

Hanford Challenge (Liz Mattson)

Please see our attached comments. Thank you!



September 9, 2026

Comments Submitted Electronically at:

<https://ecology.commentinput.com/?id=tr4fADWGp>

Washington State Department of Ecology
3100 Port of Benton Boulevard
Richland, WA 99354

RE: 241-SY Tank Farm Exhausters NOC Approval Order DE26NWP-002

Thank you for the opportunity to comment on the 241-SY Tank Farm Exhausters Notice of Construction (NOC) Approval Order DE26NWP-002. This NOC is an application for modification of operations of the exhausters in the 241-SY Double-Shell Tank (DST) Farm.

Hanford Challenge is a non-profit, public interest, environmental, and worker advocacy organization located in Seattle, WA. We are an independent 501(c)(3) organization incorporated in the State of Washington since 2008 and registered in Oregon. Our mission is to create a future for the Hanford Nuclear Site that secures human health and safety, advances accountability, and promotes a sustainable environmental legacy.

Hanford Challenge has members who work at the Hanford Site. Other members of Hanford Challenge work and/or recreate near Hanford, where they may also be affected by hazardous materials emitted into the environment by Hanford. All members have a strong interest in ensuring the safe and effective cleanup of the nation's most toxic nuclear site for current and future generations, and who are therefore affected by conditions that endanger human health and the environment.

We are primarily concerned that Hanford is allowed to use sampling methods that no other industries use. Why? It is not enough to only use NIOSH, OSHA, and/or EPA ambient guidance to analyze air samples. The methods used to collect air samples need to be specified in the NOC. With industries of all types primarily using EPA source methods, how can the public get a clear understand of how Hanford air emissions compare to other industries? Hanford's underground high-level waste storage tanks are a dynamic environment with rapidly moving stack gas. What modifications have been made to the OSHA, NIOSH, EPA ambient methods identified in the NOC to address the different conditions of rapidly moving stack gas? How have the modifications been validated? What qualifications are required by the staff validating the modifications? The easiest fix to address these concerns is to require all testing methods to be EPA methods.

The use of non-standard methods at Hanford creates doubt in the results when it comes to the safety of the public. Please update the revised NOC Approval Order DE26NWP-002 to address the following questions and concerns:

- **Please make the Air Operating Permit a stand-alone document with NOC's going away once units are in operation:** As we stated in [our comments on the draft Renewal 4 of the Hanford Site Air Operating Permit \(AOP\)](#), the NOC's should go away once the unit is in operation.
 - Please update the process so that an NOC stays in place until the AOP is updated and then close out the NOC. Without this update, we have two different documents with conflicting data.
 - *For example*, there are cases where an NOC was issued for a site and then on the next AOP renewal the NOC was added to the permit, but the requirements are not the same yet both documents show as current. There are other cases where a letter is sent requesting a change years after the issuance of an NOC and Ecology agrees to the change in a letter, but the change is not made in the NOC or properly explained in the AOP. Those letters are not available to the public, so when you review the permit and NOC's on Ecology's webpage there is an unexplainable discrepancy.
 - The NOC's should go away once the unit is in operation. Please update the AOP so that the AOP is a complete stand-alone document rather than referencing multiple other documents.

- **Please update the following so that sampling requirements are in compliance with EPA methods:**
 - After review of the applicable regulation, <https://apps.leg.wa.gov/Wac/default.aspx?cite=173-400-105> (4) we see no approval by Washington State's regulations to use alternate methods such as OSHA, NIOSH or EPA ambient methods for source testing.
 - On the Environmental Protection Agency's Air Emission Measurement Center (EMC), <https://www.epa.gov/emc>, many sampling methods are listed which are approved by the EPA including <https://www.epa.gov/emc/broadly-applicable-approved-alternative-test-methods>. However, there are no references to OSHA, NIOSH or EPA ambient methods. On the same page we see guideline documents including <https://www.epa.gov/system/files/documents/2022-09/gd-022r5.pdf>, which details the lengthy process to get approval for alternative methods. Please provide the validation studies done to justify the use of Industrial Hygiene or ambient method for AOP compliance and what modifications have been to allow for stack sampling.
 - Please address the following specific concerns regarding 5. Testing, in revised NOC Approval Order DE26NWP-002:
 - 5, a, i, D, I, is 1 ppm or 15% accuracy acceptable for ammonia acceptable?
 - ii, D Why use NIOSH 6009 for mercury when there are EPA approved methods for mercury when EPA methods have far greater quality assurance measures?
 - iii, C, Why aren't the requirements for Flame Ionization Detectors (FID)'s tailored to the compound being tested with specific methods spelled out in the NOC? The NOC states that the FIDs are all the same contrary to Method 25A - Gaseous Organic Concentration - Flame Ionization,

<https://www.epa.gov/emc/method-25a-gaseous-organic-concentration-flame-ionization> , which requires the FID to be heated to at least 120C. Volatile Organic Compounds (VOCs) are temperature dependent. Why aren't you mentioning a method for FIDs? It is not enough to say a FID is a requirement.

- The NOC states that the permittee needs to use a FID that is less accurate than 25A. The calibration of the FID should be 5% as required by Method 25A - Gaseous Organic Concentration - Flame Ionization,

<https://www.epa.gov/emc/method-25a-gaseous-organic-concentration-flame-ionization>. Why does Hanford need less accurate sampling? Please change this requirement to reflect more accurate sampling per Method 25A.

- iv. B. All methods listed are either ambient or industrial hygiene methods. Please update these methods to meet EPA method requirements.
- V, c, ii. Monitoring equipment should meet EPA requirements, not the manufacture's recommendations. Please update the NOC to ensure that monitoring equipment requirements meet or exceed EPA Performance Specification 6 Flow Rate requirements:

<https://www.epa.gov/emc/performance-specification-6-flow-rate>

Sincerely,

A handwritten signature in black ink that reads "Nikolas F. Peterson". The signature is written in a cursive, flowing style.

Nikolas Peterson, Executive Director, Hanford Challenge