



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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July 23, 2013

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

Re: Second Tier Petition by The McGregor Company

Dear Ms. Wood:

The Washington State Department of Ecology's Air Quality Program (Ecology) has completed its review of health risks from ammonia (NH₃) emissions from a proposed project by the McGregor Company in Creston, Washington. The proposed project consists of storing and handling fertilizer including anhydrous and aqua ammonia, manufacturing aqua-ammonia, and use of a contractor's mobile pipe reactor up to 240 hours per year to manufacture ammonium polyphosphate fertilizer.

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

Depending on which short-term reference value is used for comparison, acute non-cancer hazards could potentially exceed unity assuming short-term exposure along a small area of the northern facility boundary. This area is generally unoccupied and primarily consists of the right-of-way for the Eastern Washington Gateway rail line. Potential non-cancer hazards that exceed unity 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.

Ecology evaluated the joint probability of poor dispersion conditions coinciding with the project's emissions and found that off-site NH₃ levels could exceed the lowest (i.e., most conservative) health-based reference value at most about one hour every two months. Given the land use at the impacted location is a railroad right-of-way, the infrequency of occurrences, and the low severity of health effect, Ecology determined that the project's emissions are unlikely to

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cause short- or long-term adverse respiratory symptoms among people exposed to ambient emissions of NH₃ and hydrogen fluoride.

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

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
Gary Huitsing, Ecology
Alex McGregor, The McGregor Company
Gary Palcisko, Ecology
David Weeks, Risk Management & Engineering Ltd.