



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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April 18, 2019

19-NWP-063

Brian T Vance, Manager  
Office of River Protection  
United States Department of Energy  
PO Box 450, MSIN: H6-60  
Richland, WA 99352

Re: Notice of Incompleteness Determination for the *Criteria and Toxics Air Emissions Notice of Construction for the Operation of Portable Exhausters Supporting Single-Shell Tank Waste Retrieval at the 241-A and 241-AX Tank Farms*, (TOC-ENV-NOC-5252)

Dear Brian T. Vance:

The Department of Ecology (Ecology) received the Notice of Construction (NOC) application TOC-ENV-NOC-5252, submitted by the U.S. Department of Energy (USDOE) in February 2016 (Reference 1). The application requested authorization for the concurrent operation of four portable exhausters to support waste retrieval activities in 241-A and 241-AX Tank Farms (A/AX). Single-Shell Tank Retrieval Exhausters, including those located in A/AX, are currently permitted under Approval Order DE05NWP-002. This project will utilize two new portable exhausters and increase the exhauster ventilation rate for A/AX from the ventilation rate authorized by DE05NWP-002, Revision 2. An application to modify DE05NWP-002, Revision 2 that removes A/AX requirements has not been submitted by USDOE.

The State of Washington filed a citizen suit in September 2015, alleging that vapors from the Hanford tank farms may present an “imminent and substantial endangerment” under RCRA section 7002(a)(1)(B), 42 USC § 6972(a)(1)(B). After this suit was filed, Ecology placed all NOC permit requests for new or modified tank farm-related projects on hold pending the outcome of the litigation. This hold included the NOC application for A/AX. The litigation was subsequently resolved by a settlement agreement that was signed in September 2018. Ecology then removed the temporary permitting hold and reinitiated the completeness determination process for the A/AX NOC application.

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Washington Administrative Code (WAC) 173-400-111(1) requires Ecology to review each NOC application for completeness after receipt of the application and the permit application fee. Ecology conducts this completeness determination to ensure the application contains all the information necessary for processing the application.

This letter serves to notify you that the submitted NOC application for A/AX does not contain all major components required in WAC 173-400 and WAC 173-460, therefore, it is incomplete. In particular, Ecology has determined the application does not adequately demonstrate that the emissions of toxic air pollutants from the A/AX emission units are sufficiently low to protect human health and safety from potential carcinogenic and/or other toxic effects, as required by WAC 173-460-070.

In December 2018, Ecology notified USDOE Richland Operation Office and USDOE Office of River Protection, that apparent changes to the Hanford Site's historical ambient air boundary had occurred and that Ecology was initiating a reevaluation of where the current ambient air boundary is located for purposes of air permitting (Reference 2). Ecology and USDOE have not yet resolved Ecology's concerns regarding the ambient air boundary. However, the NOC application for the A/AX exhausters uses the historical boundary in modeling emission exposures to the public. By using the historical ambient air boundary, the A/AX NOC application has not evaluated the current actual risk to the public as required under both the Federal and Washington Clean Air Acts.

To complete the NOC application and support permitting the A/AX exhausters, provide the following:

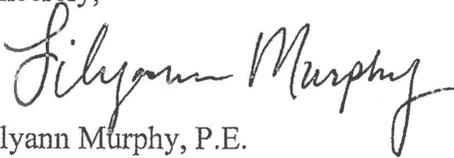
1. In order to adequately demonstrate that emissions are sufficiently low to protect human health and safety, the application must include an acceptable source impact level analysis for each toxic air pollutant emitted by the new or modified emission units in accordance with WAC 173-460-080(1). To address this requirement, the NOC application used dispersion modeling and the historical ambient air boundary. As the apparent ambient air boundary is located closer to the emission unit, the currently submitted model does not adequately evaluate compliance with all applicable rules and regulations. Dispersion modeling must evaluate concentrations in ambient air, and any areas excluded from the analysis, must demonstrate adequate control to prevent public access.
2. Since the A/AX permit application submission in February 2016, USDOE has submitted permit applications for other projects related to tank waste emissions that have identified new toxic air pollutants and higher pollutant concentrations. USDOE needs to clarify how these new pollutants and pollutant concentrations apply to the A/AX project. If the new pollutants and pollutant concentrations apply to the A/AX project, USDOE must, in accordance with WAC 173-460-050, update the source term data used for the A/AX permit application to identify all currently known or suspected air pollutants, and use this data in the evaluation of public exposure.

3. The submitted Best Available Control Technology for Toxics (tBACT) evaluation, RPP-20773, is insufficient to determine appropriate control technologies for the project pursuant to WAC 173-400-113(2) for criteria pollutants and WAC 173-460-060(2) for toxics. The underlying assumptions of the submitted evaluation are inconsistent with the proposed project and the current regulations. Best Available Control Technology (BACT) for emissions of criteria pollutants and tBACT for emissions of toxic pollutants must be reevaluated in accordance with the proposed project, incorporating results of the above items.
4. Section 1.0 of the application states *“Upon issuance of the approval order for this notice of construction application, DE05NWP-002, Revision 2, “Non-Radioactive Air Emissions Notice of Construction Approval Order Conditions and Restrictions” for Single-Shell Tank Retrieval Exhausters, will no longer apply to 241-A and 241-AX Tank Farm waste retrieval activities.”* In order to ensure that this change is made, USDOE must submit an application and pay the applicable fees to modify DE05NWP-002, Revision 2, and remove A/AX waste retrieval activities from the approval order. Issuance of a new approval order for the A/AX project alone will not modify the existing approval order.

Completion of the above items may increase the complexity of the application and require further analysis. Until USDOE addresses the above items and any subsequent requirements based on the results, Ecology cannot proceed with processing the A/AX exhauster NOC application.

If you have questions or need further information, please contact me at (509) 372-7951 or [Lilyann.Murphy@ecy.wa.gov](mailto:Lilyann.Murphy@ecy.wa.gov).

Sincerely,



Lilyann Murphy, P.E.  
Environmental Engineer  
Washington State Department of Ecology

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cc: See page 4

References:

1. Letter 16-ECD-0008 ,February 23, 2016, 16-ECD-0008: US DEPARTMENT OF ENERGY OFFICE OF RIVER PROTECTION SUBMITS TOC-ENV-NOC 5252 REV 00 CRITERIA AND TOXICS AIR EMISSIONS NOTICE OF CONSTRUCTION FOR THE OPERATION OF PORTABLE EXHAUSTERS SUPPORTING SINGLE-SHELL TANK WASTE RETRIEVAL AT THE 241-A AND 241-AX TANK FARMS
2. Letter 18-NWP-177 ,December 3, 2018, Re: Hanford Site Ambient Air Boundary Concerns

cc electronic:

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NWP Central Files