September 01, 2016

SENT CERTIFIED MAIL: 7014 2120 0000 9726 7583

Ms. Gina McCarthy, Administrator U.S. Environmental Protection Agency Ariel Rios Building 1200 Pennsylvania Avenue N.W. Washington, D.C. 20460

RE: Petition Requesting the Administrator Object to the Hanford Site Title V Operating Permit (Number 00-05-006, Renewal 2, Revision B)

Dear Administrator McCarthy:

This letter transmits my petition requesting you, in your capacity as Administrator of the U.S. Environmental Protection Agency, object to issuance of the referenced *Clean Air Act* (CAA) Title V permit revision (Permit) in accordance with CAA § 505 (b)(2). Enclosed is a hardcopy of the petition with exhibits for review pursuant to 40 Code of Federal Regulation (C.F.R.) 70.8. Also enclosed is a compact disk (CD) that includes the same information.

EPA's 45-day review expired on July 25, 2016, without an objection. The Washington State Department of Ecology (Ecology) issued this permit revision as final on July 28, 2016, with an effective date of August 1, 2016.

The petition contains a single objection. This single objection arose only from issues stated with "reasonable specificity" in public comments received by Ecology during the public comment period. This single objection is limited to the scope of Revision B announced by Ecology at the start of public comment. The objection regards failure of the permitting authority, Ecology, to conduct public review consistent with requirements of 40 C.F.R. 70.7 (h), particularly 40 C.F.R. 70.7 (h)(2).

Please do not hesitate to contact me at the address below should you have any question or if you would like any additional information.

Respectfully

Bill Green 424 Shoreline Ct. (Richland, WA 99354

enclosures

EPA Administrator McCarthy September 01, 2016 Page 2 of 2

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BEFORE THE ADMINISTRATOR UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

}

IN THE MATTER OF BILL GREEN
RICHLAND, WASHINGTON

THE HANFORD SITE}TITLE V OPERATING PERMIT}RENEWAL 2, REVISION B}ISSUED BY THE WASHINGTON STATE}DEPARTMENT OF ECOLOGY}

PERMIT NO.: 00-05-006, RENEWAL 2, REVISION B

PETITION REQUESTING THE ADMINISTRATOR OBJECT TO THE U.S. DEPARTMENT OF ENERGY HANFORD SITE, TITLE V OPERATING PERMIT, NUMBER 00-05-006, RENEWAL 2, REVISION B

Pursuant to *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) Bill Green (Petitioner) hereby petitions the Administrator of the United States Environmental Protection Agency (EPA) to object to the Hanford Site Title V Operating Permit, Number 00-05-006, Renewal 2, Revision B (Permit). As detailed below, Petitioner's objection to issuance of the Permit regards failure of the permitting authority to conduct public review consistent with requirements of 40 C.F.R. 70.7 (h), particularly 40 C.F.R. 70.7 (h)(2).

This well-supported objection plus exhibits and relevant binding authority combine to demonstrate the public review process preceding issuance of the Permit did not comply with the CAA and 40 C.F.R. 70 (Part 70). Therefore, the Administrator is obligated to object.

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Terms

Certain terms and definitions used in this Petition are as follows:

- "Administrator" means the Administrator of the U.S. Environmental Protection Agency.
- The terms "CAA Title V permit", "Title V permit", "air operating permit", "AOP", and "Part 70 permit" are synonymous and mean a permit required by CAA § 502 (a) [42 U.S.C. 7661a (a)].
- CAA or Act is the *Clean Air Act*, 42 U.S.C. 7401, *et seq*.
- "Ecology" means the Washington State Department of Ecology
- "Health", "DOH", or "WDOH" means the Washington State Department of Health
- NERA is The Nuclear Energy and Radiation Act, codified in Chapter 70.98 RCW
- NESHAPs stands for the National Emission Standards for Hazardous Air Pollutants
- "Part 70" means 40 C.F.R. part 70
- "Permit" means the Hanford Site Title V Operating Permit, No. 00-05-006, Renewal 2, Revision B
- "permitting authority" is as defined in CAA § 501 (4) [42 U.S.C. 7661 (4)] and 40 C.F.R. 70.2:

"The term "permitting authority" means the Administrator or the air pollution control agency authorized by the Administrator to carry out a permit program under this subchapter." CAA § 501 (4) [42 U.S.C. 7661 (4)];

"*Permitting authority* means either of the following: (1) The Administrator, in the case of EPAimplemented programs; or (2) The State air pollution control agency, local agency, other State agency, or other agency authorized by the Administrator to carry out a permit program under this part." 40 C.F.R. 70.2

- "RCW" is the Revised Code of Washington
- "subpart H" or "Subpart h" or "Subpart H" means 40 C.F.R. 61 subpart H, the *National Emission Standards for Emissions of Radionuclides Other Than Radon from Department of Energy Facilities.*
- "WAC" means the Washington Administrative Code

Background

Under section 505(a) of the *Clean Air Act* (CAA) [42 U.S.C. 7661d (a)] and 40 C.F.R. 70.8(a), the permitting authority is required to submit all proposed Title V operating permits to EPA for review. If EPA determines a permit is not in compliance with applicable requirements of the CAA or the requirements of 40 C.F.R. 70, EPA must object to the permit. If EPA does not object to the permit on its own initiative, any person may petition the Administrator to object to the permit¹ within 60 days after the expiration of EPA's 45-day review period.

1

¹ CAA 505(b)(2) [42 U.S.C. 7661d (b)(2)] and 40 C.F.R. 70.8(d)

A petition for administrative review does not stay the effectiveness of an issued permit or the terms and conditions therein. Such petition must be based on objections raised with "reasonable specificity" during the public comment period. However, a petitioner may also raise an objection if it is demonstrated it was "impracticable to raise such objections within such period, or unless the grounds for such objection arose after such period.²"

The Administrator has a nondiscretionary duty to grant or deny the petition within 60 days and may not delegate action on the petition.³ Should the Administrator fail to discharge this nondiscretionary duty, the Petitioner may seek remedy in U.S. District Court⁴, after first serving formal notice of intent to sue⁵.

Under the CAA, the Administrator "shall issue an objection [to the issuance of a Title V permit]...if the petitioner demonstrates to the Administrator that the permit is not in compliance with the requirements of [the CAA]" or is not in compliance with the Title V implementing regulation.⁶ If the Administrator denies the petition, the denial is subject to review in the Federal Court of Appeals under CAA § 307 [42 U.S.C. 7607]⁷. The court "may award costs of litigation (including reasonable attorney and expert witness fees) to any party, whenever the court determines such award is appropriate.⁸"

If EPA objects to a permit in response to a petition, the permitting authority or EPA will modify, terminate, or revoke and reissue the permit⁹ using procedures in 40 C.F.R. 70.7(g)(4) or (5)(i) and (ii).

Permit organization

The Permit is organized into four (4) parts: *Standard Terms and General Conditions*, *Attachment 1*, *Attachment 2*, and *Attachment 3*. Each of the four (4) parts has an associated Statement of Basis.

Attachment 1 contains conditions regulating most non-radionuclide air pollutants. Attachment 2 (License FF-01) contains all radionuclide air emission terms and conditions; those created pursuant to CAA § 112 (*hazardous air pollutants*) as implemented by 40 C.F.R. 61 subpart H¹⁰ and required by Part 70, and those created in accordance with "Chapter 70.98 RCW and rules adopted thereunder"¹¹. Terms and conditions created

² 40 C.F.R. 70.8(d)

³ CAA § 505(b)(2); 42 U.S.C. 7661d (b)(2)

⁴ Any person may commence a civil action on his own behalf "against the Administrator where there is alleged a failure of the Administrator to perform any act or duty under this chapter which is not discretionary with the Administrator" CAA § 304(a)(2), 42 U.S.C. § 7604(a)(2)

⁵ CAA § 304 (b)(2), 42 U.S.C. 7604 (b)(2), and 40 C.F.R. 54

⁶ 42 U.S.C. 7661d (b)(2); *see also* "The Administrator will object to the issuance of any proposed permit determined not to be in compliance with applicable requirements or requirements under this part [70]". 40 C.F.R. 70.8(c)(1)

⁷ CAA § 505(b)(2); 42 U.S.C. 7661d (b)(2)

⁸ CAA § 304(d); 42 U.S.C. § 7604(d)

⁹ See CAA § 505 (b)(3); 42 U.S.C. 7661d (b)(3).

¹⁰ National Emission Standards for Emissions of Radionuclides Other Than Radon from Department of Energy Facilities.

¹¹ WAC 173-401-200 (4)(b)

pursuant to 40 C.F.R. 61 subpart M and requirements for outdoor burning are contained in *Attachment 3*.

Attachment 1 is enforced by the Washington State Department of Ecology (Ecology), the issuing permitting authority. *Attachment 2* is authored by the Washington State Department of Health (Health), but issued and enforced by Ecology¹² pursuant to WAC 173-401. *Attachment 3* is enforced by the Benton Clean Air Agency (BCAA). While the BCAA has an approved Part 70 program (i.e. is a permitting authority under the CAA and Part 70), in the context of the Hanford Site Title V Permit the BCAA is not a permitting authority, but rather a "permitting agency"¹³.

March 22 through April 24,	Ecology opened Revision B of the Permit for public review. (<i>See</i> Ecology publication number 15-05-003.)
2015	
April 22, 2015	Petitioner submitted public review comments to Ecology.
April 22, 2015	Ecology extended the public comment period until May 8, 2015.
May 8, 2015	Close of public comment period.
May 29, 2015	EPA issues Order Granting in Part and Denying in Part Two
	Petitions for Objections to Permits (Numbers 00-05-006, Renewal
	2, and 00-05-006, Renewal 2, Revision A issued by Ecology to
	the U.S. Department of Energy's Hanford Site) in response to
	petition numbers X-2014-01 and X-2013-01.
June 10, 2016	EPA receives the Proposed Hanford Title V permit, number 00-
	05-006, Renewal 2, Revision B, for its 45-day review in
	accordance with 40 C.F.R. 70.8.
July 25, 2016	EPA concluded its 45-day review without issuing an objection.
July 28, 2016	Ecology issued Permit as final with an effective date of August 1,
	2016, and an expiration date of March 31, 2018 ¹⁴ .

General Chronology

¹² "The operating permit [issued by Ecology for the Hanford Site] will include components addressing both radioactive (from Health's license) and non-radioactive air emissions. The operating permit will be required, issued, and enforced pursuant to the authorities set forth in 70.94 Ch. R.C.W. [] and its implementing regulations, including specifically Ch. 173-401 W.A.C.... Attorney General Opinion, at 4." *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

¹³ "[F]or the Hanford Site AOP, Ecology is the permitting authority as defined in WAC 173-401-200(23). Ecology, Health and BCAA are all permitting agencies with Ecology acting as the lead agency. Health and BCAA authorities are described in the Statements of Basis for Attachments 2 and 3." *Statement of Basis for Hanford Site Air Operating Permit No. 00-05-006 Renewal2, Rev. B*, at iv. This is the Statement of Basis associated with the *Standard Terms and General Conditions*.

¹⁴ Available at: <u>http://www.ecy.wa.gov/programs/nwp/permitting/AOP/renewal/two/Revision_B/07_28_16/</u>

Scope of Revision B

Ecology defined the substantive scope of Permit Revision B in its public announcement as follows:

"The changes are to incorporate new information into the permit. In particular, the Washington State Department of Health has issued a new radioactive air emissions license.... We are also adding newly identified engines into the permit. These are diesel engines that are no longer mobile, so they must be regulated by the permit."

(Department of Ecology, State of Washington, *Public Comment Period*, Pub. No: 15-05-003, Mar. 2015. Available at:

https://fortress.wa.gov/ecy/publications/publications/1505003.pdf)

The practical scope of public review and this petition are limited by the scope of Ecology's revision¹⁵.

Objection

Petitioner respectfully requests the Administrator discharge her duty under CAA § 505(b)(2) [42 U.S.C. 7661d (b)(2)] based on the following objection:

Contrary to 40 C.F.R. 70.7 (h)(2), the issuance process for the final Permit failed to provide the public with information used to create terms and conditions implementing requirements of 40 C.F.R. 61 subpart H.

Forty (40) C.F.R. 70.8 (d) requires a petition be "...based only on objections to the permit that were raised with reasonable specificity during the public comment period . . ., or unless the grounds for such objection arose after such period." 40 C.F.R. 70.8(d). The term "reasonable specificity" is not defined. To address the requirement of "reasonable specificity" Petitioner cites to and quotes from the comment giving rise to the particular objection.

Additionally, Petitioner's objection is within the scope of review, as it is identified by Ecology in the public review announcement. The following statements appear under the heading "Permit Revision Scope" in Ecology's public review announcement:

"The changes are to incorporate new information into the permit. In particular, the Washington State Department of Health has issued a new radioactive air emissions license. . ." (Department of Ecology, State of Washington, *Public Comment Period*, Pub. No:

(Department of Ecology, State of Washington, *Public Comment Period*, Pub. N 15-05-003, Mar. 2015. Available at:

https://fortress.wa.gov/ecy/publications/publications/1505003.pdf)

Petitioner's objection is specific to changed contents, identified by Health, in Health's new radioactive air emissions license. This new license appears as *Attachment 2* of the Permit.

¹⁵ "Public objections to a draft permit, permit revision, or permit renewal must be germane to the applicable requirements implicated by the permit action in question. For example, objections addressed to portions of an existing permit that would not in any way be affected by a proposed permit revision would not be germane. Public comments will only be germane if they address whether the draft permit is consistent with applicable requirements or requirements of part 70." 57 Fed. Reg. 32250, 32290/3 (July 21, 1992).

All Petitioner's comments were received by Ecology on April 22, 2015¹⁶, well within the Ecology-identified public comment period from March 22 through April 24, 2015. (The comment period was subsequently extended until May 8, 2015. *See* "Chronology" above.)

Objection: Contrary to 40 C.F.R. 70.7 (h)(2), the issuance process for the final Permit failed to provide the public with information used to create terms and conditions implementing requirements of 40 C.F.R. 61 subpart H.

This objection is raised with "reasonable specificity" as required by 40 C.F.R. 70.8 (d) in Petitioner's Comment 28. An accurate copy of Petitioner's Comment 28 appears below. (Comment 28 also appears in *Enclosure 1* of Exhibit 1.):

"Comment 28: (*Attachment 2*, General): As required by 40 C.F.R. 70.7 (h)(2), provide the public with all information used in the permitting process to justify:

- adding six (6) new emission unit,
- removing nine (9) emissions units, and
- replacing about twenty-eight (28) Notice of Construction (NOC) orders of approval

from the previous final version of Attachment 2^1 , and restart public review.

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)

This version of *Attachment 2* contains six (6) new emissions units and about 28 new NOC approvals replacing older versions. In addition there are nine (9) emission units that were removed. These changes were affected without providing the public with any information. No NOC applications containing information required by WAC

246-247-110 *Appendix A* were provided; no modification requests or applications for modifications were provided; no closure requests and supporting information were provided. In accordance with 40 C.F.R. 70.7 (h)(2), provide all information used to justify these changes and restart public review.

¹ Draft Statement of Basis for Attachment 2, Table of Changes from FF-01 12-10-14, pgs. 23-32 of 33"

¹⁶ See Exhibit 1, p. 1

(Exhibit 1, Enclosure 1, Comment 28)

Petitioner's Comment 28 is specific to Permit *Attachment 2*, the new Health license; cites to EPA's interpretation of language in 40 C.F.R. 70.7 (h)(2) as captured in a ruling by the 11th Circuit¹⁷ and identifies the source of the number of each type of change as the "Draft Statement of Basis for Attachment 2, Table of Changes from FF-01 12-10-14, pgs. 23-32 of 33".¹⁸

(Cited pages are from Health license FF-01, "Table of Changes" and are contained in Exhibit 3.)

Requirements

Forty (40) C.F.R. 70.7 (h)(2) requires, in part, that a proper notice "... shall identify a person from whom interested persons may obtain additional information, including copies of the permit draft, the application, all relevant supporting materials, ..., and all other materials available to the permitting authority that are relevant to the permit decision; ..."¹⁹

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,' [in] **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) (Enclosed as page 1 of Exhibit 4)

EPA has also determined that "... while the underlying requirements of Subpart H are not subject to public comment under title V, the application of Subpart H to a particular source is."²⁰ Application of Subpart H to individual Hanford emissions units occurs in *Attachment 2*, Health license FF-01. Additionally, many requirements of 40 C.F.R 70 (Part 70) apply to all emissions units, including those regulated in *Attachment 2*, Health license FF-01.

Federal requirements for approval of a state's Part 70 program require a legal opinion stating the laws of the state provide adequate authority to carry out all aspects of a Part 70 program²¹. EPA has determined the legal mechanism for regulation of radionuclides described in the opinion submitted by Washington State adequately implements Part 70 for radionuclides, a class of *hazardous air pollutants* listed under section 112 (b) of the federal CAA.

"The operating permit [issued by Ecology for the Hanford Site] will include components addressing both radioactive (from Health's license) and non-radioactive air emissions. The

Available at: <u>http://www.epa.gov/region07/air/title5/petitiondb/petitions/hanford_response2014.pdf</u>²¹ 40 C.F.R. 70.4 (b)(4)

¹⁷ See Sierra Club v. Johnson, 436 F.3d 1269, 1284, (11th Cir. 2006) (Enclosed as Exhibit 4)

¹⁸ Exhibit 1, *Enclosure 1*, Comment 28, footnote 1.

¹⁹ 40 C.F.R. 70.7 (h)(2)

²⁰ U.S. Department of Energy-Hanford Operations, Benton County, Washington, Order on Petitions X-2014-01 and X-2013-01 (May 29, 2015). p. 22 Included as Exhibit 4, p. 2.

operating permit will be required, issued, and enforced pursuant to the authorities set forth in 70.94 Ch. R.C.W. [] and its implementing regulations, including specifically Ch. 173-401 W.A.C....²² (reference omitted) and "The regulations comprising the EPA-approved program in Washington are found in W.A.C. Ch. 171-401.²³"

Thus, the issuance process for *Attachment 2*, containing federally enforceable terms and conditions regulating radionuclides from emissions units at the Hanford Site, must be as required by WAC 173-401. Further, the issuance process in WAC 173-401 must be consistent with the issuance requirements specified in Part 70, including 40 C.F.R. 70.7 (h)(2).

Argument

Petitioner's Comment 28 requests Ecology provide the public with all information used in the permitting process to justify adding six (6) new emissions units, removing nine (9) emissions units, and replacing about twenty-eight (28) Notice of Construction (NOC) orders of approval from the previous final version of *Attachment 2*, and restart public review²⁴. These additions, removals, and replacements from the previous final version of Hanford's Title V permit in some way implicate Subpart H and could not have occurred absent a request by the permittee and some sort of justifying documentation (e.g. an NOC application). Because the initiating requests and justifications for the additions, replacements, and removals 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 also captured in a ruling by the 11th Circuit Court of Appeals cited above. Absent such documentation it is highly unlikely, if not impossible, such additions, removals, and replacements could have occurred. Absent such documentation, it is also extremely difficult, if not impossible, for the public to conduct a meaningful public review.

No previous public review(s) of the new Health license occurred. Health's regulation, WAC 246-247, does not require public participation and Health suffers no obligations under Part 70's public participation requirements. Nor were the underlying documents used as the basis for the additions, replacements, and removals ever provided to the public. To continue to overlook public involvement for those terms and conditions implementing requirements of 40 C.F.R. 61 Subpart H, would completely ignore any public input into the final Permit for such federally enforceable terms and conditions. This oversight is contrary to 40 C.F.R. 70.7 (h). Terms and conditions implementing all federally enforceable requirements, including those implementing requirements of Subpart H, are subject to pre-issuance public review. (40 C.F.R. 70.7 (a)(1)(ii)) EPA has already determined that "... while the underlying requirements of Subpart H are not subject to public comment

²² 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

²³ *Id.* at 2

²⁴ See Exhibit 1, Enclosure 1, Comment 28

under title V, the application of Subpart H to a particular source is [subject to public comment under title V].²⁵

Ecology responds to a portion of Petitioner's Comment 28, in part, by stating: In Sierra Club v. Johnson, the court determined that all information used by the permitting authority to develop the **air operating permit** must be made available to the public for public comment. The court did not require the permitting agency²⁶ [footnote added] to make available to the public all information used to develop the underlying applicable requirements that are included in an air operating permit.

(Exhibit 2, p. 24)

Ecology's response goes on to state:

"... there is no requirement for Ecology to make available to the public all the information used by the Department of Health in developing the FF-01 license."

Ecology's response mis-represents the issue. The issue isn't whether Health is required to comply with the Part 70 issuance process when it promulgates a new license under WAC 246-247, but whether Ecology, the Part 70 permitting authority, must abide by Part 70 when Ecology issues new terms and conditions implementing a federallyapplicable requirement (Subpart H) in a Title V permit. Ecology's response seems to take the position that because Ecology did not author the new Health license, Ecology has no other obligation under Part 70 than to incorporate that new Health license, as-is, into Hanford's Title V permit. EPA previously determined that position as being extraregulatory: "... while the underlying requirements of Subpart H are not subject to public comment under title V, the application of Subpart H to a particular source is [subject to public comment under title V]."²⁷ Application of Subpart H to Hanford occurs, in part, through certain terms and conditions contained in the new Health license. EPA has also spelled-out Ecology's role with regard to regulation of radionuclides in Hanford's Title V permit under Washington State's approved Title V program: "The operating permit [issued by Ecology for the Hanford Site] will include components addressing both radioactive (from Health's license) and non-radioactive air emissions. The operating permit will be required, issued, and enforced pursuant to the authorities set forth in 70.94 Ch. R.C.W. [] and its implementing regulations, including specifically Ch. 173-401 W.A.C....²⁸ Revising Hanford's Title V permit by including the new Health license in accordance with "... W.A.C. Ch. 173-401, Ecology's regulation implementing the EPA-approved title V program in Washington"²⁹ involves compliance with 40 C.F.R. 70.7 (h), including 40 C.F.R. 70.7 (h)(2).

Available at: <u>http://www.epa.gov/region07/air/title5/petitiondb/petitions/hanford_response2014.pdf</u> ²⁶ While the court did not use the term "permitting agency" anywhere in this decision, Ecology associates this term with Health in Hanford's Title V permitting documents to distinguish Health's role from that of a permitting authority under Part 70. Health is not a permitting authority under Part 70.

²⁷ U.S. Department of Energy-Hanford Operations, Benton County, Washington, Order on Petitions X-2014-01 and X-2013-01 (May 29, 2015). p. 22 Included as Exhibit 4, p. 2.

Available at: <u>http://www.epa.gov/region07/air/title5/petitiondb/petitions/hanford_response2014.pdf</u> ²⁸ 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

²⁵ U.S. Department of Energy-Hanford Operations, Benton County, Washington, Order on Petitions X-2014-01 and X-2013-01 (May 29, 2015). p. 22 Included as Exhibit 4, p. 2.

Ecology's response errs when it identifies Attachment 2, Health's license FF-01, as an "underlying applicable requirement", a term undefined by regulation, or as an "applicable requirement", a term defined in 40 C.F.R. 70.2. Earlier, EPA determined a license issued by Health pursuant to WAC 246-247 is not an "applicable requirement" under 40 C.F.R. 70.2³⁰. "[O]ur conclusion [is] that a NERA license is not an "applicable requirement" within the meaning of the EPA-approved title V permitting program for Washington."³¹ Ecology's response errs again when it contradicts EPA's interpretation of EPA's regulatory language in 40 C.F.R. 70.7 (h)(2) as contained in the 11th Circuit's opinion in Sierra Club v. Johnson, supra. EPA and the court have already determined "the phrase 'materials available to the permitting authority that are relevant to the permit decision,' [in] 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..." Sierra Club v. Johnson, 436 F.3d 1269, 1284, (11th Cir. 2006). Ecology's response errs a third time when it fails to acknowledge that Ecology, as the permitting authority for Hanford's Title V permit, is solely responsible for issuing the Hanford Title V permit in accordance with WAC 173-401 and Part 70. While the Department of Health authored license FF-01, Washington's approved Title V program requires Ecology to issue and enforce such a license in accordance with WAC 173-401: "... the title V operating permit for the Hanford Site will be required, issued, and enforced pursuant to the authorities set forth in R.C.W. Ch. 70.94 and its implementing regulations, including specifically, W.A.C. Ch. 173-401, Ecology's regulation implementing the EPA-approved title V program in Washington.³²"

Ecology's response denies Petitioner's Comment 28, in its entirety. ("It is not necessary to restart the public comment and no change in the AOP is required."³³) This denial effectively removes from the Part 70 issuance process the new, replaced, and removed federally enforceable terms and conditions implementing Subpart H in a permit required by Part 70. The public has a right to impact the air we breathe through the submission of public comments. The U.S. Congress codified this right in Title V of the CAA. This right is abridged by the failure to fully comply with the Part 70 public participation requirements for terms and conditions implementing Subpart H.

³⁰ Whether such a license is an "applicable requirement" under state law depends on binding authority, i.e. legal authority that must be followed by a court. For a permit required by, and issued and enforced in accordance with WAC 173-401, binding authority is WAC 173-401. An attorney general's opinion is not binding authority; neither is a memorandum of understanding, or a definition in a different regulation authored by an agency that does not have rulemaking authority and cannot enforce the binding authority. Under WAC 173-401-200, the definition of "applicable requirement" does not include a license developed under the authority of RCW 70.98. The binding definition of "applicable requirement" only extends to "Chapter 70.98 RCW and rules adopted thereunder". WAC 173-401-200 (4)(d) A Health license is neither RCW 70.98 or a rule adopted thereunder. (Imagine the compliance and enforcement nightmare resulting from agencies changing other agencies regulations.)

³¹ U.S. Department of Energy-Hanford Operations, Benton County, Washington, Order on Petitions X-2014-01 and X-2013-01 (May 29, 2015). N 14 p. 15

³² U.S. Department of Energy-Hanford Operations, Benton County, Washington, Order on Petitions X-2014-01 and X-2013-01 (May 29, 2015). p. 3

Available at: http://www.epa.gov/region07/air/title5/petitiondb/petitions/hanford_response2014.pdf ³³ Exhibit 2, p. 24

The Administrator is obligated to object

Contrary to 40 C.F.R. 70.7 (h)(2) Ecology, the permitting authority, didn't provide any information used in the permitting process for establishment of terms and conditions implementing 40 C.F.R. 61, Subpart H, a federally applicable requirement under Part 70. Specifically, in issuing *Attachment 2* of Hanford's Title V permit in accordance with Washington's EPA-approved Part 70 program, Ecology:

- failed to provide any information deemed relevant by using that information as a basis for the addition of six (6) new emissions units;
- failed to provide any information deemed relevant by using that information as a basis for replacing about 28 NOC approvals; and
- failed to provide any information deemed relevant by using that information as a basis for removing nine (9) emissions units from regulation under Hanford's Title V Permit.

Ecology justifies providing zero information to the public for terms and conditions implementing requirements of Subpart H by offering its incorrect opinion that *Attachment* 2 is an "underlying applicable requirement" and therefore its contents are not subject to issuance requirements in 40 C.F.R. 70.7 (h)(2).

EPA has already determined *Attachment 2*, the Health license FF-01, is not an "applicable requirement" under Part 70 and that terms and conditions implementing Subpart H are subject to the permit-issuing requirements of Part 70. EPA and the 11th Circuit Court of Appeals have also determined that "materials deemed relevant to the permitting process consists of all information the permitting authority deemed to be relevant by using it in the permitting process." (See Sierra Club v. Johnson, 436 F.3d 1269, 1284, (11th Cir. 2006) page 1 of Exhibit 4) Thus, EPA and the 11th Circuit both take a position contrary that expressed in Ecology's response.

In accordance with the CAA, the Administrator "shall issue an objection [to the issuance of a Title V permit]...if the petitioner demonstrates to the Administrator that the permit is not in compliance with the requirements of [the CAA]" or is not in compliance with Part 70, the regulation implementing Title V.³⁴ Under case law, the Administrator has discretion defining a reasonable interpretation of the term "demonstrate" in CAA § 505 (b)(2) [42 U.S.C. 7661d (b)(2)]³⁵. However, once the petitioner demonstrates the permit is not in compliance, the Administrator has no option but to object to the permit³⁶.

³⁴ CAA § 502 (b)(2) [42 U.S.C. 7661d (b)(2)]; *see also* "The Administrator will object to the issuance of any proposed permit determined not to be in compliance with applicable requirements or requirements under this part [70]". 40 C.F.R. 70.8(c)(1)

³⁵ "The ambiguity of this provision in the statute [42 U.S.C. 7661d (b)(2)] suggests that Congress has left the meaning of "demonstrate" open for EPA to supply a reasonable interpretation under *Chevron* [*Chevron USA Inc. v. Natural Res. Def. Council, Inc.,* 467 U.S. 837, 104 S.Ct. 2778, 81 L.Ed.2d 694 (1984)]." *MacClarence v. U.S. E.P.A.,* 596 F.3d 1123, 1131 (9th Cir. 2010)

³⁶ "Simply put, the Administrator is required to object to permits that violate the Clean Air Act. This duty to object to such permits is a nondiscretionary duty." *New York Public Interest Research Group v. Whitman*, 321 F. 3d 316, 333 (2d Cir. 2003)

Ecology received all Petitioner's comments within the specified public comment period. The scope of Petitioner's objection is consistent with the Ecology-identified scope of the revision. Petitioner's objection is stated with "reasonable specificity". Petitioner offers as evidence Ecology's response to his Comment 28. Further, Petitioner:

- offers EPA's previous determinations that a Health license is not an "applicable requirement" under Part 70:
- offers EPA's previous determinations that application of Subpart H to the Hanford Site is subject to requirements of Title V (see Exhibit 4, p. 2); and
- offers, EPA's previous determinations that materials needed to support public review . include all information the permitting authority deemed relevant by using it in the permitting process. This EPA determination is contained in an opinion by the 11 Circuit Court of Appeals in Sierra Club v. Johnson, 436 F.3d 1269, 1284, (11th Cir. 2006), which is attached as Exhibit 4, p. 1.

Therefore, the Administrator must object.

Conclusion

For the reasons argued above, the Permit was issued outside of the requirements of Part 70, and must be re-issued.

The only conclusion supported by the objection, is:

Ecology failed to provide all relevant materials used in the permitting process. Such materials are addressed in 40 C.F.R. 70.7 (h)(2) and defined by EPA in an opinion by the 11th Circuit Court of Appeals in Sierra Club v. Johnson, 436 F.3d 1269, 1284, (11th Cir. 2006). (See Exhibit 4, p. 1)

Therefore, the Administrator has a nondiscretionary duty to object to the issuance of this Permit.

Respectfully submitted September 01, 2016, by:

Bill Green, Petitioner

PETITION TO OBJECT TO THE HANFORD SITE. TITLE V OPERATING PERMIT, NUMBER 00-05-006, RENEWAL 2, REV. B

BILL GREEN 424 SHORELINE CT. RICHLAND, WA 99354 (509) 375-5443

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List of Exhibits

Exhibit 1		
	Page 1 Pages 2-29	Petitioner's transmittal letter.<i>Enclosure 1</i>, Petitioner's comments.(Enclosures 2 and 3 referenced in the transmittal letter are not included.)
Exhibit 2		
	Pages 1-30	First 30 pages from Ecology's response to public comments. This is the version sent to EPA for its 45-day review under 40 C.F.R. 70.8. The final version, in its entirety, is available at: <u>https://fortress.wa.gov/ecy/publications/documents/1605014.pdf</u>
Exhibit 3		
	Pages 1-10	"Table of Changes from FF-01 12-10-14", <i>Statement of Basis, Hanford Site Air Operating Permit, No. 00-05-006, Renewal 2, Revision B, Attachment 2 , Department of Health License</i> , Draft ver. ³⁷ , pp. 23-31.
Exhibit 4	Page 1	Page 1284 from <i>Sierra Club v. Johnson</i> , 436 F.3d 1269, (11th Cir. 2006).
	Page 2	Page 22 from U.S. Department of Energy-Hanford Operations, Benton County, Washington, Order on Petitions X-2014-01 and X-2013-01 (May 29, 2015). ³⁸

³⁷ Available at: <u>http://www.ecy.wa.gov/programs/nwp/permitting/AOP/renewal/two/Revision_B/Draft/SB-</u> Att-2/SB-Att-2_R2RB.pdf ³⁸ Available at: http://www.epa.gov/region07/air/title5/petitiondb/petitions/hanford_response2014.pdf

Exhibit 1

Exhibit 1:

Page 1	Petitioner's transmittal letter.
Pages 2-29	Enclosure 1, Petitioner's comments.

BILL GREEN 424 SHORELINE CT. RICHLAND, WA 99354 (509) 375-5443

Exhibit 1, Petition to object to Hanford's Title V permit

RECEIVED

APR 22 2015

DEPARTMENT OF ECOLOGY NWP - RICHLAND

April 22, 2015

Mr. Philip Gent Department of Ecology 3100 Port of Benton Blvd. Richland, WA 99354

SENT CERTIFIED MAIL: 7014 0150 0001 6882 8764

Mr. Dennis J. McLerran Regional Administrator United States Environmental Protection Agency Region 10 1200 6th Ave., Suite 900 Seattle, WA 98101-3140

RE: Draft Hanford Site Title V Operating Permit, No. 00-05-006, Renewal 2, Revision B

Dear Mr. Gent and Mr. McLerran:

Enclosure 1 and this letter contain my comments on the referenced draft Title V permit. These comments are supplied in accordance with the public review provisions of 40 Code of Federal Regulations (C.F.R.), part 70. By this letter I also provide EPA with a copy of my comments in advance of Ecology's responses.

Enclosure 2 is a copy of a federally-funded report prepared by an independent panel of experts, commissioned through the Savannah River National Laboratory. [W.R. Wilmarth et al., *Hanford Tank Vapor Assessment Report*, SRNL-RP-2014-00791, Oct. 30, 2014.] The purpose of this report was to get an independent analysis of, and recommendations to address, the ongoing problem of health-related exposures to chemical vapors by workers at Hanford's Tank Farms. The authors found that the data "strongly suggests a causal link between chemical vapor releases [from Tank Farm emissions units] and subsequent adverse health effects experienced by tank farm workers." The report further determined that "ongoing emission of tank vapors, which contain a mixture of toxic chemicals, is inconsistent with the provisions of a safe and healthful workplace free from recognized hazards." Based on the findings in this report, the Washington State Attorney General served the U.S. Department of Energy and the responsible Hanford contractor with a Notice of Endangerment and Intent to File Suit (NOI) under the Resource Conservation and Recovery Act (RCRA). The Attorney General's NOI is enclosed as *Enclosure 3*.

Most of the enclosed comments regard Ecology's failure to regulate radionuclides in accordance with the federal *Clean Air Act* (CAA) and 40 C.F.R. 70. This failure has been

Mr. Gent and Mr. McLerran April 22, 2015 Page 2 of 2

the subject of several previous comments. I am awaiting a response from the Administrator of EPA to objections raised in some of these earlier comments.

Other comments allege Ecology has not adequately regulated the toxic and hazardous air emissions identified by the independent panel of experts. After all, the very same "mixture of toxic chemicals [that] is inconsistent with the provisions of a safe and healthful workplace free from recognized hazards" is also regulated under the CAA. A worker falls well within the definition of "person" in the CAA [42 U.S.C. 7602 (e); CAA § 302 (e)], and thus falls under the protection of the CAA. Furthermore, specific emission limits, emission controls, and emission monitoring required under the CAA apply at the particular on-site emissions unit and not at a distant site boundary. What is most telling with regard to Ecology's inadequate regulation of harmful emissions at Tank Farms, is that Hanford can comply with requirements in Ecology's existing regulatory orders, yet the mixture of toxic chemical vapors remains undetected. Had Ecology implemented adequate monitoring at frequencies sufficient to ensure continuous compliance with the CAA, there would be no undetected toxic and hazardous air pollutants, there would have been no need to commission the Hanford Tank Vapor Assessment Report, and there would have been no basis for the announced action by Washington State's Attorney General.

The CAA demands an enforceable schedule of compliance in situations, including the one existing at Tank Farms, where the permittee has not accurately characterized its emissions and associated potentials-to-emit and, therefore, cannot immediately comply with applicable requirements that may be implicated. Such a schedule offers a mechanism to require the permittee to identify all regulated air pollutants in emissions from Tank Farms and further to provide for adequate control of emissions plus monitoring of these emissions sufficient to demonstrate continuous compliance with requirements of the CAA.

I hope the enclosures are useful in drafting and issuing a Hanford Site Title V permit that complies with all requirements of the CAA.

Respectfully,

Bill Green 424 Shoreline Ct. Richland, WA 99354-1938

Enclosures (3) cc: encl. 1 via email P. Gent, Ecology Comments: draft Hanford Site AOP, Renewal 2, Rev. B Bill Green April 22, 2015 Page 1 of 28

The following definitions apply when the associated terms are used in the comments below. – *permitting authority* is as defined in CAA § 501 (4) [42 U.S.C. 7661 (4)] and 40 C.F.R. 70.2.

"The term "permitting authority" means the Administrator or the air pollution control agency authorized by the Administrator to carry out a permit program under this subchapter." CAA § 501 (4) [42 U.S.C. 7661 (4)];

"*Permitting authority* means either of the following: (1) The Administrator, in the case of EPAimplemented programs; or (2) The State air pollution control agency, local agency, other State agency, or other agency authorized by the Administrator to carry out a permit program under this part." 40 C.F.R. 70.2

- **AOP, Part 70 Permit, and Title V permit** are synonymous, meaning any permit that is required by 40 C.F.R. 70, and Title V of the CAA.

- CAA or Act is the Clean Air Act, 42 U.S.C. 7401, et seq.

- Health, DOH, or WDOH is the Washington State Department of Health

- **Hanford Vapor Report** is the *Hanford Tank Vapor Assessment Report*, SRNL-RP-2014-00791, Oct. 30, 2014, authored by W.R. Wilmarth et al. Included as *Enclosure 2*.

Comments include any associated endnote(s) or footnote(s).

GENERAL:

Comment 1: (general AOP structure): The regulatory structure of this draft AOP is contrary to *Clean Air Act* (CAA) section $502(b)(5)(E)^1$ [42 U.S.C. 7661a (b)(5)(E)] and 40 C.F.R. 70.11 (a), because this structure does not provide Ecology, the sole permitting authority, with the legal ability to enforce all standards or other requirements controlling emissions of radionuclides, a *hazardous air pollutant* under CAA § 112 [42 U.S.C. 7412].

Because radionuclides are listed in CAA § 112 (b) as a *hazardous air pollutant*, conditions regulating radionuclide air emissions are CAA Title V (AOP) applicable requirements, subject to inclusion in AOPs pursuant to CAA § 502 (a) [42 U.S.C. 7661a (a)], 40 C.F.R. 70.2 *Applicable requirement* (4), RCW 70.94.161 (10)(d), and WAC 173-401-200 (4)(a)(iv).

In this draft Hanford Site AOP radionuclides are regulated solely in *Attachment 2* (License FF-01) in accordance with RCW 70.98, the *Nuclear Energy and Radiation Act* (NERA). NERA implements neither Title V of the CAA nor 40 C.F.R. 70, nor is NERA obligated by either the CAA or 40 C.F.R. 70. Only the Washington State Department of Health (Health) has Legislative authorization to enforce NERA through regulations adopted thereunder. (*See* RCW 70.98.050 (1))

Absent Legislative authorization Ecology cannot act, in any way, on *Attachment 2* (License FF-01) or on any of the terms and conditions contained therein². Furthermore, according to *Appendix A* of 40 C.F.R. 70, Health is not a permitting authority under the CAA and therefore does not have an EPA-approved program implementing CAA Title V and 40 C.F.R. 70. Thus, neither NERA nor Health-adopted regulations promulgated

Comments: draft Hanford Site AOP, Renewal 2, Rev. B Bill Green April 22, 2015 Page 2 of 28

under authority of NERA, have been approved to implement requirements of CAA Title V and 40 C.F.R. 70.

Ecology, the issuing permitting authority, is required by the CAA to have all authority necessity to enforce permits, including the authority to recover civil penalties and provide for criminal penalties. In plain language, the CAA requires:

"... the minimum elements of a permit program to be administered by any air pollution control agency... shall include each of the following:... (5) A requirement that the permitting authority have adequate authority to:.. (E) enforce permits, permit fee requirements, and the requirement to obtain a permit, including authority to recover civil penalties ..., and provide appropriate criminal penalties;" [CAA § 502 (b); 42 U.S.C. 7661a (b)]

EPA addresses this obligation in 40 C.F.R. 70.11 (a), which requires, in part, that:

"[a]ny agency administering a program shall have the following enforcement authority to address violations of program requirements by part 70 sources: (1) To restrain or enjoin immediately and effectively any person by order or by suit in court from engaging in any activity in violation of a permit that is presenting an imminent and substantial endangerment to the public health or welfare, or the environment. (2) To seek injunctive relief in court to enjoin any violation of any program requirement, including permit conditions, without the necessity of a prior revocation of the permit. (3) To assess or sue to recover in court civil penalties and to seek criminal remedies, including fines, . . ." 40 C.F.R. 70.11 (a)

Ecology doesn't have authority to sue to recover civil penalties or to provide appropriate criminal penalties for any activity in violation of any term or condition in *Attachment 2*, nor can Ecology seek injunctive relief in court to enjoin any violation of *Attachment 2* (License FF-01). Under the codified structure used in this draft AOP, Ecology, the sole permitting authority, has no authority to enforce any term or condition in *Attachment 2* (License FF-01), including those terms and conditions implementing federally enforceable requirements in 40 C.F.R. 61 subpart H. Only Health, a "permitting agency", can enforce these permit terms and conditions. Therefore, Ecology lacks the minimum authority specified in CAA § 502 (b) [42 U.S.C. 7661a (b)] and 40 C.F.R. 70.11 (a), with regard to *Attachment 2* (License FF-01).

Contrary to CAA § 502 (b)(5)(E) [42 U.S.C. 7661a (b)(5)(E)] and 40 C.F.R. 70.11 (a), the regulatory structure used in this draft AOP does not allow Ecology, the sole permitting authority, to enforce all standards or other requirements controlling emissions of radionuclides, a *hazardous air pollutant* under CAA § 112.

¹ "[T]he minimum elements of a permit program to be administered by any air pollution control agency... **shall** include each of the following: ... (5) A requirement that the permitting authority have adequate authority to: ... (E) enforce permits, permit fee requirements, and the requirement to obtain a permit, including authority to recover civil penalties ..., and provide appropriate criminal penalties;" (emphasis added) CAA § 502 (b); 42 U.S.C. 7661a (b)

² The Washington State Supreme Court addressed the issue of limits on an administrative agency's authority, stating: "[There is] a fundamental rule of administrative law - an agency may only do that which it is authorized to do by the Legislature (citations omitted). . . [Additionally an] administrative agency cannot modify or amend a statute through its own regulation." *Rettkowski v. Department of Ecology*, 122 Wn.2d 219, 226-27, 858 P.2d 232 (1993)

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Comment 2: (general AOP structure): The regulatory structure used in this draft AOP does not allow Ecology, the sole permitting authority, to issue a Title V permit containing all standards or other requirements controlling emissions of radionuclides, a *hazardous air pollutant* under CAA § 112, contrary to *Clean Air Act* (CAA) section 502 (b)(5)(A)¹ [42 U.S.C. 7661a (b)(5)(A)], 40 C.F.R. 70², and WAC 173-401³.

The regulatory structure of this draft Permit denies Ecology, the sole permitting authority, the legal ability to act on terms and conditions in *Attachment 2*. Terms and conditions in *Attachment 2* (License FF-01) include all those implementing requirements of 40 C.F.R. 61 subpart H. *Attachment 2* (License FF-01) was created in accordance with RCW 70.98, the *Nuclear Energy Radiation Act* (NERA) rather than in accordance with Title V of the CAA and 40 C.F.R. 70. Health, the sole agency with authority to enforce NERA and *Attachment 2*, is not a permitting authority, according to *Appendix A* of 40 C.F.R. 70, and therefore does not have a program authorized to implement CAA Title V and 40 C.F.R. 70.

Ecology does not have Legislative authorization to enforce NERA⁴. Absent Legislative authorization, Ecology lacks jurisdiction over *Attachment 2* (License FF-01). This jurisdictional limitation does not allow Ecology to take any action regarding *Attachment 2* (License FF-01) including the act of issuing License FF-01⁵. Without the legal ability to issue and enforce a permit containing terms and conditions implementing requirements of 40 C.F.R. 61 subpart H, Ecology cannot issue permits that "assure compliance . . . with each applicable standard, regulation or requirement under this chapter" CAA § 502 (b)(5)(A); 42 U.S.C. 7661a (b)(5)(A)

Contrary to CAA § 502 (b)(5)(A)¹ [42 U.S.C. 7661a (b)(5)(A)], 40 C.F.R. 70², and WAC 173-401³, the regulatory structure used in this draft AOP does not allow Ecology, the sole permitting authority, to issue a Title V permit containing all standards or other requirements controlling emissions of radionuclides, a hazardous air pollutant under CAA § 112.

¹ "[T]he minimum elements of a permit program to be administered by any air pollution control agency... **shall** include each of the following: ... (5) A requirement that the permitting authority have adequate authority to: ... (A) issue permits and assure compliance ... with each applicable standard, regulation or requirement under this chapter;" (emphasis added) CAA § 502 (b); 42 U.S.C. 7661a (b)

² 40 C.F.R. 70.1 (b), -70.3 (c), -70.6 (a), and -70.7 (a)

³ WAC 173-401-100 (2), -600, -605, -700 (1)

⁴ "The department of health is designated as the state radiation control agency,... and shall be the state agency having <u>sole</u> responsibility for administration of the regulatory, licensing, and radiation control provisions of this chapter." (emphasis added) RCW 70.98.050 (1).

⁵ Absent legal ability to act on requirements developed pursuant to RCW 70.98 (NERA) and the regulations adopted thereunder Ecology cannot subject *Attachment 2* to any requirement of 40 C.F.R. 70. ["[there is] a fundamental rule of administrative law- an agency may only do that which it is authorized to do by the Legislature. *In re Puget Sound Pilots Ass'n*, 63 Wash.2d 142, 146 n. 3, 385 P.2d 711 (1963); *Neah Bay Chamber of Commerce v. Department of Fisheries*, 119 Wash.2d 464, 469, 832 P.2d 1310 (1992)." *Rettkowski v. Department of Ecology*, 122 Wn.2d 219, 226, 858 P.2d 232 (1993).]

Comments: draft Hanford Site AOP, Renewal 2, Rev. B Bill Green April 22, 2015 Page 4 of 28

Comment 3: (general AOP structure): The regulatory structure used in this draft AOP does not allow Ecology, the sole permitting authority, to offer for public review AOP terms and conditions controlling Hanford's radionuclide air emissions, contrary to *Clean Air Act* (CAA) section 502 (b)(6)¹ [42 U.S.C. 7661a (b)(6)], 40 C. F.R. 70.7 (h)², RCW 70.94.161 (2)(a) & (7)³, and WAC 173-401-800⁴. Nor can Ecology provide for a public hearing on AOP terms and conditions controlling Hanford's radionuclide air emissions. Radionuclides are a *hazardous air pollutant* under CAA § 112.

Attachment 2 (License FF-01) is not a "rule" as defined by the Administrative procedure Act⁵ (RCW 34.05), and therefore modifications of this license are not subject to the rulemaking process. Modifications of Attachment 2 (License FF-01) are also not subject to the CAA, 40 C.F.R. 70, the Washington Clean Air Act (RCW 70.94), and WAC 173-401; this because Attachment 2 was created and is enforced under authority of RCW 70.98, the Nuclear Energy Radiation Act (NERA), a statute that does not accommodate either public review or a public hearing.

Clean Air Act (CAA) § 502 (b)(6) [42 U.S.C. 7661a (b)(6)], 40 C.F.R. 70.7 (h), RCW 70.94.161 (2)(a) & (7), and WAC 173-401-800 all require the public be provided with the opportunity to comment on draft AOPs and the opportunity for a public hearing⁶. However, RCW 70.98, the statute under which License FF-01 is issued, is silent with regard to public comments or public hearings. Both 40 C.F.R. 70 and WAC 173-401 require the general public be provided with the opportunity for a review of thirty (30) or more days on any draft AOP. 40 C.F.R. 70.7 (h), WAC 173-401-800

The Washington State Supreme Court addressed the issue of limits on an administrative agency's authority, stating:

"[There is] a fundamental rule of administrative law-an agency may only do that which it is authorized to do by the Legislature (citations omitted). . . [Additionally an] administrative agency cannot modify or amend a statute through its own regulation." *Rettkowski v. Department of Ecology*, 122 Wn.2d 219, 226-27, 858 P.2d 232 (1993)

According to *Rettkowski*, absent statutory authorization, Ecology can neither enforce NERA or the regulations adopted thereunder, nor can Ecology modify NERA or the regulations adopted thereunder to provide for public review or public hearings required by CAA § 502 (b)(6) [42 U.S.C. 7661a (b)(6)], 40 C.F.R. 70.7 (h), RCW 70.94.161 (2)(a) & (7), and WAC 173-401-800.

Only Health has been authorized by statute to enforce NERA and the regulations adopted thereunder. [*See* RCW 70.98.050 (1)] However, under *Rettkowski*, even Health cannot modify NERA to allow for public comments or public hearings required by the CAA, 40 C.F.R. 70, RCW 70.94, and WAC 173-401.

Contrary to CAA § 502 (b)(6) [42 U.S.C. 7661a (b)(6)], 40.C.F.R. 70.7 (h), RCW 70.94.161 (2)(a) & (7), and WAC 173-401-800, the regulatory structure used in this draft AOP does not allow Ecology, the sole permitting authority, to offer for public review AOP terms and conditions controlling Hanford's radionuclide air emissions. Nor can Ecology provide for a public hearing on AOP terms and conditions controlling Hanford's radionuclide air emissions.

Comments: draft Hanford Site AOP, Renewal 2, Rev. B Bill Green April 22, 2015 Page 5 of 28

¹ "[T]he minimum elements of a permit program to be administered by any air pollution control agency... shall include each of the following:... (6) Adequate, streamlined, and reasonable procedures ... including offering an opportunity for public comment and a hearing,..." (emphasis added) CAA § 502 (b) [42 U.S.C. 7661a (b)]

² state operating permit programs ". . .shall provide adequate procedures for public notice including offering an opportunity for public comment and a hearing on the draft permit." 40 C.F.R. 70.7 (h). Additionally "[t]he permitting authority shall provide at least 30 days for public comment and shall give notice of any public hearing" 40 C.F.R. 70.7 (h)(4)

 3 "(2)(a) Rules establishing the elements for a statewide operating permit program and the process for permit application and renewal consistent with federal requirements shall be established . . . (7) All draft permits shall be subject to public notice and comment." RCW 70.94.161

⁵ "Rule" means any agency order, directive, or regulation of general applicability . . .' RCW 34.05.010
(16) License FF-01 applies to only Hanford and therefore is not "of general applicability".

⁶ "[T]he minimum elements of a permit program to be administered by any air pollution control agency... **shall** include each of the following:... (6) Adequate, streamlined, and reasonable procedures ... including **offering an opportunity for public comment and a hearing**,..." (emphasis added) CAA § 502 (b) [42 U.S.C. 7661a (b)]; state operating permit programs "...shall provide adequate procedures for public notice including offering an opportunity for public comment and a hearing on the draft permit." 40 C.F.R. 70.7 (h). Additionally "[t]he permitting authority shall provide at least 30 days for public comment and shall give notice of any public hearing ..." 40 C.F.R. 70.7 (h)(4); "(2)(a) Rules establishing the elements for a statewide operating permit program and the process for permit application and renewal consistent with federal requirements shall be established ... (7) All draft permits shall be subject to public notice and comment." RCW 70.94.161; "(3) ... [T]he permitting authority shall provide a minimum of thirty days for public comment ... (4)... [t]he applicant, any interested governmental entity, any group or any person may request a public hearing within the comment period required under subsection (3) of this section." WAC 173-401-800

Comment 4: (general AOP structure): Contrary to *Clean Air Act* (CAA) section 502 (b)(6)¹ [42 U.S.C. 7661a (b)(6)], 40 C.F.R. 70.4(b)(3)(x) and $(xii)^2$, and WAC 173-401-735 (2)³, the regulatory structure used in this draft AOP to control Hanford's radionuclide air emissions does not recognize the right of a public commenter to judicial review in State court of the final permit action.

Attachment 2 (License FF-01) of this draft AOP contains all terms and conditions regulating Hanford's radioactive air emissions. License FF-01 was created pursuant to authority provided by RCW 70.98, the *Nuclear Energy and Radiation Act* (NERA), rather than in accordance with Title V of the CAA and 40 C.F.R. 70. NERA is silent with regard to the opportunity for judicial review by any person who participated in the public comment process. Furthermore, Ecology, the single permitting authority for the draft Hanford Site AOP, has no authority to require Health provide for such judicial review.

Washington State law requires all appeals of AOP terms and conditions be filed only with the Pollution Control Hearings Board (PCHB) in accordance with RCW 43.21B. [*See* RCW 70.94.161 (8) and WAC 173-401-620(2)(i)] However, PCHB jurisdictional limitations (RCW 43.32B.110) prevent the PCHB from acting on AOP conditions developed and enforced by Health. Comments: draft Hanford Site AOP, Renewal 2, Rev. B Bill Green April 22, 2015 Page 6 of 28

Contrary to CAA § 502 (b)(6) [42 U.S.C. 7661a (b)(6)], 40 C.F.R. 70.4(b)(3)(x) and (xii), and WAC 173-401-735 (2), the regulatory structure used in this draft AOP to control Hanford's radionuclide air emissions does not recognize the right of a public commenter to judicial review in State court of the final permit action.

Comment 5: (general AOP structure): The regulatory structure used in this draft AOP does not require pre-issuance review by a professional engineer or staff under the direct supervision of a professional engineer in the employ of the permitting authority for any term or condition controlling Hanford's radionuclide air emissions, contrary to RCW 70.94.161 (2)(a)¹ and WAC 173-400-700 (1)(b).

All terms and conditions regulating Hanford's radionuclide air emissions were developed and are enforced under authority provided by RCW 70.98, the *Nuclear Energy and Radiation Act* (NERA), rather than in accordance with the RCW 70.94, *Washington Clean Air Act* (WCAA). NERA does not require "that every proposed permit must be reviewed prior to issuance by a professional engineer or staff under the direct supervision of a professional engineer in the employ of the permitting authority" as is required by RCW 70.94.131 (2)(a). Neither NERA nor the rules adopted under NERA recognize either a "proposed permit" or a "permitting authority", nor does NERA even contain the words "professional engineer".

Ecology is the permitting authority for the Hanford AOP. However, because Ecology lacks Legislative authorization to enforce NERA, Ecology is prohibited from acting, in any way, on a regulatory product developed pursuant to NERA; including requiring a review by a professional engineer or affecting any changes to *Attachment 2* resulting from such a review.

Contrary to RCW 70.94.161 (2)(a) and WAC 173-401-700 (1)(b), the regulatory structure used in this draft AOP does not require pre-issuance review by a professional engineer or staff under the direct supervision of a professional engineer in the employ of the permitting authority for any term or condition controlling Hanford's radionuclide air emissions.

¹ "[T]he minimum elements of a permit program to be administered by any air pollution control agency... **shall** include ... (6) ... an opportunity for judicial review in State court of the final permit action by [] any person who participated in the public comment process ... " (emphasis added) CAA § 502 (b) [42 U.S.C. 7661a (b)]

 $^{^{2}}$ 40 C.F.R. 70.4(b)(3)(xii) provides "that the opportunity for judicial review described in paragraph (b)(3)(x) of this section shall be the exclusive means for obtaining judicial review of the terms and conditions of permits . . ."

³ "Parties that may file the appeal . . . include any person who participated in the public participation process" WAC 173-401-735 (2)

¹ "... The rules shall provide that every proposed permit must be reviewed prior to issuance by a professional engineer or staff under the direct supervision of a professional engineer in the employ of the permitting authority...." RCW 70.94.131 (2)(a)

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Comment 6: (general AOP structure) In this draft Hanford Site AOP, regulate radionuclide air emissions in accordance with WAC 173-400 rather than in accordance with WAC 246-247. Radionuclides regulated as an applicable requirement under WAC 173-401, require pre-issuance review by the public, affected states, and EPA; are subject to judicial review by the Pollution Control Hearings Board; and can be enforced by Ecology; all of which satisfy requirements of the *Clean Air Act*. Radionuclides regulated pursuant to WAC 246-247 cannot satisfy these CAA requirements.

Under WAC 173-400 Ecology has authority to regulate radionuclide air emissions. Ecology incorporated the radionuclide NESHAPs by reference into *The General Regulations for Air Pollution Sources*, codified at WAC 173-400¹. These regulations apply statewide². Because Ecology is a permitting authority, and because Ecology has incorporated the radionuclide NESHAPs into its regulations, Ecology has authority under the CAA to implement and enforce the radionuclide NESHAPs against the Hanford Site. Furthermore, terms and conditions developed by Ecology pursuant to the radionuclide NESHAPs are federally enforceable.

Comment 7: (general AOP structure, *Attachment 2*, License FF-01): In this draft Hanford Site AOP regulation of radionuclides is inappropriately decoupled from 40 C.F.R. 70 (Part 70). Regulation of radionuclides occurs pursuant to a regulation that does not implement Part 70, is not authorized by EPA to implement Part 70, and cannot be enforced by Ecology, the issuing permitting authority.

Because radionuclides are listed in CAA § 112 (b) as a *hazardous air pollutant*, conditions regulating radionuclide air emissions are CAA Title V (AOP) applicable requirements, subject to inclusion in AOPs pursuant to CAA § 502 (a) [42 U.S.C. 7661a (a)], 40 C.F.R. 70.2 *Applicable requirement* (4), RCW 70.94.161 (10)(d), and WAC 173-401-200 (4)(a)(iv).

In this draft Hanford Site AOP radionuclides are regulated only in *Attachment 2* (License FF-01) in accordance with RCW 70.98, the *Nuclear Energy and Radiation Act* (NERA) rather than in accordance with Title V of the CAA and 40 C.F.R. 70. Only the Washington State Department of Health (Health) has Legislative authorization to enforce NERA through regulations adopted under rulemaking authority provided by NERA. (*See* RCW 70.98.050 (1)) According to *Appendix A* of 40 C.F.R. 70, Health is not a permitting authority under the CAA and therefore does not have an EPA-approved program implementing CAA Title V and 40 C.F.R. 70. Furthermore, neither NERA nor Health-adopted regulations promulgated thereunder, implement requirements of CAA Title V and 40 C.F.R. 70.

Contrary to CAA Title V and 40 C.F.R. 70, regulation of radionuclide air emissions in this draft Hanford Site AOP occurs pursuant to a regulation that does not

¹ "(1) National emission standards for hazardous air pollutants (NESHAPs). 40 C.F.R. Part 61 and Appendices in effect on July 1, 2012, are adopted by reference. The term "administrator" in 40 C.F.R. Part

⁶¹ includes the permitting authority." WAC 173-400-075 (1)

² "(1) The provisions of this chapter shall apply statewide, . . ." WAC 173-400-020 (1)

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implement requirements of CAA Title V and 40 C.F.R. 70, and is not enforceable by Ecology, the issuing permitting authority.

Comment 8: (general AOP, *Attachment 1*, and *Attachment 2*, License FF-01): **Provide** an accurate inventory of regulated air pollutants expected from Tank Farm point sources and fugitive sources that is consistent with the findings of the Hanford Vapor Report¹.

The entire Title V permitting process begins with and depends heavily upon an accurate emissions inventory. Absent an accurate emissions inventory it is difficult, if not impossible, to determine the applicability of:

1. any particular regulatory requirement;

2. any implicated pollution control requirements, and;

3. any applicable monitoring method(s)

needed to assure continuous compliance with the applicable requirements.

According to the Hanford Vapor Report, previous estimates of emissions, both point source and fugitive, understated not only the number of air pollutants² potentially released into the environment from Tank Farms, but also the concentrations of these pollutants.

"It is the head space composition that determines the composition of the vent, stack, and most fugitive emissions.... Past head space characterization did not evaluate the effect of waste disturbing activities on the chemicals in the head space and their concentrations." W.R. Wilmarth et al., *Hanford Tank Vapor Assessment Report*, SRNL-RP-2014-00791, Oct. 30, 2014 at 23

and;

"The present list of COPCs [chemicals of potential concern] appears to rely on several assumptions all of which may not be valid at all times. . ." *Id.* at 25

and;

"Radiolytically generated free radicals can produce compounds not seen with the tank head space characterization sampling and analytical methods used to generate the lists used to define COPCs [chemicals of potential concern]." (references omitted) *Id.* at 36

The first (1st) step in complying with Title V of the CAA is to accurately assess the chemicals that are both present and subject to regulation. Flawed characterization of Tank Farm emissions has so far delayed this process. Until an accurate emission inventory has been supplied to the permitting authority (Ecology), the permittee can not even start the process leading to compliance with Title V.

¹W.R. Wilmarth et al., *Hanford Tank Vapor Assessment Report*, SRNL-RP-2014-00791, Oct. 30, 2014 ² 'The term ''air pollutant'' means any air pollution agent or combination of such agents, including any physical, chemical, biological, radioactive (including source material, special nuclear material, and byproduct material) substance or matter which is emitted into or otherwise enters the ambient air. Such term includes any precursors to the formation of any air pollutant, to the extent the Administrator has identified such precursor or precursors for the particular purpose for which the term ''air pollutant'' is used.' 42 U.S.C. 7602 (g); CAA § 302 (g)

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Comment 9: (general AOP, *Attachment 1*, and *Attachment 2*, License FF-01): **Reopen Hanford's AOP in accordance with 40 C.F.R. 70.7** (f)(1)(iii) & (iv) and revise Tank Farm emission limits, monitoring, and sampling to be consistent with the regulated air pollutants expected pursuant to the Hanford Vapor Report (W.R. Wilmarth et al., *Hanford Tank Vapor Assessment Report*, SRNL-RP-2014-00791, Oct. 30, 2014)¹. The Hanford Vapor Report establishes that all previous estimates of emissions by the permittee understated both the number of regulated air pollutants and the concentration of these regulated air pollutants in Tank Farm emissions from both point sources and from fugitive sources. Absent an accurate assessment of emissions, Ecology cannot establish appropriate emission controls, emissions limits, and monitoring, reporting, and recordkeeping conditions that assure continuous compliance with requirements of the federal *Clean Air Act* (CAA).

The driver for the Hanford Vapor Report was numerous complaints regarding continuing problems of health-related exposures to chemical vapors by workers at Hanford's Tank Farms. The authors found that the data "strongly suggests a causal link between chemical vapor releases [from Hanford's Tank Farms] and subsequent adverse health effects experienced by tank farm workers." The report further determined that "ongoing emission of tank vapors, which contain a mixture of toxic chemicals, is inconsistent with the provisions of a safe and healthful workplace free from recognized hazards." Based on the findings in this report, the Washington State Attorney General served the U.S. Department of Energy and the responsible Hanford contractor with a Notice of Endangerment and Intent to File Suit (NOI) under the Resource Conservation and Recovery Act (RCRA). (NOI enclosed as *Enclosure 3.*) A second NOI regarding these same worker exposures was filed by Hanford Challenge, the Washington Physicians for Social Responsibility, and the United Association of Plumbers and Steamfitters, Local Union 598, the local union which represents the exposed workers. This second NOI is available at: http://www.hanfordchallenge.org/wp-content/uploads/2014/11/2014.11.18-FINAL-Hanford-RCRA-Notice-with-Attachments.pdf.

Had existing monitoring and sampling been compliant with the CAA and the Washington Clean Air Act (WCAA), these unaccounted-for hazardous and toxic emissions would have been assessed and addressed in the very first (1st) version of Hanford's AOP. There would have been no need to commission the Hanford Vapor Report and likely no basis for the "Knowing Endangerment" NOIs, because all toxic and hazardous air pollutants would have been monitored and reported.

Now that Ecology is aware that Energy's air permitting applications contained material mistakes and, through ignorance, inaccurate statements, Ecology is obligated to reopen Hanford's AOP to bring emission controls, emissions limits and monitoring, reporting, and recordkeeping requirements for all Tank Farm hazardous and toxic air pollutants into compliance with the CAA and the WCAA.

¹ This federally-funded report was prepared by an independent panel of experts, commissioned through the Savannah River National Laboratory. Report enclosed as *Enclosure 2*.

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Comment 10: (general AOP, *Attachment 1*, and *Attachment 2*, License FF-01): **Supply a** *schedule of compliance*¹ as required by 40 C.F.R. 70.6(c)(3) and WAC 173-401-630 (3) for establishment of monitoring and for identification and control of emissions of previously unaccounted for *hazardous air pollutants* (HAPs) and *toxic air pollutants* (TAPs), including those associated with transient peaks in release rates from Tank Farm emissions units. Also, in accordance with 40 C.F.R. 70.7 (h) and WAC 173-401-800, provide the public with the opportunity to review the schedule of compliance, and any resulting applicable requirements Ecology incorporates into the Hanford Site AOP.

An independent panel of experts issued the federally-funded Hanford Tank Vapor Assessment Report² (Hanford Vapor Report). This report proposes implementation of specific remedial actions to identify and reduce ongoing emissions of harmful tank vapors. The compliance schedule required by 40 C.F.R. 70.6(c)(3) and WAC 173-401-630 (3) should provide enforceable dates by which these recommendations are implemented along with a schedule for submission of certified progress reports [40 C.F.R. 70.6(c)(4)].

In the Hanford Vapor Report the authors stated that:

"... under certain weather conditions, concentrations approaching 80% of the [tank] head space concentration could exist 10 feet downwind from the release point" W.R. Wilmarth et al., *Hanford Tank Vapor Assessment Report*, SRNL-RP-2014-00791, Oct. 30, 2014, at 30

and:

"Monitoring and sampling policy [at Tank Farms] appears to be inadequate with respect to detecting short-term episodic exposure. The current policy does not address the potential for wafting plumes or puffs of chemical vapors in relatively high concentrations, which may be occasional and isolated in nature." *Id.* at 30

and:

"The materials originally present are subject to complex thermal and radiolytic reactions that vastly increased the compound classes and individual compounds present. It is the head space composition that determines the composition of the vent, stack, and most fugitive emissions." *Id.* at 23

The Hanford Vapor Report leaves no doubt that the current methodology used by the permittee to characterize tank vapors and to justify current emissions limits, and monitoring, frequency of sampling, and approved analytical methods understates the actual emissions and the composition and concentration of the regulated air pollutants in these emissions.

Under the CAA, Ecology has a non-discretionary duty to issue an AOP that assures compliance with all applicable requirements. [40 C.F.R. 70.6 (a)(1)] The current characterization scheme used by the permittee did not capture all *hazardous air pollutants* (HAPs) and *toxic air pollutants* (TAPs).

"Radiolytically generated free radicals can produce compounds not seen with the tank head space characterization sampling and analytical methods used to generate the lists used to define COPCs [chemicals of potential concern]." (references omitted) *Id.* at 36

Given this ignorance gap, neither the permittee nor Ecology can assure compliance with all applicable requirements for HAPs and TAPs. A source not in compliance with all

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applicable requirements at the time of permit issuance is required to adhere to a schedule of compliance as specified in 40 C.F.R. 70.6(c)(3) and WAC 173-401-630 (3). Such a source is also required to submit certified progress reports at least every six (6) months in accordance with 40 C.F.R. 70.6(c)(4) and WAC 173-401-630 (4).

Comment 11: (general AOP, *Attachment 1*, and *Attachment 2*, License FF-01): **Provide** emission limits, and associated monitoring, reporting, and recordkeeping requirements sufficient to assure continuous compliance with any requirements for control of all regulated air pollutants anticipated by the Hanford Vapor Report¹ and expected from Tank Farm emissions units².

Ecology is prohibited from issuing a permit that does not comply with all emission limits and applicable monitoring, reporting, and recordkeeping requirements at the time the permit is issued. 40 C.F.R. 70.6 (a)(1) & (3). Monitoring must be sufficient to yield reliable data from the relevant time period to comply with 40 C.F.R. 70.6 (a)(3)(i)(B).

The CAA requires a major stationary source, such as Hanford, to account for all regulated air pollutants³ released from any emissions unit.

"Emissions unit" means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under section 112(b) of the FCAA....' WAC 173-401-200 (12) (*See also* definition in 40 C.F.R. 70.2)

An emissions unit is the specific point-of-application for all applicable requirements. *"Applicable requirement* means all of the following as they **apply to emissions units** in a part 70 source . . ." (emphasis added) 40 C.F.R. 70.2

Applicable requirements under 40 C.F.R. 70 include the National Emission Standards for Hazardous Air Pollutants (NESHAPs). While at least one (1) NESHAP contains a standard that applies to the public (thus applies at the source's property boundary) [*see* 40 C.F.R. 61.92] and, while air dispersion modeling quite often focuses on the public and the source's boundary⁴, any emission limit and associated monitoring, reporting and recordkeeping requirements in a Title V permit applies at the individual emissions unit. For example, the 20% opacity requirement in WAC 173-400-040 (2) for air contaminants applies at the implicated emissions unit (stack, in this example) and not at the source's boundary. Monitoring for the opacity requirement must occur very near the point of entry of the air contaminants into the atmosphere and not at the source's boundary. Even in the case of 40 C.F.R. 61 subpart H, monitoring and sampling for major point sources is applicable at the emissions unit. [40 C.F.R. 61.93 (b)(4)(i)] Emissions from other potential sources of radionuclides require periodic confirmatory measurements to verify low emissions where these emissions enter the environment.

The word "person" is defined in the CAA without any association to any property boundary.

'The term ''person'' includes an <u>individual</u>, corporation, partnership, association, State, municipality, political subdivision of a State, and any agency, department, or instrumentality of

¹ 'The term ''schedule of compliance'' means a schedule of remedial measures, including an enforceable sequence of actions or operations, leading to compliance with an applicable implementation plan, emission standard, emission limitation, or emission prohibition.' CAA § 501 (3); 42 U.S.C. 7661 (3)

² Wilmarth et al., *Hanford Tank Vapor Assessment Report*, SRNL-RP-2014-00791, Oct. 30, 2014, at 90-91.

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the United States and any officer, agent, or employee thereof.' (emphasis added) 42 U.S.C. 7602 (e); CAA § 302 (e)

Additionally, criminal enforcement under 42 U.S.C. 7413 [CAA § 113] applies to harm suffered by a "person", without reference to the location of that "person" when harmed. Any person who negligently releases into the ambient air any hazardous air pollutant listed pursuant to section 7412 of this title or any extremely hazardous substance listed pursuant to section 11002(a)(2) of this title that is not listed in section 7412 of this title, and **who at the time negligently places another person in imminent danger** of death or serious bodily injury shall, upon conviction, be punished by a fine under title 18 or by imprisonment for not more than 1 year, or both. If a conviction of any person under this paragraph is for a violation committed after a first conviction of such person under this paragraph, the maximum punishment shall be doubled with respect to both the fine and imprisonment. (emphasis added) 42 U.S.C. 7413 (c)(4); CAA § 113 (c)(4)

and:

Any person who knowingly releases into the ambient air any hazardous air pollutant listed pursuant to section 7412 of this title or any extremely hazardous substance listed pursuant to section 11002(a)(2) of this title that is not listed in section 7412 of this title, and **who knows at the time that he thereby places another person in imminent danger** of death or serious bodily injury shall, upon conviction, be punished by a fine under title 18 or by imprisonment of not more than 15 years, or both. Any person committing such violation which is an organization shall, upon conviction under this paragraph, be subject to a fine of not more than \$1,000,000 for each violation. . . . (emphasis added) 42 U.S.C. 7413 (c)(5)(A); CAA § 113 (c)(5)(A)

Consistent with 42 U.S.C. 7413 [CAA § 113], emission limits, and associated monitoring sufficient to yield reliable data from the relevant time period [40 C.F.R. 70.6 (a)(3)(i)(B)], reporting, and recordkeeping requirements must be adequate to determine whether any hazardous air pollutant or extremely hazardous air pollutant released into the environment could harm any "person". The point of compliance is at the emissions unit where these pollutants are released into the environment and not at the source's property line.

The Hanford Vapor Report finds that not only has Hanford overlooked regulated air pollutants from Tank Farm emissions and, therefore, any associated emission limits units, but Hanford has also employed monitoring that did not detect these pollutants. In accordance with these findings, provide emission limits, and associated monitoring, reporting, and recordkeeping requirements sufficient to assure continuous compliance with any applicable requirements for control of all regulated air pollutants anticipated from Tank Farm point sources and fugitive sources.

¹ W.R. Wilmarth et al., *Hanford Tank Vapor Assessment Report*, SRNL-RP-2014-00791, Oct. 30, 2014 ² "*Emissions unit* means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under section 112(b) of the Act." 40 C.F.R. 70.2 ³As defined in 40 C.F.R. 70.2 and WAC 173-401-200 (26)

⁴ The standard in 40 C.F.R. 61 subpart H (40 C.F.R. 61.92) applies to "any member of the public". Compliance with this standard is determined using approved sampling procedures including approved modeling. *See* 40 C.F.R. 61.93 (a). All past compliance determinations are now suspect because emissions from all Tank Farm emissions units have never been accurately measured. *See* W.R. Wilmarth et al., *Hanford Tank Vapor Assessment Report*, SRNL-RP-2014-00791, Oct. 30, 2014

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Comment 12: (general AOP, *Standard Terms and General Conditions* Section 5.27 and Table 5-1, *Attachment 1*, and *Attachment 2*, License FF-01): **This draft Hanford Site AOP omits regulation of radon, the only radionuclide identified by name as a** *hazardous air pollutant* **in section 112 of the** *Clean Air Act* (CAA).

The CAA requires a Title V permit contain requirements addressing all *hazardous air pollutants* (HAPs) emitted by the source. Radon is a radioactive gas listed as a HAP in CAA § 112 (b) [42 U.S.C. 7412 (b)]. The permittee acknowledges radon is released from the Hanford Site and that these releases of radon contribute to the off-site dose received by the maximally exposed individual¹ (MEI). This acknowledgement appears in six (6) of the last seven (7) published annual radionuclide air emissions reports² required by 40 C.F.R. 61 subpart H, as augmented by WAC 246-247, a state-only enforceable regulation. These reports are certified, under penalty of law, as "true, accurate, and complete"³ by the manager of the U.S. Department of Energy, Richland Operations Office.

The permittee certifies to releasing radon, a HAP, and further certifies these releases of radon have a quantifiable impact the MEI who, by definition, is any member of the public who abides or resides off the Hanford Site. Yet this draft Hanford AOP omits all federal requirements addressing these releases. Even though EPA has not yet promulgated a regulation or standard specific to releases of radon from Hanford emissions units, CAA § 112 (j)(5)⁴ requires EPA or the state to establish an equivalent limitation on a case-by-case basis.

This draft Hanford AOP cannot comply with the CAA when it omits all federallyenforceable requirements regulating radon, a listed *hazardous air pollutant*.

¹ "Maximally exposed individual" (MEI) means any member of the public (real or hypothetical) who abides or resides in an unrestricted area, and may receive the highest TEDE from the emission unit(s) under consideration, taking into account all exposure pathways affected by the radioactive air emissions.' WAC 246-247-030 (15)

² See "Abstract" in the following documents: DOE/RL-2008-03, Rev. 0 (2008); DOE/RL-2009-14, Rev. 0 (2009); DOE/RL-201 0-17, Rev. 0 (2010); DOE/RL-2011-12, Rev. 0 (2011); DOE/RL-2012-19, Rev. 0 (2012); DOE/RL-2013-12, Rev. 0 (2013); and DOE/RL-2014-14, Rev. 0 (2014)

³ 'Each report shall be signed and dated by a corporate officer or public official in charge of the facility and contain the following declaration immediately above the signature line: "I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment. See, 18 U.S.C. 1001." 40 C.F.R. 61.94 (b)(9)

⁴ "The permit shall be issued pursuant to subchapter V of this chapter and shall contain emission limitations for the hazardous air pollutants subject to regulation under this section [§ 112] and emitted by the source that the Administrator (or the State) determines, on a case-by-case basis, to be equivalent to the limitation that would apply to such source if an emission standard had been promulgated in a timely manner . . ." CAA §112 (j)(5); 42 U.S.C. 7412 (j)(5)

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Comment 13: (general AOP, *Standard Terms and General Conditions*, *Attachment 1*, and *Attachment 2*, License FF-01): This draft Hanford Site AOP overlooks the Columbia River as a source of Hanford's diffuse and fugitive emissions of radionuclides.

For many decades the Columbia River has acted as the conduit for the transport of radionuclides originating from Hanford that are deposited downstream in sediments behind McNary Dam¹. Radionuclides of Hanford Site origin include isotopes of uranium. All isotopes or uranium are radioactive, and thus subject to radioactive decay. The decay chain for all uranium isotopes includes radon. Therefore, where there is uranium there is also radon. If that uranium is from Hanford's past operations, then the accompanying radon is above background and both unsafe² and regulated in accordance with the *Linear No Threshold Model* used by EPA.

In a study published in 2007, researchers at the Pacific Northwest National Laboratory (PNNL) reported:

"Radionuclide concentrations in sediment collected from riverbank spring discharges along the Hanford Site shoreline were similar to levels in Columbia River sediment, with one exception—the 300 Area, where the average uranium concentrations were usually two to three times the concentrations measured [upstream] at Priest Rapids."³

The 300 Area is just north of the City of Richland and housed research and development laboratories, six (6) small nuclear reactors⁴, plus uranium fuel fabrication facilities and associated waste sites, now inactive. When active, "hundreds of thousands of tons of raw uranium was sent to the 300 Area to be manufactured into fuel assemblies . . ."⁵ The PNNL report continues, stating:

"[S]ite groundwater contaminated from past operations continues to discharge into the river from riverbank springs and groundwater seeps (Poston et al. 2005; Dirkes 1990)."⁶

and:

"Riverbank spring water samples collected along the Hanford Site 300 Area (adjacent to a contaminated groundwater plume) have concentrations of uranium and gross alpha radioactivity that can exceed drinking water standards, with both concentrations decreasing rapidly upon release to the river (Poston et al. 2005; Patton et al. 2002)."⁷

A report published in 2012 by the U.S. Department of Energy (USDOE) informs that uranium is present in the groundwater underneath the 300 Area⁸ and that there was elevated uranium levels in near-shore water samples taken from the Columbia River at two (2) 300 Area locations⁹. Additionally, there certainly is the potential for Hanford's radionuclides to be deposited into the Columbia River from contaminated dust and from contaminated organic debris, such as tumbleweeds, that may have grown in contaminated groundwater. Severe dust storms in this region of the country are not uncommon.

Thus, groundwater discharges from springs in Hanford's 300 Area into the Columbia River include uranium of Hanford Site origin, and near-surface water samples confirm measurable uranium of Hanford origin in the Columbia River. Where there is uranium there is radon. Because the uranium is from Hanford's past operations, the accompanying radon is also attributable to Hanford's past operations. Such radon is therefore above natural background radiation.

The depth of the Columbia River is also subject to fluctuations. These fluctuations may change the depth of the river by ten (10) feet in a 24 hour period¹⁰. Rapid changes in river stage have the potential to strand uranium from groundwater

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releases on dry river banks, if only temporally. Any uranium in open air results in radon being released directly into the air.

Any potential-to-emit radionuclide air pollutants attributable to radionuclides of Hanford Site origin is subject to inclusion in Hanford's AOP along with monitoring, reporting, and recordkeeping sufficient to ensure "reliable data from the relevant time period."¹¹ The Columbia River has the potential-to-emit radon owing to the existence of Hanford's radionuclide pollutants. The large fluctuations in river stage only exacerbate the potential-to-emit radionuclides.

At the end of 2005 the Hanford Site ceased monitoring the Columbia River shoreline in response to budget cuts¹². In 2006, Health began an independent monitoring program with 26 thermoluminescent dosimeters (TLDs) located along the Columbia River¹³. However, the radionuclides are Hanford's and so is the responsibility to monitor and report these radionuclide emissions. Until the EPA sets a *de minimis* by rule for radionuclide air emissions, all of Hanford's radionuclide air emissions above background are required by the CAA to be addressed in Hanford's Title V permit. All Hanford's radionuclide air emissions include those that likely emanate from the Columbia River.

Sediment, 1988 Through 2004, Pacific Northwest National Laboratories, PNNL-16990, Oct. 2007, at iv . Available at: <u>http://www.pnl.gov/main/publications/external/technical_reports/PNNL-16990.pdf</u>)

⁴ <u>http://www.hanford.gov/page.cfm/300area</u> Last visited March 31, 2015.

⁸ U.S. Dept. of Energy, Richland Operations Office, *Hanford Site Environmental Report for Calendar Year* 2011, DOE/RL-2011-119, Rev. 0, Sept. 2012, at 7.15

Available at http://msa.hanford.gov/files.cfm/2011_DOE-RL_2011-

⁹ *Id.* at 7.17.

¹ Beasley M.T., D.C. Jennings, and A.D. McCullough, "Sediment Accumulation Rates in the Lower Columbia River.", 1986 *J. Environ. Radioactivity* 3:103-123; Robertson, D.E. and J.J. Fix, *Association of Hanford Origin Radionuclides with Columbia River Sediments*, BNWL-2305, 1977

² 'There is no firm basis for setting a "safe" level of exposure [to radiation] above background... Many sources emit radiation that is well below natural background levels. This makes it extremely difficult to isolate its stochastic effects. In setting limits, EPA makes the conservative (cautious) assumption that any increase in radiation exposure is accompanied by an increased risk of stochastic effects.¹

http://www.epa.gov/rpdweb00/understand/health_effects.html#anyamount Last visited March 31, 2015. ³ G. W. Patton and R. L. Dirkes, *Summary of Radiological Monitoring of Columbia and Snake River*

⁵ *Id*.

 ⁶ G. W. Patton and R. L. Dirkes, Summary of Radiological Monitoring of Columbia and Snake River Sediment, 1988 Through 2004, Pacific Northwest National Laboratories, PNNL-16990, Oct. 2007, at 2.4.
 ⁷ Id. at 4.5

¹¹⁹_HanfordSiteEnviroReport4CY2011.pdf

¹⁰ "As a result of daily fluctuations in discharges from Priest Rapids Dam, the depth of the river varies significantly over a short time period. River stage changes of up to 3 m (10 ft) during a 24-hr period may occur along the Hanford Reach (Poston et al. 2000)."

D. A. Neitzel, *Editor, Hanford Site National Environmental Policy Act (NEPA) Characterization*, PNNL-6415, Rev. 13, Sep. 2001 at 4.61

Available at: <u>http://www.pnl.gov/main/publications/external/technical_reports/pnnl-6415rev13.pdf</u>¹¹ 40 C.F.R. 70.6 (a)(3)(i)(B)

¹² Pacific Northwest National Laboratory, *Hanford Site Environmental Report for Calendar Year 2010*, PNNL-20548, Sept. 2011, at 8.124

Available at: <u>http://msa.hanford.gov/files.cfm/2010_PNNL-20548_Env-Report.pdf</u>¹³ *Id.* at 8.125.

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STANDARD TERMS AND GENERAL CONDITIONS

Comment 14: (*Standard Terms and General Conditions*, Section 4.6, pg. 13 of 53): Clarify Section 4.6. Enforceability. Federally-enforceable requirements include any requirement of the CAA, or any of its applicable requirements, including CAA § 116 [42 U.S.C. 7416] and any requirements in 40 C.F.R. 70.

For example, standard permit terms required by WAC 173-401-620 are federallyenforceable. Both 40 C.F.R. 70.6(b) and WAC 173-401-625 state that all terms and conditions of a Title V permit are federally enforceable except those designated as "state only", and that "state-only" requirements are those requirements that are not required under the CAA or any of its applicable requirements. Thus almost all requirements in Sections 4.0 and 5.0 (e.g. "Duty to comply", § 5.1; "Permit actions", § 4.10; "Permit fees", § 5.3; "Inspection and entry", § 5.2; "Permit appeals", § 4.12, etc.) are federally enforceable and apply to all draft Hanford Site AOP attachments; *Attachment 1*, *Attachment 2*, and *Attachment 3*. All requirements in Part 70 (40 C.F.R. 70) are also federally enforceable because Part 70 is required by the CAA. Thus all requirements in Part 70 also apply to Attachments 1, 2, and 3.

Additionally, where both a federal requirement and a state (or local) requirement apply to the same source, both must be included in the AOP, regardless of whether one is more stringent than the other.

"However, if both a State or local regulation and a Federal regulation apply to the same source, both must be complied with, regardless of whether the one is more stringent than the other, pursuant to the requirements of section 116 of the Clean Air Act." *Partial Approval of the Clean Air Act, Section 112(l), Delegation of Authority to the Washington State Department of Health*, 71 Fed. Reg. 32276, 32278 (June 5, 2006)

(*See also* WAC 173-401-600 (4) "Where an applicable requirement based on the FCAA and rules implementing that act (including the approved state implementation plan) is less stringent than an applicable requirement promulgated under state or local legal authority, both provisions shall be incorporated into the permit in accordance with WAC 173-401-625.")

In particular, this requirement is overlooked in *Attachment 2*.

Radionuclides are a *hazardous air pollutant* listed under CAA § 112 [42 U.S.C. 7412]. Radionuclides do not cease to be federally regulated under the CAA simply because they are also regulated by Washington State. Any requirement Ecology deems as "state-only" enforceable must be accompanied by the analogous federal requirement, even if the "state-only" requirement is more stringent. Only Ecology, as the issuing the permitting authority, can designate a requirement as "state-only" enforceable. [40 C.F.R. 70.6 (b)(2) & WAC 173-401-625 (2)]

"... the **permitting authority shall specifically designate** as not being federally enforceable under the FCAA ..." (emphasis added) WAC 173-401-625 (2) see also 40 C.F.R. 70.6 (b)(2)

Compliance with requirements in the CAA cannot be avoided by claiming federally-enforceable requirements implemented through a state regulation are no longer federally-enforceable requirements.

Please clarify Section 4.6.

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Comment 15: (*Standard Terms and General Conditions*, Section 4.12, pg. 14 of 53): Specify the appeal process applicable to AOP terms and conditions in *Attachment 2* that are created and enforced by Health pursuant to RCW 70.98 and the regulations adopted thereunder.

Neither the permittee nor the public can appeal terms and conditions contained in *Attachment 2* of this draft AOP as stated in *Section 4.12*. This is because the specified appeal process does not apply to *Attachment 2*. The Pollution Control Hearings Board (PCHB) does not have jurisdiction over licenses created under the authority of RCW 70.98, *The Nuclear Energy and Radiation Act*. Such licenses are enforced only by the Washington State Department of Health (Health). Health is not a permitting authority nor does Health have the legal ability to issue an AOP in accordance with RCW 70.94, the CAA, and 40 C.F.R. 70.

Specify the appeal process applicable to AOP terms and conditions in *Attachment* 2.

Comment 16: (*Standard Terms and General Conditions*, Section 5.19, pg. 28 of 53): State that changes allowed by sections 5.19 and 5.20 only apply to *Attachment 1* and *Attachment 3*. The statute and the regulation under which *Attachment 2* was created do not recognize either "Off-permit Changes" or "Changes Not Requiring Permit Revisions".

Comment 17: (*Standard Terms and General Conditions*, Section 5.19.3, pgs. 28 & 29 of 53): After line **39 on page 28 add the phrase "or other such address as provided by Ecology".** After the EPA address on page **29 add the phrase "or other such address as provided by EPA".** These additions will avoid a technical violation should either Ecology or EPA change addresses during the term of the AOP.

Comment 18: (*Standard Terms and General Conditions*, Section 5.20.1, pg. 29 of 53): After Ecology's address, add the phrase "or other such address as provided by Ecology". After the EPA address, add the phrase "or other such address as provided by EPA". These additions will avoid a technical violation should either Ecology or EPA change addresses during the term of the AOP.

ATTACHMENT 1

Comment 19: (*Attachment 1*, Table 1.4, Marshalling Yard fugitive dust control) **Missing** from Table 1.4 are conditions from BCAA Administrative Order (AO) of Correction, No. 20030006, for control of fugitive dust from the Marshalling Yard. Requirements from this AO survive for at least as long as the Marshalling Yard

¹ "The hearings board shall only have jurisdiction to hear and decide appeals from the following decisions of the department [Ecology], the director, local conservation districts, and the air pollution control boards or authorities as established pursuant to chapter 70.94 RCW, or local health departments [regarding issuance and enforcement of solid waste permits and permits to use or dispose of biosolids]. . ." RCW 43.21B.110 (1).

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exists. According to EPA, requirements in an AO are to be treated as "applicable requirements" under Title V that must be included in a source's AOP.

Control of fugitive dust pursuant to WAC 173-400-040(8) (2002) is part of the EPA-approved state implementation plan (SIP), and therefore is a federally enforceable requirement. In its response to public comments on the draft Hanford Site AOP Renewal 2, Ecology states: "On March 21, 2003, a separate *WTP Marshalling Yard Dust Control Plan* was developed in response to a BCAA Order of Correction 20030006". [Ecology response to Comment No. 98, as provided to EPA pursuant to WAC 173-401-700 (9); *see* Publication no. 13-05-010: available at: <u>http://www.ecy.wa.gov/biblio/nwp.html</u>] While an AO may result in "closing" a case, federally enforceable requirements in that AO remain in force until the subject of those conditions no longer exists. Neither Ecology nor BCAA have the requisite authority to vacate applicable federal requirements. As of April 12, 2015, the Marshalling Yard still existed.

EPA addresses the status of requirements in an AO with respect to Title V as follows:

'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_response200 7.pdf

Consistent with this EPA position, Ecology must include in the Hanford Site AOP requirements from the AO for control of fugitive dust at the Marshalling Yard.

Comment 20: (*Attachment 1* and public review file): **Missing from the public review file is Dust Control Plan 24590-WTP-GPP-SENV-015, Revision 1,** *Fugitive Dust Control.* **Pursuant to 40 C.F.R. 70.7** (h)(2), all information Ecology deemed to be relevant by using it in the permitting process must be made available to support **public review.**

In its response to public comments on the draft Hanford Site AOP Renewal 2, Ecology states "[o]n March 3, 2010, the above implemented and compliant Dust Control Plans [for the Marshalling Yard and WTP] were consolidated into one plan with issuance of 24590-WTP-GPP-SENV-015, Revision 1, *Fugitive Dust Control*." [Ecology response to Comment No. 98, as provided to EPA pursuant to WAC 173-401-700 (9); *see* Publication no. 13-05-010: available at: <u>http://www.ecy.wa.gov/biblio/nwp.html</u>] Ecology thus acknowledges it utilized "24590-WTP-GPP-SENV-015, Revision 1, *Fugitive Dust Control*" in the permitting process. This plan should, therefore, have been included in the information provided to the public pursuant to 40 C.F.R. 70.7 (h)(2) and *Sierra Club v. Johnson*, 436 F.3d 1269, (11th Cir. 2006).

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.

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"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. . . " *Sierra Club v. Johnson*, 436 F.3d 1269, 1284, (11th Cir. 2006)

Ecology acknowledges it used "24590-WTP-GPP-SENV-015, Revision 1, *Fugitive Dust Control*" in the permitting process. In accordance with 40 C.F.R. 70.7 (h)(2) Ecology must provide the public with an opportunity to review "24590-WTP-GPP-SENV-015, Revision 1, *Fugitive Dust Control*".

Restart public review and support this review by providing all information Ecology deemed relevant by using it in the permitting process, including "24590-WTP-GPP-SENV-015, Revision 1, *Fugitive Dust Control*".

Comment 21: (*Attachment 1*, Section 1.1, pg. 8, line 6): Correct "emission units" to read "emissions unit". It is "Emissions unit" that is defined in WAC 173-401-200 (12).

"Emissions unit" means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under section 112(b) of the FCAA....' WAC 173-401-200 (12)

Comment 22: (*Attachment 1*, Section 1.2, pg. 11, lines 9-11): **Delete the sentence beginning on line 9: "All emission units not identified in Section 1.4 Discharge Points that are subject to 40 CFR 61, Subpart H in Attachment 2, Health License, have been determined to represent insignificant sources of non-radioactive regulated air pollutants**". Ecology can not use a permit to revise a regulation¹, specifically WAC 173-401-530 (2)(a).

Ecology's regulation, WAC 173-401-530 (2)(a)², states that, (with certain exceptions not applicable here) ". . .no emissions unit or activity subject to a federally enforceable applicable requirement shall qualify as an insignificant emissions unit or activity." WAC 173-402-530 (2)(a). 40 C.F.R. 61 subpart H is a federally enforceable applicable requirement under which radionuclides are regulated without a *de minimis*. Therefore, under Ecology's regulation an emission unit or activity subject to 40 C.F.R. 61 subpart H cannot be insignificant. If Ecology wishes, it can change its regulation by using the rulemaking process as codified in the state *Administrative Procedure Act*, (APA) RCW 34.05. However, Ecology cannot use language in a permit to change its regulation.

Furthermore, until emissions from Tank Farm emissions units have been adequately characterized, Ecology can not know if 40 C.F.R. 61 subpart H is the only federally enforceable requirement applicable to these emission units.

Delete the referenced sentence.

¹ The Washington State Supreme Court addressed the issue of limits on an administrative agency's authority, stating: "[There is] a fundamental rule of administrative law - an agency may only do that which it is authorized to do by the Legislature (citations omitted). . . [Additionally an] administrative agency cannot modify or amend a statute through its own regulation." *Rettkowski v. Department of Ecology*, 122 Wn.2d 219, 226-27, 858 P.2d 232 (1993)

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 2 "Notwithstanding any other provision of this chapter, no emissions unit or activity subject to a federally enforceable applicable requirement . . . shall qualify as an insignificant emissions unit or activity. . . ." WAC 173-401-530 (2)(a)

Comment 23: (*Attachment 1*, Section 1.2 "Insignificant Emission Units"): **Re-evaluate Tank Farm emissions units**¹ **currently designated as insignificant emissions units** (**IEUs**) **based on requirements of WAC 173-401-530** (2)(a) and on findings in the Hanford Vapor Report².

These emissions units are currently regulated only in *Attachment 2* even though they are subject to 40 C.F.R. 61 subpart H, a federally enforceable applicable requirement. According to WAC 173-401-530 (2)(a) "no emissions unit or activity subject to a federally enforceable applicable requirement . . . shall qualify as an insignificant emissions unit or activity. . .". Thus, any emissions units subject to 40 C.F.R. 61 subpart H can't be considered IEUs and must be addressed in *Attachment 1*. In addition, all Tank Farm emissions units were permitted using characterization information that greatly underestimated both the number of chemicals in the expected emissions and the respective concentrations of these chemicals.

"[U]under certain weather conditions, concentrations approaching 80% of the head space concentration could exist 10 feet downwind from the release point..." W.R. Wilmarth et al., *Hanford Tank Vapor Assessment Report*, SRNL-RP-2014-00791, Oct. 30, 2014 at 9

and:

"The materials originally present [in the tanks] are subject to complex thermal and radiolytic reactions that vastly increased the compound classes and individual compounds present. It is the head space composition that determines the composition of the vent, stack, and most fugitive emissions. Spills and leaks during transfers and recovery may lead to condensed phase fugitive emissions from fugitive sources such as valves and line connections. Waste disturbing activities can greatly alter the concentration and composition of the head space gases and vapors. Past head space characterization did not evaluate the effect of waste disturbing activities on the chemicals in the head space and their concentrations." *Id.* at 23

and:

"Monitoring and sampling policy appears to be inadequate with respect to detecting short-term episodic exposure. The current policy does not address the potential for wafting plumes or puffs of chemical vapors in relatively high concentrations, which may be occasional and isolated in nature." *Id.* at 30

Accurate characterization information will certainly increase the number of currently-reported regulated air pollutants present in emissions from Tank Farm emissions units, and may implicate other NESHAPs, either directly or in accordance with CAA §112 (j)(5) [42 U.S.C. 7412 (j)(5)]. WAC 173-401-530 (2)(c) indicates that if an emissions unit is no longer considered an IEU, that unit is subject to all testing, monitoring, recordkeeping, and reporting requirements necessary to assure compliance with WAC 173-401.

Using accurate characterization information, re-evaluate all Tank Farm emissions units with regard to WAC 173-401-530 (2)(a) and require appropriate emissions limits, emissions controls, monitoring, reporting, and recordkeeping necessary to assure continuous compliance with WAC 173-401 for those units that can no longer be considered as IEUs.

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¹ "Emissions unit" means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under section 112(b) of the FCAA....' WAC 173-401-200 (12)

²W.R. Wilmarth et al., *Hanford Tank Vapor Assessment Report*, SRNL-RP-2014-00791, Oct. 30, 2014

Comment 24: (*Attachment 1*, Section 1.4.25, pg. 84, Discharge Point: Ventilation Systems for 241-AN and 241AW-Tank Farms, and Section 1.4.32, pg. 110, Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation): **Revise the emission limits, and** requirements for monitoring, reporting, and recordkeeping for these discharge points (collectively "exhausters") to reflect findings in the Hanford Vapor Report¹. (*See* Enclosure 2)

The very same harmful emissions that necessitated the Hanford Vapor Report are emissions that are regulated under the CAA and should have been addressed in all previous versions of the Hanford Site AOP. Under the CAA there can be no unmonitored emissions of regulated air pollutants. It is only because of inaccurate characterization of Tank Farm emissions in all permit applications submitted to Ecology that these harmful emissions have been allowed to escape regulation under the CAA.

The authors of the Hanford Vapor Report point out that:

"The Hanford tank waste is a complex matrix of aqueous soluble and insoluble inorganic salts combined with an inventory of water and organic components that number into the thousands. These organic components are constantly undergoing radiolysis from the tank radioactivity plus thermal and chemical reactions with tank contents." W.R. Wilmarth et al., *Hanford Tank Vapor Assessment Report*, SRNL-RP-2014-00791, Oct. 30, 2014 at 16

and:

"The materials originally present are subject to complex thermal and radiolytic reactions that vastly increased the compound classes and individual compounds present. . . . Waste disturbing activities can greatly alter the concentration and composition of the head space gases and vapors. Past head space characterization did not evaluate the effect of waste disturbing activities on the chemicals in the head space and their concentrations." *Id.* at 23

and:

"The exhausters used for active venting occasionally shut down, . . . When this occurs, an interlock shuts down sluicing and retrieval operations, and the inlet vent on any tank involved is effectively rendered a passive exhaust vent. Although the waste disturbance activities have ceased, the head space then being vented through the inlet vents and fugitive pathways is potentially at orders of magnitude greater concentration of vapors than during routine passive venting." *Id.* at 28

It is apparent that the regulatory orders now in force (all versions of DE05NWP-001 and subsequent amendments; and DE11NWP-001) greatly underestimated not only the number of *hazardous air pollutants* (HAPs) and *toxic air pollutants* (TAPs) in the exhauster emissions, but also the concentration of HAPs and TAPs in these emissions. Without knowledge of the chemicals in the exhauster emissions it is not possible to determine whether TAPs are below their respective acceptable source impact level (ASIL). Such knowledge is also necessary to determine any HAPs requirements, including emission limits, and requirements for monitoring sufficient to yield reliable data from the relevant time period [40 C.F.R. 70.6 (a)(3)(i)(B)], reporting, and recordkeeping.

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Ecology can't determine if a HAP or TAP is properly regulated absent accurate characterization of the emissions.

Current sampling is focused primarily on ammonia and VOCs. Sampling for ammonia occurs at six (6) month intervals. Sampling for VOCs occurs annually and uses time-weighted averaging. Using time weighted averaging greatly underestimates the actual emissions.

"[A] time weighted average concentration of less than 10 ppm can be thousands to tens of thousands of ppm when delivered as a bolus." *Id.* at 35

Furthermore, the test methods used and the sampling frequencies are not capable of determining both the number of HAPs and TAPs and the respective concentrations.

"[T]he [sampling] program should not rely on stack or exhauster sampling results to understand the possible releases as these samples represent mixtures of tank contents exhausted through a mutual stack or exhauster that have been diluted during the process." *Id.* 16

The Hanford Vapor Report recommends:

Hanford "[i]dentify and implement sampling and or *in situ* analytical methods as appropriate for reactive VOCs, submicron aerosol, volatile metal compounds, and volatile metalloid compounds that may be present but would have been missed by past head space sampling and analytical methods." *Id.* at 36

Consistent with this recommendation, the current regulatory orders for these exhausters should be corrected to require:

1. sampling sufficient to detect all regulated air pollutants exhausted into the air;

2. controls to adequately limit these emissions;

3. requirements for monitoring at a frequency sufficient to yield reliable data from the relevant time period [40 C.F.R. 70.6 (a)(3)(i)(B)], and;

4. adequate reporting, and recordkeeping.

¹ W.R. Wilmarth et al., *Hanford Tank Vapor Assessment Report*, SRNL-RP-2014-00791, Oct. 30, 2014

ATTACHMENT 2

Comment 25: (*Attachment 2*, General): Address federally-enforceable requirements as specified in WAC 173-401-625, 40 C.F.R. 70.6 (b), and CAA § 116.

License FF-01 confuses "state-only" enforceable regulation (i.e. not federally enforceable under the CAA) with "state-only" enforceable requirement. While WAC 246-247 is a "state-only" enforceable regulation, requirements developed pursuant to WAC 246-247 implementing federal requirements remain federally enforceable (i.e., enforceable by the Administrator of EPA and the public in accordance with the CAA). Such requirements include:

those terms and conditions that are required by the CAA or any of its applicable requirements (40 C.F.R. 70.6 (b)) (*see* WAC 173-401-620 (2) for some examples) [WAC 173-401 is "state-only" enforceable yet requirements in WAC 173-401-620 (2) are federally enforceable];

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- those requirements clarified by the 1994-95 *Memorandum of Understanding Between the U.S. Environmental Protection Agency and the U.S. Department of Energy*¹;
- those requirements that impact emissions (40 C.F.R. 70.6 (a)(1));
- those requirements that set emission limits (*id.*);
- those requirements that address monitoring (40 C.F.R. 70.6 (a)(3)(C)(i)), reporting (40 C.F.R. 70.6 (a)(3)(C)(ii)), or recordkeeping (40 C.F.R. 70.6 (a)(3)(C)(iii)); and
- those requirements enforceable pursuant to 40 CFR $70.11(a)(3)(iii)^2$.

The Washington State Department of Health (Health) cannot seek to avoid federal enforceability by incorporating federal requirements by reference (*see* WAC 246-247-035³) then creating License conditions pursuant to WAC 246-247, overlooking the federal analogs. For example, included with the requirements for emission units in *Enclosure 1* of License FF-01, is the following text:

"state only enforceable: WAC 246-247-010(4), 040(5), 060(5)". However, all three WAC citations have federal NESHAP analogs pertaining to control technology (WAC 246-247-010(4)⁴), limitations on emissions (WAC 246-247-040(5)⁵), and the need to follow WAC 246-247 requirements, including federal regulations incorporated by reference (WAC 246-247-060(5)⁶; *see* WAC 246-247-035). The designation "state-only" enforceable applies to only those requirements that cannot also be enforced pursuant to a federal regulation. The radionuclide NESHAPs are federal regulations that exist independent of and in addition to WAC 246-247. Health simply cannot remove radionuclides from the CAA by incorporating the radionuclide NESHAPs into WAC 246-247.

Minimally, all License FF-01 conditions that are required by the CAA or any CAA applicable requirement, any conditions that impact emissions, or set emission limits, or address monitoring, reporting, or recordkeeping, and any requirements enforceable pursuant to 40 CFR 70.11(a)(3)(iii) are federally enforceable under 40 C.F.R. 70.6.

Even if Health assumes that every requirement created pursuant to WAC 246-247 is "state-only" enforceable, Health is still required by CAA § 116 to include in License FF-01 both the "state-only" enforceable requirement and the analogous federallyenforceable requirement. EPA determined CAA § 116 requires Health to include both the "state-only" enforceable requirement plus the federally enforceable analog, regardless of which is the more stringent.

"However, if both a State or local regulation and a Federal regulation apply to the same source, both must be complied with, regardless of whether the one is more stringent than the other, pursuant to the requirements of section 116 of the Clean Air Act." *Partial Approval of the Clean Air Act, Section 112(1), Delegation of Authority to the Washington State Department of Health*, 71 Fed. Reg. 32276, 32278 (June 5, 2006)

(*See* also WAC 173-401-600 (4) "Where an applicable requirement based on the FCAA and rules implementing that act (including the approved state implementation plan) is less stringent than an applicable requirement promulgated under state or local legal authority, both provisions shall be incorporated into the permit in accordance with WAC 173-401-625.")

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Radionuclides remain federally enforceable pursuant to the CAA regardless of how Health regulates radionuclides under WAC 246-247. A federal CAA requirement implemented by a state regulation is still a federal requirement.

Treat federally enforceable requirements as specified in WAC 173-401-625 and 40 C.F.R. 70.6 (b).

¹ Memorandum of Understanding Between the U.S. Environmental Protection Agency and the U.S. Department of Energy Concerning The Clean Air Act Emission Standards for Radionuclides 40 CFR 61 Including Subparts H, I, O & T, signed 9/29/94 by Mary D. Nichols, EPA Assistant Administrator for Air and Radiation, and on 4/5/95 by Tara J. O'Toole, DOE Assistant Secretary for Environment, Safety and Health.

² "The reason for EPA's decision to grant partial rather than full approval was that WDOH does not currently have express authority to recover criminal fines for knowingly making a false material statement, representation, or certificate in any form, notice or report, or knowingly rendering inadequate any required monitoring device or method, as required by 40 CFR 70.11(a)(3)(iii)" *Partial Approval of the Clean Air Act, Section 112(l), Delegation of Authority to the Washington State Department of Health*, 71 Fed. Reg. 32276 (June 5, 2006); While Health (WDOH) did amend WAC 246-247 to address the cited shortcoming, EPA has not yet announced rulemaking needed to grant Health delegation of authority to enforce 40 CFR 70.11(a)(3)(iii).

³ "(1) The following federal standards . . . are adopted by reference . . .

(a) For federal facilities: . . .(i) 40 CFR Part 61, Subpart A . . .(ii) 40 CFR Part 61, Subpart H . . .(iv) 40 CFR Part 61, Subpart Q . . ." WAC 246-247-035

⁴ "The control technology standards and requirements of this chapter apply to the abatement technology and indication devices of facilities and emission units subject to this chapter. Control technology requirements apply from entry of radionuclides into the ventilated vapor space to the point of release to the environment." WAC 246-247-010(4)

⁵ "In order to implement these standards, the department may set limits on emission rates for specific radionuclides from specific emission units and/or set requirements and limitations on the operation of the emission unit(s) as specified in a license." WAC 246-247-040(5)

⁶ "The license shall specify the requirements and limitations of operation to assure compliance with this chapter. The facility shall comply with the requirements and limitations of the license." WAC 246-247-060(5)

Comment 26: (*Attachment 2*, General): In *Attachment 2*, provide the specific monitoring, reporting, and recordkeeping requirements needed to demonstrate continuous compliance with each term or condition that appears in the annual compliance certification report required by 40 C.F.R. 70.6 (c)(5) and WAC 173-401-615 (5).

The licensee/permittee is required by 40 C.F.R. 70.6 (c)(5) and WAC 173-401-615 (5) to annually certify compliance status (either continuous or intermittent) with each term or condition in the permit that is the basis for the certification. Absent some specified criteria, neither the licensee/permittee nor the public can determine what constitutes continuous compliance and how continuous compliance can be demonstrated. Without such criteria, the public is denied the information needed to assess compliance. Comments: draft Hanford Site AOP, Renewal 2, Rev. B Bill Green April 22, 2015 Page 25 of 28

Comment 27: (*Attachment 2*, General): **Track and report the total potential radionuclide emissions allowed from individual emissions units specified in** *Attachment 2, Enclosure 1 Emission Unit Specific License.*

The sum of allowable potentials-to-emit from emission units regulated in License FF-01 alone exceeds 10 mrem/yr to the maximally-exposed member of the public. Provide the sum of all potentials-to-emit radionuclides.

Comment 28: (*Attachment 2*, General): As required by 40 C.F.R. 70.7 (h)(2), provide the public with all information used in the permitting process to justify:

- adding six (6) new emission unit,
- removing nine (9) emissions units, and
- replacing about twenty-eight (28) Notice of Construction (NOC) orders of approval

from the previous final version of Attachment 2^1 , and restart public review.

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)

This version of *Attachment 2* contains six (6) new emissions units and about 28 new NOC approvals replacing older versions. In addition there are nine (9) emission units that were removed. These changes were affected without providing the public with any information. No NOC applications containing information required by WAC 246-247-110 *Appendix A* were provided; no modification requests or applications for modifications were provided; no closure requests and supporting information were provided. In accordance with 40 C.F.R. 70.7 (h)(2), provide all information used to justify these changes and restart public review.

¹ Draft Statement of Basis for Attachment 2, Table of Changes from FF-01 12-10-14, pgs. 23-32 of 33

ATTACHMENT 3

Comment 29: (*Attachment 3*, General): **The regulatory structure of the draft Hanford Site AOP does not provide Ecology, the sole permitting authority, with the legal ability to enforce the "National Emission Standards for Asbestos" (40 C.F.R. 61 subpart M).** In this draft AOP asbestos requirements are created and enforced in **accordance Benton Clean Air Agency (BCAA) Regulation 1, Article 8.** Ecology can **not enforce or otherwise act on BCAA regulations.**

Sections 502 (b)(5)(A) & (E) and section 502 (b)(6) of the CAA require a permitting authority have all authority necessary to issue permits and ensure compliance with all applicable requirements, to enforce permits including the authority to recover civil penalties, and the ability to offer the opportunity for public comment and a hearing.

Comments: draft Hanford Site AOP, Renewal 2, Rev. B Bill Green April 22, 2015 Page 26 of 28

Only the BCAA can fulfill these requirements of the CAA with respect to BCAA Regulation 1, Article 8. However, for the Hanford Site AOP, the BCAA is not a permitting authority, but rather a "permitting agency". Ecology is the only permitting authority and Ecology can not act on BCAA Regulation 1, Article 8.

STATEMENTS OF BASIS

Comment 30: (*Statement of* Basis for Standard Terms and General Conditions, Renewal 2, Revision B, pg. iv, line 1) Line 1 on page iv of the Statement of Basis for Standard Terms and General Conditions contains the following statement: "Health regulates radioactive air emissions under the authority of RCW 70.92, . . .". Citing to RCW 70.92 is incorrect. The title of RCW 70.92 is "PROVISIONS IN BUILDINGS FOR AGED AND HANDICAPPED PERSONS".

"PROVISIONS IN BUILDINGS FOR AGED AND HANDICAPPED PERSONS", RCW 70.92, doesn't provide Health authority to regulate radioactive air emissions. This statute doesn't even mention the Department of Health nor does this statute address radionuclides.

Provide an accurate source for Health's authority to regulate radionuclide air emissions.

Comment 31: (*Statements of Basis*; general): 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, 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:

 $http://www.epa.gov/region07/air/title5/petitiondb/petitions/citgo_corpuschristi_west_response200~7.pdf$

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.

Comments: draft Hanford Site AOP, Renewal 2, Rev. B Bill Green April 22, 2015 Page 27 of 28

Comment 32: (*Statements of* Basis; general): **Missing from the Statements of Basis is** the memorandum of understanding between Ecology and Health describing the roles and responsibilities of each agency in coordinating the regulation of Hanford's radionuclide air emissions. This memorandum of understanding¹ is referenced on page 4 of the legal opinion² required by 40 C.F.R. 70.4 (b)(3).

Ecology, the permitting authority, is required by 40 C.F.R. 70.7 (a)(5) and WAC 173-401-700 (8) to "provide a statement that sets forth the legal and factual basis for the draft permit conditions (including references to the applicable statutory or regulatory provisions)." (40 C.F.R. 70.7 (a)(5)) This requirement cannot be met when Ecology fails to include the agreement establishing the respective roles and responsibilities of Ecology and Health that resulted in regulating pollutants in the Hanford Site Title V permit based on whether they are radioactive.

¹ Memorandum of understanding between the Washington State Department of Ecology and the Washington State Department of Health Related to the Respective Roles and Responsibilities of the Two Agencies in Coordinating Activities Concerning Hanford Site Radioactive Air Emissions ² M. S. Wilson, Attorney General's Opinion for the Washington State Department of Ecology, 10-27-1993

Comment 33: (*Statements of* Basis; general): **Contrary to 40 C.F.R. 70.7** (a)(5) and **WAC 173-401-700** (8), the permitting authority failed to address the legal and factual basis for regulating radioactive air emissions in the draft Hanford Site AOP pursuant to *The Nuclear Energy and Radiation Act* (NERA) rather than in accordance with the *Clean Air Act* (CAA).

An AOP is the regulatory product required by Title V of the CAA. The purpose of an AOP is to capture all of a source's obligations with respect to each of the air pollutants it is required to control. One of the CAA pollutants the Hanford Site is required to control is radionuclides. However, in the draft Hanford Site AOP applicable requirements regulating Hanford's radionuclide air emissions are enforced pursuant to NERA rather than in accordance with Title V of the CAA.

The incompatibilities between the CAA and NERA are near total. Some of these incompatibilities are as follows:

- The CAA is a legislative product of the U.S. Congress while NERA (RCW 70.98) was created by the Washington State Legislature.
- State and federal governmental agencies and departments authorized to enforce the CAA cannot enforce NERA.
- The Hanford Site Title V permit is required by the CAA and not required by NERA.
- The CAA requires public involvement to include a minimum public comment period of thirty (30) days. NERA provides for no public involvement. The CAA requires the opportunity for review by EPA and affected states; NERA does not.
- The CAA calls for an opportunity for judicial review in State court of the final permit action by any person who participated in the public participation process. NERA does not provide an opportunity for such judicial review by a qualified public commenter.

Comments: draft Hanford Site AOP, Renewal 2, Rev. B Bill Green April 22, 2015 Page 28 of 28

• The CAA defines specific processes for permit issuance, modification, and renewal, all of which include EPA notification and public review. NERA does not provide for such modification processes and associated notification and public review.

In short, the CAA and NERA are not compatible in almost every regard. What then is the legal and factual basis for using NERA rather than the CAA to regulate a CAA pollutant in a CAA-required permit?

Comment 34: (*Statements of* Basis; general): In accordance with 40 C.F.R. 70.7 (a)(5) and WAC 173-401-700 (8), provide the legal and factual basis for omitting the Columbia River as a source of radionuclide air emissions.

The Columbia River is the only credible conduit for radionuclides of Hanford Site origin found in the sediments behind McNary Dam and possibly beyond. This AOP should address the Columbia River as a radionuclide air emissions source, given:

- 1) the discovery of significant radionuclide-contamination in the 300 Area groundwater entering the Columbia River; plus
- 2) radionuclide-contaminated groundwater entering the Columbia River from other Hanford Site sources, some with huge curie inventories like the 618-11 burial trench;
- 3) the fact that radionuclide decay results in production of airborne radionuclide isotopes; and
- 4) neither Health nor EPA recognize either a regulatory *de minimis* or a health-effects *de minimis* for radionuclide air emissions above background.

Exhibit 2

Exhibit 2

Pages 1-30 First 30 pages from Ecology's response to public comments. This is the version sent to EPA for its 45-day review under 40 C.F.R. 70.8. The final version, in its entirety, is available at: https://fortress.wa.gov/ecy/publications/documents/1605014.pdf

Exhibit 2, Petition to object to Hanford's Title V permit



Response to Comments

Hanford Air Operating Permit, Revision B March 22 – April 24, 2015, with extension to May 8, 2015

Summary of a public comment period and responses to comments

<mark>Month</mark> 2016 Publication no. [<mark>xx-xx-xxx</mark>]

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Ecology publishes this document to meet the requirements of <u>Washington Administrative Code</u> <u>173-401-800</u>.

If you need this document in a format for the visually impaired, call the Nuclear Waste Program at 509-372-7950. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

Response to Comments

Hanford Air Operating Permit, Revision B March 22 – April 24, 2015, with an extension to May 8, 2015

> Department of Ecology Nuclear Waste Program 3100 Port of Benton Boulevard Richland, Washington 99354

<mark>XX</mark>/2016 Ecology Publication <mark>XX-05-XXX</mark> **Exhibit 2, Petition to object to Hanford's Title V permit** Response to Comments Hanford Air Operating Permit, Revision B

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Exhibit 2, Petition to object to Hanford's Title V permit Response to Comments Hanford Air Operating Permit, Revision B

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INTRODUCTION

The Washington State Department of Ecology's Nuclear Waste Program regulates air pollution sources at the Hanford Site through permits. These permits ensure Hanford's air emissions stay within regulatory limits to protect people and the environment. The Hanford Air Operating Permit puts all of the various emission requirements into a single composite permit.

The purpose of this Response to Comments is to:

- 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, Revision B, March 22 – April 24, 2015, with an extension to May 8, 2015.
Permit:	Hanford Air Operating Permit, Revision B

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

REASONS FOR ISSUING THE PERMIT

The purpose of the Air Operating Permit (AOP) is to ensure Hanford's air emissions stay within safe limits that protect people and the environment. Three agencies contribute the underlying permits to the AOP.

- The Washington State Department of Ecology (Ecology) is the overall permitting authority and regulates toxic air emissions.
- The Washington State Department of Health (Health) regulates radioactive air emissions.
- The Benton Clean Air Agency (BCAA) regulates outdoor burning and the Federal Clean Air Act asbestos national Emission Standards for Hazardous Air Pollutants (NESHAP) regulations.

This permit is a revision of the AOP and incorporates changes made during 2013 and 2014.

PUBLIC INVOLVEMENT ACTIONS

The Nuclear Waste Program encouraged public comment on the Hanford Air Operating Permit during a 30 day public comment period held March 22 through April 24, 2015. During this comment period, a request was submitted to Ecology to extend the comment period. Ecology extended the comment period two weeks. The extended comment period ended on May 8, 2015.

We took the following actions to inform the public about the comment period:

- Mailed a public notice announcing the comment period to mailing list of 1436 interested members of the public.
- Emailed a notice announcing the start of the comment period to the <u>Hanford-Info email list</u>, which had 3330 recipients.
- Posted he comment period as an event on Ecology's Hanford Education & Outreach Facebook page.
- Distributed copies of the public notice to members of the public at Hanford Advisory Board meetings.
- Identified the original comment period in Ecology's Permit Register on March 10, 2015.
- Identified the extension to the comment period in Ecology's Permit Register on April 24, 2015.
- Placed a public announcement legal classified advertisement for the original comment period in the Tri-City Herald on March 22, 2015.
- Placed a public announcement legal classified advertisement for extension to the comment period in the Tri-City Herald on April 24, 2015.

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

- Public notice
- Transmittal letter
- Statement of Basis for the proposed Hanford Air Operating Permit, Revision B
- Draft Hanford Air operating Permit, Revision B
- Supporting documents

The following public notices for this comment period are in Appendix A of this document:

- 1. Public notice (focus sheet)
- 2. Classified advertisement in the Tri-City Herald
- 3. Notice sent to the Hanford-Info email list
- 4. Event posted on Ecology Hanford Education & Outreach Facebook page

THE ENVIRONMENTAL PROTECTION AGENCY ORDER TO ECOLOGY

The U.S. Environmental Protection Agency (EPA) issued an Order on May 29, 2015, granting in part and denying in part two petitions for objection to permits 00-05-006, Renewal 2, and 00-05-006, Renewal 2, Revision A (the Hanford Air Operating Permit Renewal 2 and Revision A). The Order is attached as Exhibit F.

The EPA granted Claim 3B "... the Petitioner's request to object to the Hanford Title V Permit on the basis that Ecology's record is inadequate with respect to addressing Subpart A and H in the Hanford Title V Permit." The EPA also proposed a number of options that could be used to address this inadequacy. Additionally, the EPA clarified the scope of judicial review in a discussion under Claim 4.

Ecology and Health discussed the findings of the Order and selected to implement one of the suggestions in the Order. Ecology will "attach an addendum to the Hanford Title V Permit to correct any omissions or errors – if any – contained in the license with respect to Subpart A and H, since Ecology also has authority to enforce the NESHAP."

The Addendum will also be used to correct errors (if any) in Attachment 2 not related to Subpart A or H enforcement (e.g. administrative changes, State-Only requirements, etc.) if Health requests Ecology to add the correction to the Addendum.

This addendum to the Hanford Title V Permit is located in the Attachment 2 Section of the permit. The addendum contains requirements that the Permittee has to abide by in addition to the requirements in Attachment 2. Health will use the addendum in Attachment 2 to correct the underlying radiological air emission license(s) (RAEL) in the next revision of the Hanford RAEL (FF-01).

In the following "Response to Comments" section, responses that indicate information will be added or placed in the addendum to Attachment 2 indicates that Ecology has, in accordance with the advice from EPA, placed corrections to the license with respect to Subpart H in the addendum.

In the EPA Order, fifteen specific responses to the Hanford AOP Renewal 2 and the Hanford AOP Renewal 2, Revision A were identified. These specific comments were not part of the comments received during the public comment period for the Hanford AOP Renewal 2, Revision B. They have been added as responses 110-124 to respond to the objection raised by the EPA. The responses provided here are not the original responses (the responses the EPA objected to), but are new responses prepared under consideration of the EPA Order.

The previous response to comments are included as Exhibit G and Exhibit H.

LIST OF COMMENTERS

Commenter Identification:

The table below lists the names of organizations or individuals who submitted a comment on the Hanford Air Operating Permit modification and where you can find Ecology's response to the comment(s).

Commenter	Organization	Comment Number	Page Number
Johns, William	Citizen	1	5
Green, Bill	Citizen	2	5-6
Conlan, Mike	Citizen	3	6
Kaldor, Reed	Contractor to permittee	4	7
Green, Bill	Citizen	5 - 38	7-28
Poirier, Jeanne	Citizen	39	28
Vanni, Jean	Citizen	40	28
Integrated comments from USDOE	USDOE-RL and USDOE-ORP	41 - 71	29-35
Sanders, Beth	Citizen	72	36
Thorton, Dale	Citizen	73	36-37
Carpenter, Tom	Hanford Challenge	74 - 109	37-57
Various	Response to EPA Objection	110-124	57-64

RESPONSE TO COMMENTS

The Nuclear Waste Program accepted comments on the draft AOP from March 22 through April 24, 2015, with an extension to May 8, 2015. This section provides a summary of comments we received during the public comment period and our responses, as required by the <u>Revised Code of Washington (RCW) 34.05.325(6)(a)(iii)</u>.

Revision B of the AOP was considered by Ecology to be significant enough from a structural formatting basis that the entire AOP was opened for comment by the public. Requirements for many emission/discharge points did not change between Revision A and B, but the change in format and grouping would make it difficult to specify what did and what did not change.

It was decided to open the entire AOP, Revision B, to comments to minimize any potential confusion on the part of commenters. Responses 1 through 109 are on comments received for the complete Revision B of the Hanford AOP and comments 110 through 124 are from the Renewal 2 and Revision A of the Hanford AOP. Each comment is addressed separately.

Please refer to the References section of this document for Exhibits A through H. The Nuclear Waste Program's responses directly follow each comment in italic font. Verbatim copies of all written comments are attached in Appendix B.

Ecology has attached an addendum to the Hanford Title V Permit to correct an errors contained in the license with respect to Subpart A and H, since Ecology also has authority to enforce the NESHAP.

Comment # 1 from Bill Johns, dated March 23, 2015

"If we were building with paper everything would be done. Enough is enough. Diesels temp or permanent. You guys are making it impossible to complete anything with a reasonable cost and timeframe. Stop it!"

Ecology Response:

The Hanford Air Operating Permit (AOP) was created under rules and regulations to implement both the Federal Clean Air Act and the Washington Clean Air Act. Both Acts have numerous parts specific to certain industrial activities (e.g. coal fired power plant, cement kiln, etc.) or specific to types of emission units (e.g. stationary diesel engines). Both Acts also require the creation of a single Permit (the AOP) to contain all of the various and distinct permits a permittee is required to follow. This allows for the permittee, the regulatory agency, and the public to go to one Permit and determine requirements for the site.

Comment # 2 from Bill Green, emails dated March 25 to March 26, 2015

- 1. "I downloaded the documents supporting Revision B to the Hanford Site AOP and noticed the Attachment 2 file appeared unchanged from the version in Revision A. Ecology's public announcement stated the scope of Revision B included a new radioactive air emissions license. Would it be possible to get an electronic copy of Health's new license?
- Two of the reasons I am suspicious the included file for Attachment 2 was incorrect are:

 the date of the signature is August 30, 2013; and 2. the definitions from WAC 246-247
 on page 9/843 do not reflect Health's most current rulemaking where the definition of
 "license" was changed.
- 3. Ecology's announcement (Publication # 15-05-003) specifically states: "the Washington State Department of Health has issued a new radioactive air emissions license." The announcement strongly implies incorporating this new license is a major reason for the revision. Is Ecology's announcement correct?

Ecology Response:

- 1. Attachment 2 is indeed the new FF-01 license issued by the Department of Health.
- 2. The signature was not changed because the Department of Health only updates the signature page when they change general conditions. The Department of Health will examine their license process and evaluate the potential to update the license in some manner to reflect the effective or issue date of the license
- 3. Ecology's announcement is correct. The license in AOP Revision B is a revision (e.g. new) from the license in Revision A.

Comment # 3 from Mike Conlan, dated April 1, 2015

"It makes sense to have all the info for air emissions in one database - that really should have been done years ago - government does move at a snail's pace esp. w/pollution issues (lobbyists). Hanford:

- 1) completely clean the Hanford site -
- 2) don't allow anymore radioactive waste on Hanford -
- 3) get the radiation out of the ground water seeping into the Columbia"

Ecology Response:

- 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. 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 "air" emissions. Groundwater contamination is covered under other programs (e.g. CERCLA).

No changes to the Permit are required.

Comment # 4 from Reed Kaldor, representing USDOE, dated March 18, 2015

Thank you for the letter. One thing I noticed is that in the current version of the FF-01 license, EU 1419 in Table 2-1 is identified as J-969W1, I think it should have been J-696W1. This would keep the nomenclature similar to the stack nomenclature when it was EU 62 and make it easier to track the change in the future if needed. Probably not a big deal but I thought I would bring it to your attention

Ecology Response:

The commenter is correct. This correction will be placed in the Addendum to Attachment 2.

Comment # 5 from Bill Green, dated April 23, 2015 (Mr. Green comment #1)

Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.

The regulatory structure of this draft AOP is contrary to Clean Air Act (CAA) section $502(b)(5)(E)^1$ [42 U.S.C. 7661a (b)(5)(E)] and 40 C.F.R. 70.11 (a), because this structure does not provide Ecology, the sole permitting authority, with the legal ability to enforce all standards or other requirements controlling emissions of radionuclides, a hazardous air pollutant under CAA § 112 [42 U.S.C. 7412].

Ecology Response:

The commenter claims that Ecology, does not have adequate authority to enforce the radionuclide requirements in a license issued by Health that are part of an air operating permit. This issue was previously raised in inquiries to the United States Environmental Protection Agency (EPA) and the Washington State Department of Health. Those agencies responded to the inquiry in letters dated October 11, 2012, and July 16, 2010, which are attached as Exhibit A and B respectively.

This issue was also raised and responded to by the EPA in their order granting in part and denying in part two petitions for objection to permits (attached as Exhibit F).

Please see Exhibit A at page 1-4; Exhibit B at page 3, Issue 1; Exhibit F at pages 12 - 13 Claim 1.

No change in the AOP is required

Comment # 6 from Bill Green, dated April 23, 2015 (Mr. Green comment #2)

Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.

The regulatory structure used in this draft AOP does not allow Ecology, the sole permitting authority, to issue a Title V permit containing all standards or other requirements controlling emissions of radionuclides, a hazardous air pollutant under CAA § 112, contrary to Clean Air

Act (CAA) section 502 (b)(5)(A)¹ [42 U.S.C. 7661a (b)(5)(A)], 40 C.F.R. 70², and WAC 173-401³.

Ecology Response:

Please see the response to comment # *5.*

No change in the AOP is required.

Comment # 7 from Bill Green, dated April 23, 2015 (Mr. Green comment #3)

Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.

The regulatory structure used in this draft AOP does not allow Ecology, the sole permitting authority, to offer for public review AOP terms and conditions controlling Hanford's radionuclide air emissions, contrary to Clean Air Act (CAA) section 502 (b)(6)¹ [42 U.S.C. 7661a (b)(6)], 40 C. F.R. 70.7 (h)², RCW 70.94.161 (2)(a) & (7)³, and WAC 173-401-800⁴. Nor can Ecology provide for a public hearing on AOP terms and conditions controlling Hanford's radionuclide air emissions. Radionuclides are a hazardous air pollutant under CAA § 112.

Ecology Response:

Please refer to Exhibit A, last paragraph of page 5 and continued onto page 6; Exhibit B, Issue No.2, page 3-4; Exhibit C, page 2; and Exhibit F, page 23. The Exhibits specifically address the applicability of public notice requirements to underlying requirements.

The FF-01 license is completed by the Department of Health and sent as a unit to the Department of Ecology for inclusion into the Hanford Air Operating Permit (AOP) as an applicable requirement.

The mechanism to change the FF-01 license is not part of the AOP process under Washington Administrative Code 173-401. However, if a correction needs to be represented in the AOP to correct any errors or emissions contained in the license with respect to Subpart A or H, an addendum will be added to Attachment 2 of the AOP, as Ecology also has authority to enforce the NESHAP. The addendum will contain requirements that the Permittee will have to abide by in addition to the requirements of Attachment 2.

No change in the AOP is required.

Comment # 8 from Bill Green, dated April 23, 2015 (Mr. Green comment #4)

Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.

Contrary to Clean Air Act (CAA) section 502 (b)(6)¹ [42 U.S.C. 7661a (b)(6)], 40 C.F.R. 70.4(b)(3)(x) and (xii)², and WAC 173-401-735 (2)³, the regulatory structure used in this draft AOP to control Hanford's radionuclide air emissions does not recognize the right of a public commenter to judicial review in State court of the final permit action.

Ecology Response:

Please refer to Exhibit A, last paragraph of page 5 and continued onto page 6; Exhibit B, Issue No. 3, pages 4-5; Exhibit C, page 1; and Exhibit F, page 23.

The requirements of Health license issued under state law is appealable within the timeframe provided after the license is issued, but only the applicant or licensee can appeal under RCW 70.98.080, 70.98.130(3) and RCW 43.70.115. But, per the EPA Order (Exhibit F), bottom of page 24 - 25 and footnote 18, any conditions in the Health license that are used to address federal requirements are appealable to the PCHB at the time the AOP is issued/finalized.

No change in the AOP is required.

Comment # 9 from Bill Green, dated April 23, 2015 (Mr. Green comment #5)

Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.

The regulatory structure used in this draft AOP does not require pre-issuance review by a professional engineer or staff under the direct supervision of a professional engineer in the employ of the permitting authority for any term or condition controlling Hanford's radionuclide air emissions, contrary to RCW 70.94.161 (2)(a)¹ and WAC 173-400-700 (1)(b).

Ecology Response:

A requirement of pre-issuance professional engineer review isn't directly required for underlying conditions (e.g. FF-01 license). The underlying requirements to the Hanford Air Operating Permit (AOP) (e.g. Ecology Approval Orders, Health FF-01 License, etc.) have been finalized prior to revision of the AOP. This issue was addressed by the United States Environmental Protection Agency in Exhibit A, page 6, second full sentence which stated "...Part 70 cannot be used to revise or change applicable requirements."

The AOP incorporated all of the applicable requirements, was prepared by and engineer, and will be stamped by a licensed professional engineer in the State of Washington who is in the employ of the Department of Ecology.

No change in the AOP is required.

Comment # 10 from Bill Green, dated April 23, 2015 (Mr. Green comment #6)

Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.

In this draft Hanford Site AOP, regulate radionuclide air emissions in accordance with WAC 173-400 rather than in accordance with WAC 246-247. Radionuclides regulated as an applicable requirement under WAC 173-401, require pre-issuance review by the public, affected states, and EPA; are subject to judicial review by the Pollution Control Hearings Board; and can be

enforced by Ecology; all of which satisfy requirements of the Clean Air Act. Radionuclides regulated pursuant to WAC 246-247 cannot satisfy these CAA requirements.

Ecology Response:

Please see the response to Comment # 7, Comment # 8, Exhibit A, Exhibit B, Exhibit C, and Exhibit F.

No change in the AOP is required.

Comment # 11 from Bill Green, dated April 23, 2015 (Mr. Green comment #7)

Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.

In this draft Hanford Site AOP regulation of radionuclides is inappropriately decoupled from 40 C.F.R. 70 (Part 70). Regulation of radionuclides occurs pursuant to a regulation that does not implement Part 70, is not authorized by EPA to implement Part 70, and cannot be enforced by Ecology, the issuing permitting authority

Ecology Response:

Please refer to Exhibit A and Exhibit F.

No change in the AOP is required.

Comment # 12 from Bill Green, dated April 23, 2015 (Mr. Green comment #8)

Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.

Provide an accurate inventory of regulated air pollutants expected from Tank Farm point sources and fugitive sources that is consistent with the findings of the Hanford Vapor Report1.

Ecology Response:

Ecology does not question the data presented in the Hanford Tank Vapor Assessment Report (TVAR), but the applicability or relevancy of the data to the Federal Clean Air Act and the Washington Clean Air Act is not clear as the data is lacking important meta-data (e.g. where was the sample collected, how was the sample collected, what protocols were used for sample collection, etc.).

Ecology doesn't have access to the actual data presented in the TVAR and can only depend on the information as presented in the report. This raises a question on how relevant the data are for use in determining ambient air concentration data to be compared to acceptable source impact level (ASIL) values of Washington Administrative Code 173-460. WAC 173-460 is a State-Only requirement.

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The objective of the Hanford Tank Vapor Assessment Team is stated on page 12 of 153 of the TVAR as "WRPS asked the Savannah River National Laboratory (SRNL) to assemble and lead the Hanford Tank Vapors Assessment Team (TVAT) 2014 to determine the adequacy of the established WRPS program and prevalent site practices to protect **workers** from adverse health effects of exposure to the chemical vapors on the Hanford tank farms." [emphasis added]

Approval Orders incorporated into the AOP as applicable requirements were issued under the Clean Air Act (CAA) and its amendments regulating ambient air. Ambient air is defined in 40 CFR Part 50.1 (e) as "... that portion of the atmosphere, external to buildings, to which the general public has access." [emphasis added]

In addition, WAC 173-460-070 requires compliance with the state toxic air pollutant (TAP)s requirements to be demonstrated "in any area to which the applicant does not restrict or control access." The Hanford site is land owned or controlled by the source and to which general public access is precluded by a fence or other physical barriers.

The air at the Hanford Site doesn't qualify as ambient air. Therefore, the State TAP requirements need not be met within the boundaries of the Hanford Site. However, on-site personnel are covered by other laws, rules, and regulations in regards to their safety.

The Tank Farm emissions for double shell tanks (DSTs) in the original application for DSTs were based on a number of conservative assumptions designed to overestimate emissions:

- 1. The highest emission rate from any given tank for each toxic air pollutant (TAP) was assumed to be the emission rate for that pollutant for all tanks in the Double Shell Tank (DST) tank farm. This results in a 'worse case tank' in regards to TAPs emitted.
- 2. When a TAP had values below the laboratory detection limit, the laboratory detection limit was assumed to be the TAP's value.
- 3. Based upon mixer pump tests in DST 241-AZ-101, it was assumed the headspace concentrations increased by a factor of 10 during waste mixing activities.
- 4. The maximum per tank emission rate was multiplied by a factor of 10 for each assumed mixing tank and 1 for each quiescent tank.
- 5. The AY/AZ tank system has four tanks, so the multiplication factor was 22 (2 mixed tanks for 20 and 2 quiescent tanks for 2 more, yielding 22). However, the AP tank farm contains 8 tanks (2 mixed tanks and 6 quiescent tanks) for a multiplication factor of 26. As 26 is the more conservative value, 26 was used as the multiplication factor for all emissions from both the AY/AZ tank farm, the SY tank farm and the AP tank farm.

The concentrations of all of the TAPs were standardized to mg/m3 at 25°C to allow for uniformity and then multiplied by the flow rate from the tank (provided by the exhauster) and converted to a flux per tank in grams per second (g/s). The flux was multiplied by the dispersion factor determined from the approved modeling program to yield the maximum offsite concentration in μ g/m3. This value was directly compared to the Acceptable Source Impact Levels (ASIL) from Washington Administrative Code 173-460-150. The results indicated that dimethyl mercury was the only compound that had a calculated value in excess of the ASIL value (3.23E-08 μ g/m³ and 1.00E-99 μ g/m³ respectively). It was for this exceedance the permittee applied for a Tier 2 analysis.

The next two TAPs closest to exceeding an ASIL limit were n-Nitrosodimethylamine (2.17E-4 $\mu g/m_3 ASIL$ and 6.82E-5 $\mu g/m_3$ calculated) at ~ 31.4% of the ASIL and Chromium Hexavalent (6.40E-5 $\mu g/m_3 ASIL$ and 2.63E-5 $\mu g/m_3$ calculated) at ~38.8% of the ASIL.

Dimethyl mercury is the only compound exceeding the ASIL values in WAC 173-460. No certified instrumentation currently exists to provide real time monitoring of dimethyl mercury emissions. Instrumentation does exist for mercury emissions, but this instrumentation measures all of the mercury being emitted (as elemental mercury) and is not specific to dimethyl mercury. Therefore, using a mercury monitor would not be indicative of dimethyl mercury release values. In addition, elemental mercury has a distinct and different ASIL value from dimethyl mercury, and, while a mercury monitor would provide information relevant to the elemental mercury ASIL, it would not provide information relevant to the dimethyl mercury ASIL. Because real-time monitoring of dimethyl mercury is not possible, analysis of dimethyl mercury in the emissions would require collecting a sample, submitting the sample to a laboratory, waiting for analysis and notification of results, and then comparing the results to emission limits, a process that typically takes weeks or months. As this process isn't timely, it was deemed prudent to select a more readily measured compound to use as a surrogate for dimethyl mercury.

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. Consistent with this analysis, NOC approval order DE14NWP-001 Rev 3 uses measured emissions of ammonia to estimate emissions of dimethyl mercury. Thus Ecology is not considering all toxic air pollutants expected from the tank to be ammonia, but is using ammonia and the modeled ratio between ammonia and all other toxic air pollutants.

Ammonia was selected as a surrogate for dimethyl mercury as it:

- Can be directly measured using monitoring equipment.
- Is emitted from the tanks in concentrations facilitating measurement with a variety of instruments.
- Has EPA established sampling and analysis protocols.

Ecology used the ratio representation approach outlined above to use ammonia emission concentrations to determine the dimethyl mercury emission concentrations. The dimethyl mercury emission concentration from the dispersion modeling has a corresponding emission concentration for ammonia. It is this ammonia value that Ecology is using as a surrogate measurement.

As discussed above, the assumptions used in preparing the modeling for the applicable requirement was a conservative estimate and covers the emission levels presented in the TVAR. Therefore, no change is required to the Permit.

Comment # 13 from Bill Green, dated April 23, 2015 (Mr. Green comment #9)

Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.

Reopen Hanford's AOP in accordance with 40 C.F.R. 70.7 (f)(1)(iii) & (iv) and revise Tank Farm emission limits, monitoring, and sampling to be consistent with the regulated air pollutants expected pursuant to the Hanford Vapor Report (W.R. Wilmarth et al., Hanford Tank Vapor Assessment Report, SRNL-RP-2014-00791, Oct. 30, 2014)¹. The Hanford Vapor Report establishes that all previous estimates of emissions by the permittee understated both the number of regulated air pollutants and the concentration of these regulated air pollutants in Tank Farm emissions from both point sources and from fugitive sources. Absent an accurate assessment of emissions, Ecology cannot establish appropriate emission controls, emissions limits, and monitoring, reporting, and recordkeeping conditions that assure continuous compliance with requirements of the federal Clean Air Act (CAA).

Based on the findings in this report, the Washington State Attorney General served the U.S. Department of Energy and the responsible Hanford contractor with a Notice of Endangerment and Intent to File Suit (NOI) under the Resource Conservation and Recovery Act (RCRA). (NOI enclosed as Enclosure 3.) A second NOI regarding these same worker exposures was filed by Hanford Challenge, the Washington Physicians for Social Responsibility, and the United Association of Plumbers and Steamfitters, Local Union 598, the local union which represents the exposed workers

Ecology Response:

Please see response to comment # 12.

Additionally, as the commenter states, the Notice of Endangerment and Intent to File Suit (NOI) was issued under the Resource Conservation and Recovery Act (RCRA) for worker endangerment. It was not issued under the Clean Air Act because the CAA regulates ambient air and the workers are not in ambient air as explained in response to comment # 12.

No change to the permit is needed.

Comment # 14 from Bill Green, dated April 23, 2015 (Mr. Green comment #10)

Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.

Supply a *schedule of compliance*¹ as required by 40 C.F.R. 70.6(c)(3) and WAC 173-401-630 (3) for establishment of monitoring and for identification and control of emissions of previously unaccounted for *hazardous air pollutants* (HAPs) and *toxic air pollutants* (TAPs), including those associated with transient peaks in release rates from Tank Farm emissions units. Also, in

accordance with 40 C.F.R. 70.7 (h) and WAC 173-401-800, provide the public with the opportunity to review the schedule of compliance, and any resulting applicable requirements Ecology incorporates into the Hanford Site AOP.

Ecology Response:

Please see responses to comments # 12 and # 13.

Additionally, the underlying Notice of Construction Approval Orders incorporated into this AOP as applicable requirements considered the emissions for the discharge points covered by those NOCs. The impact to ambient air was evaluated at that time using modeled impacts to the ambient air from the best available sample data and application of conservative assumptions. From these evaluations Approval Orders were issued to the Permittee to operate the emissions points.

A schedule of compliance is not required because hazardous air pollutants (HAPs) and toxic air pollutants (TAPs) have not reached ambient air in concentrations requiring action or have already been assigned permit conditions in the underlying applicable requirement (e.g. NOC permit). WAC 173-460-150 is used with TAPs to determine when modeling is required. The processes in WAC 173-460 have been followed for NOC Approval Orders that have become incorporated into this AOP. HAPs are regulated via the NESHAPs, which are also incorporated into the AOP. As such, the requirements for HAPs and TAPs have been incorporated into the AOP, and the permittee is required to follow those requirements, so there is no need for a schedule of compliance.

No change to the permit is needed.

Comment # 15 from Bill Green, dated April 23, 2015 (Mr. Green comment #11)

Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.

Provide emission limits, and associated monitoring, reporting, and recordkeeping requirements sufficient to assure continuous compliance with any requirements for control of all regulated air pollutants anticipated by the Hanford Vapor Report¹ and expected from Tank Farm emissions units².

The word "person" is defined in the CAA without any association to any property boundary.

Additionally, criminal enforcement under 42 U.S.C. 7413 [CAA § 113] applies to harm suffered by a "person", without reference to the location of that "person" when harmed.

Ecology Response:

Please see responses to comments #12, #13, and #14.

Additionally, the requirements for monitoring, reporting, and recordkeeping is specific to each emission unit and related to the type of emission being monitored. Each emission unit has the appropriate monitor requirements in the issued approval order for that unit. These requirements

become part of the AOP monitoring, reporting, and record keeping requirements. As such, each emission unit is subject to appropriate monitoring, reporting, and recordkeeping emission data.

It is agreed that certain emission units have different points of compliance (e.g. opacity at the stack, HAPS and TAPS in ambient air, etc., but these are addressed in the NOC approval orders and the AOP.

The commenter points out that the federal Clean Air Act defines "person" without reference to the site boundary, and makes it a criminal offense to place a "person" in imminent danger, without reference to the location of that "person" when harmed, citing 42 USC 4713 [CAA § 113]. The commenter neglects to note that the provision cited, 42 USC 7413(c)(4) makes it unlawful for any person to "negligently release into the **ambient air** any hazardous air pollutant..." [emphasis added]. Ambient air has been defined previously (see comment # 13) and ambient air is a location. Thus, the CAA protects people located in ambient air.

Ecology agrees with the commenter that permits must "... be adequate to determine whether any hazardous air pollutant or extremely hazardous air pollutant released into the environment could harm any 'person'." But this requirement is applicable to ambient air and the current monitoring, reporting, and recordkeeping for the underlying requirement are adequate to meet this requirement.

No change in the permit is required.

Comment # 16 from Bill Green, dated April 23, 2015 (Mr. Green comment #12)

Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.

This draft Hanford Site AOP omits regulation of radon, the only radionuclide identified by name as a *hazardous air pollutant* in section 112 of the *Clean Air Act* (CAA).

Ecology Response:

Radon has not been overlooked. WAC 246-247-020 (4) and 40CFR61.91(a) (both referenced in the General Conditions of Attachment 2) allow the exclusion of naturally occurring radon and its respective decay products unless the concentrations or rates of emissions have been enhanced by industrial processes. This is the case at most of the Hanford site. However, where this is not the case, radon has been addressed. For example at the 325 building, which has a radon generator as part of its licensed process (see EU ID 361), radon emissions are tracked and reported. Also see Exhibit F page 26 - 29

No change in the AOP is required.

Comment # 17 from Bill Green, dated April 23, 2015 (Mr. Green comment #13)

Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.

This draft Hanford Site AOP overlooks the Columbia River as a source of Hanford's diffuse and fugitive emissions of radionuclides.

Ecology Response:

EPA has evaluated the claim that the Columbia River is a source of emissions of radionuclides and has stated from Exhibit F, page 28:

"With regard to the Petitioner's claim that the Columbia River should be regulated as a source of radionuclides in the Hanford Title V Permit, the Petitioner has not demonstrated that the permit unlawfully "overlooks the Columbia River as a source of diffuse and fugitive emissions of radionuclides" that must be regulated under the Hanford Title V Permit. By its terms, Subpart H applies to operations at DOE "facilities," which is defined as "all buildings, structures and operations on one contiguous site." 40 C.F.R. 61.91(b). The Columbia River is not a building, structure or operation and thus not part of the DOE facilities subject to Subpart H. Moreover, the Hanford Site is regulated as a "major source" under the title V program. "Major source" is defined in the Part 70 regulations in part as "any stationary source (or any group of stationary sources that are located on one or more contiguous or adjacent properties, and are under common control (or persons under common control))...." 40 C.F.R. § 70.2; see also W.A.C. 173-401-200(34). " Stationary source," in turn, is defined as building, structure, facility or installation that emits or may emit any regulated air pollutant or any pollutant listed under section 112(b) of the Act." 40 C.F.R. § 70.2; see also W.A.C. 173-401-200(19). The Petitioner has not demonstrated that the Columbia River is a stationary source under common control with DOE and we see no reason to conclude that it is part of the title V major source subject to the title V permit for the Hanford Site."

Ecology agrees with this evaluation.

No change in the AOP is required.

Comment # 18 from Bill Green, dated April 23, 2015 (Mr. Green comment #14)

Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.

Clarify *Section 4.6. Enforceability*. Federally-enforceable requirements include any requirement of the CAA, or any of its applicable requirements, including CAA § 116 [42 U.S.C. 7416] and any requirements in 40 C.F.R. 70.

Ecology Response:

Please see exhibit F, pages 15 and 16 for CAA § 116. Ecology agrees with the EPA on this issue.

Attachment 2 did not overlook the requirement where both a federal requirement and a state (or local) requirement apply to the same source, both must be included in the AOP.

Attachment 2 contains a section titled "DOE Federal Facilities 40CFR61 Subparts A, H, and WAC 246-247 Standard Conditions and Limitations" at the start of the Attachment. The

conditions in this section apply to all of the individual licenses on an emission unit basis and indicate the Federal and State only requirements.

Additionally, each emission unit will call out additional citations (Federal or State), as required, that apply to that particular emission unit.

As the citations are already listed as federally enforceable or "State only," no change in the permit is required.

Comment # 19 from Bill Green, dated April 23, 2015 (Mr. Green comment #15)

Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.

Specify the appeal process applicable to AOP terms and conditions in *Attachment 2* that are created and enforced by Health pursuant to RCW 70.98 and the regulations adopted thereunder.

Ecology Response:

The appeal process for the AOP is presented in section 4.12 of the Standard Terms and General Conditions and Attachment 2 is part of the AOP.

As discussed in the response to comment no. 8, any conditions in the Health license that are used to address federal requirements are appealable to the PCHB at the time the AOP is issued/finalized

No change in the AOP is required.

Comment # 20 from Bill Green, dated April 23, 2015 (Mr. Green comment #16)

Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.

State that changes allowed by sections 5.19 and 5.20 only apply to *Attachment 1* and *Attachment 3*. The statute and the regulation under which *Attachment 2* was created do not recognize either "Off-permit Changes" or "Changes Not Requiring Permit Revisions"

Ecology Response:

Ecology agrees. The language will be changed to:

5.19.1 The source shall be allowed to make changes to Attachment 1 not specifically addressed or prohibited by the permit terms and conditions without requiring a permit ..."

"5.20.1 Permittee is authorized to make the changes described in this section to Attachment 1 without a permit revision, providing the following conditions are met"

Comment # 21 from Bill Green, dated April 23, 2015 (Mr. Green comment #17)

Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.

After line 39 on page 28 add the phrase "or other such address as provided by Ecology". After the EPA address on page 29 add the phrase "or other such address as provided by EPA". These additions will avoid a technical violation should either Ecology or EPA change addresses during the term of the AOP

Ecology Response:

Ecology agrees. The language will be changed to:

On page 28, lines 33 and 34 "Notification shall be submitted to Ecology to the address below or as provided by Ecology:"

On page 28, line 41 "and EPA Region 10 to the address below or as provided by Ecology or EPA:"

Comment # 22 from Bill Green, dated April 23, 2015 (Mr. Green comment #18)

Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.

After Ecology's address, add the phrase "or other such address as provided by Ecology". After the EPA address, add the phrase "or other such address as provided by EPA". These additions will avoid a technical violation should either Ecology or EPA change addresses during the term of the AOP.

Ecology Response:

Ecology agrees. The language will be changed to:

On page 29, lines 30 and 31 "Notification shall be submitted to Ecology to the address below or as provided by Ecology:"

On page 29, line 38 "and EPA Region 10 to the address below or as provided by Ecology or EPA:"

Comment # 23 from Bill Green, dated April 23, 2015 (Mr. Green comment #19)

Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.

Missing from Table 1.4 are conditions from BCAA Administrative Order (AO) of Correction, No. 20030006, for control of fugitive dust from the Marshalling Yard. Requirements from this AO survive for at least as long as the Marshalling Yard exists. According to EPA, requirements in an AO are to be treated as "applicable requirements" under Title V that must be included in a source's AOP.

Ecology Response:

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 are found in the terms of the underlying requirement in Approval Order DE02NWP-002, Amendment 4. DE02NWP-002, Amendment 4 states a dust control plan shall be "developed and implemented." Additionally, the dust control plan "shall be made available to Ecology upon request."

This issue has also been heard and resolved by the Pollution Control Hearings Board. See Bill Green v. Ecology and Department of Energy, PCHB NO. 07-012, Summary Judgment Order (Aug. 22, 2007), pages 15 and 16. The Board noted:

"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 [dust control] 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."

No change in the AOP is required.

Comment # 24 from Bill Green, dated April 23, 2015 (Mr. Green comment #20)

Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.

Missing from the public review file is Dust Control Plan 24590-WTP-GPP-SENV-015, Revision 1, *Fugitive Dust Control*. Pursuant to 40 C.F.R. 70.7 (h)(2), all information Ecology deemed to be relevant by using it in the permitting process must be made available to support public review

Ecology thus acknowledges it utilized "24590-WTP-GPP-SENV-015, Revision 1, Fugitive Dust Control" in the permitting process. This plan should, therefore, have been included in the information provided to the public pursuant to 40 C.F.R. 70.7(h)(2) and *Sierra Club v. Johnson*, 436 F.3d 1269 (11the Cir. 2006)

Ecology Response:

Please see response to comment # 23.

In Sierra Club v. Johnson, the court determined that all information used by the permitting authority to develop the **air operating permit** must be made available to the public for public comment. The court did not require the permitting agency to make available to the public all information used to develop the underlying applicable requirements that are included in an air operating permit.

The dust control plan is the permittee's document and under their direct control. The permittee updates the dust control plan as required for activities being performed. As such, the dust control plan does not become a direct permit document in the AOP. Because the document is not directly

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in the AOP and wasn't used as supporting material in the issuance of the AOP, no requirement exists to provide the dust control plan for public review at this time.

Additionally, with the dust control plan requirements found in the terms of the underlying requirement to the Air Operating Permit (AOP) in Approval Order DE02NWP-002, Amendment 4, the information used and deemed relevant and used in the permitting process was included in the original public comment period.

No change in the AOP is required.

Comment # 25 from Bill Green, dated April 23, 2015 (Mr. Green comment #21)

Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.

Correct "emission units" to read "emissions unit". It is "Emissions unit" that is defined in WAC 173-401-200 (12).

Ecology Response:

Ecology offers the following explanation.

Ecology agrees the defined term in Washington Administrative Code (WAC) 173-401-200 (12) is "emissions unit." The statement was intended to convey to all of the multiple units on the site. Ecology will change the language from "emission units" to "emissions units"

Comment # 26 from Bill Green, dated April 23, 2015 (Mr. Green comment #22)

Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.

Delete the sentence beginning on line 9: "All emission units not identified in Section 1.4 Discharge Points that are subject to 40 CFR 61, Subpart H in Attachment 2, Health License, have been determined to represent insignificant sources of non-radioactive regulated air pollutants". Ecology can not use a permit to revise a regulation¹, specifically WAC 173-401-530 (2)(a).

Ecology Response:

The sentence was intended to convey that discharge points not listed in Section 1.4 do not need compliance certification for non-radiological emissions. As it appears the current language might cause some confusion, the second sentence of the paragraph will be changed to, "[f] or these emission units no additional monitoring, reporting, or recordkeeping is necessary beyond the requirements in Attachment 2."

For radiological emissions units, this sentence will guide the reader to Attachment 2 as the rest of the paragraph states.

Comment # 27 from Bill Green, dated April 23, 2015 (Mr. Green comment #23)

Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.

Re-evaluate Tank Farm emissions units¹ currently designated as insignificant emissions units (IEUs) based on requirements of WAC 173-401-530 (2)(a) and on findings in the Hanford Vapor Report².

In addition, all Tank Farm emissions units were permitted using characterization information that greatly underestimated both the number of chemicals in the expected emissions and the respective concentrations of these chemicals.

Ecology Response:

The Tank Farm emissions have not been categorically designated as insignificant emission units.

Section 1.4.25 and 1.4.26 are both permits for Tank Farm emissions units. Tank farm emissions have been and are evaluated against WAC 173-400, General Standards for Air Pollution Sources, to determine if they need to have a Notice of Construction Approval Order (permit) issued for their emissions.

For Tank Farm emissions requiring a permit or license, a permit or license is issued following the regulations of WAC 173-400 or WAC 246-247, respectively. Upon issuance, the permit or license becomes an applicable requirement and is added to the AOP.

No requirement exists on where in the AOP the underlying requirements must be located or addressed. Federally enforceable 40 CFR 61, Subpart A and H requirements are located in Attachment 2 of the AOP. As the requirements are in Attachment 2 of the AOP, they don't need to be in Attachment 1.

No permit change is required.

Comment # 28 from Bill Green, dated April 23, 2015 (Mr. Green comment #24)

Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.

Revise the emission limits, and requirements for monitoring, reporting, and recordkeeping for these discharge points (collectively "exhausters") to reflect findings in the Hanford Vapor Report¹. (*See* Enclosure 2)

Ecology Response:

Please see the responses to comments #12, #13, #14, and #15.

Ecology is not disputing the Hanford Tank Vapor Assessment Report, but its results are not directly applicable to Clean Air Act regulations and permits because, there is no evidence the

emissions identified in the Tank Vapor Assessment Report reach the ambient air above regulatory limits.

The units in question have been issued a permit conforming to the requirements of WAC 173-400. The permittee submitted a permit application for those units that gave the basis for the emission data, the conditions the units would operate under, and the concentration of toxic and hazardous air pollutants in ambient air. Where the concentration of toxic air pollutants exceeded the Acceptable Source Impact Level, the permittee installed abatement control device(s) or requested a second tier evaluation of the emissions (see WAC 173-460).

Federally listed hazardous air pollutants are not present in sufficient quantity to classify the Hanford Site as a major source of HAPs or trigger an NESHAP related Subparts. From this data and analysis, the permit conditions were developed. If evidence shows that these conditions are being violated, or that concentrations of HAPs or TAPS in the ambient air exceed those in the permit application, Ecology will take the appropriate actions.

The summation of all HAPs do not exceed major source limits and do not trigger any NESHAPs related to HAPs. As no additional requirements for HAPs, the underlying requirements already part of AOP are sufficient. As long as the Permittee complies with the Permit and the application conditions used to provide operating conditions, no need exists to revise the emission limits, or the requirements for monitoring, reporting, or recordkeeping.

No permit change is required.

Comment # 29 from Bill Green, dated April 23, 2015 (Mr. Green comment #25)

Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.

Address federally-enforceable requirements as specified in WAC 173-401-625, 40 C.F.R. 70.6 (b), and CAA § 116.

Ecology Response:

Please see the response for comment 18.

The Washington State Department of Health has not sought to avoid federal enforceability by incorporating federal requirements by reference. They have listed Federal and State-only requirements that apply to all licenses at the start of Attachment 2. Each individual emission unit will also list additional Federal or State-only requirements, as needed, in each specific emission unit.

The cited "state only enforceable: WAC 246-247-01094), 040(5), 060(5)" under the Abatement Technology section of an individual emission unit are for State-only requirements. The Federal regulations provide limits on emissions (e.g. effective dose equivalent of 10 mrem/yr), but doesn't provide specifics on abatement technology. If the Federal requirements did list abatement technology, this would be listed at the start of the permit as applicable to all emission units.

No change in the AOP is required.

Comment # 30 from Bill Green, dated April 23, 2015 (Mr. Green comment #26)

Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.

In *Attachment 2*, provide the specific monitoring, reporting, and recordkeeping requirements needed to demonstrate continuous compliance with each term or condition that appears in the annual compliance certification report required by 40 C.F.R. 70.6 (c)(5) and WAC 173-401-615 (5).

Ecology Response:

Note: There is no WAC 173-401-615(5). The monitoring, reporting, and recordkeeping requirements are found in WAC 173-401-615 (1) - (4), while compliance certification requirements are found in WAC 173-401-630(5).

The requirements for each emission unit in Attachment 2 contains reference to abatement technology and monitoring requirements. For abatement technology, the technology (e.g. HEPA) is required to be in place and functional. The Licensee is required to certify the compliance status.

When multiple methods of certifying compliance is acceptable, it isn't required to specify one particular method over another. As a result, the Licensee can select the method that best fits into their work practices to certify compliance. As the case with abatement technology either being in place and functional or not, the person in charge of that system can verify by statement.

For the monitoring requirements for each emission unit in Attachment 2, the regulatory citation, monitoring and testing requirements, radionuclides requiring measurement, and sampling frequency is all specifically listed. The Licensee most follow the monitoring and testing requirements on the radionuclides required to be measured at a frequency specified in the license.

Where specific monitoring conditions are required, these conditions have been specified in Attachment 2. Where various methods of compliance certification are acceptable, a specific method has not been selected in order to allow the licensee flexibility to select the best method for them.

As each term or condition in the permit provides adequate information for the licensee to certify annual compliance status as required, no change in the AOP is required.

Comment # 31 from Bill Green, dated April 23, 2015 (Mr. Green comment #27)

Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.

Track and report the total potential radionuclide emissions allowed from individual emissions units specified in *Attachment 2, Enclosure 1 Emission Unit Specific License*.

Ecology Response:

No regulatory basis exists to require the summation of potentials to emit.

40 CFR 61, subpart H (§ 61.92) sets the emission standard at an effective dose equivalent of 10 mrem/yr on actual emissions from the Site. It is the actual emissions (abated) from the Site that the Licensee certifies to have meet the 10 mrem/yr requirement, not the potential to emit.

It is important to note that the potential to emit is the theoretical unabated emissions from the Site. It is not the actual (regulated) emissions from the Site. Potential to emit is used to determine Federal and State-Only monitoring requirements. It is also used to determine State-Only abatement control requirements.

No change in the AOP is required.

Comment # 32 from Bill Green, dated April 23, 2015 (Mr. Green comment #28)

Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.

As required by 40 C.F.R. 70.7 (h)(2), provide the public with all information used in the permitting process to justify:

- adding six (6) new emission unit,
- removing nine (9) emissions units, and
- replacing about twenty-eight (28) Notice of Construction (NOC) orders of approval from the previous final version of *Attachment* 2¹, and restart public review.

Ecology Response:

In Sierra Club v. Johnson, the court determined that all information used by the permitting authority to develop the **air operating permit** must be made available to the public for public comment. The court did not require the permitting agency to make available to the public all information used to develop the underlying applicable requirements that are included in an air operating permit.

Attachment 2 is created under the authority of WAC 246-247 and provided to Ecology as a whole. Ecology accepts the FF-01 license "as-is" and incorporates it into the air operating permit. If any federally enforceable requirements are not in the FF-01 license (Attachment 2 of the Hanford AOP), Ecology will add them to the Hanford AOP in an addendum to Attachment 2 and the Permittee will have to abide by the addendum requirements in addition to the requirements in Attachment 2. Thus there is no requirement for Ecology to make available to the public all the information used by the Department of Health in developing the FF-01 license.

Nor does any requirement exist in WAC 246-247 for listing the changes in the FF-01 license. Even so, the Department of Health created a "Table of Changes" in the FF-01 License to provide a brief description of changes (starting on page 23 of Attachment 2) for the convenience of the reader even though it was not required to do so.

It is not necessary to restart the public comment and no change in the AOP is required.

Exhibit 3

Exhibit 3

Pages "Table of Changes from FF-01 12-10-14", *Statement of Basis, Hanford* 1-10 *Site Air Operating Permit, No. 00-05-006, Renewal 2, Revision B, Attachment 2 , Department of Health License*, Draft ver., pp. 23-31. Available at: <u>http://www.ecy.wa.gov/programs/nwp/permitting/AOP/renewal/two/Revision_B/Draf</u> t/SB-Att-2/SB-Att-2_R2RB.pdf

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Table of Changes from FF-01 12-10-14

Building	Type of Change	Affected Emission Unit	NOC ID/Title	Description of Changes	Date Changed	FF-01 Page Changes	AIR Letter # Authorizin g Change
Signature page of the FF-01	Corrected the titles of RCW 70.98, RCW 70.94 and WAC 246- 247 to the correct titles. This was done in response to public comment received through the	None		Corrected the titles of RCW 70.98, RCW 70.94 and WAC 246-247 to the correct titles. This was done in response to public comment received through the	8/30/2013	Page 1	
Hanford Site	Dept. of Ecology Enclosure 4 Air Monitoring Stations Updated	Enclosure 4 of the FF-01		Dept. of Ecology Ambient Air Monitors N550, N551, N577 removed. N910 E renamed with the designation N910 S (for south) instead of N910 E (for East) to reflect the relocation.	8/30/2013	Removed enclosure 4, pages 1- 3. Replaced with enclosure 4, pages 1- 3 footer dated 08/30/2013	AIR 12- 1002, AIR 13-202 and e-mail # 3486
WESF	Replacement of NOC	EU 340	NOC 649	Reinserted EU 340, During FF-01 renewal NOC 649 was incorrectly removed.	8/30/2013	Removed EU 340, page 1. Replaced with EU 340, pages 1-3 footer dated 08/30/2013	AIR 12-1204
331 Building	Removal of EU	EU 1180	NOC 787	Removed EU 1180. EU closed and no longer an emission source.	8/30/2013	Removed EU 1180, pages 1-24.	AIR 12-505
AY/AZ Tank Farms	Removal of EU	EU 1330	NOC 819, 832	Removed EU 1330. EU closed and not a source of emissions.	8/30/2013	Removed EU 1330, pages 1-2.	AIR 13-516

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Building	Type of Change	Affected Emission Unit	NOC ID/Title	Description of Changes	Date Changed	FF-01 Page Changes	AIR Letter # Authorizin g Change
AY/AZ Tank Farms	Removal of EU	EU 1331	NOC 819, 832	Removed EU 1331. EU closed and not a source of emissions.	8/30/2013	Removed EU 1331, pages 1-3.	AIR 13-516
242-A Evaporator	Removal of EU	EU 1294	NOC 864	Removed EU 1294. EU closed, remaining diffuse/fugitiv e emissions accounted for in EU 486.	8/30/2013	Removed EU 1294, pages 1-3.	AIR 13-607
242-A Evaporator	Removal of EU	EU 141		Removed EU 141. EU closed, remaining diffuse/fugitiv e emissions accounted for in EU 486.	8/30/2013	Removed EU 141, page 1.	AIR 13-607
ALARACT	Revised ALARACT	ALARAC T Revision		Removed ALARACT 02.1 replaced with ALARACT 02.2	8/30/2013	Removed ALARACT 02.1, pages 1-3. Replaced with ALARACT 02.2 pages 1-2, footer dated 08/30/2013	AIR 13-605
241 AY/AZ Tank Farms	Removed NOC 840 added NOC 901	EU 93	NOC 840 removed, NOC 901 added	NOC 840 replaced with NOC 901	8/30/2013	Removed EU 93, pages 1-7. Replaced EU 93 pages1-8, footer dated 08/30/2013	AIR 13-707
296-A-19 Annulus Exhauster	Modification of EU	EU 218	NOC 877	Modification of EU 218 from a minor emission source to a major emission source.	8/30/2013	Removed EU 218, page 1. Replaced with EU 218, pages 1-3 footer dated 8-30- 2013.	AIR 13-401

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Building	Type of Change	Affected Emission Unit	NOC ID/Title	Description of Changes	Date Changed	FF-01 Page Changes	AIR Letter # Authorizin g Change
222-S Laboratory	Replacement of NOC	EU 254	NOC 881	Removed NOC 831, replaced with NOC 881.	8/30/2013	Removed EU 254, pages 1-3. Replaced EU 254 with pages 1-4, footer dated 08/30/2013	AIR 13-306
200 Area Diffuse and Fugitive	Removal of NOCs and Addition of NOCs	EU 486	Remove d NOC 832, 840, 855, 858, 859. Added NOC 863, 879, 898.	Removed NOC 832, 855, 858, 859. Added NOC 863, 879 & 898.	8/30/2013	Removed EU 486, pages 1- 100. Replaced with EU 486, pages 1-100 footer dated 08/30/2013	AIR 13-607, AIR 13-807, AIR-12- 1001, AIR- 13-807
209-E Criticality Lab	Removal of EU	EU 210	NOC 858	Removed EU 210. EU transitioned to CERCLA regulation.	8/30/2013	Removed EU 210, pages 1-5	AIR 12-510
Decon Trailer (collection tank vents)	Removal of EU	EU 1187	NOC 844	Removed EU 1187. EU has been closed and is no longer a source of emissions.	8/30/2013	Removed EU 1187, Pages 1-2	AIR 13-802
Decon Trailer (intermittent powered Exhaust)	Removal of EU	EU 1186	NOC 844	Removed EU 1186. EU has been closed and is no longer a source of emissions.	8/30/2013	Removed EU 1186, Pages 1-2	AIR 13-802
241-U-301B Breather Filter	Replacement of NOC	EU 1129	NOC 897	Removed NOC 865, Replaced with NOC 897	8/30/2013	Removed EU 1129, pages 1-2. Replaced EU 1129 with pages 1-2 footer dated 08/30/2013	AIR 13-820

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Building	Type of Change	Affected Emission Unit	NOC ID/Title	Description of Changes	Date Changed	FF-01 Page Changes	AIR Letter # Authorizin g Change
241-AZ-154 Breather Filter	Replacement of NOC	EU 1130	NOC 896	Removed NOC 865, Replaced with NOC 896	8/30/2013	Removed EU 1130, pages 1-2. Replaced EU 1130 with pages 1-2 footer dated 08/30/2013	AIR 13-819
241-UX-302A Breather Filter	Replacement of NOC	EU 894	NOC 895	Removed NOC 865, Replaced with NOC 895	8/30/2013	Removed EU 894, pages 1-2. Replaced EU 894 with pages 1-2 footer dated 08/30/2013	AIR 13-818
240-S-302 Breather Filter	Replacement of NOC	EU 1232	NOC 894	Removed NOC 865, Replaced with NOC 894	8/30/2013	Removed EU 1232, pages 1-2. Replaced EU 1232 with pages 1-2 footer dated 08/30/2013	AIR 13-817
244-TX Annulus Breather Filter	Replacement of NOC	EU 969	NOC 889	Removed NOC 859, Replaced with NOC 889	8/30/2013	Removed EU 969, pages 1-2. Replaced EU 969 with pages 1-2 footer dated 08/30/2013	AIR 13-816
244-S Annulus Breather Filter	Replacement of NOC	EU 959	NOC 888	Removed NOC 859, Replaced with NOC 888	8/30/2013	Removed EU 959, pages 1-2. Replaced EU 959 with pages 1-2 footer dated 08/30/2013	AIR 13-815

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Building	Type of Change	Affected Emission Unit	NOC ID/Title	Description of Changes	Date Changed	FF-01 Page Changes	AIR Letter # Authorizin g Change
244-BX Annulus Breather Filter	Replacement of NOC	EU 922	NOC 887	Removed NOC 859, Replaced with NOC 887	8/30/2013	Removed EU 922, pages 1-3. Replaced EU 922 with pages 1-2 footer dated 08/30/2013	AIR 13-814
244-A Annulus Breather Filter	Replacement of NOC	EU 912	NOC 886	Removed NOC 859, Replaced with NOC 886	8/30/2013	Removed EU 912, pages 1-4. Replaced EU 912 with pages 1-2 footer dated 08/30/2013	AIR 13-813
244-TX Primary Breather Filter	Replacement of NOC	EU 744	NOC 885	Removed NOC 859, Replaced with NOC 885	8/30/2013	Removed EU 744 pages 1-3. Replaced EU 744 with pages 1-2 footer dated 08/30/2013	AIR 13-812
244-S Primary Breather Filter	Replacement of NOC	EU742	NOC 884	Removed NOC 859, Replaced with NOC 884	8/30/2013	Removed EU 742 pages 1-4. Replaced EU 742 pages 1-2 footer dated 8/30/2013.	AIR 13-811
244-BX Primary Breather Filter	Replacement of NOC	EU 740	NOC 883	Removed NOC 859, Replaced with NOC 883	8/30/2013	Removed EU 740, pages 1-4. Replaced EU 740 with pages 1-2 footer dated 08/30/2013	AIR 13-810

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Building	Type of Change	Affected Emission Unit	NOC ID/Title	Description of Changes	Date Changed	FF-01 Page Changes	AIR Letter # Authorizin g Change
244-A Primary Breather Filter	Replacement of NOC	EU 738	NOC 882	Removed NOC 859, Replaced with NOC 882	8/30/2013	Removed EU 738 pages 1-4. Replaced EU 1129 with pages 1-2 footer dated 8/30/2013.	AIR 13-809
Cold Vacuum Drying Facility	Emission Unit Removed from FF-01	EU 436	NOC 836	Emission unit has been removed from FF-01. Emission unit has been transitioned to CERCLA regulation.	9/18/2013	Removed EU 436 pages 1-6.	AIR 13-905
Hanford Sitewide type-1, type-2, type-3	Removed NOC 840	EU 447	NOC 840	Removed NOC 840. NOC 840 contained construction activities associated with EU 93 and are no longer needed.	10/2/2013	Removed EU 447, pages 1-14. Replaced with EU 447, pages 1-12, footer dated 10/02/2013	AIR 13-707
Hanford Site W-PORTEX 007	Removed NOC 840	EU 455	NOC 840	Removed NOC 840. NOC 840 contained construction activities associated with EU 93 and are no longer needed.	10/2/2013	Removed EU 455, pages 1-13. Replaced with EU 455, pages 1-9 footer dated 10-2- 2013	AIR 13-707
Hanford Sitewide Guzzler-001	Removed NOC 840	EU 476	NOC 840	Removed NOC 840. NOC 840 contained construction activities associated with EU 93 and are no longer needed.	10/2/2013	Removed EU 476, pages 1-25. Replaced with EU 476, pages 1-25 footer dated 10-2- 2013	AIR 13-707

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Building	Type of Change	Affected Emission	NOC ID/Title	Description of Changes	Date Changed	FF-01 Page	AIR Letter #
	J	Unit		<u> </u>	J	Changes	Authorizin g Change
241-AZ Tank Farm	Replacement of NOC	EU 751	NOC 863	Removed NOC 858. Replaced with NOC 863.	10/2/2013	Removed EU 751, pages 1-5. Replaced with EU 751, pages 1-3 footer dated 10/02/2013	AIR 12-1001
SX Farm Pore Water Extraction Test	New Emission Unit	EU 1391	NOC 904	New NOC 904	10/2/2013	Added EU 1391, pages 1-2 footer dated 10/02/2013	AIR 13-1001
Liquid Effluent Retention Facility (LERF)	Replacement of NOC	EU 146	NOC 911	Removed NOC 822. Replaced with NOC 911. New activitiy added.	12/10/201 4	Removed EU 146, pages 1-3 Replaced with EU 146 pages 1-5 footer dated 12- 10-2014	AIR 14-302
Liquid Effluent Retention Facility (LERF)	Replacement of NOC	EU 147	NOC 912	Removed NOC 822. Replaced with NOC 912. New activitiy added.	12/10/201 4	Removed EU 147, pages 1-3 Replaced with EU 147 pages 1-5 footer dated 12- 10-2014	AIR 14-303
Liquid Effluent Retention Facility (LERF)	Replacement of NOC	EU 148	NOC 913	Removed NOC 822. Replaced with NOC 913. New activitiy added.	12/10/201 4	Removed EU 148, pages 1-3 Replaced with EU 148 pages 1-5 footer dated 12- 10-2014	AIR 14-304
Effluent Treatment Facility (ETF)	Replacement of NOC	EU 301	NOC 905	Removed NOC 822. Replaced with NOC 905. New activitiy added.	12/10/201 4	Removed EU 301, pages 1-3 Replaced with EU 301 pages 1-5 footer dated 12/10/2014	AIR 14-305

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Building	Type of Change	Affected Emission Unit	NOC ID/Title	Description of Changes	Date Changed	FF-01 Page Changes	AIR Letter # Authorizin g Change
T Plant Complex	Approved removal of abatement controls.	EU 315	NOC 920	Removed NOC 829, Replaced with NOC 920	12/10/201 4	Removed EU 315, pages 1-7 Replaced with EU 315 pages 1-8 footer dated 12/10/2014	AIR 14-1001
Waste Encapsulation and Storage Facility (WESF)	Replacement of NOC	EU 340	NOC 649	Clerical error corrected NOC 649	12/10/201 4	Removed EU 340, pages 1-2 Replaced with EU 340 pages 1-2 footer dated 12/10/2014	AIR 06-1014 AIR 06-1067 AIR 12-1204
Central Waste complex	Replacement of NOC	EU 439	NOC 922	Removed NOC 654 Replaced with NOC 922. Permacon (EU 461) is still active under NOC 654.	12/10/201 4	Removed EU 439, pages 1-6 Replaced with EU 439 pages 1-6, footer dated 12/10/2014	AIR 14-908
200 diffuse/ fugitive emissions	Reinstate NOC	EU 486	NOC 856	Reinstate NOC 856. Mistakenly removed in last revision.	12/10/201 4	Removed EU 486, pages 1-97 Replaced with EU 486 pages 1-87 footer dated 12/10/2014	AIR 12-335 AIR 12-343
200 diffuse/ fugitive emissions	Reinstate NOC	EU 486	NOC 857	Reinstate NOC 857. Mistakenly removed in last revision.	12/10/201 4	Removed EU 486, pages 1-97 Replaced with EU 486 pages 1-87 footer dated 12/10/2014	AIR 12-336 AIR 12-343
200 diffuse/ fugitive emissions	Replacement of NOC	EU 486	NOC 915	Removed NOC 822, replaced with NOC 915. New activity added.	12/10/201 4	Removed EU 486, pages 1-97 Replaced with EU 486 pages 1-87 footer	AIR 14-306

Building	Type of Change	Affected Emission Unit	NOC ID/Title	Description of Changes	Date Changed	FF-01 Page Changes dated	AIR Letter # Authorizin g Change
						12/10/2014	
200 diffuse/ fugitive emissions	Replacement of EU	EU 486	NOC 932	Removed NOC 879. Replaced with NOC 932	12/10/201 4	Removed EU 486, pages 1-97 Replaced with EU 486 pages 1-87 footer dated 12/10/2014	AIR 14-910
200 diffuse/ fugitive emissions	Addition of new activity for 218-E-12B Management of Radiological Contaminatio n at Trench 94	EU 909	NOC 917	Added NOC 917	12/10/201 4	Added EU 909 pages 1-6 footer dated 12/10/2014	AIR 14-1008
300 Diffuse/Fugitiv e Emissions	Replacement of NOC	EU 1185	NOC 921	Removed NOC 862. Replaced with NOC 921. New activity added.	12/10/201 4	Removed EU 1185, pages 1-2 Replaced with EU 1185 pages 1-4 footer dated 12/10/2014	AIR 14-509
242-A- Evaporator	Reinstatement of EU	EU 1294	NOC 933	Removed NOC 864. Replaced with NOC 933	12/10/201 4	Removed EU 1294, pages 1-3 Replaced with EU 1294 pages 1-3 footer dated 12/10/2014	AIR 14-911
331 LIFE SCI LAB	New Emission Unit	EU 1370	NOC 906	New License. The Operation of EP-331-09- S in the North Wing at the Life Sciences Laboratory (331 Building) issued under NOC 906	12/10/201 4	Added EU 1370 pages 1-28 footer dated 12/10/2014	AIR 13-1008

12/10/2014

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Building	Type of Change	Affected Emission Unit	NOC ID/Title	Description of Changes	Date Changed	FF-01 Page Changes	AIR Letter # Authorizin g Change
Tank Farms	New Emission Unit	EU 1371	NOC 899	New activity. Added NOC 899	12/10/201 4	Added EU 1371 pages 1-3 footer dated 12/10/2014	AIR 13-1107
Tank Farms	New Emission Unit	EU 1384	NOC 908	New activity. Added NOC 908	12/10/201 4	Added EU 1384 pages 1-3 footer dated 12/10/2014	AIR 13-1106
Tank Farms	New Emission Unit	EU 1406	NOC 914	New activity. Added NOC 914	12/10/201 4	Added EU 1406 pages 1-2 footer dated 12/10/2014	AIR 14-301
WSCF	New Emission Unit	EU 62 changed to EU 1419	NOC 820	Change in status from point source to fugitive emission unit.	12/10/201 4	EU 1419 to Table 2-1 EU 62 will be removed on next revision of FF-01	Per RAES Managers
ALARACT	Revised ALARACT	ALARAC T 02		Removed ALARACT 02.2 replaced with ALARACT 02.3	12/10/201 4	Removed ALARACT 02.2, pages 1-2. Replaced with ALARACT 02.3 pages 1-2, footer dated	AIR 14-611

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2 7.0 CERCLA APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS

3 **CERCLA Substantive Requirements -- Applicable or Relevant and Appropriate**

4 **Requirements**

5 [WAC 246-247-040]

6 Regulations promulgated under statutory authority other than the FCAA (e.g., RCRA and CERCLA)

7 are not Title V applicable requirements and are not included in the license. In addition, actions taken

8 pursuant to CERCLA are exempt from permitting. However, the actions taken must meet the

9 substantive requirements of applicable or relevant and appropriate requirements (ARARs) (e.g., WAC

10 246-247-040, ALARACT). Characterization and cleanup activities are being conducted at Hanford

11 pursuant to CERCLA. The characterization and cleanup activities are applying best available

12 radionuclide control technology to control emissions, and emissions are being monitored to ensure that

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Exhibit 4

Exhibit 4:		
	Page 1	Page 1284 from Sierra Club v. Johnson, 436 F.3d 1269,
		(11th Cir. 2006).
	Page 2	Page 22 from U.S. Department of Energy-Hanford
		Operations, Benton County, Washington, Order on Petitions
		X-2014-01 and X-2013-01 (May 29, 2015).
		Available at:
		http://www.epa.gov/region07/air/title5/petitiondb/petitions/hanford_response2014.pdf

Exhibit 4, Petition to object to Hanford's Title V permit

suance of draft Title V permits requires state permitting authorities to give notice of:

the name, address, and telephone number of a person from whom interested persons may obtain additional information, including copies of the permit draft, the application, all relevant supporting materials, ... and all other materials available to the permitting authority that are relevant to the permit decision

*1284 40 C.F.R. § 70.7(h)(2) (emphasis added). This issue involves a dispute over what constitutes information "relevant to the permit decision" for purposes of this regulation. Id.

EPA has approved, and thereby adopted as its own, Georgia EPD's position that the regulation allows a permitting authority to make available to the public only the information that it has actually used in the permit review process. The problem, according to the Sierra Club and Georgia Forestwatch, is that additional relevant information is kept at the Title V facilities; the public has no access to this information; and Georgia EPD may, and often does, choose not to review it. For example, monitoring data is often kept at the facilities, and facilities' risk management plans, if they exist, are housed at the Risk Management Plan Reporting Center in Virginia. Georgia EPD may choose not to use these materials in developing the draft permits.

The Sierra Club and Georgia Forestwatch argue that the plain language of 40 C.F.R. § 70.7(h)(2) requires public access to all information that is relevant and available to the permitting authority-not just the information that the permitting authority deems relevant and actually uses in its permitting review process. Georgia EPD's public notice makes available for review the draft permit and all of the materials that it actually used to develop the permitnot all of the materials that it could have used.

Again we are considering EPA's interpretation of its own regulations, and again we apply a deferential standard of review. See Legal Envtl. Assistance

Found., 276 F.3d at 1262 (giving the agency's interpretation "controlling weight," "even if this interpretation is not the best or most natural one by grammatical or other standards") (citations and quotation marks omitted). 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. EPA argues that Sierra Club's contrary interpretation of the regulation would place no boundaries on the scope of the "relevant" material that a permitting authority would have to produce, and that a citizens' group would inevitably claim a violation of § 70.7(h)(2) if the permitting authority excluded any requested information.

EPA's interpretation of § 70.7(h)(2) may not be the one that we would have chosen, but it is not contrary to the plain meaning of the language. Nor can we say that EPA's interpretation is unreasonable. The regulation does not detail what materials are "relevant to the permitting decision" and does not specify who gets to decide. Therefore, we conclude that EPA did not abuse its discretion or act arbitrarily or capriciously in refusing to object to the four permits based on the failure of Georgia EPD to provide the public during the comment period with information about the facilities that it, as the permitting authority, did not consider.

VI.

Insofar as it concerns the King Finishing facility, we GRANT the petition for review, VACATE the EPA's order, and REMAND the case to EPA for further consideration consistent with this opinion, based on Georgia EPD's failure to use a mailing list for public notification during the comment period. In all other respects, we DENY the petitions for review.

C.A.11,2006. Sierra Club v. Johnson Washington has identified R.C.W. Ch. 70.98, NERA and the regulations adopted thereunder, as an "applicable requirement" under its title V operating permit program. *See* W.A.C. 173-401-200(4)(d); *see also* R.C.W. 70.94.161(10)(d) (stating that "every requirement in an operating permit shall be based upon the most stringent of the following requirements," and including R.C.W. Ch. 70.94 and the rules adopted thereunder). The two letters relied on by Ecology in its response to comment on the Hanford Title V Permit make the point that there is no requirement under title V or part 70 that Ecology or Health provide an opportunity for public comment on a license issued under R.C.W. Ch. 70.98 and W.A.C. Ch. 246-247, which Ecology has determined is required to be included in the title V permit for Hanford as a matter of state law. *See* W.A.C. 246-247-002(6). The EPA continues to agree with this conclusion.

Ecology's response, however, is inconsistent with the fact that Subpart H is defined as a federal applicable requirement under part 70 (*see* 40 C.F.R. § 70.2) and under Ecology's title V operating permits program (*see* R.C.W. 70.94.161(10)(a) and W.A.C. 173-401-200(4)(a)(iv)). Title V and the part 70 regulations, as well as Ecology's title V regulations, do require a public comment opportunity on how Subpart H is addressed for a particular source in a particular title V permit. In other words, while the underlying requirements of Subpart H are not subject to public comment under title V, the application of Subpart H to a particular source is. This question was not addressed by the letters referred to by Ecology, and Ecology's reliance on these letters to respond to comments on the application of Subpart H to the Hanford Site in the Hanford Title V Permit is misplaced.

There are several ways Ecology can address the CAA requirements regulating radionuclides (specifically Subpart H) under its existing statutory and regulatory scheme consistent with the public participation requirements of title V of the CAA and Ecology's title V operating permit program. For example, Ecology could attach an addendum to the Hanford Title V Permit to correct any omissions or errors - if any - contained in the license with respect to Subpart H, since Ecology also has authority to enforce the NESHAP. Health could also defer final issuance of the NERA license until Ecology completes a public participation process on a draft title V permit for the Hanford Site that includes a draft NERA license as an attachment to the title V permit so that any public comments on the draft title V permit that relate to how Subpart H is addressed in the license and as an attachment to the title V permit can be addressed by Ecology (with assistance from Health) in responding to comments on the draft title V permit. Alternatively, if the NERA license is final when Ecology includes the license as an attachment to the draft title V permit that is put out for public comment, Ecology could work with Health in responding to the substance of any comments that relate to how Subpart H is addressed in the title V permit (including the license as an attachment). To the extent a public comment raises an issue that requires a revision to the license before issuance of a title V permit that meets the requirements of the CAA and Ecology's title V program with respect to Subpart H, and Ecology believes it does not have authority to make those revisions in the title V permit itself, Ecology could defer issuance of the title V permit until the license is revised and can be included as an attachment to the final title V permit. Under this latter option, however, Ecology would also need to be mindful of the timeframes for permit issuance under title V of the CAA and Ecology's title V operating permits program. The EPA observes that there may be other ways that Ecology and Health could collaborate to adapt the licensing and permitting processes to ensure that Hanford Title V Permit is revised as necessary in response to any significant comments on federal