



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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July 15, 2011

Mr. Ron Skinnarland
Department of Ecology
Richland Field Office
3100 Port of Benton Blvd.
Richland, WA 98354

Dear Mr. Skinnarland:

Second Tier Petition by the U.S. Dept. of Energy (Hanford)

The Washington State Department of Ecology's Air Quality Program (Ecology) has completed their review of health risks from dimethyl mercury (DMM) emissions from the proposed 241-SY, 241-AP, and 241-AY/AZ Tank Farm ventilation system upgrades in Benton County, Washington.

Ecology's review indicates that the proposed project will not result in appreciable neurotoxicity risk to people at any off-site location. Ecology validates the applicant's assertion that the highest conceivable Hazard Quotient (HQ) is only 6.9E-07.

Ecology also considered the cumulative impacts of existing background concentrations of DMM in addition to proposed tank farm ventilation system emissions. Tank farm ventilation system emissions may result in dispersed concentration increases at least 39-fold lower than the existing DMM concentrations.

Given the lack of appreciable tank farm ventilation system impacts, Ecology concludes that additional mitigation measures are unnecessary; however, Ecology recommends that if significant increases in DMM or other toxic air pollutants occur unexpectedly, another risk assessment should be conducted.

Ecology recommends approval of the proposed project because project-related health risks are permissible under WAC 173-460-090, and the cumulative Neurotoxicity HQ posed by DMM in the Hanford area is far less than one.

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This project has satisfied all requirements of a second tier review. Ecology recommends that you incorporate our findings as part of your ambient air impacts analysis, and you may begin the public comment period when you are ready to do so.

If you would like to discuss this project further, please contact David Ogulei at (360) 407-6803 or david.ogulei@ecy.wa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeff Johnston". The signature is fluid and cursive, with the first name "Jeff" and last name "Johnston" clearly distinguishable.

Jeff Johnston, PhD
Science and Engineering Section Manager
Air Quality Program

jj/do/mk

Enclosure

cc: Jonathan Dowell, U.S. Department of Energy, Office of River Protection
David Ogulei, Ecology
Brian Rumburg, Washington River Protection Solutions, LLC
Oliver Wang, Ecology-NWP