

September 28, 2025

Philip Gent
Washington State Department of Ecology
Air Quality Program
P.O. Box 47600
Olympia, WA 98504-7600

RE: General Order 25AQ-GO-04

Dear Mr. Gent,

I am writing today to provide comments on the information provided by Ecology supporting a General Order for up to 21 locomotive-sized diesel engines. Being a resident of Quincy, and clearly in the shadow of Microsoft's emissions, I will restrict my comments to Quincy, unless the assumptions made by Ecology apply to all those communities impacted by this general order. In that event, I will indicate by including the word "both" in parentheses.

First, let me begin by stating that the information provided during the Zoom meeting - prior to the Public Hearing - lacked the necessary details needed for an interested party to make an informed comment. Specifically, the information provided by Ecology did not include all the assumptions Ecology made regarding building size, orientation, engine placement, etc. All important details from which attendees would have clearly been able to see the general permit as a severely flawed approach to permitting future data centers, and the pollution emitting engines they employ for backup power. (both)

Ecology makes several assumptions, including an east-west orientation of the building (both) which the agency claims is based on past projects. In Quincy, only Microsoft and some of Saby's buildings are oriented in an east-west manner. Vantage, H5, NTT and Cyrus One are oriented north-south. What are the emission's impact if the permittee chooses to orient its building north and south?

Ecology also assumes that the 20 engines will be spread equally around the north and south side of the building, and 8 meters away from it. Additionally, the agency assumes the building to be 365m x 58m, and one of two heights. Unless the agency mandates both the size, shape and height of the building, and exact placement of the engines, these assumptions are meaningless. See Table 3 below from Appendix B, 3 (b). (both)

Does Ecology have the authority to mandate these building requirements?

Table 3. Building parameters.

Location	Building Length (m)	Building Width (m)	Building Height (m)
Quincy	365	58	18.29
Quincy	365	58	8
East Wenatchee	365	58	18.29
East Wenatchee	365	58	8.5

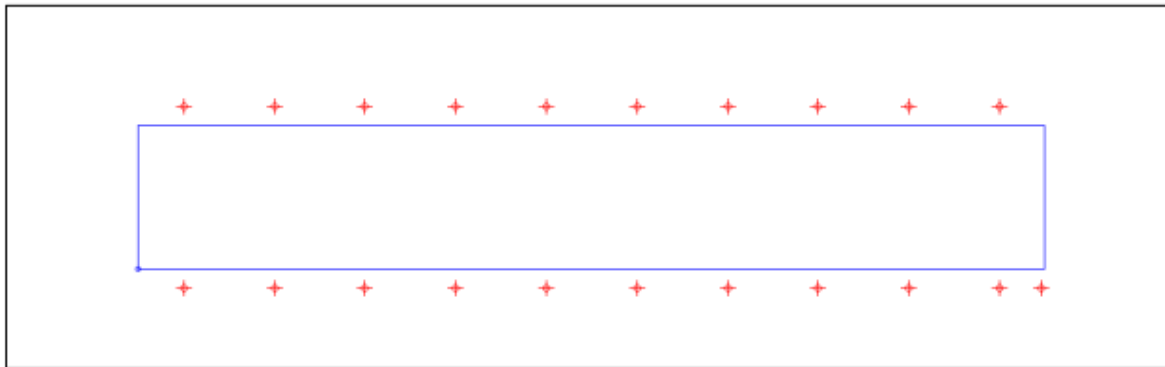


Figure 1. Building layout and engine placement.

Both of these assumptions should have been discussed with the public prior to the Public Hearing so that those in attendance could have made informed comments.

As you may be aware, Quincy ranks in the 92nd percentile for PM2.5, according to EPA's former EJScreen. As a minority community, Ecology should be doing more to reduce PM2.5 exposure, not increasing it. What Ecology deems "health hazards ... considered to be acceptable", community members (if presented with the facts) would not. For example, the 2,818% increase in DEEP (28 times ASIL), even after the use of control technology. How does that impact people with asthma or cardiovascular issues? What's the overall estimate of cancers from DEEP in Quincy now? I request that you provide that information in response to my comments.

Additionally, since this general order claims to add only an additional "five cancers" to any of the data centers (both), wouldn't the facility's aggregate emissions exceed the maximum 10 cancers per million threshold for a Second Tier review? Wouldn't the agency be required under WAC 173-460-100 to conduct a Third Tier review, requiring that -

"the applicant must hold a public hearing to: (a) Present the results of the health impact analysis, the proposed emission controls, pollution prevention methods, additional proposed measures, and remaining risks; and (b) Participate in discussions and answer questions.

This begs the question, “is this general permit being written for a specific applicant?”. It already has an assigned AQ number.

And, unless I am mistaken (please correct me if I am wrong), the standard 0.0033 ug/m^3 used for DEEP represents one cancer per million. If I am correct, then the 2,818% increase in DEEP represents 28 cancers per million and triggers a Third Tier review since it exceeds the Second Tier threshold of 10 cancers per million. If that is the case, then the provisions of WAC 173-460-100 and WAC 173-460-171 apply and the **applicant** must hold the public hearing, etc., as discussed earlier. Anonymity would not be allowed.

As you undoubtedly know, Quincy’s air monitor is located on 3rd Ave NE, halfway between the data centers located on the west side of town, and those located on the east side of town. The monitor is not on the fence line of any of the data centers, so compliance with modeled emissions, especially HAPs and DEEP, has never been confirmed. I request that Ecology locate the monitor at the fence line deemed to be the worst emission level, and after several months, relocate it to the second worst, etc., so as to get an accurate assessment of hazards from the emissions caused by over 400 diesel engines operating for monthly maintenance, testing and data center related issues.

Ecology also needs to defend its rationale for not including the secondary formation of PM_{2.5} during modeling. As you may recall, James Wilder was impeached during a PCHB hearing in 2012 for denying that he had written an email stating that Quincy has a NO_x problem. Since NO_x is a precursor to the secondary formation of PM_{2.5} Ecology is required to consider its impact on the NAAQS.

Nitrogen-oxides are also precursors to ozone, which Ecology has set at 40 ppb. Earlier estimates by contractors indicated that levels of ozone could be conservatively estimated at 65 ppb. This was lowered at the request of Ecology’s modeler at the time, but never defended. Please provide evidence that 40 ppb is appropriate for ozone.

Additionally, as was seen with engine testing back in 2011, assumptions using manufacturers emission rates underestimates actual emissions. As I recall, this was highlighted when high NO_x emissions were emitted at low load. Remembering that the manufacturer's emissions are based on a 5-weighted average, and not actual emissions, it is easy to understand that assumptions based on these rates are far from accurate. Additionally, during the process to guarantee emissions, manufacturers always start the testing after an engine has been running for 30 minutes. Therefore,

reliance on manufacturer's guarantees are unreliable, even when adding in adjustments for cold starts.

What performance tests is Ecology relying on to assure the public that the emission rates relied upon for the modeling are accurate, and do not underestimate risk? Please provide evidence.

Has any testing been done with controls on to assure the reductions in emissions, and the rates of emissions, are accurate? Has Ecology considered emissions that occur when the engine shuts down?

Finally, there are several miscellaneous comments and/or requests.

Please provide the statutory authority for 12-month rolling averages to demonstrate NAAQS compliance.

Are engines allowed to be run for storm avoidance?

Has Ecology considered the enormous amount of heat dissipated from data centers in Washington's Climate action plan?

Since this will be a federally enforceable permit because of its voluntary emissions, will Ecology include a provision for citizens to access records to assure compliance? In other permits, Ecology has limited access to only those records Ecology retains.

Did Ecology review other sized engines, including different manufacturers, for worst case emission rates (albeit flawed)?

Please list the other relevant 40 CFR 60 IIII regulations that apply to this general rule but were not included in it.

Since Ecology requires engine testing, the testing should be conducted without the 30 minute warmup required under the regulation, and with the controls in place.

In Table 2 of the Health Impact Assessment, Ecology failed to consider hexavalent chromium. In Microsoft's analysis of Quincy's water back in ~2010, they found hexavalent chromium, and as a result do not add any to their cooling tower anti-scale.

Finally, while this question may, or may not be related to this general permit, I would like to know if an entity chooses to lease multiple data centers are they required to comply with Title V if the emissions from their activities exceed Title V limits?

In closing, I appreciate Ecology holding a Public Hearing by Zoom so that more people could attend. I remain concerned that Ecology looks only at diesel emissions when the agency is well aware Quincy is surrounded by toxic agricultural chemicals, including pesticides, and continues to allow an increase in DEEP to further degrade our environment.

Thank you in advance for considering my comments.

Respectfully submitted,

Patricia Martin