

Response to Comments

Exhauster System Change for Hanford's 241-AY/AZ Tank Farms

November 10 – December 13, 2013

Summary of a public comment period and responses to comments

PUBLICATION AND CONTACT INFORMATION

This publication is available on the Department of Ecology's website at <https://fortress.wa.gov/ecy/publications/SummaryPages/1405014.html>

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Nuclear Waste Program
3100 Port of Benton Boulevard
Richland, WA 99354

Phone: 509-372-7950
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Washington State Department of Ecology - www.ecy.wa.gov

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

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 Public Comments

Exhauster System Change for Hanford's 241-AY/AZ Tank Farms November 10 – December 13, 2013

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

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INTRODUCTION

The Washington State Department of Ecology's Nuclear Waste Program (NWP) regulates air pollution sources at the Hanford Site through a permit. The Hanford Air Operating Permit ensures Hanford's air emissions stay within safe limits that protect people and the environment.

The permittee is the U.S. Department of Energy (USDOE) Office of River Protection. The permit is for USDOE's Hanford Site in south-central Washington, north of Richland.

Activities at Hanford's tank farms require occasional changes to the permit as the permittee improves ventilation systems or installs new equipment to support management and retrieval of waste in the underground storage tanks. Through Approval Orders, the permittee can seek, and Ecology can approve, certain changes that are later incorporated into the Hanford Air Operating Permit.

This Response to Comments is the last step before issuing the approval order, and its purpose is to:

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

This Response to Comments is prepared for:

Comment period: Exhauster System Change for Hanford's 241-AY/AZ Tank Farms
November 10 – December 13, 2013

Permit: *Draft Approval Order DE11NWP-001, Approval of Criteria and Toxic Air Emissions Notice of Construction (NOC) Application for the Operation of the 241-AP, 241-SY, and 241-AY/AZ Tank Farm Ventilation System Upgrades*

Original issuance date: November 30, 2011

Effective date: July 24, 2014

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

REASONS FOR ISSUING THE APPROVAL ORDER

At the Hanford Site, USDOE is engaged in a multibillion-dollar cleanup effort to address the waste resulting from decades of plutonium production. Much of the waste to be cleaned up is stored in underground tanks near the center of Hanford, several miles from any residence or agricultural land.

This Approval Order addresses the ventilation system at the 241-AY/AZ tank farms (groups of tanks). The USDOE is seeking to increase the flow from the fan in the 241-AY/AZ exhauster system. The emission levels would still be below regulatory limits.

Two years ago, Ecology approved installing new ventilation systems at three tank farms, including the 241-AY/AZ tank farm. But USDOE did not install the system at 241-AY/AZ, and now they want to change the existing system instead.

There is no change in the estimated emissions as a result of the proposed change. The only change is to the dispersion factors, since the stack height and flow rate would increase. The current approved emissions are 3.2 tons a year for volatile organic compounds and 60.8 pounds a year for ammonia.

PUBLIC INVOLVEMENT ACTIONS

NWP encouraged public comment on the proposed changes for the exhauster system at the 241-AY/AZ tank farms during a 30-day public comment period held November 10 through December 13, 2013.

NWP placed a legal classified advertisement in the *Tri-City Herald* on Sunday, November 10, 2013. A notice announcing the start of the comment period was sent to the [Hanford-Info email list](#), which then had 1,238 recipients.

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

- Public notice
- Application
- Draft Permit DE11NWP-001, Rev 1
- Letter to permittee announcing comment period
- Current permit
- Independent Cooling Module Condensate letter
- Permittee response to request for waste designation of condensate
- State Environmental Policy Act (SEPA) Determination of Nonsignificance
- SEPA checklist

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

LIST OF COMMENTERS

The table below lists the names of organizations or individuals who submitted a comment on the proposed 241-AY/AZ tank farms draft Notice of Construction and where you can find Ecology's response to the comment(s).

Commenter	Organization	Comment Number	Page Number
Bill Johns	Citizen	1	3
Guy Steen	Citizen	2	3

Bill Green	Citizen	3-12	3-6
U.S. Department of Energy	Permittee	13-17	6-7

RESPONSE TO COMMENTS

The NWP accepted comments on the draft Notice of Construction Approval Order from November 10 through December 13, 2013.

This section provides a summary of the comments we received during the public comment period and our responses, as required by RCW 34.05.325(6)(a)(iii).

Comments are grouped by individual, and each comment is addressed separately. The NWP's responses directly follow each comment in italic font. Verbatim copies of all written comments are attached in [Appendix B](#).

Comment #1 from Bill Johns, Citizen, dated December 13, 2013

"I support the permit change for the exhauster system at hanford (sic) 241-AY/AZ Tank Farm as a needed change."

Ecology Response:

No objection to issuance of Approval Order exists.

Comment #2 from Guy Steen, Citizen, dated November 11, 2013

"There seems to have been an increase in the number of noticeable vapor issues already in the East tank farm area this year.

Increasing flow rates, I feel, would require farm areas to be more actively monitored for workers safety.

I know there is technology is available to real time monitor the area. It would seem prudent to provide such monitoring if the flow rates are to increase.

I would like to see a requirement that provides real time monitoring for workers being task to be in the area."

Ecology Response:

This Approval Order is being 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."

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. As the Hanford Site doesn't qualify as ambient air, the CAA isn't applicable; but on-site personnel are covered by other laws, rules, and regulations in regards to their safety.

No change is required.

Comment #3 from Bill Green, Citizen, dated December 10, 2013

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 Appendix B.

“Both this draft order and the associated application overlook actual and potential radionuclide air emissions expected from the 241-AP, the 241-SY, and the 241-AY/AZ ventilation system upgrades. Anticipated emissions from these upgrades almost certainly have the potential to discharge radionuclides into the air in quantities which could cause an effective dose equivalent in excess of 1% of the standard specified in 40 C.F.R. 61 subpart H.”

Ecology Response:

WAC 173-400-113(1) states that Ecology may issue an NOC order of approval for a new or modified source in an attainment area only if Ecology determines that the proposal will comply with federal NSPS and NESHAPs. The provision does not say the NOC order of approval must include conditions requiring compliance with the NSPS and NESHAPs.

In this case, Ecology determined that the conditions in the Department of Health license (Emission Unit ID: 93 of FF-01 and Attachment 2 of the Hanford Air Operating Permit) would ensure that the project would comply with the applicable NESHAP, 40 CFR part 61, subpart H. This analysis satisfies the requirement in WAC 173-400-113(1).

No change is required.

Comment #4 from Bill Green, Citizen, dated December 10, 2013

“Provide a reporting requirement for ammonia stack sampling information.”

Ecology Response:

An error in number was noted by the U.S. Department of Energy (USDOE) (see Comment #14). Correcting the numbering error provides the correct references for reporting requirements. The requested requirements are located in 1.4.5.

No change is required.

Comment #5 from Bill Green, Citizen, dated December 10, 2013

“Condition 1.1.4 establishes specific pounds-per-day limits on ammonia emissions, yet confirmatory monitoring is only required quarterly (Section 3.4). Continuous compliance with specific daily limits cannot be demonstrated by taking quarterly measurements. Require monitoring and reporting sufficient to verify continuous compliance with Condition 1.1.4.”

Ecology Response:

The commenter may be confusing the requirement for continuous compliance with a requirement for continuous monitoring. Here, the requirement is for continuous compliance, not continuous monitoring.

The approval Order provides adequate documentation of operating conditions coupled with verification sampling to show continuous compliance.

No change is required.

Comment #6 from Bill Green, Citizen, dated December 10, 2013

“Provide monitoring and reporting sufficient to ensure continuous compliance with Condition 1.2.1.

Condition 1.2.1 sets both normal and maximum allowable ventilation rates for each of the three (3) primary tank ventilation exhauster systems, the 241-AP Tank Farm ventilation system, the 241-SY Tank Farm ventilation system, and the 241-AY/AZ Tank Farm ventilation system.

However, monitoring of these flow rates is only required annually. Annual monitoring cannot ensure a maximum ventilation rate is never exceeded at any point-in-time during the year. While there is a recordkeeping requirement for condition 1.2.1, there is insufficient monitoring and reporting to demonstrate continual compliance with this condition.”

Ecology Response:

Please see response to Comment #5.

Comment #7 from Bill Green, Citizen, dated December 10, 2013

“Provide monitoring and reporting requirements sufficient to ensure continuous compliance with the Condition 1.2.2 requirement that “[a]t no time shall more than two of the three tanks in the 241-SY tank farm (241SY-101 through 241-SY-103) be under active mixing and Waste Feed Delivery operations”. (emphasis added)

Continuous compliance (“at no time shall”) mandates continuous monitoring or use of some parametric requirement whereby continuous compliance is certain. There is no certainty attached to allowing USDOE to determine the monitoring and reporting requirements.”

Ecology Response:

Please see response to Comment #5.

Comment #8 from Bill Green, Citizen, dated December 10, 2013

“Provide monitoring and reporting requirements sufficient to ensure continuous compliance with the Condition 1.2.3 requirement that “[a]t no time shall more than two of the eight tanks in the 241-AP Tank Farm (241-AP-101 through 241-AP-108) be under active mixing and Waste Feed Delivery”. (emphasis added)

Continuous compliance (“at no time shall”) mandates continuous monitoring or use of some parametric requirement whereby continuous compliance is guaranteed. There is no such guarantee when Ecology allows USDOE to use whatever monitoring and reporting requirements USDOE wishes.”

Ecology Response:

Please see response to Comment #5.

Comment #9 from Bill Green, Citizen, dated December 10, 2013

Provide monitoring, recordkeeping, and reporting requirements sufficient to ensure continuous compliance with the Condition 1.2.4 requirement that “[a]t no time shall more than two of the four tanks within the 241-AY and 241-AZ Tank Farms [241-AY-101, 241-AY-102, 241-AZ-101, and 241-AZ-102] be under active mixing and Waste Feed Delivery operations.”

The unspecified content of required operational records fails to ensure continuous compliance. Ecology cannot allow USDOE to figure out what monitoring is needed, or what records it needs to keep, and when, or if, reporting is warranted. It is Ecology’s responsibility to specify detailed monitoring, reporting, and recordkeeping requirements sufficient to demonstrate continuous compliance with this condition.

Ecology Response:

Please see response to Comment #5.

Comment #10 from Bill Green, Citizen, dated December 10, 2013

In conditions 3.1.1 and 3.4 specify that both the baseline measurements and the follow-on measurements for ammonia will include individual measurements from each of the three (3) ventilation systems (241- AP, 241-SY and 241-AY/AZ). As conditions 3.1.1 and 3.4 are written, USDOE is only required to take a total three (3) measurements, and these three (3) measurements can be from a single ventilation system.

Ecology Response:

Section 3.0 of the Approval Order states the term “each exhauster system” herein, shall mean each primary tank ventilation exhauster. Section 3.1.1 and 3.4 as subsections of 3.0 require the conditions apply to “each exhauster system.”

No change is required.

Comment #11 from Bill Green, Citizen, dated December 10, 2013

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 Appendix B.

Conditions 2.4, 2.5, 3.3, 5.1, and 5.5 require, in part, USDOE provide certain records to Ecology. These records must also be provided to the public. Ecology is hereby requested to obtain these records and make them available to the public on Ecology’s website.”

Ecology Response:

The commenter’s comment is a Public Disclosure Request. Ecology requests the commenter submit a formal Public Disclosure Request following the process at <http://www.ecy.wa.gov/services/disclosure/disclose.html>

No change is required.

Comment #12 from Bill Green, Citizen, dated December 10, 2013

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 Appendix B.

“This order cannot be administratively amended into the Hanford Site air operating permit (AOP) because the notice of construction application was not processed in accordance with WAC 173-400-111 (2)”

Ecology Response:

Ecology agrees

No change is required.

Comment #13 from U.S. Department of Energy, Permittee, dated December 11, 2013

“Inclusion of this new Finding in the draft revised approval order is unnecessary and inappropriate. The initial description of the closed loop independent cooling module (ICM) in the original notice of construction (NOC) revision application was included for informational purposes only. Even if it had been retained in the project design, the ICM would have no impact on the potential emissions from the tank ventilation system and would not be considered abatement technology. The decision to not construct ICM at this time does not need to be reflected in the revised approval order. If Ecology needs to document the removal of the ICM

from the original application, it would be appropriate to do so as part of the responsiveness summary or via a fact sheet, etc. Any future decision to reexamine the need for an ICM will logically include an evaluation of whether such change constitutes a modification and whether there is even a need for another NOC application per WAC 173-400-110.”

Ecology Response:

Ecology offers the following.

The ICM was included in the original application and section 5.0 General Conditions incorporates the application into the Approval Order. Specific exclusion of the ICM as a result of additional correspondence between USDOE and Ecology is addressed in Finding 10. Finding 10 will be changed to read “The proposed installation of an optional portable closed loop independent Cooling Module (ICM) has been retracted and is not part of the application being considered.”

Comment #14 from U.S. Department of Energy, Permittee, dated December 11, 2013

“There are two sections numbered 1.1.”

Ecology Response:

Ecology agrees and will correct the number.

Comment #15 from U.S. Department of Energy, Permittee, dated December 11, 2013

“There are a number of references to prior conditions that need to be revised to accurately reflect the renumbering required to address comment USDOE-02 above.”

(Ecology Note: USDOE-02 is a reference to Ecology response #14)

Ecology Response:

Ecology agrees and will correct the references.

Comment # 16 from U.S. Department of Energy, Permittee, dated December 11, 2013

“There are a number of references to prior conditions that need to be revised to accurately reflect the renumbering required to address comment USDOE-02 above.”

(Ecology Note: USDOE-02 is a reference to Ecology response #14)

Ecology Response:

Ecology agrees and will correct references.

Comment #17 from U.S. Department of Energy, Permittee, dated December 11, 2013

“There is a reference to a prior condition that needs to be revised to accurately reflect the renumbering required to address comment USDOE-02 above.”

(Ecology Note: USDOE-02 is a reference to Ecology response #14)

Ecology Response:

Ecology agrees and will correct references.

APPENDIX A: COPIES OF ALL PUBLIC NOTICES

Public notices for this comment period:

1. Public notice (focus sheet).
2. Classified advertisement in the *Tri-City Herald*.
3. Notices sent to the Hanford-Info email list.

Exhauster System Change for Hanford's 241-AY/AZ Tank Farms

The Department of Ecology invites you to comment on a permit change for the exhauster system at the 241-AY/AZ tank farms.

The tank farms (groups of tanks) are in Hanford's 200 East Area, which is near the center of the Hanford Site, and several miles from any agriculture or residence.

The U.S. Department of Energy (USDOE) is seeking to increase the flow from the fan in the 241-AY/AZ exhauster system. The emission levels would still be below regulatory limits.

Two years ago, Ecology approved installing new ventilation systems at three tank farms. But USDOE didn't install the system at 241-AY/AZ, and now they want to change the existing system instead.

The permit regulates air emissions from the ventilation systems at Hanford's tank farms. The formal name for this change to the permit is "approval order for notice of construction."

There is no change in the estimated emissions as a result of the proposed change. The only change is to the dispersion factors, since the stack height and flow rate would increase. The current approved emissions are 3.2 tons a year for volatile organic compounds and 60.8 pounds a year for ammonia.

Information for public review

Ecology invites you to review and comment on the documents that inform our decision to approve the emissions increase. They are online and at locations listed in the box on page 2.

- The application letter.
- Draft approval order, conditions, and restrictions.
- *State Environmental Policy Act* documentation.

WHY IT MATTERS

The permit ensures Hanford's air emissions stay within safe limits that protect people and the environment.

PUBLIC COMMENT PERIOD

November 10 – December 13, 2013

TO SUBMIT COMMENTS

Send comments or questions by e-mail (preferred), U.S. mail, or hand deliver them to:

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

Hanford@ecy.wa.gov

PUBLIC HEARING

A public hearing is not scheduled, but if there is enough interest, we will consider holding one. To request a hearing or for more information, contact:

Madeleine Brown
Department of Ecology
800-321-2008

Hanford@ecy.wa.gov

SPECIAL ACCOMMODATIONS

To request this document in a format for the visually impaired, please call Ecology at 509-372-7950.

Persons with impaired hearing may call Washington Relay Service at 711.

Persons with speech disability may call 877-833-6341.

Information Repositories and other document review locations

Online

www.ecy.wa.gov/programs/nwp/comment_periods.htm

Richland

Ecology's Nuclear Waste Program
Resource Center
3100 Port of Benton Blvd.
Richland, WA 99354
Contact: Valarie Peery 509-372-7950
Valarie.Peery@ecy.wa.gov

Dept. of Energy Administrative Record
2440 Stevens Drive, Room 1101
Richland, WA 99354
Contact: Heather Childers 509-376-2530
Heather_M_Childers@rl.gov

Department of Energy Reading Room
2770 Crimson Way, Room 101L
Richland, WA 99354
Contact: Janice Parthree 509-375-3308
Janice.Parthree@pnnl.gov

Portland

Portland State University
Branford Price Millar Library
1875 SW Park Avenue
Portland, OR 97207
Contact: Claudia Weston 503-725-4542
Westonc@pdx.edu

Seattle

University of WA Suzzallo Library
P.O. Box 352900
Seattle, WA 98195
Contact: Hilary Reinert 206-543-4664
Reinerth@uw.edu

Spokane

Gonzaga University Foley Center
502 E Boone Avenue
Spokane, WA 99258
Contact: John S. Spencer 509-323-6110
spencer@gonzaga.edu

Air Pollution Regulations

Ecology is following [Washington Administrative Code 173-400](#), *General Regulations for Air Pollution Sources*, to process USDOE's request to raise ammonia emissions limits.

Washington Administrative Code Section [173-400-171](#) covers how we conduct this public comment period. It outlines when, where, and how we notify the public and provide the proposal for review.

Permittee/Site Owner

U.S. Department of Energy
Office of River Protection
P.O. Box 450
Richland, WA 99352



Air exhauster stack at a Hanford tank farm

From: Brown, Madeleine (ECY)
Sent: Wednesday, September 25, 2013 8:41 AM
To: hanford-Info@listserv.wa.gov
Subject: advance notice - comment period starts 11/3

This is a message from the Washington Department of Ecology

Advance Notice – Comment Period November 3 – December 6, 2013

The US Department of Energy Office of River Protection (ORP) seeks a change to the exhauster system at the AY/AZ tank farm at Hanford. They want to increase the air flow from one of the exhausters. The requested level will be greater than it now is, but will still be less than the state-approved level. This is because two years ago, Ecology approved installation of a dual train exhauster system, but ORP didn't install it for one of the fans.

The formal name for this change is "approval order for notice of construction." The comment period for this "Notice of Construction" will start November 3, 2013. We do not plan to hold a public hearing, but we will reconsider if there is significant public interest.

Please contact Phil Gent, Ecology, at Hanford@ecy.wa.gov or 800-321-2008 if you have questions.

From: [Brown, Madeleine \(ECY\)](#)
To: hanford-Info@listserv.wa.gov
Subject: Comment period under way for tank farm AY/AX exhauster upgrade
Date: Tuesday, November 12, 2013 5:11:00 PM

This is a message from Washington Department of Ecology

Comment period underway!

Ecology invites you to comment on a permit change for the exhauster system at Hanford's 241-AY/AZ tank farm. The comment period on this change began Sunday and runs through December 13, 2013.

The tank farms (groups of tanks) are in Hanford's 200 East Area, which is near the center of the Hanford Site, and several miles from any agriculture or residence.

The U.S. Department of Energy (USDOE) is seeking to increase the flow from the fan in the 241-AY/AZ exhauster system. The emission levels would still be below regulatory limits.

Two years ago, Ecology approved installing new ventilation systems at three tank farms. But USDOE didn't install the system at 241-AY/AZ, and now they want to change the existing system instead.

The permit regulates air emissions from the ventilation systems at Hanford's tank farms. The formal name for this change to the permit is "approval order for notice of construction."

There is no change in the estimated emissions as a result of the proposed change. The only change is to the dispersion factors, since the stack height and flow rate would increase. The current approved emissions are 3.2 tons a year for volatile organic compounds and 60.8 pounds a year for ammonia.

Ecology invites you to review and comment on the documents that inform our decision to approve the emissions increase.

- The application letter.
- Draft approval order, conditions, and restrictions.
- State Environmental Policy Act documentation.

These documents can be found at the locations listed at the end of this notice.

Air Pollution Regulations

Ecology is following [Washington Administrative Code 173-400. General Regulations for Air Pollution Sources](#), to process USDOE's request to raise ammonia emissions limits.

Washington Administrative Code Section [173-400-171](#) covers how we conduct this public comment period. It outlines when, where, and how we notify the public and provide the proposal for review.

Permittee/Site Owner

U.S. Department of Energy

Office of River Protection

P.O. Box 450

Richland, WA 99352

To Submit Comments

Send comments or questions by e-mail (preferred), U.S. mail, or hand deliver them to:

Philip Gent

Department of Ecology

3100 Port of Benton Blvd.

Richland, WA 99354

Hanford@ecy.wa.gov

Public Hearing

A public hearing is not scheduled, but if there is enough interest, we will consider holding one. To request a hearing or for more information, contact:

Madeleine Brown

Department of Ecology

800-321-2008

Hanford@ecy.wa.gov

Below are the places you can find the materials to review:

Online

www.ecy.wa.gov/programs/nwp/commentperiods.htm

Richland

Ecology's Nuclear Waste Program Resource Center

3100 Port of Benton Blvd.

Richland, WA 99354

Contact: Valarie Peery 509-372-7950

Valarie.Peery@ecy.wa.gov

Dept. of Energy Administrative Record

2440 Stevens Drive, Room 1101

Richland, WA 99354

Contact: Heather Childers 509-376-2530

Heather_M_Childers@rl.gov

Department of Energy Reading Room

2770 Crimson Way, Room 101L

Richland, WA 99354

Contact: Janice Parthree 509-375-3308

Janice.Parthree@pnnl.gov

Portland

Portland State University

Branford Price Millar Library

1875 SW Park Avenue

Portland, OR 97207

Contact: Claudia Weston 503-725-4542

Westonc@pdx.edu

Seattle

University of WA Suzzallo Library

P.O. Box 352900

Seattle, WA 98195

Contact: Hilary Reinert 206-543-4664

Reinerth@uw.edu

Spokane

Gonzaga University Foley Center

502 E Boone Avenue

Spokane, WA 99258

Contact: John S. Spencer 509-323-6110

spencer@gonzaga.edu

APPENDIX B: COPIES OF ALL WRITTEN COMMENTS

From: [Sue Johns](#)
To: [Hanford \(ECY\)](#)
Subject: Comment Exhauster at 241-AY/AZ TF
Date: Friday, December 13, 2013 11:23:16 AM

Phil Gent,

I support the permit change for the exhauster system at hanford 241-AY/AZ Tank Farm as a needed change.

Bill Johns

From: [Guy Steen](#)
To: [Hanford \(ECY\)](#)
Subject: AY/AZ exhauster upgrade
Date: Monday, November 11, 2013 9:12:42 AM

There seems to have been an increase in the number of noticeable vapor issues already in the East tank farm area this year.

Increasing flow rates, I feel, would require farm areas to be more actively monitored for workers safety.

I know there is technology is available to real time monitor the area. It would seem prudent to provide such monitoring if the flow rates are to increase.

I would like to see a requirement that provides real time monitoring for workers being task to be in the area.

Thank you, Guy Steen

RECEIVED

DEC 10 2013

DEPARTMENT OF ECOLOGY
NWP - RICHLAND

December 10, 2013

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

Re: Draft regulatory order, DENWP-001, Rev. 1

Dear Mr. Gent:

Thank you for the opportunity to provide comments on the referenced draft regulatory order. My comments are enclosed.

I hope you find my comments useful in crafting an order that not only complies with requirements of WAC 173-400, but also recognizes these terms and conditions may eventually reside in Hanford's air operating permit (AOP). The operating permit regulation requires monitoring, reporting, and recordkeeping requirements be sufficient to verify continuous compliance with each term and condition over the term of the AOP. Many verification requirements in this draft order are insufficient to ensure continuous compliance. Ecology is urged to address these deficiencies before this draft order is finalized rather than amending these requirements at the time they are incorporated into the AOP.

However, my primary concern is Ecology's failure to include radionuclides in the draft order. As you are aware:

- radionuclides air emissions will be emitted by the subject tank farm ventilation project because the tanks to be ventilated contain massive curie inventories of radionuclides;
- radionuclides are a *hazardous air pollutant* under Title III of the federal *Clean Air Act* (CAA);
- radionuclides at Hanford are regulated, without a *de minimis*, by 40 C.F.R. 61 subpart H (*National Emission Standards for Emissions of Radionuclides Other Than Radon from Department of Energy Facilities*);
- all NESHAPs establish minimum nationwide requirements for existing and new facilities; and
- Ecology has incorporated all NESHAPs, including 40 C.F.R. 61 subpart H, by reference into WAC 173-400 and made these nationwide standards enforceable statewide.

For these reasons and the reasons expressed in my comments, I believe the failure to control all emissions from pollutants subject to a nationwide emission standard is contrary to WAC 173-400, the regulation under which the referenced order was created.

Mr. Philip Gent
December 10, 2013
Page 2 of 2

I certainly look forward to receiving your response to my comments. In the interim, should you have any questions, please feel free to contact me at the address below.

Regards,

A handwritten signature in black ink, appearing to read "Bill Green", with a long horizontal flourish extending to the right.

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

Enclosure
cc: w/encl. via email
P. Gent, Ecology
T. Beam, MSA Hanford

Comments include any associated footnote(s).

Comment 1: (general) **Both this draft order and the associated application overlook actual and potential radionuclide air emissions expected from the 241-AP, the 241-SY, and the 241-AY/AZ ventilation system upgrades. Anticipated emissions from these upgrades almost certainly have the potential to discharge radionuclides into the air in quantities which could cause an effective dose equivalent in excess of 1% of the standard specified in 40 C.F.R. 61 subpart H.**

Radionuclides are a *hazardous air pollutant* under section 112 of the federal *Clean Air Act* (CAA) and thus cannot be ignored in an order issued in accordance with WAC 173-400.

The Hanford Site and the project associated with this draft order are both subject to 40 C.F.R. 61 subpart H (*National Emission Standards for Emissions of Radionuclides Other Than Radon from Department of Energy Facilities*). Ecology incorporated 40 C.F.R. subpart H, by reference, into WAC 173-400 (WAC 173-400-075) and made this NESHAP enforceable statewide (WAC 173-401-020).

Under WAC 173-400, Ecology is barred from issuing an order that does not comply with all applicable standards for *hazardous air pollutants* (WAC 173-400-113), including 40 C.F.R. 61 subpart H. While Ecology can assign any title¹ it wishes to this draft order, Ecology cannot use this draft order to remove the Hanford Site's legal obligation to fully abide by WAC 173-400. Nor can Ecology overlook the regulation of any CAA-designated *hazardous air pollutant* emitted by a source above a *de minimis* level².

The U.S. Department of Energy (USDOE) overlooks the legal reality that Ecology cannot give it permission to violate the law. USDOE is required by WAC 173-400 to provide a complete application addressing all applicable pollutants including radionuclides, a federally-designated *hazardous air pollutant*. USDOE is legally obligated to comply with all applicable requirements of WAC 173-400 independent of any action by Ecology.

The fact USDOE is also required to submit radionuclide inventory and air emission information to another state agency pursuant to another state regulation is irrelevant to a permitting action undertaken in accordance with WAC 173-400.

¹ Ecology titled this order as a "NON-RADIOACTIVE AIR EMISSIONS NOTICE OF CONSTRUCTION APPROVAL ORDER . . ."

² Under 40 C.F.R. 61 subpart H there is no regulatory *de minimis* for radionuclide air emissions, above background. See also, *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. Available at: http://www.epa.gov/radiation/docs/neshaps/epa_doe_caa_mou.pdf

Comment 2: (conditions 1.1.4, and 2.5) **Provide a reporting requirement for ammonia stack sampling information.**

Comment 3: (Condition 1.1.4) **Condition 1.1.4 establishes specific pounds-per-day limits on ammonia emissions, yet confirmatory monitoring is only required quarterly (Section 3.4). Continuous compliance with specific daily limits cannot be demonstrated by taking quarterly measurements. Require monitoring and reporting sufficient to verify continuous compliance with Condition 1.1.4.**

Comment 4: (conditions 1.2.1 and 1.3.6) **Provide monitoring and reporting sufficient to ensure continuous compliance with Condition 1.2.1.**

Condition 1.2.1 sets both normal and maximum allowable ventilation rates for each of the three (3) primary tank ventilation exhaustor systems, the 241-AP Tank Farm ventilation system, the 241-SY Tank Farm ventilation system, and the 241-AY/AZ Tank Farm ventilation system. However, monitoring of these flow rates is only required annually. Annual monitoring cannot ensure a maximum ventilation rate is never exceeded at any point-in-time during the year. While there is a recordkeeping requirement for condition 1.2.1, there is insufficient monitoring and reporting to demonstrate continual compliance with this condition.

Comment 5: (Condition 1.2.2) **Provide monitoring and reporting requirements sufficient to ensure continuous compliance with the Condition 1.2.2 requirement that “[a]t no time shall more than two of the three tanks in the 241-SY tank farm (241SY-101 through 241-SY-103) be under active mixing and Waste Feed Delivery operations”. (emphasis added)**

Continuous compliance (“at no time shall”) mandates continuous monitoring or use of some parametric requirement whereby continuous compliance is certain. There is no certainty attached to allowing USDOE to determine the monitoring and reporting requirements.

Comment 6: (Condition 1.2.3) **Provide monitoring and reporting requirements sufficient to ensure continuous compliance with the Condition 1.2.3 requirement that “[a]t no time shall more than two of the eight tanks in the 241-AP Tank Farm (241-AP-101 through 241-AP-108) be under active mixing and Waste Feed Delivery”. (emphasis added)**

Continuous compliance (“at no time shall”) mandates continuous monitoring or use of some parametric requirement whereby continuous compliance is guaranteed. There is no such guarantee when Ecology allows USDOE to use whatever monitoring and reporting requirements USDOE wishes.

Comment 7: (conditions 1.2.4 and 1.3.7) **Provide monitoring, recordkeeping, and reporting requirements sufficient to ensure continuous compliance with the Condition 1.2.4 requirement that “[a]t no time shall more than two of the four tanks within the 241-AY and 241-AZ Tank Farms [241-AY-101, 241-AY-102, 241-AZ-101, and 241-AZ-102] be under active mixing and Waste Feed Delivery operations.”**

The unspecified content of required operational records fails to ensure continuous compliance. Ecology cannot allow USDOE to figure out what monitoring is needed, or

what records it needs to keep, and when, or if, reporting is warranted. It is Ecology's responsibility to specify detailed monitoring, reporting, and recordkeeping requirements sufficient to demonstrate continuous compliance with this condition.

Comment 8: (conditions 3.1.1 and 3.4) In conditions 3.1.1 and 3.4 specify that both the baseline measurements and the follow-on measurements for ammonia will include individual measurements from each of the three (3) ventilation systems (241-AP, 241-SY and 241-AY/AZ). As conditions 3.1.1 and 3.4 are written, USDOE is only required to take a total three (3) measurements, and these three (3) measurements can be from a single ventilation system.

Comment 9: (conditions 2.4, 2.5, 3.3, 5.1, and 5.5) Conditions 2.4¹, 2.5, 3.3², 5.1³, and 5.5⁴ require, in part, USDOE provide certain records to Ecology. These records must also be provided to the public. Ecology is hereby requested to obtain these records and make them available to the public on Ecology's website.

¹ "Specific records shall be kept on the Hanford Site by the Permittee and made available for inspection by Ecology upon request." Condition 2.4

² "Permittee will develop and implement an annual sampling and analysis plan (SAP) for each exhaust system." Condition 3.3

³ "Legible copies of this Order and the O&M manual shall be available to employees in direct operation of the tank farm exhaust systems, and be available for review upon request by Ecology." Condition 5.1

⁴ "Operation of the tank farm ventilation system and related equipment shall be conducted in compliance with all data and specifications submitted as part of the NOC application and in accordance with the O&M manual, unless otherwise approved in writing by Ecology." Condition 5.5

Comment 10: (general, coordination with WAC 173-401) This order cannot be administratively amended into the Hanford Site air operating permit (AOP) because the notice of construction application was not processed in accordance with WAC 173-400-111 (2)¹.

Integrated processing addressed under WAC 173-400-111 (2) requires processing a notice of construction application in accordance with procedures codified in WAC 173-401, the operating permit program. Operating permit program procedures applicable to action on an application are codified in WAC 173-401-700. WAC 173-401-700 (1)(c) requires that a permit modification can only be issued if all requirements of WAC 173-401-800 are met. Several requirements in WAC 173-401-800 were overlooked when processing the subject notice of construction application. Minimally, processing of the application:

1. fails to comply with WAC 173-401-800 (2)(b) that requires a notice be published in the *Permit Register*;
2. fails to comply with WAC 173-401-800 (3) that specifies the start date for public review in relation to when the announcement appeared in the *Permit Register*; and
3. fails to comply with WAC 173-401-800 (2)(c) that requires Ecology utilize a mailing list to inform those persons requesting notice.

Because this order increases emissions of a regulated air pollutant specified in an existing applicable requirement², conditions of this order are subject to the significant

modification process codified in WAC 173-401-725 (4) before these conditions can be added to the Hanford Site AOP.

Ecology and USDOE are reminded that the enforceable operating permit is the Hanford Site Title V Operating Permit, Number 00-05-006, Renewal 2, (Final permit) as issued on April 1, 2013. Both Ecology and USDOE stipulated to this³. USDOE is legally required to comply with all terms and conditions in the Final permit, and Ecology must enforce all terms and conditions in the Final permit. The Final permit contains terms and conditions from NOC Order 94-07, Revision 3, dated May 7, 2008. USDOE and Ecology can only increase the emission limits of NOC Order 94-07, Revision 3, by issuing a new final permit containing new limits. Ecology currently has a draft⁴ Hanford Site AOP out for public review. Steps remaining to be satisfied before the draft Hanford Site AOP can become final include:

1. preparation of a proposed permit⁵,
2. preparation of a response to public comments document,
3. submittal of both the proposed permit and the response to public comments to EPA for its 45-day review^{6,7}, and
4. issuance of the proposed permit as final, only if EPA does not object during its 45-day review⁸.

¹ "A notice of construction application designated for integrated review must be processed in accordance with operating permit program procedures and deadlines in chapter 173-401 WAC and must comply with WAC 173-400-171." WAC 173-400-111 (2)

² "Applicable requirement" . . . includes requirements in orders issued by the permitting authority.' WAC 173-401-200 (4)(b) The subject order (DE11NWP-001, Revision 1) increases emissions to a level that exceeds limits set by NOC Order 94-07, Revision 3, dated May 7, 2008.

³ "Ecology will put the reopened Permit out for public comment for at least 30 days beginning June 30, 2013. During the public comment period, and until Ecology finalizes the response to comments and issues a revised permit, Hanford Site Title V Operating Permit, Number 00-05-006, Renewal 2, will remain in effect." *Respondents' Stipulation in Response to Motion for Summary Judgment, Green v. Ecology*, PCHB No. 13-055, May 24, 2013, at 2

⁴ "Draft permit" means the version of a permit for which the permitting authority offers public participation or affected state review.' WAC 173-401-200 (10)

⁵ "Proposed permit" means the version of a permit that the permitting authority proposes to issue and forwards to the administrator for review in compliance with 40 CFR 70.8.' WAC 173-401-200 (25)

⁶ "Upon completion of the public comment period provided in WAC 173-401-800, the permitting authority **shall** issue a proposed permit, along with a response to any comments received during the comment period. The permitting authority **shall** transmit the proposed permit and its response to any comments to the applicant and to EPA for review, as provided in WAC 173-401-810." (emphasis added) WAC 173-401-700 (9)

⁷ See 40 C.F.R. 70.8 and WAC 173-401-810.

⁸ A permit or permit modification can only be issued if "[t]he administrator has received a copy of the proposed permit and any notices required under WAC 173-401-810 and 173-401-820, and has not objected in writing to issuance of the permit within forty-five days of receipt of the proposed permit and all necessary supporting information". WAC 173-401-700 (1)(f)

From: [Beam, Thomas G](#)
To: [Hanford \(ECY\)](#)
Cc: [Bowser, Dennis W](#); [Penn, Lucinda L](#); [Joyner, Jessica A](#); [Woolard, Joan G](#); [Gent, Philip \(ECY\)](#); [Beam, Thomas G](#); [Donnelly, Jack W](#)
Subject: Public Comments on Draft NOC Approval Order DE11NWP-001, Revision 1
Date: Wednesday, December 11, 2013 1:45:54 PM
Attachments: [Hanford comment package-NOC approval order DE11NWP-001 Rev 1.pdf](#)

Mr. Phil Gent, Air Permit Engineer
Nuclear Waste Program
State of Washington
Department of Ecology

Dear Mr. Gent,

Attached for your consideration are comments on the draft subject NOC approval order transmitted by Ecology to the U.S. Department of Energy, Office of River Protection (DOE-ORP) on November 6, 2013 (Letter 13-NWP-113).

We look forward to receiving Ecology's responses to our comments. If you have questions or would like to discuss any of them further, please give me a call at the number below. Thanks.

Sincerely,

Tom Beam, Environmental Engineer
One System ESH&Q
Washington River Protection Solutions
509-376-9016

PS. Reply confirmation of your receipt of these comments to meet Ecology's 12/13/2013 deadline would be much appreciated. Thanks.

U. S. Department of Energy (USDOE) Comments—Proposed NOC Approval Order DE11NWP-001 Rev. 1

Comment Number	Approval Order Section/Citation	Comment	Recommended Action(s)/ Requested Change(s)
USDOE-01	Finding #10	Inclusion of this new Finding in the draft revised approval order is unnecessary and inappropriate. The initial description of the closed loop independent cooling module (ICM) in the original notice of construction (NOC) revision application was included for informational purposes only. Even if it had been retained in the project design, the ICM would have no impact on the potential emissions from the tank ventilation system and would not be considered abatement technology. The decision to not construct ICM at this time does not need to be reflected in the revised approval order. If Ecology needs to document the removal of the ICM from the original application, it would be appropriate to do so as part of the responsiveness summary or via a fact sheet, etc. Any future decision to re-examine the need for an ICM will logically include an evaluation of whether such change constitutes a modification and whether there is even a need for another NOC application per WAC 173-400-110.	Remove Finding #10 and renumber the remaining Findings accordingly. Verify that subsequent references to Findings in approval order are accurate.
USDOE-02	Section 1.0 Approval Conditions	There are two sections numbered 1.1.	Correct the numbering of conditions for the remainder of Section 1.0 to eliminate this error.
USDOE-03	Conditions 1.4.1 through 1.4.8	There are a number of references to prior conditions that need to be revised to accurately reflect the renumbering required to address comment USDOE-02 above.	Correct condition references.
USDOE-04	Condition 2.4.4	There are a number of references to prior conditions that need to be revised to accurately reflect the renumbering required to address comment USDOE-02 above.	Correct condition references.
USDOE-05	Condition 2.5, 3 rd paragraph	There is a reference to a prior condition that needs to be revised to accurately reflect the renumbering required to address comment USDOE-02 above.	Correct condition reference.