

STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

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June 22, 2011

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

Dear Ms. Wood:

Second Tier Petition by Sabey Corporation (Quincy)

The Washington State Department of Ecology's Air Quality Program (Ecology) has completed their review of health risks from diesel engine exhaust particulate (DEEP) and nitrogen dioxide (NO₂) emissions from the proposed Sabey Corporation (Sabey) Data Center in Quincy, Washington.

Ecology's review indicates that the proposed project could result in an increased cancer risk of up to approximately 6 in one million (6 x 10^{-6}) at the maximally impacted residential location, which is about 70 meters northwest of Sabey's property. Ecology's review also indicates NO_2 levels could rise to levels resulting in a hazard quotient greater than one during power outages meaning that sensitive individuals, such as people with asthma, could experience respiratory symptoms.

As part of the community-wide approach in Quincy, Ecology also considered the cumulative impacts of DEEP and NO₂ emissions in the area. Emissions from Sabey and other local sources of DEEP could result in lifetime increased cancer risk of approximately 38 in one million (38 x 10⁻⁶) at a residence located to the northwest of Sabey and adjacent to Intuit Data Center's southeast boundary. It is possible that during power outages some of the people with asthma near the Sabey Data Center will occasionally experience acute breathing impairment primarily due to NO₂ from background sources and Sabey. Currently, there is no numerically defined acceptable limit of noncancer adverse health risks. Given the low lifetime risk of severe asthma symptoms from Sabey NO₂ emissions and the infrequent recurrence of high NO₂ exposure situations, Ecology concludes that additional mitigation measures are unnecessary; however, Ecology will need routine reports of power failures from Sabey to help evaluate the accuracy of the assumptions in this analysis.

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Ecology recommends approval of the proposed project because project-related health risks are permissible under WAC 173-460-090, and the cumulative risk from DEEP emissions in Quincy is less than the cumulative maximum risk goal established by Ecology for permitting data centers in Quincy (100 per million or 100×10^{-6}). Ecology recommends that Sabey be required to communicate health risks posed by their emissions to current residents near Sabey and potential new homeowners at undeveloped parcels adjacent to Sabey, or to the local regulatory agency responsible for zoning and development in the affected area.

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 David Ogulei at (360) 407-6803 or david.ogulei@ecy.wa.gov.

Sincerely,

Jeff Johnston, PhD

Science and Engineering Section Manager

Air Quality Program

jj/do

Enclosure

cc:

Greg Flibbert, Ecology John Ford, Sabey David Ogulei, Ecology Jim Wilder, ICF International