirements.

Ecology Response to A-2-68

Thank you for your comment.

Based upon the information provided in DOE letter 18-ESQ-0086, the generators associated with this discharge point have been replaced with permanent power. Ecology verified this information during an inspection on 4/11/2019. The discharge point will be removed from the AOP and designated as "Reserved." Please see public comment A-3-3.

Comment A-2-69

Attachment 1, Discharge Point 1.4.43, page 132

The compliance requirement and required records for the first condition should be updated as requested in the Hanford Site AOP Renewal Application (DOE/RL-2017-31) to better reflect the requirements in 40 CFR 60, Subpart III. The proposed language is directly from Section 60.4211 which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR and will ensure a clear understanding of the requirement and its implementation.

Update the compliance requirement and required records to align with the regulatory requirements.

Ecology Response to A-2-69

Thank you for your comment.

The permit will be modified to read:

Compliance Requirement

1. Compliance will be demonstrated by (A) operating and maintaining the engine and control devices according to the manufacturer's emission-related written instructions and (B) change only those emission-related settings that are permitted by the manufacturer.
2. If you do not install, configure, operate or maintain your engine and control device according to manufacturer's emission related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance by keeping a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if you do not install and configure the engine and control device according to manufacturer's emission-related written instructions, or you change the emission related settings in a way that is not permitted by the manufacturer, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

Required Records

1. Manufacturer's maintenance or operation manual
2. Developed maintenance plan, if applicable
3. Performance test, if applicable
4. Documentation of maintenance performed
5. Hours of operation

Comment A-2-70

Attachment 1, Discharge Point 1.4.44, Page 133

The compliance requirement and required records should be updated as requested in DOE/RL-2017-31 to better reflect the requirements in 40 CFR 60, Subpart JJJJ. The proposed language is directly from Section 60.4243 which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR and will ensure a clear understanding of the requirement and its implementation.

Update the compliance requirement and required records to align with the regulatory requirements.

Ecology Response to A-2-70

Thank you for your comment.

The permit will be modified to read:

Compliance Requirement

1. Compliance will be demonstrated by operating and maintaining engine and control device according to the manufacturer's emission-related written instructions and keep records of conducted maintenance.
2. If you do not operate and maintain the engine and control device according to manufacturer's emission-related written instructions, you must demonstrate compliance by keeping a maintenance plan and keep records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Required Records

1. Manufacturer's maintenance or operation manual
2. Developed maintenance plan, if applicable
3. Documentation of maintenance performed
4. Hours of operation

Comment A-2-71

Attachment 1, Discharge Point 1.4.45, Page 134

The compliance requirement and required records for the first condition should be updated as requested in DOE/RL-2017-31 to better reflect the requirements in 40 CFR 60, Subpart JJJJ. The proposed language is directly from Section 60.4243 which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR and will ensure a clear understanding of the requirement and its implementation.

Update the compliance requirement and required records to align with the regulatory requirements.

Ecology Response to A-2-71

Thank you for your comment.

The permit will be modified to read:

Compliance Requirement

1. Compliance will be demonstrated by operating and maintaining engine and control device according to the manufacturer's emission-related written instructions and keep records of conducted maintenance.
2. If you do not operate and maintain the engine and control device according to manufacturer's emission-related written instructions you must demonstrate compliance by keeping a maintenance plan and keep records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Required Records

1. Manufacturer's maintenance or operation manual
2. Developed maintenance plan, if applicable
3. Documentation of maintenance performed
4. Hours of operation

Comment A-2-72

Attachment 1, Discharge Point 1.4.47, Page 136

The compliance requirement should be updated to be consistent with the requirements in 40 CFR 60, Subpart III. The proposed language is directly from Section 60.4211 which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR and will ensure a clear understanding of the requirement and its implementation.

Please update text.

Compliance Requirement:

Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions; or a written maintenance plan in a manner consistent with good air pollution control practice for minimizing emissions.

Ecology Response to A-2-72

Thank you for your comment.

The permit will be modified to read:

Compliance Requirement

Compliance will be demonstrated by operating and maintaining the engine and after treatment control devices according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Required Records

1. Manufacturer's maintenance or operation manual
2. Developed maintenance plan, if applicable
3. Documentation of maintenance performed
4. Hours of operation

Comment A-2-73

Attachment 1, Discharge Point 1.4.48, Page 137

The engine has been removed from service. A Change Not Requiring a Permit Revision form is being prepared.

Modify text for this Discharge Point to reflect removal of the engine.

Ecology Response to A-2-73

Thank you for your comment.

The AOP will not be modified at this time to remove the discharge point. The discharge point will be removed from a future AOP revision or renewal once Ecology receives the formal request and verifies the engine has been removed from service.

Comment A-2-74

Attachment 1, Discharge Point 1.4.49, Page 138

The compliance requirement and required records for the first condition should be updated as requested in the Hanford Site AOP Renewal Application (DOE/RL-2017-31) to better reflect the requirements in 40 CFR 63, Subpart ZZZZ. The proposed language is directly from Section 63.6625(e) which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the intent, and the CFR itself, will ensure a clear understanding of the requirement and its implementation. Update the compliance requirement and required records for alignment with the regulatory requirements.

For 40 CFR 63 Subpart ZZZZ engines 40 CFR 63.6635(f) requires a non-resettable hour meter and 40 CFR 63.6655(f) require records of the hours of operation recorded through the use of a non-resettable hour meter

Change to read:

Compliance Requirement:

Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's emission-related written instructions or keeping a maintenance plan and records of conducted maintenance to demonstrate compliance and, to the extent practicable, maintaining and operating the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Required Records:

- (1) Manufacturer's maintenance or operation manual or operator developed written maintenance plan.*
- (2) Documentation of maintenance performed.*
- (3) Hour meter reading*
- (4) Developed maintenance plan, if applicable.*

Ecology Response to A-2-74

Thank you for your comment.

The permit will be modified to read:

Compliance Requirement

Compliance will be demonstrated by operating and maintaining the engine and after treatment control

devices according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Required Records

1. Manufacturer's maintenance or operation manual
2. Developed maintenance plan, if applicable
3. Documentation of maintenance performed
4. Hours of operation

Comment A-2-75

Attachment 1, Discharge Point 1.4.50, Page 139

The condition, compliance requirement and required records should be updated as requested in DOE/RL-2017-31 to better reflect the requirements in 40 CFR 60, Subpart ZZZZ. The proposed language is directly from Section 63.6625(e) which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR and will ensure a clear understanding of the requirement and its implementation.

Additionally, the maintenance requirements identified in the condition are for a compression ignition engine. This discharge point is a spark ignition engine. The condition should be modified to reflect this.

Update the compliance requirement and required records to align with the regulatory requirements.

Change (3) of the condition to read:

(3) Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first.

Ecology Response to A-2-75

Thank you for your comment.

The permit will be modified to read:

Condition Approval

Condition: (1) Operate and maintain the engine in accordance with Manufacturer's recommendations or instructions

(2) Change oil and filter every 500 hours of operation or annually, whichever comes first.

(3) Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first.

(4) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

Compliance Requirement

Compliance will be demonstrated by operating and maintaining the engine and after treatment control devices according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Required Records

1. Manufacturer's maintenance or operation manual
2. Developed maintenance plan, if applicable
3. Documentation of maintenance performed
4. Hours of operation

Comment A-2-76

Attachment 1, Discharge Point 1.4.51, Page 140

The condition, compliance requirement and required records should be updated as requested in DOE/RL-2017-31 to better reflect the requirements in 40 CFR 60, Subpart ZZZZ. The proposed language is directly from Section 63.6625(e) which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR and will ensure a clear understanding of the requirement and its implementation.

Update the compliance requirement and required records to align with the regulatory requirements.

Ecology Response to A-2-76

Thank you for your comment.

The permit will be modified to read:

Condition Approval

Condition: (1) Operate and maintain the engine in accordance with Manufacturer's recommendations or instructions

(2) Change oil and filter every 500 hours of operation or annually, whichever comes first.

(3) Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first.

(4) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

Compliance Requirement

Compliance will be demonstrated by operating and maintaining the engine and after treatment control devices according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Required Records

1. Manufacturer's maintenance or operation manual
2. Developed maintenance plan, if applicable
3. Documentation of maintenance performed
4. Hours of operation

Comment A-2-77

Attachment 1, Discharge Point 1.4.52, Page 141

The condition, compliance requirement and required records should be updated as requested in DOE/RL-2017-31 to better reflect the requirements in 40 CFR 60, Subpart ZZZZ. The proposed language is directly from Section 63.6625(e) which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR and will ensure a clear understanding of the requirement and its implementation.

Update the compliance requirement and required records to align with the regulatory requirements.

Ecology Response to A-2-77

Thank you for your comment.

The permit will be modified to read:

Condition Approval

Condition: (1) Operate and maintain the engine in accordance with Manufacturer's recommendations or instructions

(2) Change oil and filter every 500 hours of operation or annually, whichever comes first.

(3) Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first.

(4) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

Compliance Requirement

Compliance will be demonstrated by operating and maintaining the engine and after treatment control devices according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Required Records

1. Manufacturer's maintenance or operation manual
2. Developed maintenance plan, if applicable
3. Documentation of maintenance performed
4. Hours of operation

Comment A-2-78

Attachment 1, Discharge Point 1.4.53, Page 142

The compliance requirement and required records for the first condition should be updated as requested in the Hanford Site AOP Renewal Application (DOE/RL-2017-31) to better reflect the requirements in 40 CFR 63, Subpart ZZZZ. The proposed language is directly from Section 63.6625(e) which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR and will ensure a clear understanding of the requirement and its implementation. Update the compliance requirement and required records for alignment with the regulatory requirements.

For 40 CFR 63 Subpart ZZZZ engines 40 CFR 63.6635(f) requires a non-resettable hour meter and 40 CFR 63.6655(f) require records of the hours of operation recorded through the use of a non-resettable hour meter

Change to read:

Compliance Requirement: Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's emission-related written instructions or keeping a maintenance plan and records of conducted maintenance to demonstrate compliance and, to the extent practicable, maintaining and operating the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Required Records:

- (1) Manufacturer's maintenance or operation manual or operator developed written maintenance plan.*
- (2) Documentation of maintenance performed.*
- (3) Hour meter reading*
- (4) Developed maintenance plan, if applicable.*

Ecology Response to A-2-78

Thank you for your comment.

The permit will be modified to read:

Compliance Requirement

Compliance will be demonstrated by operating and maintaining the engine and after treatment control devices according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Required Records

1. Manufacturer's maintenance or operation manual
2. Developed maintenance plan, if applicable
3. Documentation of maintenance performed
4. Hours of operation

Comment A-2-79

Attachment 1, Discharge Point 1.4.56, Page 145

Update conditions in Discharge Point 1.4.56 to reflect the changes requested in Office of River Protection submittal 17-ECD-0046. This includes provisions for development and use of a maintenance plan consistent with the requirements in 40 CFR 60, Subpart IIII. The proposed language is from Section 60.4211 which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR and will ensure a clear understanding of the requirement and its implementation.

Please update conditions in Discharge Point 1.4.56 to reflect the changes requested in 17-ECD-0046.

Ecology Response to A-2-79

Thank you for your comment.

Not all revisions requested in 17-ECD-0046 were administrative changes and require public involvement in accordance with WAC 173-401-800. Ecology will evaluate the requested changes for inclusion in the next revision of AOP Renewal 3.

No change to the AOP is required.

Comment A-2-80

Attachment 1, Discharge Point 1.4.57, Page 146

The compliance requirement and required records for the first condition should be updated as requested in the Hanford Site AOP Renewal Application (DOE/RL-2017-31) to better reflect the requirements in 40 CFR 63, Subpart ZZZZ. The proposed language is directly from Section 63.6625(e) which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR and will ensure a clear understanding of the requirement and its implementation

Update the compliance requirement and required records to align with the regulatory requirements.

Ecology Response to A-2-80

Thank you for your comment.

The permit will be modified to read:

Compliance Requirement

Compliance will be demonstrated by operating and maintaining the engine and after treatment control devices according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Required Records

1. Manufacturer's maintenance or operation manual
2. Developed maintenance plan, if applicable
3. Documentation of maintenance performed
4. Hours of operation

Comment A-2-81

Attachment 1, Discharge Point 1.4.60, Page 149

The compliance requirement and required records for the first condition should be updated as requested in the Hanford Site AOP Renewal Application (DOE/RL-2017-31) to better reflect the requirements in 40 CFR 63, Subpart ZZZZ. The proposed language is directly from Section 63.6625(e) which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR and will ensure a clear understanding of the requirement and its implementation

Update the compliance requirement and required records to align with the regulatory requirements.

Ecology Response to A-2-81

Thank you for your comment.

The permit will be modified to read:

Compliance Requirement

Compliance will be demonstrated by operating and maintaining the engine and after treatment control devices according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Required Records

1. Manufacturer's maintenance or operation manual
2. Developed maintenance plan, if applicable
3. Documentation of maintenance performed
4. Hours of operation

Comment A-2-82

Attachment 1, Discharge Point 1.4.61, Page 150

The compliance requirement and required records for the first condition should be updated as requested in the Hanford Site AOP Renewal Application (DOE/RL-2017-31) to better reflect the requirements in 40 CFR 63, Subpart ZZZZ. The proposed language is directly from Section 63.6625(e) which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR and will ensure a clear understanding of the requirement and its implementation

Update the compliance requirement and required records to align with the regulatory requirements.

Ecology Response to A-2-82

Thank you for your comment.

The permit will be modified to read:

Compliance Requirement

Compliance will be demonstrated by operating and maintaining the engine and after treatment control devices according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Required Records

1. Manufacturer's maintenance or operation manual
2. Developed maintenance plan, if applicable
3. Documentation of maintenance performed
4. Hours of operation

Comment A-2-83

Attachment 1, Discharge Point 1.4.62, Page 151

The compliance requirement and required records for the first condition should be updated as requested in the Hanford Site AOP Renewal Application (DOE/RL-2017-31) to better reflect the requirements in 40 CFR 63, Subpart ZZZZ. The proposed language is directly from Section 63.6625(e) which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR and will ensure a clear understanding of the requirement and its implementation

Update the compliance requirement and required records to align with the regulatory requirements.

Ecology Response to A-2-83

Thank you for your comment.

The permit will be modified to read:

Compliance Requirement

Compliance will be demonstrated by operating and maintaining the engine and after treatment control devices according to the manufacturer's emission-related written instructions or develop your own

maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Required Records

1. Manufacturer's maintenance or operation manual
2. Developed maintenance plan, if applicable
3. Documentation of maintenance performed
4. Hours of operation

Comment A-2-84

Attachment 1, Discharge Point 1.4.63, Page 152

The compliance requirement and required records for the first condition should be updated as requested in the Hanford Site AOP Renewal Application (DOE/RL-2017-31) to better reflect the requirements in 40 CFR 63, Subpart ZZZZ. The proposed language is directly from Section 63.6625(e) which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR and will ensure a clear understanding of the requirement and its implementation

Update the compliance requirement and required records to align with the regulatory requirements.

Ecology Response to A-2-84

Thank you for your comment.

The permit will be modified to read:

Compliance Requirement

Compliance will be demonstrated by operating and maintaining the engine and after treatment control devices according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Required Records

1. Manufacturer's maintenance or operation manual
2. Developed maintenance plan, if applicable
3. Documentation of maintenance performed
4. Hours of operation

Comment A-2-85

Attachment 1, Discharge Point 1.4.64, Page 153

Update conditions in Discharge Point 1.4.64 to reflect the changes requested in Office of River Protection submittal 17-ECD-0046. This includes provisions for development and use of a maintenance plan consistent with the requirements in 40 CFR 60, Subpart IIII. The proposed language is from Section 60.4211 which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR and will ensure a clear understanding of the requirement and its implementation.

Please update conditions in Discharge Point 1.4.64 to reflect the changes requested in 17-ECD-0046.

Ecology Response to A-2-85

Thank you for your comment.

Not all revisions requested in 17-ECD-0046 were administrative changes and require public involvement in accordance with WAC 173-401-800. Ecology will evaluate the requested changes for inclusion in the next revision of AOP Renewal 3.

No change to the AOP is required.

Comment A-2-86

Attachment 1, Discharge Point 1.4.65, Page 154

Update conditions in Discharge Point 1.4.65 to reflect the changes requested in Office of River Protection submittal 17-ECD-0046. This includes provisions for development and use of a maintenance plan consistent with the requirements in 40 CFR 60, Subpart IIII. The proposed language is from Section 60.4211 which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR and will ensure a clear understanding of the requirement and its implementation.

Please update conditions in Discharge Point 1.4.65 to reflect the changes requested in 17-ECD-0046.

Ecology Response to A-2-86

Thank you for your comment.

Not all revisions requested in 17-ECD-0046 were administrative changes and require public involvement in accordance with WAC 173-401-800. Ecology will evaluate the requested changes for inclusion in the next revision of AOP Renewal 3.

No change to the AOP is required.

Comment A-2-87

Attachment 1, Discharge Point 1.4.66, Page 155

Update conditions in Discharge Point 1.4.66 to reflect the changes requested in Office of River Protection submittal 17-ECD-0046. This includes provisions for development and use of a maintenance plan consistent with the requirements in 40 CFR 60, Subpart IIII. The proposed language is from Section 60.4211 which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR and will ensure a clear understanding of the requirement and its implementation.

Please update conditions in Discharge Point 1.4.66 to reflect the changes requested in 17-ECD-0046.

Ecology Response to A-2-87

Thank you for your comment.

Not all revisions requested in 17-ECD-0046 were administrative changes and require public involvement in accordance with WAC 173-401-800. Ecology will evaluate the requested changes for inclusion in the next revision of AOP Renewal 3.

No change to the AOP is required.

Comment A-2-88

Attachment 1, Discharge Point 1.4.67, Page 156

Update conditions in Discharge Point 1.4.67 to reflect the changes requested in Office of River Protection submittal 17-ECD-0046. This includes provisions for development and use of a maintenance plan consistent with the requirements in 40 CFR 60, Subpart III. The proposed language is from Section 60.4211 which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR and will ensure a clear understanding of the requirement and its implementation.

Please update conditions in Discharge Point 1.4.67 to reflect the changes requested in 17-ECD-0046.

Ecology Response to A-2-88

Thank you for your comment.

Not all revisions requested in 17-ECD-0046 were administrative changes and require public involvement in accordance with WAC 173-401-800. Ecology will evaluate the requested changes for inclusion in the next revision of AOP Renewal 3.

No change to the AOP is required.

Comment A-2-89

Attachment 1, Discharge Point 1.4.68, Page 157

Update conditions in Discharge Point 1.4.68 to reflect the changes requested in Office of River Protection submittal 17-ECD-0046. This includes provisions for development and use of a maintenance plan consistent with the requirements in 40 CFR 60, Subpart III. The proposed language is from Section 60.4211 which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR and will ensure a clear understanding of the requirement and its implementation.

Please update conditions in Discharge Point 1.4.68 to reflect the changes requested in 17-ECD-0046.

Ecology Response to A-2-89

Thank you for your comment.

Not all revisions requested in 17-ECD-0046 were administrative changes and require public involvement in accordance with WAC 173-401-800. Ecology will evaluate the requested changes for inclusion in the next revision of AOP Renewal 3.

No change to the AOP is required.

Comment A-2-90

Attachment 1, Discharge Point 1.4.69, Page 158

Update Discharge Point 1.4.69 to reflect the change requested in Office of River Protection submittal 17-ECD-0046 to remove this Discharge Point from the AOP.

*Please update Attachment 1 to reflect removal of Discharge Point 1.4.69.
1.4.69 Reserved*

Ecology Response to A-2-90

Thank you for your comment.

The AOP was drafted before letter 17-ECD-0046 was received so discharge point 1.4.69 was not removed from AOP Renewal 3. Upon verification of removal, the discharge point will be removed and replaced with a 'reserved' status upon subsequent revision of the AOP.

Comment A-2-91

Attachment 1, Discharge Point 1.4.70, Page 159

Update conditions in Discharge Point 1.4.70 to reflect the changes requested in Office of River Protection submittal 17-ECD-0046. This includes provisions for development and use of a maintenance plan consistent with the requirements in 40 CFR 60, Subpart IIII. The proposed language is from Section 60.4211 which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR and will ensure a clear understanding of the requirement and its implementation.

Please update conditions in Discharge Point 1.4.70 to reflect the changes requested in 17-ECD-0046.

Ecology Response to A-2-91

Thank you for your comment.

Not all revisions requested in 17-ECD-0046 were administrative changes and require public involvement in accordance with WAC 173-401-800. Ecology will evaluate the requested changes for inclusion in the next revision of AOP Renewal 3.

No change to the AOP is required.

Comment A-2-92

Attachment 1, Discharge Point 1.4.71, Page 160

The compliance requirement should be updated to be consistent with the requirements in 40 CFR 60, Subpart IIII. The proposed language is directly from Section 60.4211 which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR and will ensure a clear understanding of the requirement and its implementation.

Please update text.

Compliance Requirement:

Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions; or a written maintenance plan in a manner consistent with good air pollution control practice for minimizing emissions.

Ecology Response to A-2-92

Thank you for your comment.

The permit will be modified to read:

Compliance Requirement

1. Compliance will be demonstrated by (A) operating and maintaining the engine and control devices according to the manufacturer's emission-related written instructions, and (B) change only those emission-related settings that are permitted by the manufacturer.
2. If you do not install, configure, operate or maintain your engine and control device according to manufacturer's emission related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance by keeping a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if you do not install and configure the engine and control device according to manufacturer's emission-related written instructions, or you change the emission related settings in a way that is not permitted by the manufacturer, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

Required Records

1. Manufacturer's maintenance or operation manual
2. Developed maintenance plan, if applicable
3. Performance test, if applicable
4. Documentation of maintenance performed
5. Hours of operation

Comment A-2-93

Attachment 1, Discharge Point 1.4.72, Page 161

The compliance requirement and required records should be updated to be consistent with the request changes for other engines in the permit subject to 40 CFR 60, Subpart JJJJJ. The proposed language is directly from Section 60.4243 which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR and will ensure a clear understanding of the requirement and its implementation.

Update the compliance requirement and required records to read:

Condition Approval

Condition:

- (1) Hydrocarbons (HC) and nitrogen oxides (NOX) emission limit of 13.4 g/kW-hr.*
- (2) Carbon monoxide (CO) emission limit of 519 g/kW-hr.*

Compliance Requirement:

Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's emission-related written instructions or keeping a maintenance plan and records of conducted maintenance to demonstrate compliance and, to the extent practicable, maintaining and operating the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Required Records:

- (1) Manufacturer's maintenance or operation manual.*
- (2) Documentation of maintenance performed.*
- (3) Hours of operations (4) Developed maintenance plan, if applicable.*

State-Only: No.

Calculation Model: Not applicable.

Ecology Response to A-2-93

Thank you for your comment.

The permit will be modified to read:

Compliance Requirement

1. Compliance will be demonstrated by operating and maintaining engine and control device according to the manufacturer's emission related written instructions and keep records of conducted maintenance.
2. If you do not operate and maintain the engine and control device according to manufacturer's emission-related written instructions, you must demonstrate compliance by keeping a maintenance plan and keep records of conducted maintenance, and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Required Records

1. Manufacturer's maintenance or operation manual
2. Developed maintenance plan, if applicable
3. Documentation of maintenance performed
4. Hours of operation

Comment A-2-94

Attachment 1, Discharge Point 1.4.73, page 162

The compliance requirement and required records for the first condition should be updated as requested in the Hanford Site AOP Renewal Application (DOE/RL-2017-31) to better reflect the requirements in 40 CFR 63, Subpart ZZZZ. The proposed language is directly from Section 63.6625(e) which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR and will ensure a clear understanding of the requirement and its implementation

Update the compliance requirement and required records for alignment with the regulatory requirements.

Ecology Response to A-2-94

Thank you for your comment.

The permit will be modified to read:

Compliance Requirement

Compliance will be demonstrated by operating and maintaining the engine and after treatment control devices according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Required Records

1. Manufacturer's maintenance or operation manual
2. Developed maintenance plan, if applicable
3. Documentation of maintenance performed
4. Hours of operation

Comment A-2-95

Attachment 1, Discharge Point 1.4.74, page 163

The compliance requirement and required records for the first condition should be updated as requested in the Hanford Site AOP Renewal Application (DOE/RL-2017-31) to better reflect the requirements in 40 CFR 63, Subpart ZZZZ. The proposed language is directly from Section 63.6625(e) which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR and will ensure a clear understanding of the requirement and its implementation

Update the compliance requirement and required records to align with the regulatory requirements.

Ecology Response to A-2-95

Thank you for your comment.

The permit will be modified to read:

Compliance Requirement

Compliance will be demonstrated by operating and maintaining the engine and after treatment control devices according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Required Records

1. Manufacturer's maintenance or operation manual
2. Developed maintenance plan, if applicable
3. Documentation of maintenance performed
4. Hours of operation

Comment A-2-96

Attachment 1, Discharge Point 1.4.75, Page 164

The compliance requirement and required records for the first condition should be updated as requested in the Hanford Site AOP Renewal Application (DOE/RL-2017-31) to better reflect the requirements in 40 CFR 60, Subpart IIII. The proposed language is directly from Section 60.4211 which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR and will ensure a clear understanding of the requirement and its implementation. Update the compliance requirement and required records for alignment with the regulatory requirements
The use of a non-resettable hour meter is not required for non-emergency use engines. Requirement is not based in regulation and not required for non-emergency use engines

Change to read:

Compliance Requirement:

Compliance will be determined by operating and maintaining the engines in accordance with the manufacturer's emission-related written instructions or keeping a maintenance plan and records of conducted maintenance to demonstrate compliance and, to the extent practicable, maintaining and operating the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Required Records:

- (1) Manufacturer's maintenance or operation manual or operator developed written maintenance plan.*
- (2) Documentation of maintenance performed*
- (3) Developed maintenance plan, if applicable.*

ECOLOGY Response to A-2-96

Thank you for your comment.

The permit will be modified to read:

Compliance Requirement

1. Compliance will be demonstrated by (A) operating and maintaining the engine and control devices according to the manufacturer's emission-related written instructions, and (B) change only those emission-related settings that are permitted by the manufacturer.
2. If you do not install, configure, operate or maintain your engine and control device according to manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance by keeping a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if you do not install and configure the engine and control device according to manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

Required Records

1. Manufacturer's maintenance or operation manual
2. Developed maintenance plan, if applicable
3. Performance test, if applicable
4. Documentation of maintenance performed
5. Hours of operation

Comment A-2-97

Attachment 1, Discharge Point 1.4.76, Page 166

The compliance requirement and required records for the first condition should be updated as requested in the Hanford Site AOP Renewal Application (DOE/RL-2017-31) to better reflect the requirements in 40 CFR 63, Subpart ZZZZ. The proposed language is directly from Section 63.6625(e) which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR and will ensure a clear understanding of the requirement and its implementation.

Limitations on hours of usage are not required for non-emergency use engines. Requirement is not based in regulation and not required for non-emergency use engines

Change to read:

Compliance Requirement:

Compliance will be determined by operating and maintaining the engines in accordance with the manufacturer's emission-related written instructions or keeping a maintenance plan and records of conducted maintenance to demonstrate compliance and, to the extent practicable, maintaining and operating the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Required Records:

- (1) Manufacturer's maintenance or operation manual or operator developed written maintenance plan.*
- (2) Documentation of maintenance performed*
- (3) Developed maintenance plan, if applicable.*

Ecology Response to A-2-97

Thank you for your comment.

The permit will be modified to read:

Compliance Requirement

Compliance will be demonstrated by operating and maintaining the engine and after treatment control devices according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Required Records

1. Manufacturer's maintenance or operation manual
2. Developed maintenance plan, if applicable
3. Documentation of maintenance performed
4. Hours of operation

Comment A-2-98

Attachment 1, Discharge Point 1.4.77, Page 168

The compliance requirement and required records for the first condition should be updated as requested in the Hanford Site AOP Renewal Application (DOE/RL-2017-31) to better reflect the requirements in 40 CFR 60, Subpart III. The proposed language is directly from Section 60. 4211 which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR and will ensure a clear understanding of the requirement and its implementation. Update the compliance requirement and required records for alignment with the regulatory requirements

The use of a non-resettable hour meter is not required for non-emergency use engines. Requirement is not based in regulation and not required for non-emergency use engines

Change to read:

Compliance Requirement: Compliance will be determined by operating and maintaining the engines in accordance with the manufacturer's emission-related written instructions or keeping a maintenance plan and records of conducted maintenance to demonstrate compliance and, to the extent practicable, maintaining and operating the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Required Records:

- (1) Manufacturer's maintenance or operation manual or operator developed written maintenance plan.*
- (2) Documentation of maintenance performed*
- (3) Developed maintenance plan, if applicable.*

Ecology Response to A-2-98

Thank you for your comment.

The permit will be modified to read:

Compliance Requirement

1. Compliance will be demonstrated by (A) operating and maintaining the engine and control devices according to the manufacturer's emission-related written instructions, and (B) change only those emission-related settings that are permitted by the manufacturer.
2. If you do not install, configure, operate or maintain your engine and control device according to manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance by keeping a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if you do not install and configure the engine and control device according to manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

Required Records

1. Manufacturer's maintenance or operation manual
2. Developed maintenance plan, if applicable
3. Performance test, if applicable
4. Documentation of maintenance performed
5. Hours of operation

Comment A-2-99

Attachment 1, Discharge Point 1.4.78, Page 170

The compliance requirement and required records for the first condition should be updated as requested in the Hanford Site AOP Renewal Application (DOE/RL-2017-31) to better reflect the requirements in 40 CFR 60, Subpart III. The proposed language is directly from Section 60. 4211 which focuses on emission-related maintenance and allows development of a maintenance plan consistent with good air pollution control practices for minimizing emissions. Consistency with the CFR and will ensure a clear understanding of the requirement and its implementation. Update the compliance requirement and required records for alignment with the regulatory requirements

The use of a non-resettable hour meter is not required for non-emergency use engines. Requirement is not based in regulation and not required for non-emergency use engines

Change to read:

Compliance Requirement:

Compliance will be determined by operating and maintaining the engines in accordance with the manufacturer's emission-related written instructions or keeping a maintenance plan and records of conducted maintenance to demonstrate compliance and, to the extent practicable, maintaining and operating the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Required Records:

- (1) Manufacturer's maintenance or operation manual or operator developed written maintenance plan.*
- (2) Documentation of maintenance performed*
- (3) Developed maintenance plan, if applicable.*

Ecology Response to A-2-99

Thank you for your comment.

The permit will be modified to read:

Compliance Requirement

1. Compliance will be demonstrated by (A) operating and maintaining the engine and control devices according to the manufacturer's emission-related written instructions, and (B) change only those emission-related settings that are permitted by the manufacturer.
2. If you do not install, configure, operate or maintain your engine and control device according to manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance by keeping a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if you do not install and configure the engine and control device according to manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

Required Records

1. Manufacturer's maintenance or operation manual
2. Developed maintenance plan, if applicable
3. Performance test, if applicable
4. Documentation of maintenance performed
5. Hours of operation

Comment A-2-100

Attachment 1, Discharge Point 1.4.79, Page 172

Typographical error. Abbreviation for hydrocarbons is not as indicated in Approval Order DE15NWP-001, Rev. 1.

Please correct typographical error.

D. Emissions of total unburned hydrocarbons (HC/VOC) will not exceed 0.257 tons per year.

Ecology Response to A-2-100

Thank you for your comment.

The permit will be modified to correct the referenced typographical error for hydrocarbons.

Comment A-2-101

Attachment 1, Discharge Point to be determined (TBD)

Include new discharge point as requested in Office of River Protection submittal 17-ECD-0049.

Please include new discharge point and conditions as requested in 17-ECD-0049 in Attachment 1 for AX Farm Area engines.

Ecology Response to A-2-101

Thank you for your comment.

The request for a new discharge point will be addressed in the next revision of the AOP. At this time, the new discharge point number has not been determined.

Comment A-2-102

Attachment 1, Discharge Point TBD

Include new discharge point as requested in Office of River Protection submittal 17-ECD-0049.

Please include new discharge point and conditions as requested in 17-ECD-0049 in Attachment 1 for AY-102 Control Trailer Area engines.

Ecology Response to A-2-102

Thank you for your comment.

The request for a new discharge point will be addressed in the next revision of the AOP. At this time, the new discharge point number has not been determined.

Comment A-2-103

Attachment 1, Discharge Point TBD

Include new discharge point as requested in Office of River Protection submittal 17-ECD-0049.

Please include new discharge point and conditions as requested in 17-ECD-0049 in Attachment 1 for Inter-Farm AX Access Area engines.

Ecology Response to A-2-103

Thank you for your comment.

The request for a new discharge point will be addressed in the next revision of the AOP. At this time, the new discharge point number has not been determined.

Comment A-2-104

Attachment 1, Discharge Point TBD

Include new discharge point as requested in Office of River Protection submittal 17-ECD-0049.

Please include new discharge point and conditions as requested in 17-ECD-0049 in Attachment 1 for Inter-Farm Construction Area engines.

Ecology Response to A-2-104

Thank you for your comment.

The request for a new discharge point will be addressed in the next revision of the AOP. At this time, the new discharge point number has not been determined.

Comment A-2-105

Attachment 1, Discharge Point TBD

Include new discharge point as requested in Office of River Protection submittal 17-ECD-0049.

Please include new discharge point and conditions as requested in 17-ECD-0049 in Attachment 1 for Inter-Farm Parking Area engines.

Ecology Response to A-2-105

Thank you for your comment.

The request for a new discharge point will be addressed in the next revision of the AOP. At this time, the new discharge point number has not been determined.

Comment A-2-106

Attachment 1, Discharge Point TBD

Include new discharge point as requested in Office of River Protection submittal 17-ECD-0049.

Please include new discharge point and conditions as requested in 17-ECD-0049 in Attachment 1 for Marshalling Yard Area engines.

Ecology Response to A-2-106

Thank you for your comment.

The request for a new discharge point will be addressed in the next revision of the AOP. At this time, the new discharge point number has not been determined.

Comment A-2-107

Attachment 1, Discharge Point TBD

Include new discharge point as requested in Office of River Protection submittal 17-ECD-0049.

Please include new discharge point and conditions as requested in 17-ECD-0049 in Attachment 1 for MO164, MO173, and MO174 Trailer Area engines.

Ecology Response to A-2-107

Thank you for your comment.

The request for a new discharge point will be addressed in the next revision of the AOP. At this time, the new discharge point number has not been determined.

Comment A-2-108

Attachment 1, Discharge Point TBD

Include new discharge point as requested in Office of River Protection submittal 17-ECD-0049.

Please include new discharge point and conditions as requested in 17-ECD-0049 in Attachment 1 for MO194 and MO195 Trailer Area engines.

Ecology Response to A-2-108

Thank you for your comment.

The request for a new discharge point will be addressed in the next revision of the AOP. At this time, the new discharge point number has not been determined.

Comment A-2-109

Attachment 1, Discharge Point TBD

The following Discharge Points should be added to the AOP per DOE letter 17-ESQ-0096.

- Wye Barricade (30 horsepower, propane-fueled, emergency generator)*
- 506BA telecommunication facility north (100 horsepower, diesel-fueled, emergency generator)*
- 182B reservoir and pump house (160 horsepower, diesel-fueled, emergency generator)*

Add discharge points to AOP.

Ecology Response to A-2-109

Thank you for your comment.

The request for a new discharge point will be addressed in the next revision of the AOP. At this time, the new discharge point number has not been determined.

Comment A-2-110

Attachment 1, Discharge Point TBD

Add the new 385 Building diesel-fueled emergency fire pump engine to Attachment 1, Section 1.4 Discharge Points, as described in DOE Letter 18-ESQ-0007.

Add discharge point to read:

1.4.XX Discharge Point: 385 Building

385 Building diesel-fired emergency fire pump engine; Engine power rating: 175 horsepower; Cylinder displacement: 6.7 liters; Model Year: 2009+

Requirement Citation: NSPS Subpart IIII

Condition Approval

Condition:

(1) Non-methane hydrocarbons (NMHC) and nitrogen oxides (NOX) emission limit of 4.0 g/KW-hr.

(2) Particulate matter emission limit of 0.20 g/KW-hr.

Compliance Requirement:

Compliance will be determined by operating and maintaining the engine in accordance with the manufacturer's emission-related written instructions.

Required Records:

(1) Manufacturer's maintenance or operation manual.

(2) Documentation of maintenance performed.

State-Only: No.

Calculation Model: Not applicable.

Condition Approval Condition: Use of fuel per 40 CFR 60.4207 (b).

Periodic Monitoring:

Compliance will be demonstrated by use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight).

Test Method: Not applicable.

Test Frequency: Not applicable.

Required Records: Vendor certification for diesel fuel sulfur content for all purchases.

State-Only: No.

Calculation Model: Not applicable.

Ecology Response to A-2-110

Thank you for your comment.

The request for a new discharge point will be addressed in the next revision of the AOP. At this time, the new discharge point number has not been determined.

Comment A-2-111

Attachment 1, Discharge Point TBD

On November 29, 2017, the Off-Permit Change Notice adding non-emergency diesel powered air compressor was sent to the Department of Ecology via letter 18-ESQ-0017.

Please add new discharge point to Attachment 1.

Ecology Response to A-2-111

Thank you for your comment.

The request for a new discharge point will be addressed in the next revision of the AOP. At this time, the new discharge point number has not been determined.

Comment A-2-112

Attachment 1, 2.1, Page 176

Remove the sentence that reads: "When any visible emissions surveys are performed, a record will be established indicating if visible emissions were or were not observed."

There are multiple reasons why visible emission checks are not needed on these stacks:

- 2 HEPA filters in series*
- HEPA filter performance testing requirements*
- Redundant systems that allow for continued operation (i.e.: multiple trains)*
- Hi/Low differential pressures detected will initiate auto shutdown*
- Most stacks have continuous record samplers*
- If visible emissions were detected, the response would be addressed through our abnormal operating procedures which would trigger an emergency response resulting in shutdown of the train and evacuation. In that event, personnel would not be able to perform a Method 9 Opacity Test when visible emissions are occurring.*

Near field monitors are in continuous operation

Note: Comment numbers 39, 56, 57, 60, 112, 113, and 117 are closely related.

Please remove the sentence that reads:

- "When any visible emissions surveys are performed, a record will be established indicating if visible emissions were or were not observed."*

Ecology Response to A-2-112

Thank you for your comment.

Visible emission conditions are incorporated into the permit as a requirement of WAC 173-400-040(2). Records shall be maintained if visible emissions surveys are performed.

No change to the AOP is required.

Comment A-2-113

Attachment 1, 2.1, Page 177

Remove bolded add-on to sentence:

*"Maintain abatement control technology as required in Attachment 2 of the Hanford AOP for that particular emission unit, **unless specific requirements in Section 1.4 are listed.**"*

There are multiple reasons why visible emission checks are not needed on these stacks:

- 2 HEPA filters in series*
- HEPA filter performance testing requirements*
- Redundant systems that allow for continued operation (i.e.: multiple trains)*
- Hi/Low differential pressures detected will initiate auto shutdown*
- Most stacks have continuous record samplers*
- If visible emissions were detected, the response would be addressed through our abnormal operating procedures which would trigger an emergency response resulting in shutdown of the train and evacuation. In that event, personnel would not be able to perform a Method 9 Opacity Test when visible emissions are occurring.*
- Near field monitors are in continuous operation*

Note: Comment numbers 39, 56, 57, 60, 112, 113, and 117 are closely related.

Please remove bolded add-on to sentence:

*"Maintain abatement control technology as required in Attachment 2 of the Hanford AOP for that particular emission unit, **unless specific requirements in Section 1.4 are listed.**"*

Ecology Response to A-2-113

Thank you for your comment.

Specific requirements listed in Section 1.4 of Attachment 1 for abatement control technologies are underlying requirements that must be met in addition to the requirements in Attachment 2. The statement "unless specific requirements in Section 1.4 are listed" will not be removed.

No change to the AOP is required.

Comment A-2-114

Attachment 1 Statement of Basis, Section 1.4, Page 10, Lines 4

It is requested that additional information be added after line four that addresses the requirements for owners and operators of stationary internal combustion engines relative to 40 CFR 60 Subpart IIII, 40 CFR 60 Subpart JJJJ, and 40 CFR 63 Subpart ZZZZ. This information will support the language proposed the Hanford Site AOP Renewal Application (DOE/RL-2017-31) and elsewhere in these comments.

Provided additional information after line four that addresses the requirements for owners and operators of stationary internal combustion engines relative to 40 CFR 60 Subpart IIII, 40 CFR 60 Subpart JJJJ, and 40 CFR 63 Subpart ZZZZ. Proposed language is provided below.

These rules define the emission limitations, operating limitations and other requirements for owners and operators of stationary internal combustion engines. Generally, emission limitations are achieved by operating and maintaining the engine in accordance manufacturer's emission-related written instructions. Emission-related maintenance means maintenance that substantially affects emissions or is likely to substantially affect emission deterioration. The rules allow an owner or operator to develop their own maintenance plan that, to the extent practical, provides for maintaining and operating the engine in a manner consistent with good air pollution control practice for minimizing emissions. Additional requirements apply depending on the size of the engine.

Ecology Response to A-2-114

Thank you for your comment.

The statement of basis is not an enforceable document. Additional language will not be added to the statement of basis regarding 40 CFR 60 Subpart IIII, 40 CFR 60 Subpart JJJJ, and 40 CFR 63 Subpart ZZZZ engines. The requirements regarding 40 CFR 60 Subpart IIII, 40 CFR 60 Subpart JJJJ, and 40 CFR 63 Subpart ZZZZ engines are listed in the Attachment 1 for each applicable discharge point.

No change to the AOP is required.

Comment A-2-115

Attachment 1 Statement of Basis, Section 1.4, Page 10, Lines 28-38 These lines address the approval to construct for the Waste Sampling and Characterization Facility. This facility ceased operations in 2014. It seems this information can be removed from the Statement of Basis. Remove information regarding the approval to construct for the Waste Sampling and Characterization Facility from the Statement of Basis.

Ecology Response to A-2-115

Thank you for your comment.

The statement of basis is not an enforceable document. Information regarding the Waste Sampling and Characterization Facility will be removed from the statement of basis.

Comment A-2-116

Attachment 1 Statement of Basis, 2.1, Page 11, Lines 19 & 20

This statement implies Method 9 is always used as the compliance method when visible emissions are observed for units using the Tier 1 alternate method. This conflicts with the enforceable language in Section 2.1 Tier 1 in Attachment 1. Revise language for consistency between the compliance document and the statement of basis.

Change to read:

The method consists of requiring personnel observation and EPA Method 9, if visible emissions are observed and corrective actions do not correct the visible emissions.

Ecology Response to A-2-116

Thank you for your comment.

The statement of basis is not an enforceable document. Visible emissions described in Section 2.1 (Tier 1 - Part A and Part B) of Attachment 1 describe when visible emissions shall be recorded by a person certified in Method 9.

No change to the AOP is required.

Comment A-2-117

Attachment 1 Statement of Basis, 2.1, Page 11, , Line 32

Delete the additional wording bolded below:

"Because of the particulate control effectiveness provided by HEPA filters, no additional opacity

monitoring, beyond visible emissions surveys, is required..."

There are multiple reasons that visible emission surveys are not needed on these stacks:

- 2 HEPA filters in series*
- HEPA filter performance testing requirements*
- Redundant systems that allow for continued operation (i.e.: multiple trains)*
- Hi/Low differential pressures detected will initiate auto shutdown*
- Most stacks have continuous record samplers*
- If visible emissions were detected, the response would be addressed through our abnormal operating procedures which would trigger an emergency response resulting in shutdown of the train and evacuation. In that event, personnel would not be able to perform a Method 9 Opacity Test when visible emissions are occurring.*
- Near field monitors are in continuous operation*
-

Note: Comment numbers 39, 56, 57, 60, 112, 113, and 117 are closely related.

Please delete the additional wording bolded below:

*"Because of the particulate control effectiveness provided by HEPA filters, no additional opacity monitoring, **beyond visible emissions surveys**, is required..."*

Ecology Response to A-2-117

Thank you for your comment.

The statement of basis is not an enforceable document. Compliance with the visible emission standards of WAC 173-400-040(2) are required for every emission unit. Other underlying requirements, such as approval orders, may contain additional opacity requirements, which may be satisfied by Attachment 1, Section 2.1, Tier 3 requirements. The statement of basis will not be modified to exclude the visible emission survey requirement for emission units with abatement control as described in Tier 3 visible emission surveys.

No change to the AOP is required.

Comment A-2-118

Attachment 1 Statement of Basis, Appendix C, Page 35

Discharge Point 1.4.13 should be added to the list of removed discharge points.

Add Discharge Point 1.4.13 to the list of removed discharge points.

Ecology Response to A-2-118

Thank you for your comment.

The Statement of Basis is not an enforceable document. This appendix is used to track the changes in AOP revisions. As this is a renewal deemed as a new permit, the entire AOP "has changed" and all parts are subject to comment. If AOP Renewal 3 is revised in the future, then any changes will be documented in this appendix and in-scope comments will be limited to only these changes. All other comments will be deemed as out-of-scope.

To clarify this, Appendix C will have all the text deleted and the section marked as reserved.

Comment A-2-119

Attachment 1 Statement of Basis, Appendix C, Page 35

Discharge Point 1.4.37 should be added to the list of removed discharge points.

Add Discharge Point 1.4.37 to the list of removed discharge points.

Ecology Response to A-2-119

Thank you for your comment.

The Statement of Basis is not an enforceable document. This appendix is used to track the changes in AOP revisions. As this is a renewal deemed as a new permit, the entire AOP "has changed" and all parts are subject to comment. If AOP Renewal 3 is revised in the future, then any changes will be documented in this appendix and in-scope comments will be limited to only these changes. All other comments will be deemed as out-of-scope.

To clarify this, Appendix C will have all the text deleted and the section marked as reserved.

Comment A-2-120

Attachment 1 Statement of Basis, Appendix C, Page 35

Discharge Point 1.4.40 should be added to the list of removed discharge points.

Add Discharge Point 1.4.40 to the list of removed discharge points.

Ecology Response to A-2-120

Thank you for your comment.

The Statement of Basis is not an enforceable document. This appendix is used to track the changes in AOP revisions. As this is a renewal deemed as a new permit, the entire AOP "has changed" and all parts are subject to comment. If AOP Renewal 3 is revised in the future, then any changes will be documented in this appendix and in-scope comments will be limited to only these changes. All other comments will be deemed as out-of-scope.

To clarify this, Appendix C will have all the text deleted and the section marked as reserved.

Comment A-2-121

Attachment 1 Statement of Basis, Appendix C, Page 37

The following Discharge Points should be added to the list of added discharge points (DOE letter 17-ESQ-0096).

- Wye Barricade*
- 506BA*
- 182B reservoir and pump house*

Add Wye Barricade, 506BA and 182B reservoir and pump house to list of added discharge points.

Ecology Response to A-2-121

Thank you for your comment.

The Statement of Basis is not an enforceable document. This appendix is used to track the changes in AOP revisions. As this is a renewal deemed as a new permit, the entire AOP "has changed" and all parts are subject to comment. If AOP Renewal 3 is revised in the future, then any changes will be documented in this appendix and in-scope comments will be limited to only these changes. All other comments will be deemed as out-of-scope.

To clarify this, Appendix C will have all the text deleted and the section marked as reserved.

Comment A-2-122

Attachment 2

Observation: There is some inconsistency as to when a citation is in bold and when it is not. Also, there is some inconsistency when the CFR reference is all together as in 40CFR61 and when it is not as in 40 CFR 61. The 'subpart' is used in relation to a regulatory reference, it is sometimes capitalized and sometimes not.

Recommend doing a search of key-words to correct editorial inconsistencies.

Ecology Response to A-2-122

Thank you for your comment.

The Washington Department of Health will work with USDOE to identify and make changes in the next issuance of the FF-01 license.

These changes do not impact 40 CFR 61 Subparts A and H, so the creation of an addendum to the AOP is not required and no change to the AOP is required.

Comment A-2-123

Attachment 2, 5.1.1, Page 41

Section 5.1.1, Monitoring is missing a closing parenthesis at the end of the WAC reference.

*Change to read:
(WAC 246-247-075(8) and (9)).*

Ecology Response to A-2-123

Thank you for your comment.

The Washington Department of Health will work with USDOE to identify and make changes in the next issuance of the FF-01 license.

These changes do not impact 40 CFR 61 Subparts A and H. As a result an addendum to the AOP is not required and no change to the AOP is required.

Comment A-2-124

Attachment 2, Emission Unit ID 361 (EP-325-01-S)

Typo at the beginning of Condition 2.

Change to read:

2) This approval...

Ecology Response to A-2-124

Thank you for your comment.

The Washington Department of Health will work with USDOE to identify and make changes in the next issuance of the FF-01 license.

These changes do not impact 40 CFR 61 Subparts A and H. As a result an addendum to the AOP is not required and no change to the AOP is required.

Comment A-2-125

Attachment 2, Emission Unit ID 1185 (361 Building)

Please remove excess bracket from citation in Condition 5.

Change to read:

5) RADIONUCLIDES - Activities at the 361 Building will be assessed to ensure that no radionuclides are handled that are not listed in this license. If any activity at the 361 Building results in a new radionuclide being handled at the building, a written notification will be made to the Washington State Department of Health (email is acceptable). WAC 246-247-060(5)

Ecology Response to A-2-125

Thank you for your comment.

The Washington Department of Health will work with USDOE to identify and make changes in the next issuance of the FF-01 license.

These changes do not impact 40 CFR 61 Subparts A and H. As a result an addendum to the AOP is not required and no change to the AOP is required.

Comment A-2-126

Attachment 2, Emission Unit ID 1370 (EP-331-09-S)

Please correct inventory tracking system name.

Change to read:

...tracked using the Pacific Northwest National Laboratory Radioactive Materials Tracking System."

Ecology Response to A-2-126

Thank you for your comment.

The Washington Department of Health will work with USDOE to identify and make changes in the next issuance of the FF-01 license.

These changes do not impact 40 CFR 61 Subparts A and H. As a result an addendum to the AOP is not required and no change to the AOP is required.

Comment A-2-127

Attachment 2, Emission Unit ID 1370 (EP-331-09-S)

Condition 5 is missing and should be added.

Change to read:

5) RELEASE RATE - Emission unit will be limited to an unabated gross alpha release rate of $1.93E-05$ Curies/year for alpha emitting isotopes.

Ecology Response to A-2-127

Thank you for your comment.

The Washington Department of Health will work with USDOE to identify and make changes in the next issuance of the FF-01 license.

These changes do not impact 40 CFR 61 Subparts A and H. As a result an addendum to the AOP is not required and no change to the AOP is required.

Comment A-2-128

Attachment 2, Enclosure 4, Air Monitoring Stations, pages 914 - 915

The Surface Environmental Surveillance Program (SESP) has been replaced by the Hanford Site Environmental Monitoring Program as identified in DOE/RL-91-50 Rev 7, and DOE/RL-2017-24 Rev 0.

Recommend replacing the two references to SESP in the WDOH RAEL-FF-01, Enclosure 4, Air Monitoring Stations, pages 914 and 915, with "Hanford Site Environmental Monitoring Program"

Ecology Response to A-2-128

Thank you for your comment.

The Washington Department of Health will work with USDOE to identify and make changes in the next issuance of the FF-01 license.

These changes do not impact 40 CFR 61 Subparts A and H. As a result an addendum to the AOP is not required and no change to the AOP is required.

Comment A-2-129

WDOH Statement of Basis, 3.0, Page 6, line 24

WDOH uses a three or four digit Emission Unit ID format. Please update text accordingly.

Change to read:

In attachment 2, Health used a three or four digit Emission Unit ID in small font under the heading text.

Ecology Response to A-2-129

Thank you for your comment.

The statement of basis is not an enforceable document. The referenced text is only an example of an emission unit.

No change to the AOP is required.

Comment A-2-130

Attachment 2 Statement of Basis, 3.0, Page 6, Line 29

Emission Unit 393 is no longer in the FF-01 License and therefore not in the AOP. It might be preferable to use an active emission unit for the example of the heading use in Attachment 2.

Consider revising the heading example to reflect an active emission unit.

Ecology Response to A-2-130

Thank you for your comment.

The statement of basis is not an enforceable document. The referenced text is only an example of an emission unit.

No change to the AOP is required.

Comment A-2-131

Attachment 2 Statement of Basis, 4.0, Table 1, Page 7

*Revision numbers in this table will require updates each time an ALARACT is revised. Consider revising the wording to remove references to the revision number.
"The ALARACTs referenced below are the latest revisions."*

Please remove the sentence that reads:

The ALARACTs referenced below are the latest revisions.

Ecology Response to A-2-131

Thank you for your comment.

The statement of basis is not an enforceable document. The statement of basis for Attachment 2 will be revised to remove Table 1, ALARACT Demonstrations.

Comment A-2-132

Attachment 2 Statement of Basis, 4.0, Table 1, Page 7

Revision numbers in this table will require updates each time an ALARACT is revised. Consider removing the revision number from the table to avoid continual updates to the table.

Please remove revision numbers listed in Table 1, ALARACT Demonstrations

Ecology Response to A-2-132

Thank you for your comment.

The statement of basis is not an enforceable document. The statement of basis for Attachment 2 will be revised to remove Table 1, ALARACT Demonstrations.

Comment A-2-133

Attachment 2 Statement of Basis, 5.0, Page 8

Please consider reinstating the list of Obsolete Emission Units. The table is a useful tool for maintaining the history and for use in preparation of future permitting activities.

Please reinstate the list of Obsolete Emissions Units.

Ecology Response to A-2-133

Thank you for your comment.

The statement of basis is not an enforceable document. Reinstatement of the list of Obsolete Emission Units is not needed. The intent of the list would be to limit the scope of comments to only the changes that have occurred between revisions of the AOP. As this is an AOP renewal, all parts are considered new and subject to comment.

No changes to the AOP is required.

Comment A-2-134

Attachment 2 Statement of Basis, 6.0, Page 8

Please consider reinstating the list of Obsolete Applicable Requirements. The table is a useful tool for maintaining the history and for use in preparation of future permitting activities.

Please reinstate the list of Obsolete Applicable Requirements.

Ecology Response to A-2-134

Thank you for your comment.

The statement of basis is not an enforceable document. Reinstatement of the list of Obsolete Emission Units is not needed. The intent of the list would be to limit the scope of comments to only the changes that have occurred between revisions of the AOP. As this is an AOP renewal, all parts are considered new and subject to comment.

No changes to the AOP is required.

Comment A-2-135

Attachment 3, Statement of Basis, Page 3

It is recommended that the Statement of Basis for Attachment 3 be revised to reflect the recent delineation of responsibility for asbestos emissions at the Hanford Site (Ecology letters 16-NWP-203 and 17-NWP-063). Additionally, DOE notified BCCA of its intent to discontinue participation in the activities in the memorandum of agreement between DOE and BCAA the implementation and management of BCAA Regulation 1, Article 8 (DOE letter 17-ESQ-0035).

Update the Statement of Basis for Attachment 3 to reflect the recent delineation of responsibility for asbestos emissions at the Hanford Site.

Ecology Response to A-2-135

Thank you for your comment.

The statement of basis is not an enforceable document. The Statement of Basis for Attachment 3 already reflects the recent delineation of responsibility for asbestos emission at the Hanford Site. Lines 31 through 34 of page 3 state, "However, BCAA [Benton Clean Air Agency] relinquished asbestos regulatory responsibility at the Hanford Site in 2016. Effective December 1, 2016, Ecology assumed responsibility and regulatory authority to ensure compliance with 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos, at the the Hanford Site." Furthermore, a copy of letter 16-NWP-205 acknowledging BCAA's relinquishment of asbestos regulatory authority to Ecology is provided in Enclosure 2 of the statement of basis.

No change to the AOP is required.

LETTER A-3: UNITED STATES DEPARTMENT OF ENERGY, 9/11/18 3:26 PM PT

Comment A-3-1

Standard Terms and Conditions, Section 5.9, Page, 19, Line 25

This line makes reference to "Attachment 1, Section 2.4." Attachment 1, Section 2.4, is "Reserved." It is believed the reference should be to Attachment 1, Section 1.4.

Revise line to refer to correct section.

Ecology Response to A-3-1

Thank you for your comment.

The reference will be changed from Section 2.4 to Section 1.4.

Comment A-3-2

Attachment 1, Discharge Point 1.4.41, Page 130

This Discharge Point can be removed from the AOP. DOE notified Ecology on July 24, 2018 (DOE letter 18-ESQ-0086) that this discharge point (a portable diesel fueled generator) was removed from service.

Remove discharge point from AOP.

Ecology Response to A-3-2

Thank you for your comment.

Based upon the information provided in DOE letter 18-ESQ-0086, the generators associated with this discharge point have been replaced with permanent power. Ecology verified this information during an inspection on 4/11/2019. The discharge point will be removed from the AOP and designated as "Reserved."

Comment A-3-3

Attachment 1, Discharge Point 1.4.42, Page 131

This Discharge Point can be removed from the AOP. DOE notified Ecology on July 24, 2018 (DOE letter 18-ESQ-0086) that this discharge point (a portable diesel fueled generator) was removed from service.

Remove discharge point from AOP.

Ecology Response to A-3-3

Thank you for your comment.

Based upon the information provided in DOE letter 18-ESQ-0086, the generators associated with this discharge point have been replaced with permanent power. Ecology verified this information during an inspection on 4/11/2019. The discharge point will be removed from the AOP and designated as "Reserved."

Comment A-3-4

Attachment 1, Discharge Point 1.4.51, Page 140

This Discharge Point is a spark-ignition engine. The third Condition should be changed to, "Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary." The previously submitted comment is unaltered by this suggested change.

Revise Condition 3 as follows. (3) Inspect {air cleaner} (remove) [spark plugs] (add) every 1,000 hours of operation or annually, whichever comes first, (and replace as necessary).

Ecology Response to A-3-4

Thank you for your comment.

The condition will be changed to remove and replace air filter with spark plugs.

Comment A-3-5

Attachment 1, Discharge Point TBD

A Discharge Point should be added to the AOP per DOE letter 18-ESQ-0078 for the emergency generator at the main lift station for the 200E Area sewage transfer system located at the southeast corner of the Baltimore Avenue and 12th Street intersection in 200 East Area

Include new discharge point and conditions as requested in 18-ECD-0078.

Ecology Response to A-3-5

Thank you for your comment.

The new discharge will be added to the next revision of the AOP.

No change to the AOP is required.

LETTER T-1: CONFEDERATED TRIBES OF THE UMATILLA INDIAN RESERVATION, 4/06/18 3:30 PM PT

Comment T-1-1

STGC

Page 15, Section 5.2.2. text stating; "Source Test Manual - Procedures for Compliance Testing,' Ecology, 7/1 2/90."

Comment: This section references WAC 173-400-105(4) as the regulatory basis for the requirement. The current document reference in WAC 173-400-105(a) is dated 20 September 2004 and not 12 July 1990.

Requested action: Please verify that the date of the reference document is correct.

Ecology Response to T-1-1

Thank you for your comment.

Line 6 of page 15 will be updated to reference September 20, 2004, version of the Source Test Manual, consistent with WAC 173-400-105.

Comment T-1-2

STGC

Page 20, Section 5.11.1, text stating: "Compliance with this standard shall be determined by calculating the highest effective dose equivalent to any member of the public at any offsite point where there is a residence, school, business or office..."

Comment: Recent actions by the USDOE are changing how the public accesses Hanford lands. These changes include, but are not limited to, establishing the Manhattan National Park and opening areas of Hanford for access to tribal members to practice traditional cultural activities. In fact, the CTUIR has recently conducted cultural services at Hanford and also has on-going projects funded by the USDOE to restore native vegetation at Hanford for the purpose of reestablishing gathering activities. The definition of "offsite" for the purpose of calculating potential public dose must include the areas of Hanford that regularly open for public or tribal access.

Requested action: Please ensure that the definition of "offsite" includes the areas of Hanford that are regularly open for public or tribal access. Tribes should be allowed to provide annual input to the development of the geographic area defined as "offsite" to ensure that the locations where cultural activities are being conducted are included in the effective dose analysis.

Ecology Response to T-1-2

Thank you for your comment.

The referenced text is the requirement from 40 CFR 61 Subpart H for determining compliance. Ecology and the Washington Department of Health will work with USDOE to determine if any changes to the modeling of reported doses need to be made due to the more recent access changes on the Hanford Site.

No change to the AOP is required.

Comment T-1-3

STGC

Page 20. Section 5.11.2, Bullet f. text stating: "Distances from the point(s) of release to the nearest residence, school, business or office and the nearest farms producing vegetables, milk, and meat;"

Comment: The CTUIR signed and (sic) access agreement with the USDOE for Hanford lands in 2014. This agreement was the first step in opening access by CTUIR tribal members to areas of Hanford that have been transitioned into long-term stewardship for the purpose of procuring foods and medicines, and engaging in traditional practices. These practices include fishing at usual and accustomed sites. Since 2014, the CTUIR and the USDOE have jointly pursued projects at Hanford to facilitate tribal access, including developing access protocols and adding tribally significant native vegetation to Hanford lands.

Requested action: Please include the requirement to expand the definition of "farm producing vegetables, milk, and meat" to include tribally significant gathering locations. Also, fishing sites should be included in the definition of a place of business. Tribes should be allowed to provide annual input to the development of the geographic areas used in developing the annual report's response to Item f.

Ecology Response to T-1-3

Thank you for your comment.

The referenced text is the requirement from 40 CFR 61 Subpart H for determining compliance. Ecology and the Washington Department of Health will work with USDOE to determine if any changes to the modeling of reported doses need to be made due to the more recent access changes on the Hanford Site.

No change to the AOP is required.

Comment T-1-4

STGC

Page 21. Section 2.12. text stating; "Under the requirements of WAC 246-247-075(9), Health may conduct an environmental surveillance program to ensure that radiation doses to the public from emission units are in compliance with applicable standards."

Comment: WAC 173-400-105(2) also proves that "Ecology shall conduct a continuous surveillance program to monitor the quality of the ambient atmosphere as to concentrations and movements of air contaminants. As a part of this program, the director of ecology or an authorized representative may require any source under the jurisdiction of ecology to conduct stack and/or ambient air monitoring and to report the results to ecology."

Requested action: Ecology should consider implementing an ambient air monitoring program for Hazardous Air Pollutants (HAPs) near the Waste Treatment Plant. Monitoring should start at least one year before facility starts hot operations.

Ecology Response to T-1-4

Thank you for your comment.

Under WAC 173-400-105(2), the ambient atmosphere is continuously monitored in the region through stations in Kennewick, Burbank, Mesa, and Sunnyside. This monitoring program has not indicated that USDOE should conduct ambient air monitoring around the Hanford Site.

Ecology agrees that avoiding damage is advantageous. The underlying requirements in the AOP have conservative assumptions and include methods to verify these assumptions (e.g. source testing, recordkeeping, and stack sampling). The underlying requirements have already considered emission impacts to ambient air. Ecology has determined the permitted monitoring requirements are sufficient to determine compliance with the permit, which would ensure acceptable emission impacts to ambient air. Ecology does not feel that requiring an ambient air monitoring program for Hazardous Air Pollutants is necessary at this time.

No change to the AOP is required.

Comment T-1-5

STGC

Page 23, Section 5.16.4.3. text stating: "Excess emission due to startup or shutdown conditions shall be considered unavoidable..."

Comment: Startups and shutdowns should be a carefully planned part of annual operations for each facility and the number of these events and the emissions from these events should be taken into account in the Title V. Requiring a detailed analysis of annual planned startup and shutdown events will be particularly important for the thermal treatment units (melters) associated with the Waste Treatment Plant (WTP) since both Criteria Pollutant and Hazardous Air Pollutants (HAPs) emissions are typically greatest during startup and shutdown {Footnote 1}. In addition, because the WTP is designed as a semi-batch unit where individual feed batches are transferred, analyzed, and prepared for treatment, it is anticipated that the unit will experience numerous planned startup and shutdown episodes each year. Emissions during these planned events should not be considered as excess emissions.

Requested action: Please consider the above comment and its implications on the WTP portion of the AOP and also how performance tests will be performed. In particular, emphasis on developing methods to measuring Criteria Pollutants and HAPs during simulated startup, shutdown, and melter idle conditions should be included in the performance tests for the Low Activity Waste (LAW) and High Level Waste (HLW) melter facilities.

{Footnote 1} Li, M, C. Wang, K. Cen, M. Ni, and X Li. 2017. PCDD/F emissions during startup and shutdown of a hazardous waste incinerator. Chemosphere, 181, 645 -654.

Ecology Response to T-1-5

Thank you for your comment.

Section 5.16.4.3 of the Standard Terms and General Conditions is a restatement of WAC 173-400-107(4). Excess emissions would not be compliant with the permit if USDOE cannot prove that the excess emissions were unavoidable in accordance with WAC 173-400-107(4) criteria. Any non-compliance with the permit would be subject to enforcement. WAC 173-400-107(3) and Section 5.16.4.6 of the Standard Terms and General Conditions also require the permittee, USDOE, to submit a full written report including the known causes, the corrective actions taken, and the preventative measures to be taken to minimize or eliminate the change of recurrence of the unavoidable excess emissions.

Ecology will consider startups, shutdowns, and melter idle conditions when reviewing performance test plans required under the AOP or its underlying requirements.

No change to the AOP is required.

Comment T-1-6

STGC SoB

Page 24, Line 25. text stating: "... or is a change subject to acid rain requirements under Title V of the FCAA..."

Comment: Acid rain regulations are contained in Title IV of the Clean Air Act though they can be implemented within the Title V permit. It would be more correct to change the indicated language to read "...or is a change subject to acid rain requirements under Title IV of the FCAA..."

Requested action: Please consider the suggested, or a similar, change to the permit language.

Ecology Response to T-1-6

Thank you for your comment.

The statement of basis is not an enforceable document. The permittee, USDOE, uses forms found in Appendix B of the Statement of Basis for Standard Terms and General Conditions in order to streamline the processing for modifications to the Hanford AOP.

Lines 24 and 25 of page 24 will be changed to state "...or is a change subject to acid rain requirements under Title IV of the FCAA."

Comment T-1-7

STGC SoB

Page 28, Lines 2 through 5. text stating: "The MM is not used for Title I modifications of the FCAA, a revision to the permit that should be addressed under a CNRR or OPC, a significant modification (a significant change in existing monitoring permit terms or conditions and every relaxation of reporting or recordkeeping permit terms or conditions), best way to define a MM is examples such as:..."

Comment: The indicated language is not a complete sentence. This can be clearly seen by removing the parenthetical and reading the sentence

Requested action: Please correct the indicated language to correctly reflect the intended meaning.

Ecology Response to T-1-7

Thank you for your comment.

The statement of basis is not an enforceable document. The permittee, USDOE, uses forms found in Appendix B of the Statement of Basis for Standard Terms and General Conditions in order to streamline the processing for modifications to the Hanford AOP.

Lines 2 through 5 of page 28 will be changed to state "The MM is not used for Title I modification of the FCAA, a revision to the permit that should be addressed under a CNRR or OPC, or a significant modification (a significant change in existing monitoring permit terms or conditions and every relaxation of reporting or recordkeeping permit terms or conditions). The best way to define a MM is examples, such as: ..."

Comment T-1-8

STGC SoB

Page 28. Lines 19 and following. text stating: "If this revision is not what is required to change the Hanford Site AOP, please review the following other types of modifications and revisions."

Comment: Based on this sentence, the reader expects to find a list of "other types of modifications and revisions." However, the language that follows is a description of the steps to be followed by the Permittee and the Agency to process a minor modification.

Requested action: Please correct the text as appropriate.

Ecology Response to T-1-8

Thank you for your comment.

The statement of basis is not an enforceable document. The permittee, USDOE, uses forms found in Appendix B of the Statement of Basis for Standard Terms and General Conditions in order to streamline the processing for modifications to the Hanford AOP. The other types of modifications and revisions referenced in the cited text are discussed in other sections of Appendix B.

Line 19 of page 28 will be revised to state "If this revision is not what is required to change the Hanford Site AOP, please review the other types of modifications and revisions."

Comment T-1-9

STGC SoB

Page 28, Lines 24-26. text stating: "In addition, a NOC/License revision, or new source permit application, or can be used or attached to the MM as a mechanism to complete the form...."

Comment: This is not a correct sentence. The phrase "or can be used..." does not make sense with preceding language.

Requested action: Please correct the text as appropriate

Ecology Response to T-1-9

Thank you for your comment.

The statement of basis is not an enforceable document. The permittee, USDOE, uses forms found in Appendix B of the Statement of Basis for Standard Terms and General Conditions in order to streamline the processing for modifications to the Hanford AOP.

Lines 24-26 of page 28 will be revised to state "In addition, a NOC/License revision or new source permit application can be used or attached to the MM as a mechanism to complete the form."

Comment T-1-10

STGC SoB

Page 35. Lines 18-21. text stating: "Develop the SM by emission unit by using the form following this section. The form, if filled out correctly and completely shall furnish the information required of an MM notification. In addition, a NOC/License revision, or new source permit application, or can be used or attached to the SM as a mechanism to complete the form."

Comment: This is not a correct sentence. The phrase "or can be used..." does not make sense with preceding language. Also, reference to MM should be changed to SM.

Requested action: Please correct the text as appropriate.

Ecology Response to T-1-10

Thank you for your comment.

The statement of basis is not an enforceable document. The permittee, USDOE, uses forms found in Appendix B of the Statement of Basis for Standard Terms and General Conditions in order to streamline the processing for modifications to the Hanford AOP.

Lines 18 through 21 of page 35 will be revised to state "In addition, a NOC/License revision or new source permit application can be used or attached to the SM as a mechanism to complete the form."

Comment T-1-11

STGC SoB

Page 35. Lines 34 and 35. Items 5 and 6text (sic) stating: "...public and affected states..."

Comment: Tribal nations are not public stakeholders. Please change the indicated language to "...public, tribal nations, and affected states..." in both Items 5 and 6.

Requested action: Please make the indicated change to the text.

Ecology Response to T-1-11

Thank you for your comment.

The statement of basis is not an enforceable document. The permittee, USDOE, uses forms found in Appendix B of the Statement of Basis for Standard Terms and General Conditions in order to streamline the processing for modifications to the Hanford AOP.

Lines 34 and 35 of page 35 will be revised to state "... public, tribal nations, and affected states..."

Comment T-1-12

Att 1

Page 9. Table 1.1. Second Table Entry" text stating: "Prohibits emissions of particulate matter from any source to be deposited beyond the facility boundaries in sufficient quantity to interfere unreasonably with the use and enjoyment of the property upon which the material was deposited. ..."

Comment: Recent actions by the USDOE are changing how the public accesses Hanford lands. These changes include, but are not limited to, establishing the Manhattan National Park and opening areas of Hanford for access to tribal members to practice traditional cultural activities. How does Ecology plan to manage the Air Operating Permit to maintain public safety given current and future changes to land use at Hanford?

Requested action: The Permittee and Ecology should develop a strategy for modifying the assessment of annual emissions and permit conditions based on the planned land use actions for Hanford. Of particular concern for the CTUIR is the assessment of possible impacts of radiological and hazardous air emissions from the WTP on lands that are being opened for resource gathering and traditional cultural activities. This comment also applies to first table entry on Page 11 (referencing WAC-173-400-40(6)).

Ecology Response to T-1-12

Thank you for your comment.

Ecology is also concerned that emissions risks to the public have not been evaluated for the Hanford Site current and planned land use actions that allow increased public access.

For discharge points in Attachment 1 which required dispersion modeling of any criteria or toxic air pollutant, the maximum concentration for each pollutant was determined for receptor points outside of the established ambient air boundary. Ambient air is defined at 40 CFR 50.1 (e) as "that portion of the atmosphere, external to buildings, to which the general public has access." The established ambient air boundary for the Hanford Site does not include all areas considered in the legal description of the Hanford Site. Tribal members that are accessing the Hanford Site, within the established ambient air boundary, and conducting traditional activities are considered 'the general public' under the above regulations. People accessing the Manhattan National Park for tours or other events could be considered 'the general public' under the above regulations depending on circumstances. Locations within the ambient air boundary have typically not been evaluated for emission risks to the public.

Currently, the dispersion modeling used for most air permitting under WAC 173 for the Hanford Site has not evaluated emissions within the established ambient air boundary. If lands that are being opened for resource gathering and traditional cultural activities are within the established ambient air boundary, Ecology has not been provided modeling or data to determine any possible impacts of radiological or hazardous air emission from WTP in these lands.

The permittee, USDOE, is responsible for maintaining and complying with the ambient air boundary consistent with the established ambient air boundary used in their air permitting efforts. Deviations from this boundary would be a compliance concern regarding the AOP. Changing the ambient air boundary would require reevaluation of all permits that utilized the boundary. Ecology is aware of this issue and is working towards collaborating with USDOE to develop a strategy for reevaluating the established ambient air boundary.

No change to the AOP is required.

Comment T-1-13

Att 1

Page 11. Table 1.1. first table entry. 5th column "2.2"

Comment: Section 2.2 describes a procedure requiring the Permittee to respond to complaints forwarded by Ecology concerning emissions that might jeopardize the health, safety, or property.

Requested action: It is recognized the indicated procedure is important. However, avoiding damage is more advantageous and for this reason Ecology should consider establishing monitoring program for the WTP to verify the impacts of emissions outside of the WTP fence line.

Ecology Response to T-1-13

Thank you for your comment.

Ecology agrees that avoiding damage is advantageous. The underlying requirements in the AOP for WTP have conservative assumptions and include methods to verify these assumptions (e.g. source testing, recordkeeping, and stack sampling). The underlying requirements have already considered emission impacts to ambient air. Ecology has determined the permitted monitoring requirements for WTP are sufficient to determine compliance with the permit, which would ensure acceptable emission impacts to ambient air.

Under WAC 173-400-105(2), the ambient atmosphere is continuously monitored in the region through stations in Kennewick, Burbank, Mesa, and Sunnyside. This monitoring program has not indicated that USDOE should conduct ambient air monitoring around the Hanford Site.

Additionally, Ecology only regulates the emissions outside of the ambient air boundary. The impacts of emissions outside of the WTP fence line but within the ambient air boundary are regulated under a different ruleset, Occupational Safety and Health Act of 1970, which USDOE self-regulates on the Hanford Site.

No change to the AOP is required.

Comment T-1-14

Att 1

Page 13. General Comment.

Comment: Section 1.4 needs a table summarizing the emission units. The table should include the discharge point name, location on the Hanford site, and a cross reference to the Department of Health unit identifier (if applicable).

Requested action: Please consider modifying the text as requested.

Ecology Response to T-1-14

Thank you for your comment.

A table summarizing the discharge points is not required by the regulations. The discharge point name is included in the Table of Contents, which typically indicates the location on the Hanford Site.

Additionally, the discharge point name and general area on the Hanford Site (e.g., 200 East Area or 300 Area) is provided in the beginning of each subsection of Section 1.4. Including a table with repeated information does not add value to the permit and would require continual updates, which would increase the processing time of the already complex Hanford Site AOP.

In addition, the Washington Department of Health maintains the FF-01 license and has the ability to modify the license as frequently as needed, including replacing emission units that could change emission unit identification numbers associated with the toxics discharge point. Each emission unit license identifies project information that can be used to correlate it to the toxics discharge point. Including a cross reference to the emission unit identifier does not add value to the permit and would require continual updates, which would increase the processing time of the already complex Hanford Site AOP.

No change to the AOP is required.

Comment T-1-15

Att 1

Page 57. Lines 11-13. General Comment:

Comment: The CTUIR is interested in understanding how the ASIL values were established and the underlying assumptions about human activity near the source of the emission. The underlying concern associated with this comment is that the methodology used to create the ASILs may not be protective of tribal members that are accessing the Hanford site and conducting traditional activities.

Requested action: Please provide a reference to a document describing the methodology used to calculate the ASIL values.

Ecology Response to T-1-15

Thank you for your comment.

For discharge points in Attachment 1 which were subject to WAC 173-460 and required dispersion modeling of any toxic air pollutant, the maximum concentration for each pollutant was determined for receptor points outside of the established ambient air boundary. Ambient air is defined at 40 CFR 50.1 (e) as "that portion of the atmosphere, external to buildings, to which the general public has access." The established ambient air boundary for the Hanford Site does not include all areas considered in the legal description of the Hanford Site. Tribal members that are accessing the Hanford Site, within the established ambient air boundary, and conducting traditional activities would be considered 'the general public' under the above regulations.

Currently, the dispersion modeling used for permitting under WAC 173-460 for the Hanford Site has not considered tribal members site access within the established ambient air boundary. Therefore, Ecology cannot determine if the current approval orders under WAC 173-460 are protective of tribal members that are accessing the Hanford Site.

Providing a link to a document describing the methodology used to calculate the ASIL values is unnecessary. The ASIL values were established from acceptable data sources, such as the EPA's Integrated Risk Information System, California's Office of Environmental Health Hazards Assessment reference exposure levels and cancer potency factors, or the Agency for Toxic Substances and Disease Registry minimal risk levels. Ecology may deviate from these data sources if we determine that there is sufficiently compelling evidence of significant health concerns or limitations in the calculation methods

used. Ecology published the document "Methods to Update the List of Toxic Air Pollutants" to be used in the 2018 rulemaking effort to amend Chapter 173-470 WAC. This same methodology was used in 2009 when WAC 173-460-150, Table of ASIL, SQER and de minimis emission values, was last revised. This document is available on Ecology's rulemaking web page at: <https://ecology.wa.gov/Regulations-Permits/Laws-rulesrulemaking/Rulemaking/WAC173-460>.

No change to the AOP is required.

Comment T-1-16

Att 1

Page 63, Line 3, text stating: "DE02NWP-002, Revision 2"

Comment: The referenced document is a Notice of Construction for a ventilation exhaust system for single shelled tank retrieval. The document does not discuss WTP operations or facilities.

Requested action: Please verify that DE02NWP-002, Revision 2 is a correct requirement citation for Discharge Point P-WTP-001.

Ecology Response to T-1-16

Thank you for your comment.

The conditions on page 63 for discharge point 1.4.23 is for P-WTP-001. Approval Order DE02NWP-002, Revision 2 is for non-radioactive air emissions for the Waste Treatment and Immobilization Plant (WTP). Ventilation exhaust systems for single-shell tank waste retrieval operations is permitted under Approval Order DE05NWP-002, Revision 2. The correct citation is listed for the discharge point.

No change to the AOP is required.

Comment T-1-17

Att 1

Page 67. Line 4. text stating: "A new NOC will be required, if total emissions of toxic air pollutants exceed WAC 173-460 ASILs or result in criteria pollutant emission increases. These values shall be confirmed by emission calculations, for indicator constituents, derived from waste characterization data obtained through implementation of the Ecology approved Regulatory Data Objectives Supporting Tank Waste Remediation System Privatization Project (PNNL-12040). The mass feed rates for the indicator constituents will be verified to be less than or equal to the mass feed rates used in the Integrated Emissions Baseline Report...."

Comment: It is not evident from the above methodology if, or how, the results of the Environmental Performance Demonstration Tests (EPDT) will be used in computing compliance with emission limits for toxic air pollutants. It appears from this language that the Integrated Emissions Baseline Report will be used as the estimate of system performance rather than the results of the EPDT. Please clarify if the EPDT will use surrogate compounds for various classes of toxic air pollutants and if destruction and removal efficiency (DRE) for these compounds will be computed. If so, then will the surrogate DREs from the EPDT be used to set feed rate limits?

Requested action: Please clarify the source of data that will be used to compute emission rates from feed rates for the PT, LAW, and HLW systems. Justify the data source if actual system performance results are not used.

Ecology Response to T-1-17

Thank you for your comment.

The Integrated Emissions Baseline Report served as the basis for the emission estimates provided in the application for Approval Order DE02NWP-002, Revision 2. Condition 4.1 of the approval order requires the permittee to demonstrate initial compliance for the Low Activity Waste (LAW) and High Level Waste (HLW) verification facilities through a performance demonstration conducted per an Ecology approved Performance Demonstration Plan. Condition 4.1.1 of the approval order states "the permittee shall utilize the Performance Demonstration Plan requirements identified in the Dangerous Waste Portion of the Resource Conservation and Recovery Act Permit for the Treatment, Storage, and Disposal of Dangerous Waste Hanford Waste Treatment and Immobilization Plant (DWP), condition II.10.H.5F (LAW) and III.10.J.5.f (HLW)." The conditions in the approval order have been incorporated into the AOP under Discharge Point 1.4.23.

An Environmental Performance Demonstration Test (EPDT) for the LAW facility was drafted and issued for public comment under Chapter 173-303 Washington Administration Code (WAC) Dangerous Waste Regulations. The EPDT for the LAW facility was approved and incorporated into the DWP under this authority, effective September 29, 2018. The permittee, USDOE, must submit the EPDT for the LAW facility for approval under Chapter 173-400 WAC, General Regulations for Air Pollution Sources, and Chapter 173-460 WAC, Controls for New Sources of Toxic Air Pollutants. This methodology will ensure that the permittee can complete all necessary testing requirements under both air and dangerous waste requirements in a single performance test effort.

The EPDT utilizes bounding feed concentrations of organics (naphthalene and chlorobenzene), metals, and chloride to represent the worst-case-source term (i.e., worst-case Tank Farm feed). The worst-case source term must be less than or equal to the mass feed rates used in the Integrated Emissions Baseline Report to verify the emissions resulting from the EPDT conform to the assumptions used in Approval Order DE02NWP-002, Revision 2.

The EPDT will measure 228 target analytes. For target analytes that are identified as toxic air pollutants or criteria pollutants, sample results and calculated emission rates from the EPDT will be evaluated for compliance against the permitted limits in Approval Order DE02NWP-002, Revision 2.

Actual emissions data will be used to confirm compliance. Emission rates are not being computed from feed rates to determine compliance. The EPDT for LAW sample results and calculated emission rates must confirm the bounding feed rates meet the assumptions, and permitted limits in Approval Order DE02NWP-001, Revision 2, or the approval order may require modification. Total emission limits for other facilities covered under this approval order must be demonstrated using the specified compliance demonstrations and the general testing requirements permitted in Approval Order DE02NWP-002, Revision 2, incorporated in the AOP under discharge point 1.4.23.

No change to the AOP is required.

Comment T-1-18

Att 1

Page 69, Table between Lines 7 and 8, General Comment.

Comment: The table lists the requirement to include Volatile Organic Compounds (VOCs), Sulfur Dioxide, and Carbon Monoxide compliance monitoring during the initial system testing. These items are

also included in the LAW EPDT Plan (24590-PER-CTST-17-001, Rev0). These items are not mentioned in the Notice of Construction (PSD-02-01, Amendment 3). Furthermore, there are no emission limits or on-going monitoring requirements for these criteria pollutants.

Requested action: Please provide the rationale for not including emission limits or on-going monitoring requirements for VOCs, Sulfur Dioxide, and Carbon Monoxide.

Ecology Response to T-1-18

Thank you for your comment.

The original Waste Treatment and Immobilization Plant (WTP) project qualified as a major modification to a major source under the Prevention of Significant Deterioration (PSD) regulations because nitrogen oxides (NOx) had "significant" emission increases of greater than 40 tons per year and particulate matter finer than 10 microns in diameter (PM10) had "significant" emission increases that are greater than 15 tons per year. The emissions of volatile organic compounds (VOCs), sulfur dioxides (SO2), or carbon monoxide (CO) from the WTP project were not considered "significant" as defined by 40 CFR 52.21. The PSD permit, PSD-02-01, Amendment 3, is only applicable to the criteria pollutants which had "significant" emission increases from the proposed project. Therefore, PSD-02-01, Amendment 3, does not identify emission limits for VOCs, SOx, or CO.

Approval Order DE02NWP-0002, Revision 2, permit condition 3.0 requires that the total emissions from all activities will not result in criteria pollutant emission increases. Compliance with this condition is demonstrated by boiler source testing for VOCs, CO, and SOx after initial startup and through a performance demonstration conducted per an Ecology approved Performance Demonstration Plan at initial startup and at a frequency identified in the Dangerous Waste Portion of the Resource Conservation and Recovery Act Permit for the Treatment, Storage, and Disposal of Dangerous Waste Hanford Waste Treatment and Immobilization Plant. These requirements are partially contained in the the draft Hanford AOP Renewal 3 under discharge point 1.4.23 on page 67, 68, and 69.

The total emission limits from DE02NWP-002, condition 2.1 is erroneously not incorporated into the draft AOP Renewal 3. This condition will be added into the Hanford AOP Renewal 3 under discharge point 1.4.23. The addition of this condition provides emission limits and monitoring requirements for VOCs, SOx, and CO.

Additionally, Revision 1 of DE02NWP-002 combined conditions 2.2 and 2.3 to require a new NOC if total emissions of toxic air pollutants exceed WAC 173-460 ASILs or result in criteria pollutant emission increases, which is now condition 3.2. This condition is identified for discharge point 1.4.23 on page 67, but does not include the required records for criteria pollutants. "Calculations of criteria pollutants" will be added to the required records for the first condition on page 67, which is condition 3.2 from DE02NWP-002, Revision 1. The second condition on page 67, which is condition 2.3 from the original DE02NWP-002, will be removed from the Hanford AOP Renewal 3 since it has been replaced.

Comment T-1-19

Att 1

Page 69. Table between Lines 7 and 8. General Comment.

Comment: The WTP is designed to operate as a semi-batch facility treating widely varying waste streams. For this reason, it is sensible to expect that the facility will experience frequent startup, shutdown, and hot idle cycles. Because steady state and transient emissions differ in thermal processing systems, it is

important that the performance tests for the HLW/ and the LAW systems be designed to capture the full range of operating conditions. When using calculated emissions to demonstrate compliance, the total emissions for a unit should take into account the measured emission rates during steady state, startup, shutdown, and hot-idle and the number of hour spent in each mode. A better option would be to use continuous emissions monitoring (CEM) units as much as possible to ensure on-going compliance. Currently PSD-02-01, Amendment 3 only requires CEM units for NOx.

Requested action: Please consider requiring the EPDT for the LAW and HLW/ to include measuring emissions during startup, shutdown, hot-idle, and steady state conditions. Also consider requiring the use of CEM monitors for other species such as CO.

Ecology Response to T-1-19

Thank you for your comment.

The Environmental Performance Demonstration Test for the Waste Treatment and Immobilization Plant (WTP) is a requirement of the dangerous waste permit for WTP. The Prevention of Significant Deterioration (PSD) permit for WTP, PSD-02-01, and the air toxics emissions approval order, DE02NWP-002, Revision 2, require source testing and compliance demonstrations to verify the estimated emissions as submitted in the applications. In accordance with both permits, Ecology must approve the source testing and compliance demonstration test plans. Ecology will consider emissions from startup, shutdown, hot-idle, and steady state conditions during its evaluation and approval of the test plans.

The WTP project initially qualified as a major modification to a major source under the PSD regulations because nitrogen oxides (NOx) had "significant" emission increases of great than 40 tons per year and particulate matter finer than 10 microns in diameter (PM10) had "significant" emission increases that are greater than 15 tons per year. The emissions of other pollutants from the WTP project were not considered "significant" as defined by 40 CFR 52.21. Therefore, the emissions rates of other pollutants, such as carbon monoxide (CO), did not warrant requiring continuous emission monitoring (CEM) under PSD-02-01. Furthermore, the emission units proposed in the project did have additional regulations requiring the use of CEMs for other pollutants above what is required in PSD-02-01.

No change to the AOP is required.

Comment T-1-20

Page 70. Line 20. text stating: "...0.003%..."

Comment: This value is 0.0015% in Condition 2 of PSD-02-01, Amendment 3

Requested action: Please verify the correct value for the limit on sulfur content of fuel

Ecology Response to T-1-20

Thank you for your comment.

Line 20 of page 70 will be revised to state "Use Ultra-low sulfur fuel < 0.0015% by wt."

Comment T-1-21

Att 2

Page ?. General Comment.

Comment: There are no page numbers after the table of contents

Requested action: Please add page numbers

Ecology Response to T-1-21

Thank you for your comment.

Pages of each Emission Unit are numbered. This allows for insertion or removal of Emission Units from the physical copy of the FF-01 license when there are changes. To use sequential page numbering throughout the entire FF-01 license would require reprinting of the full FF-01 license for each revision.

No change to the AOP is required.

Comment T-1-22

Att 2

Emission Unit ID 58. Page 5 of 7, text stating: "WDOH accepts that the PTE calculation shall be based on the inventory of material to be managed (tank inventory and supernate) using the release fraction for the tank inventory of 1.0E-3 for tank inventory and 8.0E-5 for supernate. ..."

Comment: The text should read as follows:

"WDOH accepts that the PTE calculation shall be based on the inventory of material to be managed (tank inventory and supernate) using the release fraction {Strike through start} for the tank inventory {strike through end} of 1.0E-3 for tank inventory and 8.0E-5 for supernate...." This language is repeated all the EUs for tank farm skid/mobile type portable exhausters.

Requested action: Please consider changing the sentence as indicated wherever it appears.

Ecology Response to T-1-22

Thank you for your comment.

The Washington Department of Health will look at clarifying the referenced condition using the proposed wording in future versions.

This potential change does not impact 40 CFR 61 Subparts A and H. No change to the AOP is required.

Comment T-1-23

Att 2

Emission Unit ID 218. Page 3 of 3, text stating: "The PTE calculation shall be based on the inventory of material to be managed (tank inventory and supernate) using the release fraction for the tank inventory of 1.0E-3 for tank inventory and 8.0E-5 for supernate."

Comment: This is EU is an annulus exhauster. The text should read:

The PTE calculation shall be based on the inventory of material to be managed (annulus content) using the release fraction of {Strike through start} for the tank inventory {Strike through end} 1.0E-3 for tank inventory and 8.0E-5 for supernate.

Requested action: Please consider changing the sentence as indicated.

Ecology Response to T-1-23

Thank you for your comment.

The Washington Department of Health will look at clarifying the referenced condition using the proposed wording in future versions.

This potential change does not impact 40 CFR 61 Subparts A and H. No change to the AOP is required.

Comment T-1-24

Att 2

Emission Unit ID 254. Page 2 of 3. text stating: ". . .waste generated at 222-S Laboratory and small amounts of radioactive waste not generated as the 222-5 Laboratory ..."

Comment: Use of the word "as" is not correct

Requested action: Please change "as" to "in"

Ecology Response to T-1-24

Thank you for your comment.

The referenced administrative correction will be made at the next update of the FF-01 license.

This change does not impact 40 CFR 61 Subparts A and H. No change to the AOP is required.

Comment T-1-25

Att 2

Emission Unit ID 254, Page 2 of 3. text stating: "an addition ot the east end of the 222-S..."

Comment: The sentence contains a typo.

Requested action: Please change "ot" to "to"

Ecology Response to T-1-25

Thank you for your comment.

The referenced administrative correction will be made at the next update of the FF-01 license.

This change does not impact 40 CFR Subparts A and H. No change to the AOP is required.

Comment T-1-26

Att 2

Emission Unit ID 314. Page 2 of 8. text stating: "DOE must notify the Department of any changes to a NESHAP major emission unit when a specific isotope is newly identified as contributing greater than 10% of the potential TEDE to the MEI, or greater than 25% off the TEDE to the MEI after controls. (WAC 246-247-110(9))"

Comment: Only a portion of WAC 246-247-110(9) is included in this sentence. The full list of conditions is as follows (omitted language underlined): "...contribute {Start Underline} greater than 10% of the potential-to-emit TEDE to the MEI, {End Underline} or greater than 0.1 mrem/yr potential-to-emit TEDE to the MEI, or greater than 25% of the TEDE to the MEI, after controls."

This language is repeated for multiple emission units

Requested action: Please determine if omission of the underlined language was intentional, or accidental and correct as appropriate throughout the document.

Ecology Response to T-1-26

Thank you for your comment.

The language which was omitted from WAC 246-247-110(9) is the portion identifying isotopes which could contribute greater than 0.1 millirem per year potential-to-emit total effective dose equivalent (TEDE) to the maximally exposed individual (MEI). The reason for this is an increase in emissions will be covered by the requirement of the sentence immediately preceding the referenced sentence, which states "DOE must notify the Department of a "modification" to the emission unit as defined in WAC 246-247-030(16)." The reason the other two criteria are specifically called out is because it is possible to change the ratio of isotopes emitted and not cause an increase in emissions. By requiring USDOE to notify the Washington Department of Health if either of these two conditions occur, it will ensure the proper isotopes are being monitored.

No change to the AOP is required.

Comment T-1-27

Att 2

Emission Unit ID 314. General Comment.

Comment: Sections 6,7, and 15 read like procedures written to protect worker safety and health and not air operating permit conditions. Is this language appropriate for the AOP since worker safety is not regulated by DOH or Ecology?

Requested action: Please only include operating conditions that are relevant to the AOP. There are also many typos, language use errors, and formatting errors in the conditions for EU 314.

Ecology Response to T-1-27

Thank you for your comment.

The referenced conditions are written to document how the Permittee proposed the work to be conducted to prevent the release of radionuclides into the air space. The Washington Department of Health will work with the Permittee to correct administrative errors in EU 314 conditions in the next issuance of the FF-01 license.

These changes do not impact 40 CFR 61 Subparts A or H. No change to the AOP is required.

Comment T-1-28

Att 2

Emission Unit ID 361. Page 1 of 6, text stating: "his approval applies to those additional..."

Comment: The word "his" should be changed to "This".

Requested action: Please make the indicated correction.

Ecology Response to T-1-28

Thank you for your comment.

The correct word in the referenced text should be "This." This will be correct in the next issuance of the FF-01 license.

This change does not impact 40 CFR 61 Subparts A and H. No change to the AOP is required.

Comment T-1-29

Att 2

Emission Unit ID 402" Page 2 of 2. text stating: "...ANSI 509/510..."

Comment: Should this reference be "ASME/ANSI N509 and N510?"

Requested action: Please ensure the correct reference is quoted. The reference to ANSI 509/510 appears in several other locations in the document.

Ecology Response to T-1-29

Thank you for your comment.

The correct reference in the cited text should be ANSI N 509/510. This will be corrected in the next issuance of the FF-01 license.

This change does not impact 40 CFR 61 Subparts A and H. No change to the AOP is required.

Comment T-1-30

Att 2

Emission Unit ID 412. Page 28 of 28. text stating: "Total design flow through each HEPA filter bank shall not exceed the maximum rated flow rate for..."

Comment: The design flow is a calculated value and not an actual flow rate. Does the author mean that the "Flow through each HEPA filter bank shall not exceed the maximum..."

Requested action: Please correct the language as appropriate.

Ecology Response to T-1-30

Thank you for your comment.

The referenced text should read "the total flow." This will be corrected in the next issuance of the FF-01 license.

This change does not impact 40 CFR 61 Subparts A and H. No change to the AOP is required.

Comment T-1-31

Att 2

Emission Unit ID 435, Page 6 of 7. text stating : "Total system flow shall not exceed 9,487 CFM..."

Comment: Is this limit set on the actual flow rate (ACFM) or a corrected value?

Requested action: Please specify if the value is ACFM or a corrected value.

Ecology Response to T-1-31

Thank you for your comment.

The value for the limit in the referenced text is actual flow rate. This will be corrected in the next issuance of the FF-01 license.

This change does not impact 40 CFR 61 Subparts A and H. No change to the AOP is required.

Comment T-1-32

Att 2

Emission Unit ID 1322, Page 2 of 4, text stating: "...including humidity caused by misting, exceeds 85%..."

Comment: Most, if not all, the other EUs with an upper humidity constraint for HEPA protection use a value of 70%. Is an 85% upper limit acceptable for EU 1322?

Requested action: Please verify that an upper humidity limit of 85% is correct for EU 1322.

Ecology Response to T-1-32

Thank you for your comment.

Each emission unit abatement technology is evaluated individually, along with any applicable constraints, associated processes, and the specific environment. The abatement technology at Emission Unit 1322 was identified and evaluated. During the evaluation process, the humidity constraint for the emission unit was identified as 85%. This is a higher humidity limit than the tank farm emission units, which have a different environment and associated process.

No change to the AOP is required.

Comment T-1-33

Att 2

Emission Unit ID 1322. Page 3 of 4. Condition 7. General Comment.

Comment: This condition is a statement and not a constraint.

Requested action: Please reword Condition 7 as a constraint.

Ecology Response to T-1-33

Thank you for your comment.

The first part of Condition 7 for Emission Unit 1322 lays out the limits of acceptable contamination. Additionally, Conditions 4 and Conditions 11 for Emission Unit 1322 identify the notification and operation actions to be taken. Condition 4 states "Exceeding any of these contamination limits will require work to stop, and notification to Operation and RadCon management in accordance with the RWP. Notifications to WDOH via email or the established procedures in the Environmental Notification program will be required. For work to continue above any of these limiting radiological conditions, the PES and commensurate controls will be implemented. The PES exhaust system will be utilized to minimize the potential for contamination spreads outside of posted radiological areas." Condition 11 states "Exceeding any of these contamination limits will require work to stop, and notification to Operation and RadCon management in accordance with the RWP. Notifications to WDOH via email or the established procedures in the Environmental Notification program will be required. For work to continue above any of these limiting radiological conditions, the NGR containment system and commensurate controls will be implemented. The NGR containment will be utilized to minimize the potential for contamination spreads outside of posted radiological areas." Therefore, Condition 7 for Emission Unit 1322 will not be changed.

No change to the AOP is required.

Comment T-1-34

Att 2

Emission Unit ID 1328. Page 4 of 4. text stating: "...minimum efficiency of 99.95%..."

Comment: Reference to required particle removal efficiency should specify if the efficiency is based on total mass or the mass of particle above a particular particle diameter. This comment also applies to the numerous other instances in the document where a HEPA removal efficiency is mentioned without a description of the basis for the value.

Requested action: Please add the indicated details to the condition on filter efficiency.

Ecology Response to T-1-34

Thank you for your comment.

As part of the application process, the Permittee has to address the technology standards ASME N509 and ASME N510. HEPA filter test parameters are described in those standards. In addition to the application requirements HEPA filter efficiency tests are now being referenced in accordance with either ASME N510 or ASME N511 standards. Both of these standards specify how the efficiency tests will be conducted. As updates to emission units occur, one of these standards will be included in the emission unit requirements.

This change does not impact 40 CFR 61 Subparts A and H. No change to the AOP is required.

Comment T-1-35

Att 2

Emission Unit ID 1440. Page 3 of 8. text stating: "<20mph"

Comment: References to wind speed conditions need to designate where the wind speed is to be measured. Is this value a local, ground level, wind speed, or a value measured at one of the Hanford meteorological stations?

Requested action: Please clarify how the wind speed is to be measured to show compliance with the condition.

This comment also applies to Condition 28 on Page 7 of 8

Ecology Response to T-1-35

Thank you for your comment.

The referenced measurement is based on the prediction of the Hanford meteorological station. This will be corrected in the next issuance of the FF-01 license.

This change does not impact 40 CFR 61 Subparts A and H. No change to the AOP is required.

Comment T-1-36

Att 2

Emission Unit ID 1472. Page 3 of 3. text stating:"...(table 3)..."

Comment: There is no Table 3 in this section. This comment also applies to EU 1473,1474, 1475,1476, 1477, 1478,1479, and 1480.

Requested action: Please correct the text as appropriate.

Ecology Response to T-1-36

Thank you for your comment.

The referenced entry was an error. The activities to stabilize the PUREX Tunnel 1 have been completed and the emission units have been closed out of the FF-01 license. It will be reflected in the next issuance of FF-01 license by the removal of these emission units.

This change does not impact 40 CFR 61 Subparts A and H. No change to the AOP is required.

Appendix A: Copies of all public notices

Public notices for this comment period:

- Focus Sheet
- Classified advertisements in the *Tri-City Herald*
- Notices mailed to the Hanford Facility mailing list
- Notices sent to the Hanford-Info email list

Hanford Site Air Operating Permit Renewal 3 Public Comment Period



Public Comment Period

December 17, 2017, through
February 16, 2018

Submit comments to:

Electronically (preferred) via:

[http://wt.ecology.commentinput.com/
/?id=Urk6K](http://wt.ecology.commentinput.com/?id=Urk6K)

By U.S. Mail or hand-deliver to:

Daina McFadden
3100 Port of Benton Blvd
Richland WA 99354

Public Meeting

A public meeting is not scheduled, but if there is enough interest, we will consider holding one. To request a meeting or for more information, contact:

Daina McFadden
509-372-7950
Hanford@ecy.wa.gov

Special Accommodations

To request ADA accommodation, including materials in a format for the visually impaired, call the Nuclear Waste Program at 509-372-7950.

Persons with impaired hearing may call Washington Relay Service at 711.
Persons with speech disability may call TTY at 877-833-6341.

Public comment invited

Washington Department of Ecology invites you to comment on the draft permit renewal of the Hanford Site Air Operating Permit (AOP) No. 00-05-006 Renewal 3. Due to the large volume of support documents, we are holding a 60-day comment period.

Background

The State's regulations for control of air emissions limit the duration of an AOP to five years. The current Hanford Site AOP expires on March 31, 2018. A new AOP is needed as the Hanford Site still has air emissions. Ecology received the renewal application form the U.S. Department of Energy on September 12, 2017, and determined the application was complete on November 7, 2017. During the permit renewal process the existing AOP (No. 00-05-006 Renewal 2, Rev. B) remains in effect.

About the permit

Congress amended the federal Clean Air Act in 1990 by creating AOPs for industrial sources of air pollution. An AOP brings all applicable air requirements into one document. In 1991, the Washington State Legislature updated the Washington Clean Air Act (RCW 70.94) to make it consistent with these changes. In 1993, Ecology developed Washington's AOP regulation (WAC 173-401) to comply with federal regulations. The U.S. Environmental Protection Agency granted the state the authority to implement the AOP regulations in November 1994. The Hanford Site AOP was first issued in June 2001.

Three agencies administer the Hanford Site AOP. Ecology regulates the nonradioactive criteria and toxic air emissions. The Washington State Department of Health regulates all radioactive air emissions. The Benton Clean Air Authority administers outdoor burning.



3100 Port of Benton Blvd
Richland, WA 99354

Hanford's Information Repositories and Document Review Locations

WASHINGTON

Richland

Ecology Nuclear Waste Program
Resource Center
3100 Port of Benton Blvd.
Richland, WA 99354
509-372-7950

U.S. Department of Energy
Administrative Record
2440 Stevens Drive, Room 1101
Richland, WA 99354
509-376-2530

Washington State University Tri-Cities
Department of Energy Reading Room
2770 Crimson Way, Room 101L
Richland, WA 99354
509-375-7443

Seattle

University of Washington, Suzzallo Library
P.O. Box 352900
Seattle, WA 98195
206-543-5597

Spokane

Gonzaga University, Foley Center
502 E Boone Avenue
Spokane, WA 99258
509-313-6110

OREGON

Portland

Portland State University, Millar Library
1875 SW Park Avenue
Portland, OR 97207
503-725-4542

relevant education and professional experience may be substituted for the educational requirement on a year-for-year basis.
Apply on line by Jan. 24, 2018 at www.wsujobs.com, position #96722. WSU is an EO/AA educator and employer.

WASHINGTON STATE UNIVERSITY

Site Manager
WSU Tri-Cities is seeking a GEAR UP Site Manager to work at Robert Olds Middle School with a work location in Connell, WA. The position is responsible for providing leadership, collaborative planning, administration, supervising staff, and direct student support to increase postsecondary awareness and readiness. Services include academic support in classrooms, after school programs, campus visits, educational field trips, family events, and college and career exploration. Position requires a Bachelor's degree and three (3) years of professional work experience in student services or related education/experience. Experience leading or directing the work of others. A Master's degree in a related field may substitute for one (1) year of professional work experience. Any combination of relevant education and professional experience may be substituted for the educational requirement on a year-for-year basis.
Apply online by Jan. 24, 2018 at www.wsujobs.com, position #97695. WSU is an EO/AA educator and employer.

Visit TRI-CITIES WASHINGTON

VISIT TRI-CITIES, a non-profit destination marketing organization with 800 members and 15 staff, is seeking its next President and CEO to lead the organization. The Mission is to promote and market the Tri-Cities region as a desirable leisure and business travel destination.
For more information visit <http://www.visittri-cities.com/about-visit-tri-cities/current-job-postings/>

Skilled Labor Trades

Milne

Can you make the holidays merry and bright? Mechanic with electrical experience needed at Milne! Full-time, year-round with benefits. More info at milnefruit.com/careers EOE

CITY OF WALLA WALLA

Irrigation Technician
Perform technical work in the design, repair, maintenance and improvement of City irrigation systems; prepare and maintain a variety of records and reports related to assigned work. REQUIREMENTS: High School graduate or possession of GED certificate. Any combination equivalent to graduation from an accredited program in irrigation/turf management and three years well-rounded experience managing contemporary irrigation systems. Valid State driver's license; valid First Aid and CPR Certificate issued by an authorized agency; Backflow Assembly Tester (BAT) certification within six months of hire.
For complete application package visit: www.wallawalla.gov Open until filled. EOE/ADA

ESD 105

Custodian (Evening shift)
ESD 105 is seeking a custodian to be responsible for the care, cleaning, maintenance and repair of its physical plant, including the exterior grounds.

Qualifications and position description are available at www.esd105.org
Closes: January 23, 2018 EOE

BENTON P.U.D.

Lineman - Journeyman
Benton PUD is accepting applications for a Journeyman Lineman. The primary purpose of this position is to operate all line equipment used in construction, maintenance and removal of overhead and underground power lines. The position requires completion of a Lineman Apprentice Program and Journeyman Certification in Lineman Craft.

Applicants must apply online to be considered. For further position details, wage information, additional minimum requirements and to access our on line application system, visit our "careers" page on our Web Site at www.bentonpud.org. Opportunity closes on January 7, 2018.

Equal Opportunity Employer
Minorities/Women/Veterans/Disabled

Walla Walla County Public Works

Vegetation/Traffic Control Management Worker: \$18.19 per hour, 40 hr./wk. plus benefits.
Operate various vegetation management, sign maintenance, pavement marking equipment. Use, apply products for chemical control of vegetation. Install, replace, maintain traffic control and other road signs. See employment ad for required experience and licenses. Pre-employment drug and alcohol screening required. Apply online: www.co.walla-walla.wa.us or obtain application at Human Resources, 314 W. Main room 216, 509-524-2600, hr@co.walla-walla.wa.us
Application, cover letter and resume required. Closes: 1/26/18 at 4:00 pm ADA/EEO



Merchandise

Antiques

ANTIQUÉ/COLLECTIBLE Flea Market
Spokane Co Fair & Expo Center
January 13th & 14th
Sat. 9-5 Sun. 9-3
Admission: \$4.00
Info: 503-363-9564 or www.wesknodelgunshows.com

Firearms

GUN SHOW
Spokane Co Fair & Expo Center
January 13th & 14th
Sat. 9-5 Sun. 9-3
Admission: \$8.00
Info: 503-363-9564
www.wesknodelgunshows.com

Bargains under \$200

1891 Emerson Upright Piano \$125 509-521-4671.

1950's CURVED COUCH \$65 REUPHOLSTERED ORANGE 734-1323

2-PIECE SHOWER HEAD ONLY \$45 BUCKS CALL 735-9298

3 HP GAS ENGINE \$50 509-378-5557

4-light bathroom fixture nice only \$45 call 735-9298

Barbie Disney (13) Fashion Doll Set + Extra Clothes \$25 509-521-6545

Barbie Doll Set (10) +Extra Clothes and Accessories \$22 509-521-6545

Cash Register works good \$35 509-586-6848

Electric Lift Recliner Great condition. \$125.00 or OBO. 509-735-9200.

Ford Escape Rims 4 - 16" aluminum rims \$180 Randy-509-528-5880

New Q Sheets med blue, 1600 series, top, bottom, 4 cases \$30 509-783-8855

OLD CROCK 5 GALLON NICE \$50 509-378-5557

PORT OF KENNEWICK PUBLIC NOTICE

Architectural and Engineering Professional Services Roster
Notice is hereby given the Port of Kennewick (the "Port"), is accepting applications for the Professional Services Roster for Architectural and Engineering Services ("Roster") as provided by RCW 39.80.030. Firms engaged in the lawful practice of their profession are encouraged to apply online at the following link: <http://portofkennewick.org/business/sma-all-works-professional-roster/> and submit a Statement of Qualifications, including but not limited to, Architecture, Landscape Architecture and Civil Engineering, Environmental Engineering and Marine Engineering specializing in design and construction of buildings, structures, roadways, utilities, landscape design, surveying and environmental assessments, marinas, identification of hazardous substances, master/comprehensive planning, land use planning, project management, feasibility studies, interior design, historic preservations, code compliance, and zoning analysis. Firms are asked to specify for which services they wish to be considered. Minority and women owned firms are encouraged to apply.

To be placed on the Port's Professional Services Roster, submit one copy of your firm's Statement of Qualifications to: Port of Kennewick, 350 Clover Island Drive, Suite 200 Kennewick, WA 99336
The Statement of Qualifications should include: 1) History of firm, 2) List of example projects and type of work your firm performs, 3) At least five references with contact names and phone numbers, and 4) Resumes of key staff.
Qualified applications will be placed on the roster. Please contact Kandy Yates at kyates@portofkennewick.org or at 509-586-1186, to verify if a particular company is listed on the Port's current Roster. #3467737 01/10 & 01/14/2018

The Columbia Water and Power District is soliciting sealed bids for the replacement of Pump Bowls at the River station located at 58949 SR 14, near Paterson, Wa. Contractor will be responsible for replacing the old pump bowls, replace line shaft and packing box shaft, lengthen or shorten the pump column pipe as needed to maintain the required depth. The CWPD will provide the crane to pull and reset the pump, but not the transportation of the hardware to and from the selected vendors shop. A performance bond and safety paperwork will be required from the contractor awarded this project. All work will be governed by prevailing wages determined by L&I at the date of close of bidding.

Project specifications as built: Pump #16: 1500 HP, 1188 rpm @ 540' head, 4 stage, 30" bowls, 8000-8200 GPM, pump column 24 ft. and with a pump down thrust that cannot exceed 29,000 lb. Interested parties can get additional information by contacting Carl Mohr at 509-832-2518 or by email at carl.mohr@smw.com. Sealed bids are to be sent to: Columbia Water & Power District, C.O., 14 Hands Winery, 660 Frontier Rd., Prosser, Wa. 99350 by January 26, 2018. Bids will be opened on the January 29, 2018 at 3 PM at the 14 Hands Winery Conference rm. #3467303 01/07 & 01/14/2018

Hanford Site Air Operating Permit Renewal 3 Public Comment Period

Ecology is changing the public comment period end date originally published on December 17, 2017. The new end date will be March 16, 2018. The Washington Department of Ecology invites you to comment on the draft permit renewal of the Hanford Site Air Operating Permit (AOP) No. 00-05-006 Renewal 3. The comment period now ends March 16, 2018. The State's regulations for control of air emissions limit the duration of an AOP to five years. The current Hanford Site AOP expires on March 31, 2018. A new AOP is needed as the Hanford Site still has air emissions. Ecology received the renewal application form from the U.S. Department of Energy on September 12, 2017, and determined the application was complete on November 7, 2017. During the permit renewal process the existing AOP (No. 00-05-006 Renewal 2, Rev. B) remains in effect. Congress amended the federal Clean Air Act in 1990 by creating AOPs for industrial sources of air pollution. An AOP brings all applicable air requirements into one document. In 1991, the Washington State Legislature updated the Washington Clean Air Act (RCW 70.94) to make it consistent with these changes. In 1993, Ecology developed Washington's AOP regulation (WAC 173-401) to comply with federal regulations. The U.S. Environmental Protection Agency granted the state the authority to implement the AOP regulations in November 1994. The Hanford Site AOP was first issued in June 2001.

Three agencies administer the Hanford Site AOP. Ecology regulates the nonradioactive criteria and toxic air emissions. The Washington State Department of Health regulates all radioactive air emissions. The Benton Clean Air Agency administers outdoor burning. Please submit comments by March

16, 2018

Electronically (preferred) via: <http://wt.ecology.commentinput.com/?id=URK6K>
By U.S. Mail or hand-deliver to: Daina McFadden, 3100 Port of Benton Blvd, Richland WA 99354

A public meeting is not scheduled, but if there is enough interest, we will consider holding one. To request a meeting or for more information, contact: Daina McFadden, 509-372-7950, Hanford@ecy.wa.gov

Copies of the proposed modification are located in the Administrative Record and Information Repositories (below). In addition, the proposed modification is online at <http://www.ecy.wa.gov/programs/nwp/commentperiods.htm>.

To request ADA accommodation, including materials in a format for the visually impaired, call the Nuclear Waste Program at 509-372-7950. Persons with impaired hearing may call Washington Relay Service at 711. Persons with speech disability may call TTY at 877-833-6341.

Richland
Ecology Nuclear Waste Program Resource Center
3100 Port of Benton Blvd.
Richland, WA 99354
509-372-7950

U.S. Department of Energy
Administrative Record
2440 Stevens Drive, Room 1101
Richland, WA 99354
509-376-2530
Washington State University Tri-Cities
Department of Energy Reading Room
2770 Crimmon Way, Room 101L
Richland, WA 99354
509-375-7443

Seattle
University of Washington, Suzzallo Library
P.O. Box 352900
Seattle, WA 98195
206-543-5597

Spokane
Gonzaga University, Foley Center
502 E Boone Avenue
Spokane, WA 99258
509-313-6110

Portland
Portland State University, Millar Library
1875 SW Park Avenue
Portland, OR 97207
503-725-4542
#3479206 01/14/2018

INVITATION TO BID

Toppenish School District
Valley View Elementary School 10 Classroom Addition

The Toppenish School District (Owner) will receive sealed bids for their Valley View Elementary School 10 Classroom Addition from qualified general contractors. Bids will be received until 2:00 p.m. (PST) on Wednesday, January 31, 2018 at ONW administrative offices located at 306 Bohn Drive, Toppenish, WA 98948. Bids received after the stated time will not be accepted. The bids will be publicly opened by Owner staff. Official bid results shall be made public within 48 hours of bid opening. Bids will be on a lump-sum basis awarded to the lowest responsive bidder. The Owner reserves the right to reject any or all bids or to waive informalities in the bidding. No bids shall be withdrawn for a period of 30 days subsequent to opening of bids without the written consent of the Owner.

There will be a pre-bid walk through for all bidding general contractors on Tuesday, January 23, 2018 at 2:00 p.m. at the Valley View Elementary School located at 515 Zillah Drive, Toppenish, WA 98948. Subcontractors are also welcome.

The Base Bid project scope of work is as described in the construction documents and includes construction of a 12,093 square foot classroom addition, three storage rooms, an electrical/mechanical room, a custodian's room, a printer/copier room, boys restrooms, and girls restrooms. The project includes concrete foundations and stem walls, wood framing, a metal panel and drivit block system, and a TPO roofing system. The project interior includes casework, SACT, finished and painted GWB, carpeting, sheet vinyl, HVAC heating and cooling system, plumbing system, and electrical and low volt systems. The design-build Automatic Fire Protection Sprinkler system and Fire Alarm Systems shall be extended into the Classroom addition as part of the base bid. The interior cabinetry will be completed by the District.

The HVAC heating and cooling systems, plumbing system, and electrical and low volt systems shall be completed as a design-build. Bid shall include submitting for approval the designs with the AHJ. The bid shall include all plumbing systems and fixtures including roof drains and rainwater drains. The bid shall include submitting for approval with both L&I and the AHJ. Bid Alternate 1 consists of installing a new exterior to the previous CLT 4 Classroom Addition to match the exterior of the new 10 classroom addition.

The Owner hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunities to submit bids, and will not be discriminated against on the grounds of race, color, sex, handicap, or national origin in consideration for an award. This project is subject to the Yakima County prevailing wage rate

requirements.
Contact Meier Architecture - Engineering Inc., 12 W. Kennewick Ave., Kennewick, WA 99336, Project Manager, Jason Ingalls, 509.737.6916 for any questions regarding the Construction Documents. One PDF set of Construction Documents will be provided to each of the pre-selected bidders. Sets of Construction Documents are available for purchase at the Yakima Plan Center, 1212 N. 16th Avenue, Yakima, WA 98902, 509.457.4271, Tri-City Construction Council, 20 E. Kennewick Avenue, Kennewick, WA 99336 509.582.7424 and Abadan Print Center, 79 Aaron Drive #100, Richland, WA 99352 509.946.7693 at their standard print rates.

Each bid shall be accompanied by a certified check, cashier's check, bank draft, or money order payable to the Owner or a bid bond with a corporate surety licensed to do business in the State of Washington, in an amount not less than five (5) percent of the amount of the bid.
Toppenish School District
#3479169 01/14 & 01/21/2018

Kennewick Irrigation District (KID) Vendor List

Per RCW 87.03.437 and RCW 39.04.190 notice is hereby given that the KID is now updating its Vendor List to award contracts for materials, equipment, supplies or services up to \$50,000 in lieu of the requirements for formal sealed bidding. The Vendor List shall consist of all responsible vendors who have requested to be on this list, and where required by law are properly licensed or registered to provide materials, equipment, supplies or perform such services in this state. If you are currently on our vendor list, you do not need to reapply. To be added on our 2018 Vendor List go to: www.kid.org, click "Business" then "Vendors" and complete the Vendor List Form. KID retains the right to use the sealed bid or any other legal process for future purchases at the District's option. Minority, women-owned, federally disadvantaged and small businesses are encouraged to apply. For KID projects covered by Federal or State funding, Vendors must also not be included on the list of parties suspended or debarred from doing business with the Federal or State government. If you do not have access to the internet you may contact Brad at (509) 586-6012 for assistance.
#3464518 01/07 & 01/14/2018

CITY OF RICHLAND

NOTICE OF JANUARY 16, 2018 CITY COUNCIL PREMEETING TIME CHANGE FROM 7:00 P.M. TO 6:45 P.M. The City Council has added 15 minutes to the pre-meeting due to the number of agenda items to review. For more information, please contact Marcia Hopkins, City Clerk, at mhopkins@ci.richland.wa.us or 509-942-7389.
#3475404 01/14/2018

PORT OF BENTON

NOTICE OF ACCEPTANCE OF WORK 2017 PORT-WIDE PAVEMENT MAINTENANCE

Notice is hereby given that the Port of Benton accepts the work done by Central Washington Asphalt for the scope of work on the 2017 Port-Wide Pavement Maintenance. Any laborer, mechanic, subcontractor, material man or person claiming to have supplied material, provisions or goods for the prosecution of such work or the making of such improvements who has not been paid should present to and file with the Bond of Commissioners a notice in accordance with RCW 39.08.030 and within the time set forth therein. /s/John Haakenson, Director of Airports/Operations, Port of Benton #3469053 01/14, 01/21, & 01/28/2018

Public Notice

Please take notice that the regular quarterly meeting of the Pasco Public Facilities District Board of Directors has been rescheduled to 4:00 p.m., Tuesday, February 6 in the Council Chambers at Pasco City Hall, 525 N. 3rd Avenue, Pasco, WA. For further information, please contact the Pasco City Manager's office at 509-545-3404. Daniela Erickson, Secretary Pasco Public Facilities District #3472483 01/14/2018

REQUEST FOR PROPOSALS FOR Concessionaire in OHV Landing Kitchen

Morrow/Grant OHV Park - Morrow County, Oregon
Morrow County, Oregon, requests proposals for a qualified Concessionaire in OHV Landing Kitchen.

To provide food handling and preparation services for various events and regular season. Janitorial supplies and equipment is furnished. Concessionaire will need food inventory and appropriate food handler's licenses. Contractors submitting qualifications shall be considered based upon the following general evaluation criteria:

1. Experience.
 2. Method of approach.
 3. Availability of labor and inventory.
- Copies of the Request for Proposals may be obtained from Morrow County Public Works, P.O. Box 428, 365 W Hwy 74, Lexington, Oregon 97839, (541) 989-9500. Complete proposals will be accepted at the same address no later than 4:00 p.m., January 24, 2018. Any questions or concerns may be addressed to Sandi Pointer.
#3437761 12/17, 12/24, 12/31, 01/07, 01/14, & 01/21/2018

REQUEST FOR QUALIFICATIONS

Benton County is requesting Statements of Qualifications from professional consulting firms (hereinafter called "Consultants") with expertise in public facility interior and exterior remodeling design to provide costs estimates, complete construction plans and technical specifications for the upgrading of various areas at the Benton County Courthouse in Prosser Washington.

Preferred format for submittal: electronic - PDF via/email - publicworks@co.benton.wa.us; Criteria for selection of firm will include experience and qualifications of staff assigned to the project, experience with similar projects, previous experience with Benton County, capacity to perform the work within anticipated schedule, and references.

Further details and a complete RFQ package may be obtained from the Benton County Web Site at the following link: <http://www.co.benton.wa.us/bids.aspx?id=820&catid=46> -OR- by typing RFQ into the search bar on the Benton County home page and following the Purchasing (RFP,RFQ) link. Questions may be addressed in writing to Matt Rasmussen, PE PLS Public Works Administrator Matt.Rasmussen@co.benton.wa.us Deadline for submittal: no later than 3:30 pm on Friday, February 2nd, 2018 #3479073 01/14/2018

South Columbia Basin Irrigation District Request for Statements of Qualifications

And Performance Data
Notice is hereby given that the South Columbia Basin Irrigation District (SCBID) is seeking statements of qualifications and performance data from qualified consulting firms for non-destructive testing, risk assessment, and structural condition evaluation of approximately 6,000 feet of 90 inch Cylinder Prestressed Concrete Pipe.

The WB44 Lateral is a diversion off of the Wahluke Branch Canal. The head of the lateral is located approximately 5.5 miles east of Mattawa, Washington. The lateral is comprised of 21,183 feet of 90 inch pipe and 1,817 of 60 inch pipe. All discharge out of the lateral main line is into sub-laterals, taking off from the main line perpendicularly through butterfly valves. There is no terminal outflow from the WB44 lateral main line. The 90 inch portion of the lateral is made up of reinforced concrete pipe and cylinder prestressed concrete pipe (also known as PCCP). The 90 inch PCCP portion of the lateral to be evaluated begins at Station 32+50 and extends to Station 92+51.52 and is rated for 356 cfs. The 90 inch and 60 inch reinforced concrete pipe portions of the lateral main line are not under consideration in this action.

SCBID will evaluate the statements of qualifications and performance data for public projects for which engineering design and modeling services may be needed in calendar year 2018. Responses shall include the following: 1. Qualifications showing specialized experience and technical competence in similar work. 2. The capacity and capability of the firm to perform the work within time limitations. 3. Past record of performance of the firm with respect to factors such as cost control, work quality and ability to meet dead lines. 4. Standard or preferred form of contract. 5. A company brochure with general information on the firm and resumes for the key personnel to be assigned to the project.

The requested information is to be emailed, mailed or hand delivered to: Mr. David A. Solem, Secretary/Manager South Columbia Irrigation District P.O. Box 1006 1135 E Hillsboro, Suite A Pasco, WA 99301-1006 Telephone: (509) 547-1735 Fax: (509) 547-8669 Email: dsolem@scbid.org #3472217 01/14 & 01/21/2018

PORT OF KENNEWICK PUBLIC NOTICE

Small Works Roster for Public Works Projects

Notice is hereby given that Port of Kennewick (the "Port"), is accepting applications from contractors who wish to be placed upon the Port's Small Works Roster (The "Roster") for Public Works Projects. Applicants must be properly licensed or registered to perform work in the State of Washington. Contractors whose names appear on the Roster may be contacted to submit job proposals for contracts in the amount of \$300,000 or less as provided by RCW 39.04.155. PLEASE NOTE: PORT OF KENNEWICK COMPLIES WITH THE PREVAILING WAGE LAW OF THE STATE OF WASHINGTON (RCW 39.12) AND REQUIRES ALL CONTRACTORS TO COMPLY. APPLICANTS: Please apply online using the QR code below; the following link: <http://portofkennewick.org/business/sma-all-works-professional-roster/> or contact Kandy Yates at 509.586.1186 to have an application mailed. Qualified applications will be placed on the roster.
#3468567 01/10 & 01/14/2018

To place your Legal Announcement, Call 585-7213.

CLASSIFIED LEGALS

Legals

Legals & Public Notices

KENNEWICK CITY COUNCIL
NOTICE OF ACCEPTANCE OF WORK
 On the 17th day of July 2018, the Kennewick City Council accepted the work of Sanske Lawn & Tree Care, Inc. for Contract P1701-17, Furnishing & Applying Herbicide 2017-2018, in the amount of \$66,085.74.
 Terri L. Wright, City Clerk
 #3770438 07/22/2018

ADVERTISEMENT FOR BIDS

Sealed bids will be received by the Board of Directors of Moses Lake School District No. 161 in the school district Board Room at the Central Washington Region Transportation Cooperative, 940 E. Yonezawa Blvd., Moses Lake, Washington for construction of the MOSES LAKE HIGH SCHOOL SITE IMPROVEMENTS as follows:

Contractors shall submit their sealed proposals until 5:00 pm, August 2, 2018. Sealed proposals shall include both the Base Bid and Alternate Bid(s).

Proposals received after time set for opening will not be considered. Bids will be opened and publicly read immediately after the final submittal deadline.

Drawings and Specifications will be available on Friday, July 13, 2018 at www.nacplans.com and may be examined at the following locations: NAC Architecture, Spokane; Abadan Regional Plan Center.

Associated Builders and Contractors - Inland Pacific Chapter, Associated General Contractors of Idaho, Construction Market Data Group, Daily Journal of Commerce - Seattle, Dodge Data & Analytics, NW Contractors Network, Ridgeline Graphics (Wenatchee Plan Center), Southwest Washington Contractors Association, Spokane Regional Plan Center, Tri-City Construction Council, Walla Walla Valley Plan Center, WCR Plan Center, Yakima Plan Center.

Bidders may download digital files at no cost. Printed documents are available by choosing the "Order" option. Bona Fide General Contractors, licensed in the State of Washington may receive up to 2 full sets of "Refundable Documents" upon deposit of \$100.00 per set. Make checks payable to NAC Architecture and mail to Abadan Regional Graphics, 603 East 2nd Avenue, Spokane, WA 99202. Deposit will not be returned if documents are mutilated or so marked that they are not reusable and/or if they are not returned to the Architect within ten (10) days after bids are received. Additional or partial sets may be purchased, at bidders' expense, (non-refundable), from www.nacplans.com or a printer of the bidders' choosing.

Bidders wishing to be formally listed as a plan holder must log in and choose "Add me as a Plan Holder" at www.nacplans.com, where a current plan holder list is continually posted. Any questions regarding www.nacplans.com shall be directed to plan center services, 509-747-2964 or repro@abadanregional.com.

Optional Pre-Bid Conference: A Pre-Bid Conference is scheduled for July 25, 2018 at 2:00 pm and held at the project site located at 803 Sharon Ave E, Moses Lake, Washington, commencing at the High School entry courtyard.

No bidder may withdraw its bid after hour set for opening thereof, unless award is delayed for a period exceeding 90 days.

The Board of Directors of Moses Lake School District No. 161 reserves the right to reject any or all bids and to waive informalities.

By Order of the Board of Directors, Moses Lake School District No. 161
 END OF ADVERTISEMENT FOR BIDS
 #3760116 07/15 & 07/22/2018

KENNEWICK PLANNING COMMISSION

NOTICE OF PUBLIC HEARING
 August 6, 2018 6:30 p.m.

The Kennewick Planning Commission will hold a Public Hearing on Monday, August 6, 2018, at 6th Avenue, Council Chambers, 210 West 6th Avenue, at 6:30 p.m. or as soon as possible thereafter, to receive public comment on a proposed area-wide rezone of 33 properties in SE Kennewick. The proposal is to rezone properties that are currently zoned Agriculture, to an implementing zoning district for its Comprehensive Plan land use designation. Staff will be presenting the proposed changes and the Planning Commission will make a recommendation to the City Council on the individual items.

Written comments may be addressed to Steve Donovan and submitted to steve.donovan@ci.kennewick.wa.us or mailed to PO Box 6108, Kennewick, WA 99336 no later than 4:30 p.m., August 3, 2018. Comments received after this date must be presented in person at the meeting.

The City of Kennewick welcomes full participation in public meeting by all citizens. No qualified individual with a disability shall be excluded or denied the benefit of participating in such meetings. If you wish to use auxiliary aids or require assistance to comment at this public meeting, please contact Anthony Muai at (509) 585-4386 or TDD (509) 585-4425 or through the Washington Relay Service Center TTY at #711 at least ten days prior to the date of the meeting to make arrangements for special needs.
 #3764725 07/22/2018

CALL FOR BIDS

NOTICE IS HEREBY GIVEN by the Board of Port Commissioners of Port of Warden, Washington that sealed bids will be received until 1:30 p.m., Monday, August 13th, 2018, at one of the following locations:

- At the Port of Warden Office 605 West 1st Street Warden, WA 98857. Bids delivered in person will be received by the Port Manager between 11AM and 1:30PM on the day of the bid.
- Bids mailed to the Port of Warden Commissioners, Post Office Box 841, Warden, WA 98857, shall take into consideration of the mailing time process and must be received by the Port Manager by the date and time stated above.

For the PORT OF WARDEN - RAIL INFRASTRUCTURE EXPANSION (RIE) PROJECT
 Any Bids received after the time stated

Legals & Public Notices

work consists of construction of approximately 4,900 feet new railroad auxiliary track including, earthwork (totaling approximately 17,500 CY), and base materials totaling approximately 3,200 CY, ballasted track, two each turnouts (one of which is a connecting turnout installed into existing track), one each sliding derail, two each earthen bumpers, approximately 1500 linear feet of walkway, and 32 track feet of timber grade crossing, using primarily contractor supplied materials. The project shall be completed in 90 working days.

Bid / Contract Documents will be available (only) by e-mail through HDR Engineering, 1401 E. Trent Avenue, Suite 101, Spokane, Washington 99202; Paul Weber - paul.weber@hdrinc.com; phone (509) 343-8511.

This project is a Washington State Department of Transportation funded project and as such Washington State prevailing wage Law applies. Port of Warden is an Equal Opportunity Employer. Minority and women-owned businesses are encouraged to bid. There is no formal pre-bid tour. All bidders are encouraged to inspect the proposed enclosures in areas. For information to schedule a site visit, please contact Pat Millard, Port Manager at (509)348-2480 or portwarden@fiber.tn or Paul Weber, Project Engineer, at 509-343-8511 or paul.weber@hdrinc.com.

Questions will not be answered during any site inspection. Questions should be emailed to Paul Weber at paul.weber@hdrinc.com in the form of a Request for Information (RFI). The RFI and any written answers will be made available to other bidders unless they are proprietary in nature. Questions pertaining to the bid will not be taken after August 8th, 2018.

Engineers estimate for the work is approx. \$1.35 to \$1.55 Million including WSS.

#3768521 07/22, 07/23, 07/29, & 07/30/2018

Call for Bids

Sunnyside Valley Irrigation District (SVID) as the Operating Agent for the Sunnyside Division Board of Control (SDBOC) will receive sealed bids at the SVID field office, 1105 Yakima Valley Hwy, PO Box 239, Sunnyside, WA 98944, until 11:00 a.m. on August 2nd, 2018 for pipe materials to be used in the construction of the Enclosed Lateral Improvement Projects 2018-2019. Bids will then be opened and publicly read aloud. Proposals received after this time will not be considered.

Sought materials include approximately 34,000 feet of 4-inch to 36-inch diameter PVC pipe, and related valves, fittings, couplings and miscellaneous appurtenances in accordance with specifications. Contract estimate is \$800,000. Bidders are not required to bid all schedules.

Contract documents may be obtained from the SVID Field Office at 1105 Yakima Valley Hwy, Sunnyside, or by contacting Mr. David Felman felmand@svd.org or by calling (509) 837-6980.

The following is applicable to federal aid projects: Sunnyside Division Board of Control, in accordance with Title VI of the Civil Rights Act of 1964, 88 Stat. 352, hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, gender, disability, or national origin in consideration for an award.

#3768828 07/22 & 07/29/2018

Hanford Site Air Operating Permit Renewal 3

Ecology is reopening the public comment period originally published on December 17, 2017. The draft permit documents are the same, but electronic access to some supporting documentation is being made available. The new comment period is July 22 to August 24, 2018.

The Washington Department of Ecology invites you to comment on the draft permit renewal of the Hanford Site Air Operating Permit (AOP) No. 00-05-006 Renewal 3.

The State's regulations for control of air emissions limit the duration of an AOP to five years. The current Hanford Site AOP expires on March 31, 2018. A new AOP is needed as the Hanford Site still has air emissions. Ecology received the renewal application from the U.S. Department of Energy on September 12, 2017, and determined the application was complete on November 7, 2017. During the permit renewal process the existing AOP (No. 00-05-006 Renewal 2, Rev. B) remains in effect.

Congress amended the federal Clean Air Act in 1990 by creating AOPs for industrial sources of air pollution. An AOP brings all applicable air requirements into one document. In 1991, the Washington State Legislature updated the Washington Clean Air Act (RCW 70.94) to make it consistent with these changes. In 1993, Ecology developed Washington's AOP regulation (WAC 173-401) to comply with federal regulations. The U.S. Environmental Protection Agency granted the state the authority to implement the AOP regulations in November 1994. The Hanford Site AOP was first issued in June 2001. Three agencies administer the Hanford Site AOP. Ecology regulates the non-radioactive criteria and toxic air emissions. The Benton Clean Air Agency administers outdoor burning.

Please submit comments by August 24, 2018.
 Electronically (preferred) via: <http://wt.ecology.commentinput.com/?id=UrK6K>
 By U.S. Mail or hand-deliver to:
 Daina McFadden
 3100 Port of Benton Blvd
 Richland WA 99354

A public meeting is not scheduled, but if there is enough interest, we will consider holding one. To request a meeting or for more information, contact:
 Daina McFadden
 509-372-7950
hanford@ecy.wa.gov

Copies of the proposed modification are located in the Administrative Record and Information Repositories (below). In addition, the proposed modification

Legals & Public Notices

Ecology Nuclear Waste Program Resource Center
 3100 Port of Benton Blvd.
 Richland, WA 99354
 509-372-7950

U.S. Department of Energy Administrative Record
 2440 Stevens Drive, Room 1101
 Richland, WA 99354
 509-376-2530

University of Washington, Suzzallo Library
 P.O. Box 352900
 Seattle, WA 98195
 206-543-5597

Gonzaga University, Foley Center
 502 E Boone Avenue
 Spokane, WA 99258
 509-313-6110

Portland State University, Millar Library
 1875 SW Park Avenue
 Portland, OR 97207
 503-725-4542
 #3765750 07/22/2018

ADVERTISEMENT FOR BIDS

IFB 18-18
 Notice is hereby given that bid proposals will be received by Ben Franklin Transit (Owner) at the Owner's office (1038 Columbia Park Trail, Richland, WA 99352) or via mail (1000 Columbia Park Trail, Richland, WA 99352) no later than 2:00 PM on August 13th, 2018, at which time they will be opened, read, and tabulated publicly. Proposals received after the time fixed for opening will not be considered.

Work to be performed includes: Construction of a stormwater drain including precast manholes and connections to existing manholes, construction of a stormwater pump station, excavation of stormwater ponds, segmental block retaining walls, and appurtenant restructure including concrete pavement, curb and gutter, and permeable ballast surfacing. Time for completion is 30 calendar days.

A non-mandatory pre-bid conference will be held at the job site on July 26th, 2018 at 10:00 am. Complete digital contract documents are available at <http://www.rh2.com> under the Bidding tab. The complete digital contract documents may be downloaded for a \$10.00 non-refundable fee by submitting the QuestCDN project # 5822511 on the website. Please contact QuestCDN.com at 952-233-1632 or info@questcdn.com for assistance in free membership registration, downloading, and working with this digital project information. An informational copy of the contract documents is on file for inspection at the Owner's office.

Questions regarding this project should be referred to Mike Retter, PE, RH2 Engineering, Inc., 509-392-6496. Addenda, if necessary, will be posted no later than August 8th, 2018. Questions received after 3:00 pm on August 6th, 2018, will go unanswered.

Ben Franklin Transit hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, minority and women's business enterprises will be afforded full opportunity to submit bids in response to the invitation and will not be discriminated against on the grounds of race, color, national origin, or sex in consideration for an award.

Each bid proposal shall be accompanied by a bid proposal deposit in certified check, cashier's check, postal money order, or surety bond in an amount equal to at least 5 percent of the amount of such bid proposal. Checks shall be made payable to the Ben Franklin Transit. Should the successful bidder fail to enter into such contract and furnish satisfactory performance and payment bond within the time stated in the Specifications, the bid proposal deposit shall be forfeited to Ben Franklin Transit.

Ben Franklin Transit reserves the right to reject any or all bids and to waive irregularities in the bid or in the bidding. No bidder may withdraw his proposal after the hours set for the opening thereof, or before award of contract, unless said award is delayed for a period exceeding 90 calendar days.

Rob Orvis, Procurement Manager
 Ben Franklin Transit
 #3760046 07/15 & 07/22/2018

CITY OF RICHLAND REQUEST FOR PROPOSALS

RFP No. 18-0095, Metal Recycling Services
PROPOSALS DUE: July 31, 2018, 3:00 p.m., EXACTLY, Pacific Local Time

Public notice is hereby given that the City of Richland, Washington has issued the above solicitation for collection, removal and recycling of scrap metals. Detailed information and the proposal documents are available at www.publicpurchase.com, under City of Richland, Washington designated webpage.

Contact Public Purchase directly if unable to access documents online at support@publicpurchase.com. Online Chat is available from 7:00 a.m. to 4:00 p.m. MT at www.publicpurchase.com top left corner. If unable to reach Public Purchase, contact the City Purchasing Division at 509-942-7710.

The City of Richland in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 USC 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally Assisted Programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises as defined at 49 CFR Part 26 will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin, or sex in consideration for an award.

Cathy Robinson, CPPO, CPPB
 Purchasing Manager
 #3759731 07/15 & 07/22/2018

CANCELLATION OF THE REGULAR MEETING

FOR AUGUST 7, 2018
 NOTICE IS HEREBY GIVEN THAT THE CITY OF BENTON CITY, WASHINGTON HAS CANCELLED THE REGULAR CITY COUNCIL MEETING FOR TUESDAY, AUGUST 7, 2018 AT 7PM.

Legals & Public Notices

PORT OF BENTON
NOTICE OF ACCEPTANCE OF WORK
2018 PORT-WIDE PAVEMENT MAINTENANCE

Notice is hereby given that the Port of Benton accepts the work done by Blue Mountain Paving, LLC., for the scope of work on the 2018 Port-Wide Pavement Maintenance Project. Any laborer, mechanic, sub-contractor, material man or person claiming to have supplied material, provisions or goods for the prosecution of such work or the making of such improvements who has not been paid should present to and file with the Bond of Commissioners a notice in accordance with RCW 39.08.030 and within the time set forth therein.

/s/ John Haakenson, Director of Airports/Operations, Port of Benton
 #3758976 07/15, 07/22, & 07/29/2018

PORT OF BENTON

NOTICE OF ACCEPTANCE OF WORK
HVAC Replacements at Multiple Sites Project

Notice is hereby given that the PORT OF BENTON accepts the work done by M. CAMPBELL & COMPANY, INC., for the scope of work on the HVAC Replacements at Multiple Sites Project. Any laborer, mechanic, sub-contractor, material man or person claiming to have supplied material, provisions or goods for the prosecution of such work or the making of such improvements who has not been paid should present to and file with the Bond of Commissioners a notice in accordance with RCW 39.08.030 and within the time set forth therein.

/s/ Kevin Howard, Director of Maintenance, Port of Benton
 #3758959 07/15, 07/22, & 07/29/2018

ORDINANCE NO. 35-18 AN ORDINANCE

of the City of Richland amending Title 23: Zoning Regulations of the Richland Municipal Code and the Official Zoning Map of the City so as to change the zoning on 1.1 acres from Suburban Agriculture (S-12) to Single-Family Residential (R-1.2AG) said property being located at the northeast corner of the intersection of Courthouse Ridge Drive and Country Court, and adopting the findings and conclusions of the Hearing Examiner as the findings and conclusions of the Richland City Council. Ordinance effective the day following its publication. Ordinance available at the City Clerk's Office, 975 George Washington Way, Richland, WA 99352 or (509) 942-7388.

#3768789 07/22/2018

ORDINANCE NO. 36-18 AN ORDINANCE

of the City of Richland amending Chapter 12.03 of the Richland Municipal Code related to Road Impact Fees. This ordinance shall take effect the day following its publication in the official newspaper of the City of Richland, and shall apply to all new building permit applications received on or after August 1, 2018. Ordinance available at the City Clerk's Office, 975 George Washington Way, Richland, WA 99352 or (509) 942-7388.

#3768820 07/22/2018

ORDINANCE NO. 37-18 AN ORDINANCE

of the City of Richland amending the 2018 Budget to provide for additional appropriations and declaring that a public emergency exists in the City's General Fund, and amending the 2018-2023 Capital Improvement Plan. Ordinance effective the day following its publication. Ordinance available at the City Clerk's Office, 975 George Washington Way, Richland, WA 99352 or (509) 942-7388.

#3768817 07/22/2018

ORDINANCE NO. 38-18 AN ORDINANCE

of the City of Richland amending the 2018 Budget to provide for additional appropriations and declaring that a public emergency exists in the City's Street Capital Construction Fund, Capital Improvement Fund and General Fund, and amending the 2018-2023 Capital Improvement Plan. Ordinance effective the day following its publication. Ordinance available at the City Clerk's Office, 975 George Washington Way, Richland, WA 99352 or (509) 942-7388.

#3768796 07/22/2018

INVITATION FOR BIDS

HILLS WEST PHASE 2 TRANSMISSION FITTINGS PURCHASE (MATERIALS ONLY)

The Kennewick Irrigation District (KID) is inviting and requesting bid proposals for the furnishing of materials only for the Hills West Phase 2 Transmission Fittings Purchase (Materials Only) project, related but not limited to, pipe, valves, fittings, and other appurtenant water work supplies. The materials include approximately 3,920 total linear feet of 12-inch and 4-inch pipe, and other related water work supplies. Included in the project is the delivery of all the materials to the KID shop facility located at 2015 S. Ely Street, Kennewick, WA.

Bid documents, including a material list and specifications are available at the Kennewick Irrigation District, 2015 S. Ely Street, Kennewick, WA, 99337 starting at 3:00 p.m. Monday, July 16, 2018.

Bids shall be titled, "Hills West Phase 2 Transmission Fittings Purchase (Materials Only)" and shall be addressed to the Kennewick Irrigation District Board of Directors. Bids will be received by Lori Gibson, Executive Assistant, 2015 S. Ely Street, Kennewick, WA 99337, up to 1:00 p.m., on Monday, August 6, 2018, at which time they will be publicly opened and read aloud at the Kennewick Irrigation District Office. Bids are to be submitted only on original forms provided in the specifications. Following receipt of a successful bid, award of the contract will proceed the week of the bid.

Technical questions regarding the scope of this project should be directed in writing, using the Request for Information form located in the appendices of the contract documents via fax at (509) 586-7663 or by calling Alex Romero, KID Engineer at (509) 586-6012 ext. 129.

The KID reserves the right to reject any or all bids, to waive technicalities, to combine this contract with other contracts when considering contract award, and to accept any bid which it deems in the best interest of the District.

The KID hereby notifies all bidders that it encourages and will affirmatively ensure that in any contract entered into, pursuant to this invitation, certified minority and women's business enterprises will be afforded full opportunity to submit bids in response to the invitation and will not be discriminated against on the grounds of race, color, national origin, or sex in consideration for an award.

DATED: July 13, 2018
 Charles Freeman,
 District Manager
 #3759007 07/15 & 07/22/2018

Legals & Public Notices

voluntarily excluded from covered transactions by any Federal department or agency.
 DATED: July 13, 2018
 Charles Freeman,
 District Manager
 #3758999 07/15 & 07/22/2018

INVITATION FOR BIDS

ROCK FOR HILLS WEST PHASE 2 TRANSMISSION PIPING (MATERIALS ONLY)

The Kennewick Irrigation District (KID) is inviting and requesting bid proposals to provide 5/8" minus crushed surfacing top course for the Rock for Hills West Phase 2 Transmission Piping (Materials Only) project. The project includes approximately 7,100 tons of 5/8" rock for trenching backfill. The bid shall be per ton of 5/8" minus. The bidder shall specify the pit location. Pick up of the material shall be completed by KID crews. The start of pick up will be on award of the contract.

Bid documents, including a material list and specifications are available at the Kennewick Irrigation District, 2015 S. Ely Street, Kennewick, WA, 99337 starting at 3:00 p.m. Monday, July 16, 2018.

Bids shall be titled, "Rock for Hills West Phase 2 Transmission Piping (Materials Only)" and shall be addressed to the Kennewick Irrigation District Board of Directors. Bids will be received by Lori Gibson, Executive Assistant, 2015 S. Ely Street, Kennewick, WA 99337, up to 1:30 p.m., on Monday, August 6, 2018, at which time they will be publicly opened and read aloud at the Kennewick Irrigation District Office. Bids are to be submitted only on original forms provided in the specifications. Following receipt of a successful bid, award of the contract will proceed the week of the bid.

Technical questions regarding the scope of this project should be directed in writing, using the Request for Information form located in the appendices of the contract documents via fax at (509) 586-7663 or by calling Alex Romero, KID Engineer at (509) 586-6012 ext. 129.

The KID reserves the right to reject any or all bids, to waive technicalities, to combine this contract with other contracts when considering contract award, and to accept any bid which it deems in the best interest of the District.

The KID hereby notifies all bidders that it encourages and will affirmatively ensure that in any contract entered into, pursuant to this invitation, certified minority and women's business enterprises will be afforded full opportunity to submit bids in response to the invitation and will not be discriminated against on the grounds of race, color, national origin, or sex in consideration for an award. Certification information for the MWBE businesses is available at <http://www.omwbe.wa.gov>.

Bidders shall certify that it or its principles are not presently debarred, suspended proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency.

DATED: July 13, 2018
 Charles Freeman,
 District Manager
 #3759007 07/15 & 07/22/2018

INVITATION FOR BIDS

HOT MIXED ASPHALT FOR HILLS WEST PHASE 2 TRANSMISSION PIPING (MATERIALS ONLY)

The Kennewick Irrigation District (KID) is inviting and requesting bid proposals to provide hot mixed asphalt (HMA) for the Hot Mixed Asphalt for Hills West Phase 2 Transmission Piping (Materials Only) project. The project includes approximately 760 tons of HMA for roadway restoration.

The bid shall be per ton of HMA. The bidder shall specify the batch plant location. Pick up of the material shall be completed by KID crews. The start of pick up will be on award of the contract.

Bid documents, including a material list and specifications are available at the Kennewick Irrigation District, 2015 S. Ely Street, Kennewick, WA, 99337 starting at 3:00 p.m. Monday, July 16, 2018.

Bids shall be titled, "Rock for Hills West Phase 2 Transmission Piping (Materials Only)" and shall be addressed to the Kennewick Irrigation District Board of Directors. Bids will be received by Lori Gibson, Executive Assistant, 2015 S. Ely Street, Kennewick, WA 99337, up to 2:00 p.m., on Monday, August 6, 2018, at which time they will be publicly opened and read aloud at the Kennewick Irrigation District Office. Bids are to be submitted only on original forms provided in the specifications. Following receipt of a successful bid, award of the contract will proceed the week of the bid.

Technical questions regarding the scope of this project should be directed in writing, using the Request for Information form located in the appendices of the contract documents via fax at (509) 586-7663 or by calling Alex Romero, KID Engineer at (509) 586-6012 ext. 129.

The KID reserves the right to reject any or all bids, to waive technicalities, to combine this contract with other contracts when considering contract award, and to accept any bid which it deems in the best interest of the District.

The KID hereby notifies all bidders that it encourages and will affirmatively ensure that in any contract entered into, pursuant to this invitation, certified minority and women's business enterprises will be afforded full opportunity to submit bids in response to the invitation and will not be discriminated against on the grounds of race, color, national origin, or sex in consideration for an award. Certification information for the MWBE businesses is available at <http://www.omwbe.wa.gov>.

Bidders shall certify that it or its principles are not presently debarred, suspended proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency.

DATED: July 13, 2018
 Charles Freeman,
 District Manager
 #375

CLASSIFIED LEGALS

Legals

Legals & Public Notices

CITY OF PASCO NOTICE OF APPLICATION

Si necesita ayuda para entender este aviso o necesita más información, por favor llame al Departamento de Desarrollo Comunitario y Económico de la Ciudad de Pasco a 509-545-3441.

Proposal: Colette Steinwert has applied to rezone 4011 Road 96 in Pasco, Washington from RS-20 (Suburban) to RS-1 (Suburban) (MF# Z 2018-006). The proposal is subject to regulations contained in the Pasco Municipal Code.

Public Comment Period: Written comments submitted to The Community Development Department by 5:00 p.m. on August 16, 2018 will be included in the Planning Commission's meeting packet. You may also submit comments at the Planning Commission meeting advertised below. If you have questions on the proposal, contact the Planning Division at (509) 545-3441 or via e-mail to: bourcierd@pasco-wa.gov.

Open Record Hearing: The Pasco Planning Commission will conduct an open record hearing at 7:00 p.m. on August 16, 2018 in the Council Chambers in Pasco City Hall at 525 N 3rd Avenue in Pasco, Washington. The Planning Commission will consider public testimony concerning the above application at this meeting.

Determination of Completeness: The application has been declared complete for the purpose of processing.

Environmental Documents and/or Studies Applicable to this Application: Environmental Determination No. SEPA2018-037 has been assigned to this proposal. It is probable that a Determination of Non-Significance or Mitigated Determination of Non-Significance will be issued for this proposal (WAC 197.11.355 optional DNS process). The open record hearing on the Special Permit application may be the only opportunity to comment on the environmental impacts of this proposal or to appeal any State Environmental Policy Act related decisions.

Project Permits Associated with this Proposal: A building permit will be required before construction.

Preliminary Determination of Regulations Used for Project Mitigation: Titles 15 (Telecommunications), 16 (Buildings and Construction), 25 (Zoning), Regulations of the Pasco Municipal Code and the land use policies contained in the Pasco Comprehensive Plan.

Estimated Date of the Recommendation: The Pasco Planning Commission is estimated to make a recommendation on the application on September 20, 2018.

To Receive Notification of the Recommendation, Decision and/or the Environmental Determination: Contact the Planning Division at the address or telephone number below.

Appeal: Any person aggrieved by the recommendation of the Pasco Planning Commission on this proposal may appeal to the Pasco City Council within ten (10) days of the date of the recommendation.

Prepared 7/27/18 by: Darcy Bourcier, Planner I, PO Box 293 Pasco WA 99301 (509)545-3441 bourcierd@pasco-wa.gov

The City of Pasco welcomes full participation in public meetings by all citizens. No qualified individual with a disability shall be excluded or denied the benefit of participating in such meetings. If you wish to use auxiliary aids or require assistance to comment at this public meeting, please contact the Community Development Department at (509) 545-3441 or TDD (509) 585-4425 at least ten days prior to the date of the meeting to make arrangements for special needs.

3787527 08/05/2018

CITY OF PASCO NOTICE OF APPLICATION

Si necesita ayuda para entender este aviso o necesita más información, por favor llame al Departamento de Desarrollo Comunitario y Económico de la Ciudad de Pasco a 509-545-3441.

Proposal: Sprint Spectrum LP has applied for a Special Permit (MF# SP 2018-009) to locate a cellular antenna array in the steeple of the Christian Science Church at 5304 Burden Blvd in Pasco, Washington. The proposal is subject to regulations contained in the Pasco Municipal Code.

Public Comment Period: Written comments submitted to The Community Development Department by 5:00 p.m. on August 16, 2018 will be included in the Planning Commission's meeting packet. You may also submit comments at the Planning Commission meeting advertised below. If you have questions on the proposal, contact the

Legals & Public Notices

Planning Division at (509) 545 - 3441 or via e-mail to: bourcierd@pasco-wa.gov.

Continued Open Record Hearing: The Pasco Planning Commission will conduct continued open record hearing at 7:00 p.m. on August 16, 2018 in the Council Chambers in Pasco City Hall at 525 N 3rd Avenue in Pasco, Washington. The Planning Commission will consider public testimony concerning the above application at this meeting.

Determination of Completeness: The application has been declared complete for the purpose of processing.

Environmental Documents and/or Studies Applicable to this Application: Environmental Determination No. SEPA2018-033 has been assigned to this proposal. It is probable that a Determination of Non-Significance or Mitigated Determination of Non-Significance will be issued for this proposal (WAC 197.11.355 optional DNS process). The open record hearing on the Special Permit application may be the only opportunity to comment on the environmental impacts of this proposal or to appeal any State Environmental Policy Act related decisions.

Project Permits Associated with this Proposal: A building permit will be required before construction.

Preliminary Determination of Regulations Used for Project Mitigation: Titles 15 (Telecommunications), 16 (Buildings and Construction), 25 (Zoning), Regulations of the Pasco Municipal Code and the land use policies contained in the Pasco Comprehensive Plan.

Estimated Date of the Recommendation: The Pasco Planning Commission is estimated to make a recommendation on the application on September 20, 2018.

To Receive Notification of the Recommendation, Decision and/or the Environmental Determination: Contact the Planning Division at the address or telephone number below.

Appeal: Any person aggrieved by the recommendation of the Pasco Planning Commission on this proposal may appeal to the Pasco City Council within ten (10) days of the date of the recommendation.

Prepared 7/27/18 by: Darcy Bourcier, Planner I, PO Box 293 Pasco WA 99301 (509)545-3441 bourcierd@pasco-wa.gov

The City of Pasco welcomes full participation in public meetings by all citizens. No qualified individual with a disability shall be excluded or denied the benefit of participating in such meetings. If you wish to use auxiliary aids or require assistance to comment at this public meeting, please contact the Community Development Department at (509) 545-3441 or TDD (509) 585-4425 at least ten days prior to the date of the meeting to make arrangements for special needs.

3787472 08/05/2018

CITY OF PASCO NOTICE OF APPLICATION

Si necesita ayuda para entender este aviso o necesita más información, por favor llame al Departamento de Desarrollo Comunitario y Económico de la Ciudad de Pasco a 509-545-3441.

Proposal: Sprint Spectrum LP has applied for a Special Permit (MF# SP 2018-008) to locate a cellular antenna array on the rooftop of Fiesta Foods at 115 S 10th Ave in Pasco, Washington. The proposal is subject to regulations contained in the Pasco Municipal Code.

Public Comment Period: Written comments submitted to The Community Development Department by 5:00 p.m. on August 16, 2018 will be included in the Planning Commission's meeting packet. You may also submit comments at the Planning Commission meeting advertised below. If you have questions on the proposal, contact the Planning Division at (509) 545 - 3441 or via e-mail to: bourcierd@pasco-wa.gov.

Continued Open Record Hearing: The Pasco Planning Commission will conduct continued open record hearing at 7:00 p.m. on August 16, 2018 in the Council Chambers in Pasco City Hall at 525 N 3rd Avenue in Pasco, Washington. The Planning Commission will consider public testimony concerning the above application at this meeting.

Determination of Completeness: The application has been declared complete for the purpose of processing.

Environmental Documents and/or Studies Applicable to this Application: Environmental Determination No. SEPA2018-032 has been assigned to this proposal. It is probable that a Determination of Non-Significance or Mitigated Determination of Non-Significance will be issued for this proposal (WAC 197.11.355 optional DNS process). The open record hearing on the Special Permit application may be the only opportunity to comment on the environmental impacts of this proposal or to appeal any State Environmental Policy Act related decisions.

Project Permits Associated with this Proposal: A building permit will be required before construction.

Preliminary Determination of Regulations Used for Project Mitigation: Titles 15 (Telecommunications), 16 (Buildings and Construction), 25 (Zoning), Regulations of the Pasco Municipal Code and the land use policies contained in the Pasco Comprehensive Plan.

Estimated Date of the Recommendation: The Pasco Planning Commission is estimated to make a recommendation on the application on September 20, 2018.

Legals & Public Notices

at DNS process). The open record hearing on the Special Permit application may be the only opportunity to comment on the environmental impacts of this proposal or to appeal any State Environmental Policy Act related decisions.

Project Permits Associated with this Proposal: A building permit will be required before construction.

Preliminary Determination of Regulations Used for Project Mitigation: Titles 15 (Telecommunications), 16 (Buildings and Construction), 25 (Zoning), Regulations of the Pasco Municipal Code and the land use policies contained in the Pasco Comprehensive Plan.

Estimated Date of the Recommendation: The Pasco Planning Commission is estimated to make a recommendation on the application on September 20, 2018.

To Receive Notification of the Recommendation, Decision and/or the Environmental Determination: Contact the Planning Division at the address or telephone number below.

Appeal: Any person aggrieved by the recommendation of the Pasco Planning Commission on this proposal may appeal to the Pasco City Council within ten (10) days of the date of the recommendation.

Prepared 7/27/18 by: Darcy Bourcier, Planner I, PO Box 293 Pasco WA 99301 (509)545-3441 bourcierd@pasco-wa.gov

The City of Pasco welcomes full participation in public meetings by all citizens. No qualified individual with a disability shall be excluded or denied the benefit of participating in such meetings. If you wish to use auxiliary aids or require assistance to comment at this public meeting, please contact the Community Development Department at (509) 545-3441 or TDD (509) 585-4425 at least ten days prior to the date of the meeting to make arrangements for special needs.

3787426 08/05/2018

CITY OF PASCO NOTICE OF APPLICATION

Si necesita ayuda para entender este aviso o necesita más información, por favor llame al Departamento de Desarrollo Comunitario y Económico de la Ciudad de Pasco a 509-545-3441.

Proposal: Sprint Spectrum LP has applied for a Special Permit (MF# SP 2018-007) to locate a cellular antenna array on the rooftop of The Crossings at Chapel Hill apartments at 6626 Chapel Hill Blvd in Pasco, Washington. The proposal is subject to regulations contained in the Pasco Municipal Code.

Public Comment Period: Written comments submitted to The Community Development Department by 5:00 p.m. on August 16, 2018 will be included in the Planning Commission's meeting packet. You may also submit comments at the Planning Commission meeting advertised below. If you have questions on the proposal, contact the Planning Division at (509) 545 - 3441 or via e-mail to: bourcierd@pasco-wa.gov.

Continued Open Record Hearing: The Pasco Planning Commission will conduct continued open record hearing at 7:00 p.m. on August 16, 2018 in the Council Chambers in Pasco City Hall at 525 N 3rd Avenue in Pasco, Washington. The Planning Commission will consider public testimony concerning the above application at this meeting.

Determination of Completeness: The application has been declared complete for the purpose of processing.

Environmental Documents and/or Studies Applicable to this Application: Environmental Determination No. SEPA2018-030 has been assigned to this proposal. It is probable that a Determination of Non-Significance or Mitigated Determination of Non-Significance will be issued for this proposal (WAC 197.11.355 optional DNS process). The open record hearing on the Special Permit application may be the only opportunity to comment on the environmental impacts of this proposal or to appeal any State Environmental Policy Act related decisions.

Project Permits Associated with this Proposal: A building permit will be required before construction.

Preliminary Determination of Regulations Used for Project Mitigation: Titles 15 (Telecommunications), 16 (Buildings and Construction), 25 (Zoning), Regulations of the Pasco Municipal Code and the land use policies contained in the Pasco Comprehensive Plan.

Estimated Date of the Recommendation: The Pasco Planning Commission is estimated to make a recommendation on the application on September 20, 2018.

To Receive Notification of the Recommendation, Decision and/or the Environmental Determination: Contact the Planning Division at the address or telephone number below.

Appeal: Any person aggrieved by the recommendation of the Pasco Planning Commission on this proposal may appeal to the Pasco City Council within ten (10) days of the date of the recommendation.

Prepared 7/30/18 by: Darcy Bourcier, Planner I, PO Box 293 Pasco WA 99301 (509) 545-3441 bourcierd@pasco-wa.gov

The City of Pasco welcomes full participation in public meetings by all citizens. No qualified individual with a disability shall be excluded or denied the benefit of participating in such meetings. If you wish to use auxiliary aids or require assistance to comment at this public meeting, please contact the Community Development Department at (509) 545-3441 or TDD (509) 585-4425 at least ten days prior to the date of the meeting to make arrangements for special needs.

3787360 08/05/2018

Legals & Public Notices

To Receive Notification of the Recommendation, Decision and/or the Environmental Determination: Contact the Planning Division at the address or telephone number below.

Appeal: Any person aggrieved by the recommendation of the Pasco Planning Commission on this proposal may appeal to the Pasco City Council within ten (10) days of the date of the recommendation.

Prepared 7/27/18 by: Darcy Bourcier, Planner I, PO Box 293 Pasco WA 99301 (509)545-3441 bourcierd@pasco-wa.gov

The City of Pasco welcomes full participation in public meetings by all citizens. No qualified individual with a disability shall be excluded or denied the benefit of participating in such meetings. If you wish to use auxiliary aids or require assistance to comment at this public meeting, please contact the Community Development Department at (509) 545-3441 or TDD (509) 585-4425 at least ten days prior to the date of the meeting to make arrangements for special needs.

3787360 08/05/2018

CITY OF PASCO NOTICE OF APPLICATION

Si necesita ayuda para entender este aviso o necesita más información, por favor llame al Departamento de Desarrollo Comunitario y Económico de la Ciudad de Pasco a 509-545-3441.

Proposal: RP Development has submitted an application for approval of a 104-lot, single-family residential subdivision on 38 acres east of Road 76 and north of the FCID irrigation canal in Pasco, Washington (MF# PP 2018-007 - Serrano Heights). The proposal is subject to regulations contained in the Pasco Municipal Code.

Public Comment Period: Written comments submitted to The Community Development Department by 5:00 p.m. on August 16, 2018 will be included in the Planning Commission's meeting packet. You may also submit comments at the Planning Commission meeting advertised below. If you have questions on the proposal, contact the Planning Division at (509) 545-3441 or via e-mail to: bourcierd@pasco-wa.gov.

Open Record Hearing: The Pasco Planning Commission will conduct an open record hearing at 7:00 p.m. on August 16, 2018 in the Council Chambers in Pasco City Hall at 525 N 3rd Avenue in Pasco, Washington. The Planning Commission will consider public testimony concerning the above application at this meeting.

Determination of Completeness: The application has been declared complete for the purpose of processing.

Environmental Documents and/or Studies Applicable to this Application: Environmental Determination No. SEPA2018-023 has been assigned to this proposal. It is probable that a Determination of Non-Significance or Mitigated Determination of Non-Significance will be issued for this proposal (WAC 197.11.355 optional DNS process). The open record hearing on the Special Permit application may be the only opportunity to comment on the environmental impacts of this proposal or to appeal any State Environmental Policy Act related decisions.

Project Permits Associated with this Proposal: No other permits are currently in process. A building permit will be needed for any future home construction and the construction drawings for the infrastructure will need to be approved by the City Engineering Division.

Preliminary Determination of Regulations Used for Project Mitigation: Titles 16 (Buildings and Construction) 25 (Zoning), 26 (Subdivision Regulations), 12 (Streets and sidewalks) of the Pasco Municipal Code and the land use policies contained in the Pasco Comprehensive Plan. The Standard Specification of the City Engineer will apply to all utility and road work.

Estimated Date of the Recommendation: The Pasco Planning Commission is estimated to make a recommendation on the application on August 16, 2018.

To Receive Notification of the Recommendation, Decision and/or the Environmental Determination: Contact the Planning Division at the address or telephone number below.

Appeal: Any person aggrieved by the recommendation of the Pasco Planning Commission on this proposal may appeal to the Pasco City Council within ten (10) days of the date of the recommendation.

Prepared 7/30/18 by: Darcy Bourcier, Planner I, PO Box 293 Pasco WA 99301 (509) 545-3441 bourcierd@pasco-wa.gov

The City of Pasco welcomes full participation in public meetings by all citizens. No qualified individual with a disability shall be excluded or denied the benefit of participating in such meetings. If you wish to use auxiliary aids or require assistance to comment at this public meeting, please contact the Community Development Department at (509) 545-3441 or TDD (509) 585-4425 at least ten days prior to the date of the meeting to make arrangements for special needs.

3787360 08/05/2018

Legals & Public Notices

tion in public meeting by all citizens. No qualified individual with a disability shall be excluded or denied the benefit of participating in such meetings. If you wish to use auxiliary aids or require assistance to comment at this public meeting, please contact the Community Development Department at (509) 545-3441 or TDD (509) 585-4425 at least ten days prior to the date of the meeting to make arrangements for special needs.

#3786616 08/05/2018

CITY OF PASCO NOTICE OF EXECUTIVE SESSION

PLEASE TAKE NOTICE that the City Council of the City of Pasco, Washington, will conduct an Executive Session on Saturday, August 11, at 9:00 a.m., in the City Council Chambers at 525 N. 3rd Avenue, to conduct the annual (yearly) performance evaluation of the City Manager.

Daniela Erickson
City Clerk
3789768 08/05/2018

CITY OF RICHLAND NOTICE OF PUBLIC HEARING

The Richland City Council will conduct a public hearing on Tuesday, August 7, 2018 at 7:30 p.m. in the Council Chamber, Richland City Hall, 505 Swift Boulevard, to receive comments on Proposed Budget Amendment to the City's General Fund for Police Services - Ordinance No. 45-18. Comments may be emailed bavery@ci.richland.wa.us or mailed to 871 George Washington Way, Richland, WA 99352 by 5:00 p.m. on August 7, 2018. For information contact Bonnie Avery at 509-942-7340 or bavery@ci.richland.wa.us.

3788844 08/05/2018

CITY OF RICHLAND NOTICE OF PUBLIC HEARING

The Richland City Council will conduct a public hearing on Tuesday, August 7, 2018 at 7:30 p.m. in the Council Chamber, Richland City Hall, 505 Swift Boulevard, to receive comments on a budget amendment to the City's General Fund and Electric Utility Fund. Comments may be emailed to kjensen@ci.richland.wa.us or mailed to 505 Swift Blvd, Richland, WA 99352, Attn: Community & Development Services Director Kerwin Jensen by 5:00 p.m. on August 7, 2018. For information contact Lynne Follett at 509-942-7583 or lfollett@ci.richland.wa.us.

3788809 08/05/2018

ATTENTION CONTRACTORS INVITATION FOR BIDS

17003 Columbia East Pump Station
Project No. CP9-SR-2A-17-01

The City of Pasco, Washington is inviting and requesting bid proposals for the 17003 Columbia East Pump Station, Project No. CP9-SR-2A-17-01. This project involves the following:

The Work of this Contract comprises the City of Pasco 17003 Columbia East Pump Station and is described as follows:

A new below-grade pump station including cast-in-place reinforced concrete structure, immersions pumping system and appurtenances, heating and ventilation, electrical service, power distribution, and instrumentation and controls, housed in an electrical building with CMU block construction and a metal roof.

Bid documents, including plans and specifications, may be obtained beginning August 8, 2018, through QuestCDN.com using eBidDoc #5897995, for the standard download fee of \$10.00. QuestCDN.com can be contacted at 952-233-1632 or info@questcdn.com for assistance.

Bids shall be addressed to the Mayor and the City Council and will be received at the office of the City Clerk, City Hall 1st Floor, 525 North 3rd Avenue, Pasco, Washington, up to the hour of 10:00 AM, August 30, 2018, and then shall be opened in the City Council Chambers located on the first floor of the City Hall Building.

At the time and date stated, the bids will be publicly opened and read aloud. Bids are to be submitted only on forms provided in the specifications.

All bids must be accompanied by a "Good Faith Token" in the form of a Certified Check, Cashier's Check or Bid Bond in the amount of not less than 5 percent (5%) of the total or highest bid. Technical questions regarding the scope of this project should be put in writing and directed to Maria Serra, P.E., Project Manager, City of Pasco, Public Works, 525 N. 3rd Avenue, PO Box 293, Pasco, WA 99301, Email: serram@pasco-wa.gov.

Bids will only be accepted from Contractors who are eligible to perform services as governed by PMC 14.10 and who are listed on the QuestCDN Planholders list.

The City of Pasco in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 USC 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-Assisted Programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises as defined at 49 CFR Part 26 will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin, or sex in consideration for an award.

Legals & Public Notices

The City of Pasco is an equal opportunity and affirmative action employer. Small, minority- and women-owned businesses are encouraged to submit bids. All work performed on the project will be subject to the prevailing state wage rates.

The City Council reserves the right to reject any and all bids and to waive technicalities or irregularities, and after careful consideration of all bids and factors involved make the award to best serve the interests of the City of Pasco.

DATED: August 2, 2018
Maria L. Serra, P.E.
Project Manager
#3792531 08/05 & 08/12/2018

Hanford Site Air Operating Permit Renewal 3
Public Comment Period Extension

Ecology is extending the reopened Public Comment period. The new end date for the Public Comment period will be September 14, 2018. The public comment period was originally published on December 17, 2017, and was reopened from July 22, 2018, through August 24, 2018. The draft permit documents remain the same, but electronic access to some additional supporting documentation is being made available. The comment period now ends September 14, 2018.

The Washington Department of Ecology invites you to comment on the draft permit renewal of the Hanford Site Air Operating Permit (AOP) No. 00-05-006 Renewal 3.

The State's regulations for control of air emissions limit the duration of an AOP to five years. The current Hanford Site AOP expires on March 31, 2018. A new AOP is needed as the Hanford Site still has air emissions. Ecology received the renewal application from the U.S. Department of Energy on September 12, 2017, and determined the application was complete on November 7, 2017. During the permit renewal process the existing AOP (No. 00-05-006 Renewal 2, Rev. B) remains in effect.

Congress amended the federal Clean Air Act in 1990 by creating AOPs for industrial sources of air pollution. An AOP brings all applicable air requirements into one document. In 1991, the Washington State Legislature updated the Washington Clean Air Act (RCW 70.94) to make it consistent with these changes. In 1993, Ecology developed Washington's AOP regulation (WAC 173.401) to comply with federal regulations. The U.S. Environmental Protection Agency granted the state the authority to implement the AOP regulations in November 1994. The Hanford Site AOP was first issued in June 2001. Three agencies administer the Hanford Site AOP. Ecology regulates the nonradioactive criteria and toxic air emissions. The Washington State Department of Health regulates all radioactive air emissions. The Benton Clean Air Agency administers outdoor burning.

Please submit comments by September 14, 2018. Electronically (preferred) via: <http://wt.ecology.commentinput.com/?id=UrK6K>

By U.S. Mail or hand-deliver to:
Daina McFadden
3100 Port of Benton Blvd
Richland WA 99354

A public meeting is not scheduled, but if there is enough interest, we will consider holding one. To request a meeting or for more information, contact: Daina McFadden
509-372-7950
Hanford@ecy.wa.gov

Copies of the proposed modification are located in the Administrative Record and Information Repositories (below). In addition, the proposed modification is online at <https://www.ecology.wa.gov/Waste-Toxics/Nuclear-waste/Public-comment-periods>.

To request ADA accommodation, including materials in a format for the visually impaired, call the Nuclear Waste Program at 509-372-7950. Persons with impaired hearing may call Washington Relay Service at 711. Persons with speech disability may call TTY at 877-833-6341.

To place your Legal Announcement, Call 585-7213.

CLASSIFIED LEGALS

Good Land - Good People - Good Food
Pump and Pipe Tech

AgriNorthwest, a local agricultural operation, has an immediate opening for a fulltime Pump & Pipe Tech to be located in Plymouth, WA. Desired candidate will need to repair and maintain water distribution system components to operate in a manner which will prevent and avoid damage. This position requires the ability to fit and weld pipe of all sizes. Salary is commensurate with experience. Full-time employees receive excellent benefits including: Medical, Dental, Group Term Life, Disability, Retirement Plus Plan, 401k, Flex-Spending, and other miscellaneous value-added benefits. Qualified applicants who are interested need to send a resume to careers.agn@agrinw.com with the job title in the subject line.

Equal Opportunity Employer
 Drug Free Workplace

Agricultural

Farm, Ranch & Garden

ALBERTIN'S ORCHARD
 Apples many, many varieties 25lbs.-
 \$16 also Fire Wood, 212-0300

Horses & Livestock

BRED COWS
 100+ bred, black cows to sell December 19th at Northwest Livestock Sale Barn in Hermiston, OR. These are bangs vaccinated, solid mouth, one iron cows from hard dry country. Cows are bred to black bulls to calve in February & March. For more info call Jeff @ 541-561-4267 or the office @ 541-567-6649

Auctions

collectables Santa Clauses; Beautiful dolls; some decor. Space is limited. Call 509 539 0930 for dates and times.



Merchandise

Fitness/Sporting Equipment
 Total Gym, selling brand new Total Gym for \$700. 509-316-1620

Transportation

3 Positions open for truck drivers class A for local and some Seattle/Portland only serious inquires please Call (509)783-4345.

Services

Promote your business! Call 586-6181

Great Careers Start Here



Certified Nursing Assistant
Certified Medical Assistant
Surgical Technologist
Registered Nurse:

Clinic
 Jail Services
 Perioperative
 Rehabilitation
 Joint & Spine
 ICU*

Medical/Surgical Float
 Physical Therapist-Inpatient
 Weigh Management Coach
 BH Outpatient Therapist
 Echo-Sonographer Tech
 Ultra-Sonographer Tech
 Designated Mental Health Professional



*Bonus

For additional opportunities visit YOURLOURDES.COM

Lourdes Employment Office
 520 N. 4th Ave., Pasco, WA 99302-2568
 PH (509) 546-2283 | Fax (509) 546-2296
 Equal Opportunity Employer

BENTON COUNTY WATER CONSERVANCY BOARD

PUBLIC MEETING/HEARING NOTICE
 Notice is hereby given that the Benton County Water Conservancy Board will hold public meetings/hearings to review water right change/transfer applications and report of examinations-record of decisions on January 18, 2018, at 4:00 p.m., at the office of the Pacific Northwest Project, 3030 W. Clearwater, Ste. 205-A, Kennewick, WA. For further questions or information regarding the meetings or water right change/transfers, please call 509-783-1623. All BCWCB meetings are open to the public.
#3440403 12/17/2017

Public Notice
Benton-Franklin Council of Governments Notice of Plan Amendment
 The Benton-Franklin Council of Governments is holding a comment period for an Amendment to the Metropolitan/Regional Long-Range Transportation Plan, Transition2040 (Adopted May 2017). Transition2040 is a federally mandated, multi-modal planning document that identifies the mobility needs of the Tri-Cities Urban Area and Benton-Franklin region through the year 2040. The Draft Amendment will be placed on the BFCG Website, www.bfcg.us/Transition2040. Comments on the draft amendment can be submitted by email to transportation@bfcg.us, or by phone at (509)943-9185, by December 29th.
#3415967 12/10 & 12/17/2017

CALL FOR BIDS
 NOTICE IS HEREBY GIVEN that Public Utility District No. 1 of Franklin County will receive sealed bids no later than 3:00 pm, Thursday, January 4, 2018 at the offices of the District at 1411 West Clark Street, Pasco, Washington 99301. Bid is for furnishing and delivering primary underground cable, as per specifications, which may be obtained from the office of the District in Pasco, Washington. Bid prices shall be firm for a minimum of sixty (60) days from the date of the bid opening. All bid prices shall exclude State and local sales taxes and use taxes. All bids shall be sealed and shall be marked:
"Bid Document 9149 - Primary Underground Cable"
 Bids will be publicly opened in the District office at 1411 West Clark Street, Pasco, Washington, on Thursday, January 4, 2018, at 3:00 p.m. The District reserves the right to reject any or all bids and to waive informalities that may arise during the bidding process. Each bid shall be accompanied by a certified or cashier's check payable to the order of the Commissioners of Public Utility District No. 1 of Franklin County, for a sum not less than five percent (5%) of the amount of the bid or accompanied by a bid bond in an amount not less than five percent (5%) of the bid with a corporate surety licensed to do business in the State of Washington. This Call for Bids is in conformity with RCW. 54.04.070 and 54.04.080 and such statutes are incorporated into this Call for Bids.
PUBLIC UTILITY DISTRICT NO. 1 OF FRANKLIN COUNTY
 By: /s/Rebecca Diaz
 Rebecca Diaz
 Contract Specialist
#3438280 12/17/2017

CITY OF PASCO NOTICE OF CANCELLED MEETING
 PLEASE TAKE NOTICE that the Pasco LEOFF I Disability Board meeting scheduled for Monday, December 18, 2017, has been cancelled. The next scheduled meeting of the Pasco LEOFF I Disability Board will be Monday, January 15, 2018, at 6:00 p.m., in Conference Room 1 at 525 North 3rd Avenue. Please enter via the east entrance.
 Colleen Chapin, Clerk to the Board
#3434829 12/17/2017

CITY OF PASCO NOTICE OF CIVIL SERVICE COMMISSION MEETING CANCELLATION
 PLEASE TAKE NOTICE that the Pasco Civil Service Commission meeting scheduled for Monday, December 18, 2017 has been cancelled. The next scheduled meeting will be Monday, January 15, 2018, at 5:15 p.m., in Conference Room #1, 1st floor of City Hall, at 525 North 3rd Avenue. Please enter via the east entrance.
 Colleen Chapin, Clerk to the Board
#3434809 12/17/2017

In the Superior Court of the State of Washington for the County of Benton
 VIOLA B. SULLINS, Plaintiff,
 vs.
 SUNSET PRODUCE, LLC, a limited liability company;
 SUNHEAVEN FARMS, LLC, a limited liability company;
 and ARMANDO VILALOBOS, an individual. Defendants.
 No. 17-2-02780-1
 The State of Washington to the said Defendant Armando Villalobos: You are hereby summoned to appear within sixty (60) days after the date of the first publication of this summons, to wit, within sixty (60) days after the day of November 30, 2017, and defend the above entitled action in the above entitled court and answer the complaint Plaintiff Viola

B. Sullins, and serve a copy of your answer upon the undersigned attorneys for Plaintiff Viola B. Sullins, at their office below stated; and in case of your failure so to do, judgment will be rendered against you according to the demand of the complaint, which has been filed with the clerk of said court.
 Plaintiff Viola B. Sullins was struck by a forklift driven by Sunset Produce employee Armando Villalobos on December 22, 2015, causing injuries and damages to the Plaintiff.
 By: /s/Nathan W. Henry
 Nathan W. Henry, WSBA #36720
 Reing Barber Henry, PLLC
 114-A Vista Way
 Kennewick, WA 99336
 (509) 735-0535
 Benton County, Washington
#3416285 12/03, 12/10, 12/17, 12/24, 12/31, & 01/07/2018

Port of Benton Notice of Acceptance of Work
 Notice is hereby given that the Port of Benton accepts the work done by JR Swigart Co., Inc. for the scope of work on the 2345 Stevens Drive Roof Overlay Project. Any laborer, mechanic, subcontractor, material man or person claiming to have supplied material, provisions or good for the prosecution of such work or the making of such improvements who has not been paid should present to and file with the Bond of Commissioners a notice in accordance with RCW 39.08.030 and within the time set forth therein.
 /s/ Kevin Howard, Director of Maintenance, Port of Benton
#3439261 12/17, 12/24, & 12/31/2017

CITY OF PASCO NOTICE OF CANCELLED MEETING
 PLEASE TAKE NOTICE that the Pasco LEOFF I Disability Board meeting scheduled for Monday, December 18, 2017, has been cancelled. The next scheduled meeting of the Pasco LEOFF I Disability Board will be Monday, January 15, 2018, at 6:00 p.m., in Conference Room 1 at 525 North 3rd Avenue. Please enter via the east entrance.
 Colleen Chapin, Clerk to the Board
#3434829 12/17/2017

CITY OF PASCO NOTICE OF CIVIL SERVICE COMMISSION MEETING CANCELLATION
 PLEASE TAKE NOTICE that the Pasco Civil Service Commission meeting scheduled for Monday, December 18, 2017 has been cancelled. The next scheduled meeting will be Monday, January 15, 2018, at 5:15 p.m., in Conference Room #1, 1st floor of City Hall, at 525 North 3rd Avenue. Please enter via the east entrance.
 Colleen Chapin, Clerk to the Board
#3434809 12/17/2017

Hanford Site Air Operating Permit Renewal 3 Public Comment Period
 The Washington Department of Ecology invites you to comment on the draft permit renewal of the Hanford Site Air Operating Permit (AOP) No. 00-05-006 Renewal 3. Due to the large volume of support documents, we are holding a 60-day comment period. The comment period is December 17, 2017, through February 16, 2018.
 The State's regulations for control of air emissions limit the duration of an AOP to five years. The current Hanford Site AOP expires on March 31, 2018. A new AOP is needed as the Hanford Site still has air emissions. Ecology received the renewal application from the U.S. Department of Energy on September 12, 2017, and determined the application was complete on November 7, 2017. During the permit renewal process the existing AOP (No. 00-05-006 Renewal 2, Rev. B) remains in effect.
 Congress amended the federal Clean Air Act in 1990 by creating AOPs for industrial sources of air pollution. An AOP brings all applicable air requirements into one document. In 1991, the Washington State Legislature updated the Washington Clean Air Act (RCW 70.94) to make it consistent with these changes. In 1993,

Ecology developed Washington's AOP regulation (WAC 173-401) to comply with federal regulations. The U.S. Environmental Protection Agency granted the state the authority to implement the AOP regulations in November 1994. The Hanford Site AOP was first issued in June 2001.

Three agencies administer the Hanford Site AOP. Ecology regulates the nonradioactive criteria and toxic air emissions. The Washington State Department of Health regulates all radioactive air emissions. The Benton Clean Air Agency administers outdoor burning.
Please submit comments by February 16, 2018
 Electronically (preferred) via:
<http://wt.ecology.commentinput.com/?id=Urk6K>
 By U.S. Mail or hand-deliver to:
 Daina McFadden
 3100 Port of Benton Blvd
 Richland WA 99354
 A public meeting is not scheduled, but if there is enough interest, we will consider holding one. To request a meeting or for more information, contact:
 Daina McFadden
 509-372-7950
Hanford@ecy.wa.gov

Copies of the proposed modification are located in the Administrative Record and Information Repositories (below). In addition, the proposed modification is online at <http://www.ecy.wa.gov/programs/nwp/commentperiods.htm>.
 To request ADA accommodation, including materials in a format for the visually impaired, call the Nuclear Waste Program at 509-372-7950.
 Persons with impaired hearing may call Washington Relay Service at 711. Persons with speech disability may call TTY at 877-833-6341.
Richland
 Ecology Nuclear Waste Program Resource Center
 3100 Port of Benton Blvd.
 Richland, WA 99354
 509-372-7950
U.S. Department of Energy
 Administrative Record
 2440 Stevens Drive, Room 1101
 Richland, WA 99354
 509-376-2530
Washington State University Tri-Cities
 Department of Energy Reading Room
 2770 Grimsom Way, Room 101L
 Richland, WA 99354
 509-375-7443
Seattle
 University of Washington, Suzzallo Library
 P.O. Box 352900
 Seattle, WA 98195
 206-543-5597
Spokane
 Gonzaga University, Foley Center
 502 E Boone Avenue
 Spokane, WA 99258
 509-313-6110
Portland
 Portland State University, Millar Library
 1875 SW Park Avenue
 Portland, OR 97207
 503-725-4542
#3425875 12/17/2017

REQUEST FOR PROPOSALS
Southridge Sports and Events Pavilion Naming Rights
 The City of Kennewick will receive proposals for RFP 17-026 "Southridge Pavilion Naming Rights." No Later than 4:00 p.m., on Wednesday, January 17, 2018.
 The City Parks and Recreation Department is requesting proposals from entities for NAMING RIGHTS (Title Sponsor) that includes naming rights on the Southridge Sports and Events Pavilion building and highway signage for a minimum of eight (8) years.
 The proposal documents are available upon request by contacting Tim Corrigan, Buyer II at 509-585-4312 or tim.corrigan@ci.kennewick.wa.us.
#3437019 12/17 & 12/20/2017

REQUEST FOR PROPOSALS FOR Concessionaire in OHV Landing Kitchen
 Morrow/Grant OHV Park - Morrow County, Oregon
 Morrow County, Oregon, requests proposals for a qualified Concessionaire in OHV Landing Kitchen.
 To provide food handling and preparation services for various events and regular season. Janitorial supplies and equipment is furnished. Concessionaire will need food inventory and appropriate food handler's licenses. Contractors submitting qualifications shall be considered based upon the following general evaluation criteria:
 1. Experience.
 2. Method of approach.
 3. Availability of labor and inventory.
 Copies of the Request for Proposals may be obtained from Morrow County Public Works, P.O. Box 428, 365 W Hwy 74, Lexington, Oregon 97839, (541) 989-9500. Complete proposals will be accepted at the same address no later than 4:00 p.m., January 24, 2018. Any questions or concerns may be addressed to Sandi Pointer.
#3437761 12/17, 12/24, 12/31, 01/07, 01/14, & 01/21/2018

Request for Engineering Services
Submission Date: January 11, 2018
 Quincy-Columbia Basin Irrigation District (District) requests Statements of Qualifications for professional engineering design services to assist the District with modernization of Switchyard electrical equipment pursuant to Chapter 39.80 RCW.
 The District needs licensed engineering services for Electrical, Civil, and Structural improvements and repairs to district pumping plant substation facilities. Services required include design of replacement medium voltage equipment and associated structures.
 A firm will be selected for based upon the following criteria categories, weighted as indicated: Qualification of key personnel (2); Relevant experience as demonstrated on previous projects (2); Previous performance (1); Expressed interest in projects of this type (1). Additional information or clarification of submitted information may be requested in the evaluation process.
 Firms interested shall submit a complete qualification package and any other pertinent data to further assist the selection committee in evaluating the firm's qualification to: Quincy-Columbia Basin Irrigation District, ATTN: Roger Sonnichsen, Technical Services Assistant Manager, P.O. Box 188, 1720 So. Central Ave., Quincy, WA 98848. A minimum of three (3) qualification packages should be submitted to arrive no later than 4:00 PM on Thursday January 11, 2018. The District reserves the right to waive any irregularities as informalities and to reject any and all proposals.
#3428666 12/10 & 12/17/2017

NOTICE TO VENDORS AND CONTRACTORS
 Sunnyside Valley Irrigation District (SVID) and Sunnyside Division Board of Control (SDBOC) has established small works rosters for the following:
Bonded and Licensed Contractors to Perform the Following Construction or Service:
 Blasting
 Electrical
 Concrete Sawing
 Heating and Air Conditioning
 Roofing
 Asphalt Repair
 Carpentry
 Other general Construction
Vendors for the Supply of the Following:
 Pipe and Fittings
 Ready Mix Concrete
 Building Materials
 Hardware and Tools
 Equipment Rental, Sales, and Repair
 Computer Hardware
 Computer Software
 All interested parties must submit an application supplied by SVID to P.O. Box 239 Sunnyside, WA 98944 or hand deliver to 120 S. 11th St. If you have any questions please contact Chris Gardner (509) 837-6980.
#3434859 12/17 & 12/24/2017

Services
 Promote your business!
 Call 586-6181

To place your Legal Announcement, Call 585-7213.



DEPARTMENT OF
ECOLOGY
State of Washington

Publication No. 18-05-001
Nuclear Waste Program
3100 Port of Benton Blvd
Richland, WA 99354

PRSR STD
US POSTAGE PAID
WA STATE DEPT
OF ENTERPRISE SRVCS
98501

Working with you for a better Washington.

Hanford Site Air Operating Permit Renewal 3 Public Comment Period

Washington Department of Ecology invites you to comment on the draft permit renewal of the Hanford Site Air Operating Permit (AOP) No. 00-05-006 Renewal 3. Previously the end date for submitting comments was February 16, 2018. **The new end date is March 16, 2018.**

Submit comments by March 16, 2018 to:

Electronically (preferred) via:

<http://wt.ecology.commentinput.com/?id=Urk6K>

By U.S. Mail or hand-deliver to:

Daina McFadden
3100 Port of Benton Blvd
Richland, WA 99354

To request materials in a format for the visually impaired, visit <https://ecology.wa.gov/accessibility>, call Ecology at 509-372-7950, Relay Service 711, or TTY 877-833-6341.

Hanford Site Air Operating Permit Renewal 3 Public Comment Period - Reopening

Washington Department of Ecology invites you to comment on the draft permit renewal of the Hanford Site Air Operating Permit (AOP) No. 00-05-006 Renewal 3. The public comment period is reopening **July 22, 2018 through August 24, 2018**. The draft permit documents are the same, but electronic access to some supporting documentation is being made available. For more information, or to view the documents, go to: <https://ecology.wa.gov/Waste-Toxics/Nuclear-waste/Public-comment-periods>.

Submit comments by August 24, 2018 to:

Electronically (preferred) via:

<http://wt.ecology.commentinput.com/?id=Urk6K>

By U.S. Mail or hand-deliver to:

Daina McFadden
3100 Port of Benton Blvd
Richland, WA 99354

To request materials in a format for the visually impaired, visit <https://ecology.wa.gov/accessibility>, call Ecology at 509-372-7950, Relay Service 711, or TTY 877-833-6341.

Hanford Site Air Operating Permit Renewal 3 Public Comment Period - Reopening

Washington Department of Ecology invites you to comment on the draft permit renewal of the Hanford Site Air Operating Permit (AOP) No. 00-05-006 Renewal 3. The public comment period is reopening **July 22, 2018 through August 24, 2018**. The draft permit documents are the same, but electronic access to some supporting documentation is being made available. For more information, or to view the documents, go to: <https://ecology.wa.gov/Waste-Toxics/Nuclear-waste/Public-comment-periods>.

Submit comments by August 24, 2018 to:

Electronically (preferred) via:

<http://wt.ecology.commentinput.com/?id=Urk6K>

By U.S. Mail or hand-deliver to:

Daina McFadden
3100 Port of Benton Blvd
Richland, WA 99354

To request materials in a format for the visually impaired, visit <https://ecology.wa.gov/accessibility>, call Ecology at 509-372-7950, Relay Service 711, or TTY 877-833-6341.

Hanford Site Air Operating Permit Renewal 3 Public Comment Period – Reopening Extended

Washington Department of Ecology invites you to comment on the draft permit renewal of the Hanford Site Air Operating Permit (AOP) No. 00-05-006 Renewal 3.

The public comment period that was reopened from July 22, 2018 through August 24, 2018 is being extended through **September 14, 2018**.

The draft permit documents are the same, but electronic access to some additional supporting documentation is being made available. For more information, or to view the documents, go to:

<https://ecology.wa.gov/Waste-Toxics/Nuclear-waste/Public-comment-periods>.

Submit comments by September 14, 2018 to:

Electronically (preferred) via:

<https://bit.ly/2DEAc4K>

By U.S. Mail or hand-deliver to:

Daina McFadden

3100 Port of Benton Blvd

Richland, WA 99354

To request materials in a format for the visually impaired, visit <https://ecology.wa.gov/accessibility>, call Ecology at 509-372-7950, Relay Service 711, or TTY 877-833-6341.

From: McFadden, Daina (ECY)
To: HANFORD-INFO@LISTSERV.ECOLOGY.WA.GOV
Subject: Hanford Site Air Operating Permit Renewal 3 Public Comment Period Starts December 17th
Date: Thursday, December 14, 2017 4:34:43 PM

Hanford Site Air Operating Permit Renewal 3 Public Comment Period

The Washington Department of Ecology invites you to comment on the draft permit renewal of the Hanford Site Air Operating Permit (AOP) No. 00-05-006 Renewal 3. Due to the large volume of support documents, we are holding a 60-day comment period. The comment period starts **December 17, 2017**, and will end **February 16, 2018**.

The State's regulations for control of air emissions limit the duration of an AOP to five years. The current Hanford Site AOP expires on March 31, 2018. A new AOP is needed as the Hanford Site still has air emissions. Ecology received the renewal application form from the U.S. Department of Energy on September 12, 2017, and determined the application was complete on November 7, 2017. During the permit renewal process the existing AOP (No. 00-05-006 Renewal 2, Rev. B) remains in effect.

Congress amended the federal Clean Air Act in 1990 by creating AOPs for industrial sources of air pollution. An AOP brings all applicable air requirements into one document. In 1991, the Washington State Legislature updated the Washington Clean Air Act (RCW 70.94) to make it consistent with these changes. In 1993, Ecology developed Washington's AOP regulation (WAC 173-401) to comply with federal regulations. The U.S. Environmental Protection Agency granted the state the authority to implement the AOP regulations in November 1994. The Hanford Site AOP was first issued in June 2001.

Three agencies administer the Hanford Site AOP. Ecology regulates the nonradioactive criteria and toxic air emissions. The Washington State Department of Health regulates all radioactive air emissions. The Benton Clean Air Agency administers outdoor burning.

[How to Comment](#)

Please submit comments by February 16, 2018

Electronically (preferred) via:

<http://wt.ecology.commentinput.com/?id=Urk6K>

U.S. Mail or hand-deliver to:

Daina McFadden
3100 Port of Benton Blvd
Richland WA 99354

The proposed modification is online at <https://ecology.wa.gov/Waste-Toxics/Nuclear-waste/Public-comment-periods>. Copies of the proposed modification are located in the Administrative Record and [Information Repositories](#).

Public Hearing

A public meeting is not scheduled, but if there is enough interest, we will consider holding one. To request a meeting or for more information, contact:

Daina McFadden

509-372-7950

Hanford@ecy.wa.gov

For more information, contact

Phil Gent

509-372-7950

Hanford@ecy.wa.gov



Visit us on the [web](#) or [social media](#).

[Subscribe](#) or [Unsubscribe](#)

From: McFadden, Daina (ECY)
To: HANFORD-INFO@LISTSERV.ECOLOGY.WA.GOV
Subject: Hanford Site Air Operating Permit Renewal 3 - Public Comment Period - New End Date
Date: Friday, January 12, 2018 8:53:47 AM

Hanford Site Air Operating Permit Renewal 3 Public Comment Period – New End Date

Ecology is changing the public comment period's end date. The new end date will be March 16, 2018.

The Washington Department of Ecology invites you to comment on the draft permit renewal of the Hanford Site Air Operating Permit (AOP) No. 00-05-006 Renewal 3.

The comment period now ends **March 16, 2018**.

The State's regulations for control of air emissions limit the duration of an AOP to five years. The current Hanford Site AOP expires on March 31, 2018. A new AOP is needed as the Hanford Site still has air emissions. Ecology received the renewal application form the U.S. Department of Energy on September 12, 2017, and determined the application was complete on November 7, 2017. During the permit renewal process the existing

AOP

(No. 00-05-006 Renewal 2, Rev. B) remains in effect.

Congress amended the federal Clean Air Act in 1990 by creating AOPs for industrial sources of air pollution. An AOP brings all applicable air requirements into one document. In 1991, the Washington State Legislature updated the Washington Clean Air Act (RCW 70.94) to make it consistent with these changes. In 1993, Ecology developed Washington's AOP regulation (WAC 173-401) to comply with federal regulations. The U.S. Environmental Protection Agency granted the state the authority to implement the AOP regulations in November 1994. The Hanford Site AOP was first issued in June 2001.

Three agencies administer the Hanford Site AOP. Ecology regulates the nonradioactive criteria and toxic air emissions. The Washington State Department of Health regulates all radioactive air emissions. The Benton Clean Air Agency administers outdoor burning.

[How to Comment](#)

Please submit comments by March 16, 2018

Electronically (preferred) via:

<http://wt.ecology.commentinput.com/?id=Urk6K>

U.S. Mail or hand-deliver to:

Daina McFadden

3100 Port of Benton Blvd

Richland WA 99354

Copies of the proposed modification are located in the Administrative Record and

[Information Repositories.](#)

In addition, the proposed modification is online at <https://ecology.wa.gov/Waste-Toxics/Nuclear-waste/Public-comment-periods>

Public Hearing

A public meeting is not scheduled, but if there is enough interest, we will consider holding one. To request a meeting or for more information, contact:

Daina McFadden

509-372-7950

Hanford@ecy.wa.gov

[For more information, contact](#)

[Phil Gent](#)

509-372-7950

Hanford@ecy.wa.gov



Visit us on the [web](#) or [social media](#).

[Subscribe](#) or [Unsubscribe](#)

From: McFadden, Daina (ECY)
To: HANFORD-INFO@LISTSERV.ECOLOGY.WA.GOV
Subject: Hanford Site Air Operating Permit Renewal 3 Comment Period Extension
Date: Friday, March 16, 2018 11:47:57 AM

Hanford Site Air Operating Permit Renewal 3 Public Comment Period Extension

Ecology is changing the public comment period's end date. The new end date will be April 6, 2018.

The Washington Department of Ecology invites you to comment on the draft permit renewal of the Hanford Site Air Operating Permit (AOP) No. 00-05-006 Renewal 3. The comment period now ends **April 6, 2018**.

The State's regulations for control of air emissions limit the duration of an AOP to five years. The current Hanford Site AOP expires on March 31, 2018. A new AOP is needed as the Hanford Site still has air emissions. Ecology received the renewal application form the U.S. Department of Energy on September 12, 2017, and determined the application was complete on November 7, 2017. During the permit renewal process the existing AOP (No. 00-05-006 Renewal 2, Rev. B) remains in effect.

Congress amended the federal Clean Air Act in 1990 by creating AOPs for industrial sources of air pollution. An AOP brings all applicable air requirements into one document. In 1991, the Washington State Legislature updated the Washington Clean Air Act (RCW 70.94) to make it consistent with these changes. In 1993, Ecology developed Washington's AOP regulation (WAC 173-401) to comply with federal regulations. The U.S. Environmental Protection Agency granted the state the authority to implement the AOP regulations in November 1994. The Hanford Site AOP was first issued in June 2001.

Three agencies administer the Hanford Site AOP. Ecology regulates the nonradioactive criteria and toxic air emissions. The Washington State Department of Health regulates all radioactive air emissions. The Benton Clean Air Agency administers outdoor burning.

[How to Comment](#)

Please submit comments by April 6, 2018

Electronically (preferred) via:

<http://wt.ecology.commentinput.com/?id=Urk6K>

U.S. Mail or hand-deliver to:

Daina McFadden
3100 Port of Benton Blvd
Richland WA 99354

Copies of the proposed modification are located in the Administrative Record and [Information Repositories](#). In addition, the proposed modification is online at

<https://ecology.wa.gov/Waste-Toxics/Nuclear-waste/Public-comment-periods>

Public Hearing

A public meeting is not scheduled, but if there is enough interest, we will consider holding one. To request a meeting or for more information, contact:

Daina McFadden

509-372-7950

Hanford@ecy.wa.gov

For more information, contact

Phil Gent

509-372-7950

Hanford@ecy.wa.gov

Ecology logo



Visit us on the [web](#) and follow our [news and social media](#).

[Subscribe](#) or [Unsubscribe](#)

From: McFadden, Daina (ECY)
To: HANFORD-INFO@LISTSERV.ECOLOGY.WA.GOV
Subject: Public comment period opening Sunday
Date: Friday, July 20, 2018 9:24:33 AM

Hanford Site Air Operating Permit Renewal 3 Public Comment Period Reopening

Ecology is reopening the public comment period originally published on December 17, 2017. The draft permit documents are the same, but electronic access to some supporting documentation is being made available. **The new comment period is July 22 to August 24, 2018.**

The Washington Department of Ecology invites you to comment on the draft permit renewal of the Hanford Site Air Operating Permit (AOP) No. 00-05-006 Renewal 3.

The State's regulations for control of air emissions limit the duration of an AOP to five years. The current Hanford Site AOP expired on March 31, 2018. A new AOP is needed as the Hanford Site still has air emissions. Ecology received the renewal application form from the U.S. Department of Energy on September 12, 2017, and determined the application was complete on November 7, 2017. During the permit renewal process, the existing AOP (No. 00-05-006 Renewal 2, Rev. B) remains in effect.

Congress amended the federal Clean Air Act in 1990 by creating AOPs for industrial sources of air pollution. An AOP brings all applicable air requirements into one document. In 1991, the Washington State Legislature updated the Washington Clean Air Act (RCW 70.94) to make it consistent with these changes. In 1993, Ecology developed Washington's AOP regulation (WAC 173-401) to comply with federal regulations. The U.S. Environmental Protection Agency granted the state the authority to implement the AOP regulations in November 1994. The Hanford Site AOP was first issued in June 2001.

Three agencies administer the Hanford Site AOP. Ecology regulates the nonradioactive criteria and toxic air emissions. The Washington State Department of Health regulates all radioactive air emissions. The Benton Clean Air Agency administers outdoor burning.

[How to Comment](#)

Please submit comments by August 24, 2018

Electronically (preferred) via:

<http://wt.ecology.commentinput.com/?id=Urk6K>

U.S. Mail or hand-deliver to:

Daina McFadden
3100 Port of Benton Blvd
Richland WA 99354

Copies of the proposed modification are located in the Administrative Record and

[Information Repositories](#). In addition, the proposed modification is online at <https://ecology.wa.gov/Waste-Toxics/Nuclear-waste/Public-comment-periods>

Public Hearing

A public meeting is not scheduled, but if there is enough interest, we will consider holding one. To request a meeting or for more information, contact:

Daina McFadden

509-372-7950

Hanford@ecy.wa.gov

For more information, contact:

Lilyann Murphy

Hanford@ecy.wa.gov

509-372-7950

Ecology logo



Visit us on the [web](#) and follow our [news and social media](#).

[Subscribe](#) or [Unsubscribe](#)

McFadden, Daina (ECY)

From: McFadden, Daina (ECY) <dmcf461@ECY.WA.GOV>
Sent: Monday, August 6, 2018 10:00 AM
To: HANFORD-INFO@LISTSERV.ECOLOGY.WA.GOV
Subject: Hanford AOP comment period extended

Hanford Site Air Operating Permit Renewal 3 Public Comment Period Extended

Ecology is extending the reopened Public Comment period. The new end date for the Public Comment period will be September 14, 2018. The public comment period was originally published on December 17, 2017 and was reopened from July 22, 2018, through August 24, 2018. The draft permit documents remain the same, but electronic access to some additional supporting documentation is being made available. **The comment period now ends September 14, 2018.**

The Washington Department of Ecology invites you to comment on the draft permit renewal of the Hanford Site Air Operating Permit (AOP) No. 00-05-006 Renewal 3.

The State's regulations for control of air emissions limit the duration of an AOP to five years. The current Hanford Site AOP expired on March 31, 2018. A new AOP is needed as the Hanford Site still has air emissions. Ecology received the renewal application form the U.S. Department of Energy on September 12, 2017, and determined the application was complete on November 7, 2017. During the permit renewal process the existing AOP (No. 00-05-006 Renewal 2, Rev. B) remains in effect.

Congress amended the federal Clean Air Act in 1990 by creating AOPs for industrial sources of air pollution. An AOP brings all applicable air requirements into one document. In 1991, the Washington State Legislature updated the Washington Clean Air Act (RCW 70.94) to make it consistent with these changes. In 1993, Ecology developed Washington's AOP regulation (WAC 173-401) to comply with federal regulations. The U.S. Environmental Protection Agency granted the state the authority to implement the AOP regulations in November 1994. The Hanford Site AOP was first issued in June 2001.

Three agencies administer the Hanford Site AOP. Ecology regulates the nonradioactive criteria and toxic air emissions. The Washington State Department of Health regulates all radioactive air emissions. The Benton Clean Air Agency administers outdoor burning.

How to Comment

Please submit comments by September 14, 2018

Electronically (preferred) via:

<http://wt.ecology.commentinput.com/?id=Urk6K>

U.S. Mail or hand-deliver to:

Daina McFadden
3100 Port of Benton Blvd
Richland WA 99354

Copies of the proposed modification are located in the Administrative Record and [Information Repositories](#). In addition, the proposed modification is online at <https://ecology.wa.gov/Waste-Toxics/Nuclear-waste/Public-comment-periods>

Public Hearing

A public meeting is not scheduled, but if there is enough interest, we will consider holding one.

To request a meeting contact:

Daina McFadden

509-372-7950

Hanford@ecy.wa.gov

For more information, contact:

Lilyann Murphy

Hanford@ecy.wa.gov

509-372-7950



Visit us on the [web](#) and follow our [news and social media](#).

[Subscribe](#) or [Unsubscribe](#)

Effective Date: X/X/XXXX

Hanford Air Operating Permit

Expiration Date:

Permit No. 00-05-06

1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation

Renewal 3

200E Area, Tank Farms - Ventilation

Requirement Citation (WAC or Order Citation): NOC Approval Order DE11NWP-001, 4 Rev. 4(03/03/2016)

Condition Approval 03/03/2016

Condition: EMISSION LIMITS

(1.1.1) Visible emissions will not exceed five (5)% opacity. [WAC 173-400-040(2)]

Periodic Monitoring: (1.3.1, 1.3.2) Compliance and monitoring shall be met by Tier 3 visible Emission Survey requirements of the Hanford AOP, Section 2. Should visible emissions be observed which are not solely attributable to water condensation, compliance shall be met by performing an opacity determination utilizing 40 CFR 60, Appendix A, Method 9, providing that such determination shall not place the visible emission observer in hazard greater than that identified for the general worker.

Test Method: 40 CFR 60, Appendix A, Method 9

Test Frequency: Not specified except when visible emissions are observed.

Required Records: (1.3.2, 2.5) Visible emission survey records in which a visible emission was observed and is

not solely attributable to water condensation. 40 CFR 60, Appendix A, Method 9 results if conducted. Visible emission survey records shall be submitted to Ecology within thirty (30) days of completion of the survey with an assessment of the cause of visible emissions and a report of the maintenance conducted to maintain the subject system's tBACT operations

State-Only: No.

Calculation Model: Not applicable.

Commented [WRPS1]: Please Note: This is not a red-line/strike-out of the permit pages found in AOP Renewal 3. We had to convert from a pdf document to a Word document and formatting did not carry over exactly.

Commented [NWP2]: Thank you for the clarification. Our responses further distorted the formatting, but we hope the responses are easier to follow using this response method to your comment(s).

Commented [WRPS3]: We added references to DE11NWP-001, Rev 4 section numbers throughout this discharge point documentation – We find Ecology used this method in parts of the documentation but not consistently throughout. Placing them throughout the document was done for consistency and ease of cross reference.

Please add the references to the section numbers consistently throughout the discharge point.

Commented [NWP4]: References to sections of the approval order in the AOP are not required, and could create confusion when an order is modified. As a result, the section number references to approval orders will not be added to this discharge point and will be removed throughout the AOP for consistency.

Ecology will not explicitly respond to further comments about adding/removing section references in the rest of the document as it is Ecology's intent to remove all of the section references.

Commented [WRPS5]: The WAC reference is not specifically listed in DE11NWP-001, Rev 4. Please delete.

Commented [NWP6]: The reference to WAC 173-400-040(2) will be removed.

Commented [WRPS7]: We are highlighting this section to show that text found throughout this document may be pulled from multiple sections of DE11NWP-001, Rev 4 and combined here. This causes confusion.

This section is found in section 1.3.2 of the DE11NWP-001 permit

Commented [NWP8]: The AOP and the underlying requirement are written in different formats. The consolidation of all opacity limits from the underlying requirement into a single condition approval in the AOP is the intent. To assist in the clarity of this section the required records will be bulleted and the section number references removed.

Commented [WRPS9]: This section is found in section 2.5 of the DE11NWP-001 permit

Commented [NWP10]: The section number references will be removed.

1 **Condition Approval** 03/03/2016
 2 **Condition:** EMISSION LIMITS
 3 (1.1.2) VOC emissions shall not exceed the amounts listed in the table below from the
 4 241-AP, 241-SY, and 241-AY/AZ ventilation systems. As the ventilation
 5 systems become fully operational, the volatile organic emissions shall not be
 6 exceeded emission limits established for the respective exhauster systems.

Tank Farm(s)	Maximum Amount (tons per year)
Total for the 241-AP, 241-SY, and 241-AY/AZ ventilation systems	10.1
241-SY	3.2
241-AP	3.6
241-AY/AZ combined ventilation system (the 241-AY/AZ combined ventilation system is comprised of the initial AY/AZ exhauster system and the AY-102 annulus system)	3.3

7
 8 **Periodic Monitoring:** (1)(1.3.3.1) Compliance with this condition shall be demonstrated by VOC stack
 9 sampling and calculations as described in Section 3.0, and applying these
 10 concentration readings with contemporaneous stack flow rate and temperatures to
 11 determine the mass release rate of VOCs in pounds per year.

~~12 (2)(1.3.4) During solids mixing, disturbing bulk tank solids, removal of enough
 13 supernatant to potentially create a gas release event, or Waste Feed Delivery
 14 operations to the Hanford Waste Treatment and Immobilization Plant operations
 15 compliance with Approval Condition 1.1.2 shall be demonstrated by monitoring
 16 emissions of all TAP emission limits as described in Section 3.5.~~

~~17~~ **Test Method:** (3.2) VOC emissions shall be assessed quarterly in accord with EPA approved
 18 procedures for each exhauster system.

~~19~~ **Test Frequency:** Quarterly.

20 **Required Records:** (1) (2.4.2) Records of exhauster system stack flow rates and temperature records.

21 (2) (2.4.3) Emission Monitoring results required in Section 3.0

~~22~~ (2) (2.4.6) Laboratory analysis result summaries from tank headspaces or primary tank
 23 ventilation system exhaust for VOCs.

~~24~~ (3) (2.4.4) Supporting data and calculations to demonstrate compliance of VOC
 25 emission limits.

26 **State-Only:** No.

27 **Calculation Model:** Not applicable.

28

Commented [WRPS11]: The words "and calculations" are not listed in the DE11NWP-001, Rev 4, section 1.3.3.1. Please delete.

Commented [NWP12]: Periodic monitoring for this condition was streamlined from multiple requirements in the approval order. While the words "and calculations" do not appear in section 1.3.3.1 of the approval order, they do appear in section 2.4, item 4. As both sample data and calculations are required to determine the mass release rate, no change to the AOP is required.

Commented [WRPS13]: Please delete.

Commented [NWP14]: This condition comes from DE11NWP-001, Rev. 4 Condition 1.3.4 and is still required monitoring. No change to the AOP is required. Subsequent instances of this text will also be retained.

Commented [WRPS15]: Under Required Records, please add 2.4.3 to this list. "Emission monitoring results required in Section 3.0." because these quarterly VOC assessments will be completed using field direct read instruments and not laboratory analysis.

Commented [NWP16]: The required records will be revised to cover either condition where laboratory or field measurements are used to demonstrate compliance. The proposed language will not be incorporated. Item 2 will be revised to state "Laboratory analysis result summaries or emission monitoring results from tank headspaces or primary tank ventilation system exhaust for VOCs."

1 **Condition Approval** 03/03/2016
2 **Condition:** EMISSION LIMITS
3 (1.1.3) All TAPs, as shown in Table 7, 8 or 9 of Approval Order DE11NWP-001,
Rev. 4
43 -shall be below their respective ASIL or approved through a Second Tier review.
54 (4.0) Approved TAP emissions per ventilation system are detailed in Table 7 for the
65 241-SY ventilation system, Table 8 for the 241-AP ventilation system, and Table
76 9 for the 241-AY/AZ ventilation system.
87 **Periodic Monitoring:** Compliance with this condition shall be met by:
98 (1) (3.3) Development and implementation of an annual sampling and analysis
109 plan (SAP) for each exhaust system on a calendar year basis. A calendar year
runs from January 1 to December 31 to meet requirements of DE11NWP-001,
1110 Rev. 4 Section 3.3. Each SAP shall address the emission of a minimum of three
1211 TAPs with the highest potential ambient concentration relative to their ASILs of
1312 WAC 173-460-150 in addition to dimethyl mercury, n-nitrosodimethylamine,
1413 and chromium hexavalent: soluble, except chromic trioxide. The TAPs
1514 addressed in the SAP shall be identified from DE11NWP-001, Rev. 4 Table 7, 8
1615 and 9 and based on engineering judgment and most current tank content data.
1716 Analytical methods for the analyses shall be the EPA, Occupational Safety and
1817 Health Administration (OSHA), or National Institute for Occupational Safety and
1918 Health (NIOSH) approved, or by approved equivalent method.
2019 (2) (1.3.3.2, 2.5, 4.0) Stack sampling for each exhaust system as described in
Section 3
2120 of the DE11NWP-001 for TAPs, and applying these concentration readings with
2221 contemporaneous stack flow rates and temperatures to determine the mass release
2322 rates of these TAPs in pounds and their respective release rate averaging times per
WAC
2423 173-460-150. Identification of any TAP not previously identified shall be
2524 submitted to Ecology within ninety (90) days of completion of laboratory analyses
which verify
2625 emissions of that TAP. (4.0) Approved TAP emissions per ventilation system are
2726 detailed in DE11NWP-001, Rev. 4 Table 7 for the 241-SY ventilation system,
2827 DE11NWP-001, Rev. 4 Table 8 for the 241-AP ventilation system, and
2928 DE11NWP-001, Rev. 4 Table 9 for the 241-AY/AZ ventilation system.

Commented [WRPS17]: From DE11NWP-001, Rev 4, section 3.3, the following wording was eliminated here: "on a calendar year basis. A calendar year runs from January 1 to December 31"

And added the following words were added: "to meet requirements of DE11NWP-001, Rev. 4 Section 3.3."

Please state it as it appears in DE11NWP-001, Rev 4.

Commented [NWP18]: The identified text will be revised to add "on a calendar year basis" to the sentence. However, the definition of a calendar year is unnecessary for AOP streamlining purpose.

Commented [WRPS19]: From DE11NWP-001, Rev 4, Section 1.3.3 2, The words: "in pounds" were omitted from sentence. Please add.

Commented [NWP20]: Will revise text as requested.

Commented [WRPS21]: From DE11NWP-001, Rev 4, Section 2.5 "within ninety (90) days of completion of laboratory analyses" the omission of the word "completion" could lead to reporting complications. Please add.

Commented [NWP22]: Will revise text as requested.

Commented [WRPS23]: This appears to be a repeat of item (5) below.
Did you mean to add the condition "(2.5) Identification of any exceedance of condition 1.1 Emission Limits shall be submitted to Ecology within ninety (90) days of identification."

Commented [NWP24]: Section 2.5 of Approval Order DE11NWP-001, Rev. 4 requires identification of any TAP not previously identified AND identification of any exceedance of emission limits to be submitted to Ecology within ninety (90) days. These two requirements are not clearly identified by the language in items 2 and 5 of the periodic monitoring for TAP emissions. For consistency with the approval order, the identified text in Item 2 will be revised to state "Identification of any TAP not previously identified within the NOC application emission estimate shall be submitted to Ecology within ninety (90) days of completion of laboratory analyses which verify emissions of that TAP." Item 5 will be revised to state "Identification of any exceedance of TAP emission limits shall be submitted to Ecology within ninety (90) days of identification."

Effective Date: X/X/XXXX
Expiration Date: X/XX/XXXX

Hanford Air Operating Permit
Permit No. 00-05-06
Renewal 3

~~30~~ ~~(3) (1.3.4) During solids mixing, disturbing bulk tank solids, removal of enough~~
~~31~~ ~~supernatant to potentially create a gas release event, or Waste Feed Delivery~~
~~32~~ ~~operations to the Hanford Waste Treatment Plant (WTP) operations compliance~~
~~33~~ ~~with Approval Condition 1.1.3 shall be demonstrated by monitoring emissions of~~
~~34~~ ~~all TAP emission limits as described in Section 3.5.~~

~~35~~29 (4)(1.2.5)(14) Operating the exhauster systems in accordance with BACT and tBACT

~~36~~30 emission controls in place. [These controls are operation of each primary tank
~~37~~31 ventilation exhauster system not exceeding the maximum ventilation rates shown
~~38~~32 in the DE11NWP-001, Rev. 4 Table 5 with a moisture de-entrainer, heater, pre-
~~39~~33 filters, and a two-stage high Efficiency Particulate Air (HEPA) filtration system
~~40~~34 in service in each treatment train.]

~~41~~35 (5) (2.5) Identification of any TAP not previously identified within the Notice of
~~42~~36 Construction Application ~~Emission emission Limits estimate~~ shall be submitted to Ecology within

~~43~~37 90 days of ~~completion of laboratory analysis which verify emissions of that toxic air pollutant from the project identification~~

~~44~~38 Test Method: ~~Stack~~ sampling and calculations identified in the DE11NWP-001 Section 3.3.

~~45~~39 Test Frequency: Annually.

Commented [WRPS25]: tBACT Operational Limits are found in DE11NWP-0001, Rev 4, section 1.2.5 and this is listed in the AOP as its own condition. Please delete as it is covered later on in this document.

Commented [NWP26]: BACT and tBACT are a compliance demonstration method for these limits, and therefore will be retained in this section.

Commented [WRPS27]: These abatement technologies are NOT applicable to all exhausters in this permit. 241-AY/AZ does not have a de-entrainer for example per Finding 14 (i.e. each exhauster has unique abatement technology).

Commented [NWP28]: DE11NWP-001, Rev. 4, finding 4, does authorize different exhauster trains. This condition will be generalized to be inclusive of all abatement technologies used in 241 tank systems and to refer to the appropriate NOC requirements.

Commented [WRPS29]: Text corrected to match DE11NWP-001, Rev 4. Please correct.

Commented [NWP30]: Please see comment above. The identified text will be revised to state "Identification of any exceedance of TAP emission limits shall be submitted to Ecology within ninety (90) days of identification," consistent with the approval order.

Commented [WRPS31]: Remove "stack" from this requirement. It is stated in DE11NWP-001, Rev 4 that headspace or primary tank ventilation system samples can be collected, see section 2.4.6 .

Commented [NWP32]: DE11NWP-001, Revision 4, Section 2.4.6 does state "tank headspaces or primary tank ventilation system exhaust." The word "stack" could inadvertently be assumed to preclude testing in the tank headspace and will be removed.

1 Required Records: (2.4)Records shall be organized in a readily accessible manner and cover a minimum
 2 of the most recent sixty (60) month period. The records include:
 3 (1) (2.4.2) Records of exhauster system stack flow rates and temperature records.
 4 (2) (2.4.1) Records of calibration of stack gas flow rate and temperature measurement
 5 devices.
 6 (3) (3.0) Emission monitoring results required in DE11NWP-001, Rev. 4 Section 3.0.
 7 (4) (3.3) Supporting data and calculations to demonstrate compliance as detailed in
 8 DE11NWP-001, Rev. 4 Condition 3.3 and 1.1.3
 9 (5) (2.4.6) Laboratory analysis result summaries taken in accordance with these
 approval conditions of any sample undertaken after the effective date of this ORDER
 from 241-AP, 241-SY or 241-AY/AZ tank farm from tank headspaces or primary tank
 10 ventilation system exhaust which are examined for organic species for TAPs.
 11 (6) (2.4.5) Documentation and record-keeping of BACT and tBACT compliance of
 12 emission controls.

13 State-Only: No.
 14 Calculation Model: Not applicable.

15 Condition Approval 03/03/2016
 16 Condition: EMISSION LIMITS

17 (1.1.4) Ammonia emissions shall not exceed the amounts listed in the table below from
 18 the 241-AP, 241-SY, and 241-AY/AZ ventilation systems. Ammonia emissions shall
 not exceed the amounts listed in Table 2 from the 241-AP, 241-SY, 241-AY/AZ
 ventilation systems. As the ventilation systems become fully operational, the ammonia
 emissions shall not be exceeded from the respective exhauster systems. As the
 19 ventilation systems become fully operational, the emissions of ammonia shall not be
 20 exceeded emission limits established for the respective exhauster systems.

Tank Farm(s)	Maximum Amount (pounds per 24 hours)
Total for the 241-AP, 241-SY, and 241-AY/AZ ventilation systems	59.9
241-SY	19.2
241-AP	21.1
241-AY/AZ combined ventilation system (the 241-AY/AZ combined ventilation system is comprised of the initial AY/AZ exhauster system and the AY-102 annulus system)	19.6

Commented [WRPS33]: DE11NWP-001, Rev 4, section 2.4.1 states "stack gas flow rate" Please add "gas".

Commented [NWP34]: DE11NWP-001, Rev. 4 consistently uses "gas flow" when referring to instrumentation/measurements and "flow" when referring to calculations. Gas will be added to this condition.

Commented [WRPS35]: To match DE11NWP-001, Rev 4, section 2.4.6, Please add the words: "taken in accordance with these approval conditions of any sample undertaken after the effective date of this ORDER from 241-AP, 241-SY or 241-AY/AZ tank farm"

Please add "which are examined for organic species"

 As it's currently stated this would include all samples collected, including those not collected in support of or to the rigors of this Permit.

Commented [NWP36]: The AOP does not define the word 'order' and the direct text from DE11NWP-001, Rev. 4 could cause confusion regarding the onset of required recordkeeping. Therefore, the requirement will be summarized as "taken in accordance with DE11NWP-001, Rev. 4 from 241-AP, 241-SY, or 241-AY/AZ tank farm tank headspaces."

DE11NWP-001 Rev 4, Section 2.4.6 requires result summaries for "organic species or other TAPS" which would include inorganic TAPS. This condition will be modified to state "which are examined for organic species or other TAPS" to match the Approval Order.

Commented [WRPS37]: DE11NWP-001, Rev 4, section 2.4.5 requires tBACT (not BACT) and is this applicable to TAPs emissions? Please remove BACT.

Commented [NWP38]: The emission controls for this condition are interrelated in that BACT and tBACT controls are the same. Changing the text introduces the potential for misunderstanding that different systems are in place for BACT and tBACT. As a result, no change in the AOP is required.

Commented [WRPS39]: Condition rewritten in as stated in DE11NWP-001, Rev 4, section 1.1.4

Please add.

Commented [NWP40]: The AOP table is not identified as "Table 2" and therefore the first sentence in the draft AOP better describes the limit table than the first sentence suggested. The second suggested sentence better matches DE11NWP-001, Rev. 4 and corrects a grammatical error. Therefore, the second sentence will be added in place of the sentence with a suggested strikeout but the first sentence will not be modified.

1 Periodic Monitoring: (1) (1.3.3.3) Compliance with Approval Condition 1.1.4 shall be demonstrated by stack
2 sampling as described in Section 3.0 for ammonia, and applying these
3 concentration readings with contemporaneous stack flow rate and temperatures to
4 determine ~~daily mass~~ release rate of ammonia.
5 ~~(2) (1.3.4) During solids mixing, disturbing bulk tank solids, removal of enough~~
6 ~~supernatant to potentially create a gas release event, or Waste Feed Delivery~~
7 ~~operations to the Hanford Waste Treatment and Immobilization Plant operations~~
8 ~~compliance with approval condition 1.4 shall be demonstrated by monitoring~~
9 ~~emissions of all TAP emission limits as described in Section 3.5.~~

+05 Test Method: (3.1.1) Ammonia sampling and analysis will be in accord with approved alternative
+16 sampling procedures including the use of Draeger tubes or direct reading instruments to
measure stack gas
+27 concentration of ammonia providing such devices are spanned to appropriately
+38 measure the stack gas ammonia concentration. Stack flow rate and temperature
+49 will be applied with the ammonia stack gas concentration to report ammonia
+510 emission in terms of pounds per day.

+611 Test Frequency: (3.1, 3.1.1) *Baseline Assessments* Baseline assessment of ammonia stack concentrations
+712 shall be sampled a minimum of three times within ninety (90) days of
+813 commencement of operations. (2.5) Results of baseline emission assessments shall be
+914 submitted to Ecology within ninety (90) days of completion of such assessment.

Commented [WRPS41]: To match DE11NWP-001, Rev 4. Section 1.3.3.3, Please remove "mass" not present in Permit condition, Please add "daily"

Commented [NWP42]: Will revise text as suggested

Commented [WRPS43]: Please delete.

Commented [NWP44]: This condition comes from DE11NWP-001, Rev. 4 Condition 1.3.4 and is still required monitoring. No change to the AOP is required. Subsequent instances of this text will also be retained.

Commented [WRPS45]: Text found in DE11NWP-001, Rev 4, but omitted here "or direct reading instrument" Please add.

Commented [NWP46]: Will revise text as suggested.

DRAFT

Effective Date: X/X/XXXX
 Expiration Date: X/XX/XXXX

Hanford Air Operating Permit
 Permit No. 00-05-06
 Renewal 3

~~2015~~ (3.4) Quarterly Assessment In order to maintain reasonable assurance of continued
~~2416~~ compliance with emission limitations from these exhauster systems, quarterly
~~2217~~ assessment of ammonia stack emissions will be conducted according to
~~2318~~ DE11NWP-001, Rev. 4, Section 3.1.1 and 3.4. A minimum of three samples or
 measurements shall be taken each quarter to assess these emissions.
~~2419~~ shall be used to assess these emissions.
~~2520~~ Required Records: (2.4.4) Results of emission assessments and baseline assessments and quarterly emission
 monitoring
~~2621~~ results, supporting data and calculations to demonstrate compliance with
~~2722~~ ammonia limits.
~~2823~~ State-Only: No.
~~2924~~ Calculation Model: Not applicable.
~~3025~~ Condition Approval 03/03/2016
~~3126~~ Condition: EMISSION LIMITS
~~3227~~ (1.1.5) Dimethyl mercury emissions shall not exceed the amounts listed in the Table
~~3328~~ below from the 241-AP, 241-SY, and 241-AY/AZ ventilation systems. As the
~~3429~~ ventilation systems become fully operational, the dimethyl mercury emissions
~~3530~~ shall not be exceeded from the respective exhauster systems.

Tank Farm(s)	Maximum Amount (pounds per 24 hours)
Total for the 241-AP, 241-SY, and 241-AY/AZ ventilation systems	3.23E-3
241-SY	1.04E-3
241-AP	1.14E-3
241-AY/AZ combined ventilation system (the 241-AY/AZ combined ventilation system is comprised of the initial AY/AZ exhauster system and the AY-102 annulus system)	1.06E-3

Commented [WRPS47]: Self-referential and not stated in the permit. Please remove.

Commented [NWP48]: DE11NWP-001 Rev 4, Section 3.1.1 covers baseline assessment only and does not require quarterly assessments. DE11NWP-001 Rev 4, Section 3.4 refers back to Section 3.1.1 to incorporate information which is not repeated in Section 3.4. Therefore, it is appropriate to list Section 3.4 for the quarterly assessments. No change to the AOP is required.

Commented [WRPS49]: Please add: "samples or measurements shall be taken each quarter to assess these emissions"

Commented [NWP50]: Will revise as suggested.

Commented [WRPS51]: Please remove: "and quarterly emission monitoring" as there is no requirement. There is an Ammonia Emission Assessment which is required quarterly, but the emission assessment and the quarter emission monitoring are the same. Wording it this way will lead to confusion and is not in-line with the permit requirements

Commented [NWP52]: The draft text is potentially unclear. DE11NWP-001, Rev. 4 uses the term monitoring only during waste disturbing events (Section 3 5) and refers to baseline and quarterly results as "assessments." However, records are required for both monitoring and assessments and these records directly demonstrate ammonia limits will not be exceeded at any time.

The text will be revised to state "Results of baseline assessments, quarterly assessments, and ammonia monitoring as required by DE11NWP-001, Rev 4, as well as supporting data and calculations to demonstrate compliance with ammonia limits of DE11NWP-001, Rev 4."

Commented [WRPS53]: This text comes from DE11NWP-001, Rev 4, section 2.4.4 (without the word "ammonia"). The first part of the sentence is summation of all monitoring requirements in this section.

Commented [NWP54]: DE11NWP-001 Rev 4, Section 2.4.4 refers to multiple limits. This is specified for ammonia because this is the AOP emission condition for ammonia. No change to the AOP is required.

1—Periodic Monitoring: ~~(1.3.4) During solids mixing, disturbing bulk tank solids, removal of enough~~
 2—~~supernatant to potentially create gas release event, or Waste Feed-Delivery~~
 3—~~operations to the Hanford Waste Treatment and Immobilization Plant (WTP)~~
 4—~~operations compliance with Approval Conditions, Dimethyl Mercury Emission~~
 5—~~Limits shall be demonstrated by monitoring emissions of all TAP emission limits~~
 6—~~as described in section 3.5 of DE11NWP-001, Rev. 4.~~
 7—~~Test Method: (3.5.2.1) All samples collection activities will follow EPA approved procedures~~
 8—~~for each exhaustor system or submission with subsequent approval by Ecology of~~
 9—~~an alternative procedure.~~
 10—~~Test Frequency: (3.5.2.1.2) Dimethyl mercury sample collection will start no sooner than 12 hours~~
 11—~~and be completed no later than 24 hours after the start of the activity described in~~
 12—~~3.5.2.1 that requires sample collection.~~
 13—~~(3.5.2.1.4) Analytical results will be reported to Ecology as soon as possible, but~~
 14—~~no later than 30 days after collection of sample. It is acceptable to report to~~
 15—~~preliminary data and to use an informal transmittal method (e.g. email).~~
 16—~~(3.5.2.2) The permittee will evaluate the data to determine, (3.5.2.2.1) if dimethyl~~
 17—~~mercury have remained below permit conditions~~

182 Required Records: Results of emission assessments, supporting data and calculations to demonstrate
 193 compliance with dimethyl mercury limits.

204 State-Only: No.

215 Calculation Model: Not applicable.

22

23 **Condition Approval** 03/03/2016

24 **Condition:** EMISSION LIMITS

25 (1.1.6) N-Nitrosodimethylamine emissions shall not exceed the amounts listed in the
 26 table below from the 241-AP, 241-SY, and 241-AY/AZ ventilation systems. As
 27 the ventilation systems become fully operational, the N-Nitrosodimethylamine
 28 emissions shall not be exceeded from the respective exhaustor systems.

Tank Farm(s)	Maximum Amount (pounds per year)
Total for the 241-AP, 241-SY, and 241-AY/AZ ventilation systems	199.9
241-SY	61.3
241-AP	74.6
241-AY/AZ combined ventilation system (the 241-AY/AZ combined ventilation system is comprised of the initial AY/AZ exhaustor system and the AY-102 annulus system)	64

Commented [WRP55]: Please remove. This is already addressed separately under the 3.5 conditions. An annual TAP emission limit should be addressed.

Commented [NWP56]: Compliance with the dimethyl mercury emission limit is demonstrated by the monitoring of all TAPs in section 3.5 in accordance with condition 1.3.4 of DE11NWP-001, Rev. 4. Therefore, this periodic monitoring is a requirement to demonstrate compliance with this limit. No change to the AOP is required.

1

2 Periodic Monitoring: ~~(1.3.4) During solids mixing, disturbing bulk tank solids, removal of enough~~
3 ~~supernatant to potentially create gas release event, or Waste Feed Delivery~~
4 ~~operations to the Hanford Waste Treatment and Immobilization Plant (WTP)~~
5 ~~operations compliance with Approval Conditions, n-Nitrosodimethylamine~~
6 ~~Emission Limits shall be demonstrated by monitoring emissions of all TAP~~
7 ~~emission limits as described in section 3.5 of DE11NWP-001, Rev. 4.~~
8 ~~Test Method: (3.5.2.1) All samples collection activities will follow EPA approved procedures~~
9 ~~for each exhauster system or submission with subsequent approval by Ecology of~~
10 ~~an alternative procedure.~~
11 ~~Test Frequency: (3.5.2.2) The permittee will evaluate the data to determine, (3.5.2.2.1) if~~
12 ~~n-Nitrosodimethylamine have remained below permit conditions.~~

13 Required Records: Results of emission assessments, supporting data and calculations to demonstrate
14 compliance with n-Nitrosodimethylamine limits.

15 State-Only: No.

16 Calculation Model: Not applicable.

17

18 Condition Approval 03/03/2016

19 Condition: EMISSION LIMITS

20 (3.5) Ammonia shall be monitored as an indicator for compliance with TAP
21 emission limits during solid mixing, disturbing bulk tank solids, removal of
22 enough supernatant to potentially create a gas release event, or Waste Feed
23 Delivery operations to the WTP as it can be measured near real time, is readily
24 emitted by all tank farm exhausters and the rate of ammonia release is expected
25 to change (increase) with tank waste solid disturbances. A maximum
26 concentration of ammonia in parts per million (ppm) by volume of ammonia
27 emitted will be used as an indicator for compliance with release rates of TAPs.
28 The ppm value was calculated for each exhauster from the release rate of
29 ammonia in the application. Table 6 of DE11NWP-001, Rev 4 lists the maximum
allowable ammonia

30 reading in ppm for the exhausters in the AY/AZ and AP tank farms during solid
31 mixing, disturbing bulk tank solids, removal of enough supernatant to potentially
32 create a gas release event, or Waste Feed Delivery operations.

33 Ecology must be notified within 24 hours of any readings exceeding Table 6
34 values. This notification can be performed electronically (e.g. email) and shall
35 include, at a minimum, the reading(s) in exceedance, the exhauster system
36 involved, and the elapsed time between compliant readings as discussed in
37 Section 3.5.1. Table 6 values will be kept current and available for public
38 viewing on Ecology's website

39 (3.5.1) If stack effluent readings exceed Table 6 values, tank operations (not
40 ventilation) shall cease in a safe and controlled manner. Tank operations may
41 resume when stack effluent readings confirm that cumulative emissions will not
42 exceed time weighted average emissions identified in Table 6. The initial start
43 time in calculating the cumulative time weighted average emissions shall be the
44 time of collection of the effluent readings that exceed Table 6 values.

Commented [WRPS57]: Please remove. This is already addressed separately under the 3 5 conditions. An annual TAP emission limit should be addressed.

Commented [NWP58]: Compliance with the N-Nitrosodimethylamine emission limit is demonstrated by the monitoring of all TAPs in section 3 5 in accordance with condition 1.3.4 of DE11NWP-001, Rev. 4. Therefore, this periodic monitoring is a requirement to demonstrate compliance with this limit. No change to the AOP is required.

Commented [WRPS59]: Please add reference for clarity.

Commented [NWP60]: Will revise as suggested.

Commented [WRPS61]: This text is found at the Top of Table 6 of DE11NWP-001, Rev 4. This is not a condition that DOE can complete and certify as the database is owned by Ecology. It is found in DE11NWP-001, Rev 4. Please remove.

Commented [NWP62]: The text will be revised to clarify Ecology will keep a current version of Table 6 on our website for public viewing.

Commented [WRPS63]: This paragraph is a direct copy of DE11NWP-001, Rev 4, Section 3.5.1. To add clarification, please change: "tank operations (not ventilation)" to "waste disturbing activities."

Commented [NWP64]: This text is verbatim from DE11NWP-001, Rev. 4, but the intent could be misconstrued without the supporting text. Ecology will replace the suggested text "not ventilation" with "i.e. waste disturbing activities" in the parenthesis.

Effective Date: X/X/XXXX
Expiration Date: X/XX/XXXX

Hanford Air Operating Permit
Permit No. 00-05-06
Renewal 3

45

1 (3.5.2) The establishment of ammonia concentrations limit in Table 6 was
2 calculated from the best currently available data on tank waste characteristics and
3 engineering judgement on actual tank emission activity compared to theoretical
4 tank emission activity. To confirm and then adjust the emission limits as actual
5 performance data is collected during solids mixing, disturbing bulk tank solids,
6 removal of enough supernatant to potentially create a gas release event, or Waste
7 Feed Delivery operations, a method of updating the limits is established in the
8 following sections.

9 (3.5.2.1) During the start of tank activities that include solids mixing, disturbing
10 bulk tank solids, removal of enough supernatant to potentially create a gas
11 release event, or Waste Feed Delivery operations; the exhauster shall be sampled
12 for, at a minimum, dimethyl mercury, n-Nitrosodimethylamine, chromium
13 hexavalent: soluble, except chromic trioxide, and ammonia. All sample
14 collection activities will follow EPA approved procedures for each exhauster
15 system or submission with subsequent approval by Ecology of an alternative
16 procedure.

17 (3.5.2.1.1) Ammonia samples, at a minimum, will be collected at the start of
18 dimethyl mercury sample collection, mid-way through the dimethyl mercury
19 sample collection, and at the end of the dimethyl mercury sample collection.

20 (3.5.2.1.2) Dimethyl mercury sample collection will start no sooner than 12 hours
21 and be completed no later than 24 hours after the start of the activity described in
22 3.5.2.1 that requires sample collection.

23 (3.5.2.1.3) Chromium hexavalent: soluble, except chromic trioxide, sample
24 collection will start no sooner than 12 hours and be completed no later than 48
25 hours after the start of the activity described in 3.5.2.1 that requires sample
26 collection.

27 (3.5.2.1.4) Analytical results will be reported to Ecology as soon as possible, but
28 no later than 30 days after collection of the sample. It is acceptable to report
29 preliminary data and to use an informal transmittal method (e.g. email).

30 (3.5.2.2) The permittee will evaluate the data to determine (3.5.2.2.1) if
31 ammonia, dimethyl mercury and n- Nitrosodimethylamine have remained below
32 permit conditions and (3.5.2.2.2) if ammonia limits provided sufficient indicator
33 for emissions of other toxic air pollutants.

34 (3.5.2.3) If the sampled ratio would result in an increased emission limit in Table
35 6, the permittee will need to specifically request for the increased emission limit
36 to be entered into Table 6 (informal request is acceptable). The new emission
37 limit will be effective on the date entered in Table 6 in the 'Update Date' column.

38 (3.5.2.4) If the sampled ratio results in a decrease emission limit in Table 6, the
39 new limit will automatically be entered into Table 6. The new emission limit
40 will be effective on the date entered in Table 6 in the 'Update Date' column.

41 (3.5.2.5) The permittee will be notified of the new emission limit and sent an
42 electronic copy of the permit. Ecology will also post on the Nuclear Waste
43 Program web page a copy of the permit with the latest updated Table 6 values.

44

Commented [WRPS65]: How does DOE under the AOP certify compliance with these two conditions. They appear to be Ecology actions. Please remove.

Commented [NWP66]: Lines 38 through 39 will be revised to state "If the sampled ratio results in a decreased emission limit in Table 6, the permittee will notify Ecology, and Ecology will enter the new limit into Table 6."

Lines 41 through 43 will be deleted. This condition in the approval order is a procedural requirement for Ecology, but is not an applicable requirement for the permittee which must be included in the AOP.

1 (3.5.3) Stack effluent readings of ammonia (as a surrogate compound) in ppm
2 will be collected at least hourly during solids mixing, disturbing bulk tank solids,
3 removal of enough supernatant to potentially create a gas release event, or Waste
4 Feed Delivery operations to the WTP. The collected ppm reading will be
5 recorded along with, at a minimum, the date and time of reading collection and
6 activity type occurring in the tank during reading collection (e.g., pumping,
7 sluicing, etc.).

8 (3.5.3.1) A reduction in frequency of ammonia readings is allowed when the
9 conditions below are met. Any frequency reduction will be reset to one hour
10 reading collection when the tank activities change (e.g. from pumping to sluicing,
11 or sluicing to pumping, sluicing to extended reach sluicing, etc...) or a reading
12 above Table 6 values is recorded.

13 (3.5.3.2) Upon collection of 100 representative readings (readings collected must
14 have occurred during the activity being evaluated in for reading frequency
15 reduction) and at least five (5) working days of reading collection.

16 (3.5.3.3) The permittee can request a reading frequency reduction by submitting
17 to Ecology (electronic submittal is acceptable) all of the readings and
18 calculations used. Ecology will review the submission and electronically notify
19 the permittee of their decision within five (5) working days, unless Ecology
20 notifies the permittee of additional time needed to complete the review. The
21 permittee must have Ecology's approval before reducing reading frequency.

22 (3.5.3.4) Reading frequency relief will occur in two steps. The first step is
23 reducing reading collection from one hour to four hours. The second step is
24 reducing reading collection from four hours to eight hours. Each relief step must
25 independently meet condition 3.5.3.2 and 3.5.3.3.

26 (3.5.4) When tanks are acting as receiver tanks for solids mixing, disturbing bulk
27 tank solids, removal of enough supernatant to potentially create a gas release event, or
28 Waste Feed Delivery operations or providing supernatant for sluicing activities in
29 other tanks, the reading frequency will start at 4 hours. Relief to 8 hour reading
30 frequency following the requirements of 3.5.3.2 and 3.5.3.3 is allowed.

31 (3.5.4.1) Changes in active mixing, retrieval, or Waste Feed Delivery operations
32 in Tanks sending to the AP Farm will cause the reading frequency to reset to 4
33 hour intervals.

34 (3.5.4.2) The permittee can request from Ecology relief of the AP Farm reading
35 frequency reset when enough data exists to support exhauster emissions remain
36 consistent regardless of the activities in active mixing, retrieval, or Waste Feed
37 Delivery operations from the feed tanks.

38 ~~(4.0) Operation of the subject primary tank ventilation systems is intended for~~
39 ~~the storage, treatment, sampling, and Waste Feed Delivery of waste contained in~~
40 ~~the tanks as described in the NOC application. For the purposes of this~~
41 ~~authorization, "Waste Feed Delivery" includes mixing and pumping as necessary~~
42 ~~and sufficient for transfer of wastes to or from the subject tank. Waste Feed~~
43 ~~Delivery operations may encompass waste sampling activity but such sampling~~
44 ~~shall not, in and of itself, be deemed the basis for identifying operations as Waste~~
45 ~~Feed Delivery operations.~~

Commented [WRPS67]: To match DE11NWP-001, Rev 4, section 3.5.4, Please add "tank" so that it reads "bulk tank solids"

Commented [NWP68]: Will revise as suggested.

Commented [WRPS69]: This does not appear to be part of Ammonia Emission Limits. Please remove.

Commented [NWP70]: This is included to define Waste Feed Delivery operations for TAP limits. The ammonia monitoring described in this condition demonstrates compliance with multiple TAP limits, in accordance with condition 1 3.4 of DE11NWP0-001, Rev. 4. No change in the AOP is required.

- 1 Periodic Monitoring: Compliance and monitoring shall be demonstrated as described above.
- 2 Test Method: All sample collection activities will follow EPA approved procedures for each
- 3 exhauster system or submission with subsequent approval by Ecology of an
- 4 alternative procedure.
- 5 Test Frequency: Not specified.
- 6 Required Records: (1) (2.4.6) Analytical test results
- 7 (2) (2.4.4) Supporting calculations
- 8 (3) (5.1) Operations and Maintenance (O&M) manuals
- 98 (4) (2.4.7) Operational records – Waste Feed Delivery operations will be recorded
- 109 into
- 110 operational records sufficient to determine the onset and cessation of such
- 121 operations for each tank subject to this Order.
- 122 State-Only: No.
- 1312 Calculation Model: Not applicable.
- 14
- 15
- 16

DRAFT

Commented [WRPS71]: These two required record references are abbreviated from the text found in DE11NWP-001, Rev 4 section 2.4. Please add full text for clarification.

Commented [NWP72]: The required records were abbreviated to streamline the AOP. The required recordkeeping will be modified to be more similar to Section 2.4. The Required Records will be revised to state:

- (1) Records of exhauster system stack flow rates and temperature records.
- (2) Records of calibration of stack gas flow rate and temperature measurement devices.
- (3) Emission monitoring results required in DE11NWP-001, Rev. 4, Section 3.0.
- (4) Supporting data and calculations to demonstrate compliance as detailed in DE11NWP-001, Rev. 4, Conditions 3.5, 1.1.2, 1.1.3, 1.1.4, 1.1.5, and 1.1.6.
- (5) Laboratory analysis result summaries taken in accordance with DE11NWP-001, Rev. 4 from 241-AP, 241-SY, or 241-AY/AZ tank farm tank headspaces or primary tank ventilation system exhaust for which are examined for organic species or other TAPs .
- (6) Documentation and record-keeping of BACT and tBACT compliance of emission controls.
- (7) Waste Feed Delivery operations will be recorded into operation records sufficient to determine the onset and cessation of such operations for each tank subject to DE11NWP-001, Rev. 4.
- (8) Operations and Maintenance (O&M) manuals.

Commented [WRPS73]: Please remove.

Commented [NWP74]: O&M manuals are specifically required as records by DE11NWP-001, Rev. 4 Condition 5.1 and referenced in Condition 5.5. This requirement will be maintained in the AOP.

1 **Condition Approval** 03/03/2016

2 Condition: OPERATIONAL LIMITS

3 (1.2.1) Normal Double-Shell Tank (DST) primary tank ventilation system flow
 rates
 4 during Normal Operations (e.g. storage, retrieval, and sampling) are shown in the
 5 Table below. The maximum flow rates for the DST ventilation systems shall not
 6 exceed ventilation rates for Maximum Operations (Table below).

~~Project Farm~~ Ventilation Rates

Tank Farm(s)	Normal Operations (scfm)	Maximum Operations (scfm)
241-SY	1,360	2,500
241-AP (Upgraded System)	1,500	3,000 1,750
241-AP (Existing System)	850	1,000
241-AY/AZ	850	1,000
AY-102 Annulus	1,000	3,800
AY-102 Portable	1,600	3,000
scfm = standard cubic foot per minute, 1 atmosphere pressure at 20°C		

Commented [WRPS75]: Please remove "Project Farm" as it does not appear in DE11NWP-001, Rev 4.

Commented [NWP76]: The text will be revised as suggested.

Commented [WRPS77]: Text should be "3,000" not "1,750". This table is the same as Table 5 Ventilation Rates found in DE11NWP-001, Rev 4. Please change.

Commented [NWP78]: DE11NWP-001, Rev. 4 was issued a Mod A on October 26, 2016 to update the listed flow rate for 241-AP from 3,000 to 1,750 scfm. The AOP then streamlined the requirements from the approval order revision and the modification, maintaining the more stringent requirement to ensure compliance. Since the maximum permit limit of 1,750 scfm from Table 6 is in effect, this value will be retained in the AOP as the maximum operations limit for the 241-AP Upgraded System. No change to the AOP is required.

7 Periodic Monitoring: (1.3.5) Stack gas flow ~~and temperature~~ measurement at the same intervals as
 required by

8 RAELs.

9 Frequency: (1.3.5) Same intervals as required by RAELs.

10 Test Method: None Specified.

11 Required Records: 1) (2.4.1) Records of calibration of stack gas flow rate and temperature
 measurement

12 devices.

13 2) (2.4.2) Records of exhaust system stack flow rate and ~~temperature~~
~~measurements~~

14 State-Only: No.

15 Calculation Model: Not applicable.

16

17 **Condition Approval** 03/03/2016

18 Condition: EMISSION LIMITS: Baseline Assessments

19 (1) 3.1.1 Ammonia stack concentrations shall be sampled or measured a
 20 minimum of three times. Stack flow rate and temperature will be applied with
 21 ammonia stack gas concentration to report ammonia emission in terms of pounds
 22 per day.

23 (2) 3.1.2 Dimethyl mercury sampling and analysis will be in accord with U.S.
 24 EPA approved procedures for each exhauster system.

25 Periodic Monitoring: (3.1.1) Ammonia sampling and analysis will be in accord with approved alternative
 26 sampling procedures including the use of Draeger tubes or direct reading
 27 instruments to measure stack gas concentration of ammonia providing such

Commented [WRPS79]: "and temperature" is not found in DE11NWP-001, Rev 4 section 1.3.5. Please remove.

Commented [NWP80]: The text will be revised as suggested.

Commented [WRPS81]: Please add "temperature." And delete "Measurement" to match the text found in section 2.4.2 of DE11NWP-001, Rev 4.

Commented [NWP82]: The text will be revised as suggested.

Commented [WRPS83]: Ammonia Baseline Assessments already incorporated into Condition for Ammonia on page 108. Please remove.

Commented [NWP84]: Although some text is repeated, the ammonia baseline is part of the compliance demonstration for the dimethyl mercury limit and will be retained in this condition.

Effective Date: X/X/XXXX
Expiration Date: X/XX/XXXX

Hanford Air Operating Permit
Permit No. 00-05-06
Renewal 3

~~28~~24 devices are spanned to appropriately measure the stack gas ammonia
~~29~~25 concentration.

| ~~30~~26 Test Method: (1)(~~3.1.1~~) Approved sampling procedures including the use of Draegar tubes or
direct

| ~~27~~ reading instruments to measure stack gas concentrations of ammonia.

1 (2)(3.1.2) EPA approved procedures for Dimethyl mercury
2 Test Frequency: (3.1) Within 90 days after commencement of operations of each exhauster system.
3 Required Records: (1)(2.4.2) Stack flow rate and temperature readings
4 ~~(2) Ammonia emissions and concentrations~~
5 ~~(3) Test method~~
6 ~~(4) Dimethyl mercury concentrations~~
7
8 State-Only: No.
9 Calculation Model: Not applicable.
10
11 ~~Condition Approval 03/03/2016~~
12 ~~Condition: EMISSION LIMITS: Emission Assessments~~
13 ~~(1) VOC emissions from each exhauster system will be performed.~~
14 ~~(2) 3.1.2 Dimethyl mercury sampling and analysis will be in accord with U.S.~~
15 ~~EPA approved procedures for each exhauster system.~~
16 ~~Periodic Monitoring: Ammonia sampling and analysis will be in accord with approved alternative~~
17 ~~sampling procedures including the use of Draeger tubes or direct reading~~
18 ~~instruments to measure stack gas concentration of ammonia providing such~~
19 ~~devices are spanned to appropriately measure the stack gas ammonia~~
20 ~~concentration.~~
21 ~~Test Method: (1) Approved sampling procedures including the use of Draeger tubes or direct~~
22 ~~reading instruments to measure stack gas concentrations of ammonia.~~
23 ~~(2) EPA approved procedures for Dimethyl mercury~~
24 ~~Test Frequency: Within 90 days after commencement of operations of each exhauster system.~~
25 ~~Required Records: (1) Stack flow rate and temperature readings~~
26 ~~(2) Ammonia emissions and concentrations~~
27 ~~(3) Test method~~
28 ~~(4) Dimethyl mercury concentrations~~
29 ~~State Only: No.~~
30 ~~Calculation Model: Not applicable.~~
31
32 **Condition Approval 03/03/2016**
33 **Condition: OPERATIONAL LIMITS**
34 (1.2.2) No more than two of the three tanks in the 241-SY Tank Farm (241-SY-101
35 through 241-SY-103) shall be under active mixing and Waste Feed Delivery
36 operations at any one time. Waste Feed Delivery operations are defined as those
37 which mix and transfer waste, ~~including transfers to the Waste Treatment and~~
38 ~~Immobilization Plant.~~
39 ~~Periodic Monitoring: (2.4.7) Compliance and monitoring of this condition shall be demonstrated by~~
40 ~~operational record keeping of~~ Waste Feed Delivery operations recorded into
41 ~~operational records sufficient to determine onset and cessation of such operations~~
42 ~~for each tank.~~

Commented [WRPS85]: DE11NWP-001, Rev 4 does not specify these specific requirements in section 2.4. Please remove.

Commented [NWP86]: The ammonia emissions and calculations are required to demonstrate baseline and current emissions (see comment above). Test method would be part of the lab analysis result summaries required by DE11NWP-001 Rev 4, Section 2.4.6. Dimethyl mercury concentration would be calculated in the calculations to demonstrate compliance with DE11NWP-001 Rev 4, Section 2.4.4, which references Section 1.3.4, which refers back to the dimethyl mercury limit in Section 1.1.5.

On January 18, 2019, DOE proposed the alternative of changing item (3) from "Test Method" to "Sample collection methods for ammonia and dimethyl mercury" and keeping item (2) ammonia emissions and concentrations and item (4) dimethyl mercury concentrations. Ecology will revise the language according to the proposed alternative.

Commented [WRPS87]: Please delete.

Commented [NWP88]: It appears this condition was intended to capture the emission assessments for VOCs, TAPs, and Ammonia, not including the baseline assessments and the ammonia monitoring as an indicator compound requirements. The emission assessments required by DE11NPW-001 Revision 4, Sections 3.2, 3.3, and 3.4 are identified in the AOP under the applicable emission limit. The baseline assessment requirements identified in lines 13 through 27 are also found in the Emission Limits: Baseline Assessments condition above. As the requirements are already in the AOP, this section will be deleted to reduce repetition.

Commented [WRPS89]: Text "including transfers to the Waste Treatment and Immobilization Plant" is not found in section 1.2.2 of DE11NWP-001, Rev 4. Please delete.

Commented [NWP90]: Transfers to WTP are discussed in DE11NWP-001 Rev. 4, Sections 1.3.3, 1.3.4, 3.5, and 3.5.3. This text was included for clarity to document that "Delivery" includes delivery of waste from the tank farm to a treatment system or other receiving unit. The text will be maintained to support that the limit covers both delivery to and delivery from these tanks. No change to the AOP is required.

Commented [WRPS91]: Please delete. Section reference is different than what is listed in DE11NWP-001, Rev 4 section 2.4.7.

Commented [NWP92]: The text will be revised as suggested.

- 1 Test Method: Not specified
- 2 Test Frequency: Not applicable.
- 3 Required Records: (2.4.7) Operational records sufficient to determine the onset and cessation of Waste Feed
- 4 Delivery operations for each tank subject to this Order.
- 5 State-Only: No.
- 6 Calculation Model: Not applicable.
- 7 ~~Condition Approval: 03/03/2016~~
- 8 ~~Condition: OPERATIONAL LIMITS~~
- 9 ~~No more than two of the three tanks in the 241-SY Tank Farm (241-SY 101~~
- 10 ~~through 241-SY 103) shall be under active mixing and Waste Feed Delivery~~
- 11 ~~operations at any one time. Waste Feed Delivery operations are defined as those~~
- 12 ~~which mix and transfer waste, including transfers to the Waste Treatment and~~
- 13 ~~Immobilization Plant.~~
- 14 ~~Periodic Monitoring: Compliance and monitoring of this condition shall be demonstrated by~~
- 15 ~~operational record keeping of Waste Feed Delivery operations recorded into~~
- 16 ~~operational records sufficient to determine onset and cessation of such operations~~
- 17 ~~for each tank.~~
- 18 ~~Test Method: Not specified~~
- 19 ~~Test Frequency: Not applicable.~~
- 20 ~~Required Records: Operational records sufficient to determine the onset and cessation of Waste Feed~~
- 21 ~~Delivery operations for each tank subject to this Order.~~
- 22 ~~State Only: No.~~
- 23 ~~Calculation Model: Not applicable.~~
- 24

Commented [WRPS93]: This condition appears to be a copy of the condition above.
Should this be for AY/AZ?
Please delete.

Commented [NWP94]: It appears that this condition was intended for operation limits for the 241-AY and 241-AZ tank farms. DE11NWP-001, Rev. 4 has active mixing and delivery limits for 241-SY (1.2.2), 241-AP (1.2.3), and 241-AY/AZ (1.2.4). The draft AOP included the limit for 241-AP and 241-SY twice. This condition will be modified to limit these operations to 2 out of the 4 tanks in 241-AY and 241-AZ and the periodic monitoring will be edited to be consistent with the requested change above for the 241-SY tank farm operational limit.

1 **Condition Approval 03/03/2016**
2 Condition: OPERATIONAL LIMITS
3 (1.2.3) No more than two of the eight tanks in the 241-AP Tank Farm (241-AP-101
4 through 241-AP-108) shall be under active mixing and Waste Feed Delivery
5 operations at any one time. Waste Feed Delivery operations are defined as those
6 which mix and transfer waste, ~~including transfers to the Waste Treatment and~~
7 ~~immobilization Plant.~~
8 Periodic Monitoring: (2.4.7) Compliance and monitoring of this condition shall be demonstrated by
9 operational record keeping of Waste Feed Delivery operations recorded into
10 operational records sufficient to determine onset and cessation of such operations
11 for each tank.
12 Test Method: Not specified
13 Test Frequency: Not applicable.
14 Required Records: Operational records.
15 State-Only: No.
16 Calculation Model: Not applicable.
17 **Condition Approval 03/03/2016**
18 Condition: OPERATIONAL LIMITS
19 (1.2.5, 1.3.7) Compliance of condition shall be met by operating the exhauster
20 systems in
21 accordance with tBACT emission controls found for this project.
22 Periodic Monitoring: ~~(2.4.7) Compliance and monitoring of this condition shall be demonstrated by~~
23 ~~operational record keeping of Waste Feed Delivery operations recorded into~~
24 ~~operational records sufficient to determine onset and cessation of such operations~~
25 ~~for each tank.~~
26 Test Method: Not specified
27 Test Frequency: Not applicable.
28 Required Records: (2.4.5) All monitoring and operation records required to operate and maintain the
29 emission control equipment which implements tBACT.
30 State-Only: No.
31 Calculation Model: Not applicable.
32

Commented [WRPS95]: Text "including transfers to the Waste Treatment and Immobilization Plant" is not found in 1.2.2 of DE11NWP-001, Rev 4. Please delete.

Commented [NWP96]: Please see response above for the 241-SY tank farm operational limit. This text will be retained. No change to the AOP is required.

Commented [WRPS97]: For consistency – do you want the same record requirement as applied to SY farm above?

Commented [NWP98]: The text will be updated for consistency with the 241-SY tank farm operational limit, as suggested. "Periodic Monitoring" will also be updated for consistency with the above comment response.

Commented [WRPS99]: This doesn't seem to fit this Condition. Please replace with wording from DE11NWP-001, Rev 4, Section 1.3.7.

Commented [NWP100]: This periodic monitoring text identified in the comment is a requirement from DE11NWP-001, Rev 4. However, it is already included in other conditions for this discharge point, such as the operational limit condition above this condition.

Ecology agrees that this appears to be out of place, but DE11NWP-001 Revision 4, Section 1 3.7 does not specify periodic monitoring. Periodic monitoring will be revised to state "Compliance with the condition shall be met by operating the exhauster systems in accordance with tBACT emission controls for this project, as found in DE11NWP-001, Rev. 4."

The condition will also be revised for consistency with the approval order to state "The ventilation systems shall be operated in compliance with tBACT controls identified in DE11NWP-001, Rev. 4."

Effective Date: X/X/XXXX
Expiration Date: X/XX/XXXX

Hanford Air Operating Permit
Permit No. 00-05-06
Renewal 3