



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

April 27, 2022

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 for Vantage Data Center WA-13
Expansion**

Dear David:

We have completed our review of health risks posed by diesel engine exhaust particulate (DEEP) and nitrogen dioxide (NO₂) emissions from Vantage Data Center's 44 new emergency engines at new data center building (WA-13) and revised permit conditions for 12 existing engines at building WA-12 in Quincy, WA.

Vantage Data Center proposes to expand their data center in Quincy, WA. The expansion will include:

- Forty four (44) 2.75 megawatt diesel-fueled emergency generators to supply backup power to a new data center building (WA-13).
 - These engines will be certified to meet EPA tier 2 emission limits plus they will be equipped with additional controls consisting of catalyzed diesel particulate filters and selective catalytic reduction.
- Increased emission limits for 12 existing diesel-fueled generators at building WA-12.
 - These engines are certified to meet EPA tier 2 emission limits
 - Vantage requestes additional permit flexibility for these engines. They have considered these engines as new sources for the purpose of determining increases in emissions and ambient impacts analysis.

Vantage proposes to limit the operation of the 56 emergency engines at WA-12 and WA-13 to a per engine average of 84 hours per year for all purposes. The increased

emissions of DEEP from planned and unplanned engine use could result in an increased cancer risk of up to 9.7 in one million (9.7×10^{-6}) at the maximally impacted commercial location, which occurs within the boundary of Vantage Data Center.

We also considered long- and short-term non-cancer hazards associated with Vantage'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 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 Vantage'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) 995-3447.

Sincerely,



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

ch-m/te

Enclosure