



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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May 24, 2013

Ms. Karen Wood
Air Quality Program
Eastern Regional Office
4601 N. Monroe Street
Spokane, WA 99205-1295

Re: Second Tier Petition by Pacific Northwest Solutions

Dear Ms. Wood:

The Washington State Department of Ecology's Air Quality Program (Ecology) has completed our review of health risks from ammonia (NH₃) emissions from the proposed operation of a mobile pipe reactor to make 10-34-0 fertilizer at five locations in eastern Washington.

Ecology's review of non-cancer hazards indicates that the chronic non-cancer hazard quotients attributable to the mobile pipe reactor emissions are much lower than unity (1) meaning that chronic non-cancer adverse health effects are unlikely.

Acute non-cancer hazards potentially exceed unity near two of the five facilities: Crop Production Service in Moses Lake and Helena Chemical Company in Pasco, WA. Potential exceedances do not necessarily mean that an exposed person will experience respiratory symptoms, but it is possible that exposed sensitive individuals could experience some minor respiratory irritation. These short-term impacts could occur on adjacent industrial zoned property along the mobile pipe reactor facility controlled property boundaries.

Ecology evaluated the joint probability of poor dispersion conditions coinciding with MPR operation and found that off-site NH₃ levels could exceed health-based reference values at most about once every 3 to 4 years. Given the land use at the impacted locations is industrial, the infrequency of occurrences, and the low severity of health effect, Ecology determined that the MPR is unlikely to cause short- or long-term adverse respiratory symptoms among people exposed to ambient emissions of NH₃ and HF.

Ecology recommends approval of the proposed project because project-related health risks are permissible under WAC 173-460-090.

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This project has satisfied all requirements of a second tier analysis. 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 Gary Palcisko at (360) 407-7338 or gary.palcisko@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, Ph.D.
Science and Engineering Section Manager
Air Quality Program

jj/te

Enclosure

cc: Greg Flibbert, Ecology
Robert Koster, Ecology
Gary Palcisko, Ecology
Richard Underwood, Pacific Northwest Solutions
David Weeks, Risk Management & Engineering Ltd.