



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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August 17, 2021

Sanjay Barik
Department of Ecology
Air Quality Program
Central Regional Office
1250 W. Alder Street
Union Gap, WA 98903-0009

Re: Second Tier Toxics Review Petition by Microsoft Corporation

Dear Sanjay:

We have completed our review of health risks posed by diesel engine exhaust particulate (DEEP) and nitrogen dioxide (NO₂) emissions from 21 proposed emergency engines at Microsoft EAT02 Data Center in Douglas County, WA.

Microsoft proposes to build a new data center near East Wenatchee in Douglas County. The data center will include:

- 20 – 3.0 megawatt diesel-powered emergency generators
- One 0.5 megawatt diesel-powered emergency generator

Microsoft proposes to limit the operation of emergency engines to a facility-wide average of 41 hours per year per engine for routine maintenance and readiness testing. While Ecology does not intend to explicitly limit engine use during unplanned outages, Microsoft assumed engines will operate eight hours per year for unplanned purposes. The increased emissions of DEEP from these engines could result in an increased cancer risk of up to three in one million (3×10^{-6}) at the maximally impacted commercial location, which occurs along the southern fence line boundary of Microsoft EAT02 Data Center.

We also considered long- and short-term non-cancer hazards associated with Microsoft's proposed diesel engine emissions. We determined that non-cancer health effects are not likely to occur from long-term exposure to project-related DEEP. Short-term respiratory hazards posed by peak emissions of NO₂ during power outage scenarios could occur in some areas near the facility, but Douglas County Public Utility District reports very stable power. Therefore, the

Sanjay Barik
August 17, 2021
Page 2

likelihood that infrequent high emission scenarios coincide with unfavorable pollutant dispersion is very low.

We find that Microsoft's project-related health risks are permissible under WAC 173-460-090 because:

- The increase in emissions of TAPs is not likely to result in an increase cancer risk of more than one in one hundred thousand (10 in one million) which is the maximum risk allowed by a Second Tier review.
- The non-cancer hazard is acceptable.

The applicant has satisfied all requirements of a second tier analysis.

If you would like to discuss this project further, please contact Gary Palcisko at gary.palcisko@ecy.wa.gov or 360-407-7338.

Sincerely,



Chris Hanlon-Meyer
Science and Engineering Section Manager
Air Quality Program

ch-m/te

Enclosure