

## STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

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October 25, 2021

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

## Re: Second Tier Toxics Review Petition by H5 Data Centers

Dear David:

We have completed our review of health risks posed by diesel engine exhaust particulate (DEEP) and nitrogen dioxide ( $NO_2$ ) emissions from 12 proposed emergency engines at H5 Data Center in Quincy, WA.

H5 proposes to expand their data center near Quincy, WA. The expansion will include twelve 2.25 megawatt diesel-powered emergency generators.

H5 proposes to limit the operation of the 12 new emergency engines to a per engine average of 18 hours per year for routine maintenance and readiness testing. While Ecology's draft permit does not explicitly limit engine use during unplanned outages, H5 conducted an ambient impact analysis including emissions from eight hours per year of unplanned engine use. The increased emissions of DEEP from planned and unplanned engine use could result in an increased cancer risk of up to nine in one million  $(9 \times 10^{-6})$  at the maximally impacted residential location, which occurs along the southeastern property boundary of H5 Data Center.

We also considered long- and short-term non-cancer hazards associated with H5'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  $NO_2$  during power outage scenarios could occur in some areas near the facility, but Grant County Public Utility District reports very stable power. Therefore, the likelihood that infrequent high emission scenarios coincide with unfavorable pollutant dispersion is very low.

We find that H5's project-related health risks are permissible under WAC 173-460-090 because:

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- 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,

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

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Enclosure