Comments Heart of America Northwest to WA Department of Ecology on **LERF/ETF Class 2 Permit Modification**

Respond to Gerry Pollet, J.D.; Executive Director: gerry@hoanw.org and office@hoanw.org
4500 9th Ave NE Seattle, WA 98105

Heart of America Northwest requests:

a) An extension of the comment period for the permit modification for thirty days from when USDOE provides the information requested at the public meeting held on October 9, 2019 on waste quantities, characteristics, constituents and concentrations to be transferred, stored and processed.
    a. Information / data which should have been in the permit modification and a technical fact sheet for the unit(s), and which we requested, include:
        i. The annual quantities of dangerous wastes with characteristics to be transferred, stored or treated through the pipelines and facilities;
        ii. The quantities and characteristics of batches of wastes to be held in LERF units, including radionuclides (while RCRA and HWMA do not require the listing of radionuclides that are not also a dangerous waste due to toxicity or other characteristics [e.g. radioactive heavy metals such as Uranium], the SEPA analysis of potential impacts must consider the potential significant impacts from generation, release and disposal of those waste elements and their cumulative health or environmental impacts with those from dangerous wastes).
        iii. Specifically, please disclose the constituents and concentrations in "brine" which was referred to in presentations on October 9 and is the term added to the permit describing wastes to be permitted, e.g., regarding 2025-E containerized wastes to be permitted and stored in addition to dry powder wastes (see, for example, page A.6). Please provide annual quantities and total amounts allowed to be stored.
        "Brine" sounds as if it is a saltwater solution. Indeed, that is its dictionary definition. "Brine" is not a defined term pursuant to the dangerous waste rules in WAC 173-303-040. Without disclosure of the contents in the permit and fact sheet, USDOE cannot use this term and Ecology cannot have an undefined term with no limitations and description on dangerous waste constituents.
        Use of the term "brine" is misleading and not permissible without describing the specific constituents.
        Without these disclosures, it is not possible to comment on adequacy of the permit conditions for storage in a facility which is currently permitted only for storage of dry powder.
    b. This request includes SEPA analyses, which would require consideration of radioactive constituent impacts in the event of release (including failure of secondary containment) or long-term release or exposures from disposal of the ultimate waste forms in the IDF landfill.

        i. There is no linked SEPA analysis and documents in the notice or permit modification transmittal.

b) Consolidation of the permit comment periods, including SEPA analyses, for this permit and the interrelated pending Class 3 permit modification for the DFLAW Effluent Management Facility (EMF) and its transfer lines to ETF and LERF.
    a. These permits are not only closely interrelated but require SEPA analyses of those interrelationships.
    b. The Department should consolidate, rather than allow a permittee to bifurcate, interrelated permit modifications. This would provide for better public review as well as integrated review under SEPA by the Department.
    c. When two or more permit modifications are closely related to each other and involve the same systems (e.g., connected transfer lines for the same wastes, and transfer of the same wastes), SEPA requires consideration of the interrelated systems and impacts. It defeats the intent of the Department's rules for modifications if a permittee may bifurcate or trifurcate interrelated permit modifications for transferring and treating the same wastes and avoid having closely related modifications subject to the greater public review opportunities of a Class 3 Modification.

Due to the permit application failing to include the waste characteristics, quantities, etc. described above, in addition to extending the permit comment period, ***Ecology should not approve the permit*** modification. The permit application should be rejected and consolidated with the inter-related Class 3 Permit Modification for the same wastes and connected pipelines and systems for EMF. Ecology should require SEPA documentation to be included in the notice for both sets of permit modifications. At this point, there is no SEPA analysis for this permit modification.

WAC 173-303-806 requires that a Class 2 Modification meet all elements of a Final Facility Permit in WAC 173-303-806. These requirements include a waste analysis plan ad analysis of all wastes. The current proposed modification includes wastes transferred from the pending Class 3 permit modification for wastes from DFLAW which have not yet been incorporated into the facility permit. Therefore, either this Class 2 permit modification must be withdrawn / rejected and processed as part of the pending Class 3 Modification, or the permit must have the waste streams specified with quantity limitations.

Leak detection and secondary containment provisions of the proposed permit are not adequate and are not permissible:

USDOE seeks approval of a permit with a waiver of the requirements for secondary containment and ability to notify Ecology of releases from primary or secondary containment within 24 hours. See III.J.2 for transfer lines WTP's EMF to LERF. This illustrates the interconnection with the pending Class 3 Permit Modification for transfer lines for DFLAW, including LAW facility to EMF.

This should be rejected. USDOE should be required to meet the 24 hour notification, if not have real time notification required due to the nature of these wastes, the length of the pipelines, etc. If this alternative were available for this facility and transfer lines, Ecology would have to grant the same waiver anywhere in Washington. USDOE, the permit applicant, has a record of failing to notify Ecology in a timely manner of releases. Consideration of the permittee's prior noncompliance for notifications is also highly relevant.

To qualify for the variance requested, WAC 173-303-640(4)(i)(D) requires disclosure and consideration of the characteristics and contents of the wastes in the transfer lines and storage facilities / vaults. However, as highlighted above, USDOE has failed to disclose the waste quantities, characteristics, concentrations for secondary wastes from DFLAW which will be concentrated in EMF and then transferred in the pipelines and units subject to this permit modification. In order to qualify, USDOE must disclose, and Ecology consider, the maximum dangerous waste and radioactive constituent concentrations.

The sumps and vaults in the proposed permit scope do not have 100% containment capacity. This is a serious shortcoming for the highly radioactive and dangerous wastes generated and being transferred from DFLAW.

USDOE contends that an internal building floor with no berming is containment for the sump or vaults. This does not meet the RCRA / HWMA requirements and poses a grave risk of worker exposure to dangerous wastes as well as the potential for ultimate escape and release to the environment. Allowing waste to spread over a large area of sealed concrete floor is not containment. This is compounded by use of older equipment and not requiring automatic backflow detection and overflow prevention. Instead the sump relies on visual observation.

Reliance on Visual Inspection and only 1 Electronic Detection is Inadequate and Should be Rejected:

The lack of 100% containment for the sumps, sump pumps and other collection points and tanks is exacerbated by the legally inadequate proposed reliance on visual inspection (with apparently one point of electronic leak detection). Sump tank 59ATK-3 will only have a "sight glass to indicate level" and manual pump for overflow protection, instead of automatic cutoff. Reliance on proper following of protocols for visual inspections is particularly inappropriate in event of other upset conditions in the facilities which may interfere with visual inspections, simple operator inattention, and due to a history of the Hanford site contractors even ignoring results of alarms for overflows and leaks (e.g., Tank AY-102). A recording of any overflow or release event is vitally important for permitting and to ensure that a release is reported in a timely manner. Reliance on a written report following visual inspection is not acceptable.

USDOE has failed to specify in the permit how releases will be contained. Rather, USDOE relies on the entire building floor and walls as containment, which would prevent the workforce from entering and carrying out other essential activities or immediate repairs.

Only one tank will also have a manual override instead of all tanks in the event of equipment malfunction. This opens additional routes of potential release. The permit should require manual overrides as well as electronic release notifications and routine inspections.

The use of fiberglass four inch transfer lines for EMF to the LERF basins is inappropriate. These long, outdoor lines will be expected to be in use for decades and will be subject to frost and precipitation, soil movement, etc. This is exacerbated by “a single-point electronic leak detection element at LERF Basin 42.” (USDOE-RL public meeting presentation October 9, 2019). Single point detection, which is NOT along the very long, outdoor transfer line is not permissible. It is quite likely that releases along the line would go undetected by a single end point (basin) detection element. Metal piping with cathodic protection should be required as consistent with WAC, in conjunction with multiple leak detection points.

USDOE Notice:

The U.S. Department of Energy (DOE) is holding a 60-day public comment period on a proposed modification to the Hanford Dangerous Waste Permit. This proposed Class 2 permit modification would allow DOE would allow DOE to connect a waste transfer line from EMF to LERF and to make improvements to the 200 Area ETF so that it can support tank waste treatment. The improvements include adding a secondary waste load-out system inside ETF and adding a filter sump tank to the existing load-in station. This requires modification to the permit conditions and applicable addenda. Modifications to the addenda include revised information on the LERF and the 200 Area ETF boundary, the waste analysis plan, facility improvements, container management, leak detection, closure and inspection requirements.

A public meeting will be held **October 9, 2019, 5:30 p.m.**