

December 14, 2025

David Finley
Washington Department of Ecology Eastern Regional Office
4601 North Monroe Street
Spokane, WA 99205-1295

RE: Comments Sabey Data Center

Dear Mr. Finley,

Please accept my comments regarding the proposed addition of 19 diesel engines at the Sabey Data Center. Because I have a number of concerns, I will itemize them so that you can respond in kind.

PM₁₀ Emissions appear to be under estimated. Review of particulate matter emission estimates, as seen below, shows PM₁₀ and PM_{2.5} emissions to be equal. This is, however, inaccurate. While it is true that all PM_{2.5} is counted as PM₁₀, diesel engines emit both PM_{2.5} and PM₁₀. The additional PM₁₀ is not accounted for in the emission estimates.

Table C-4. Criteria Pollutants Emission Estimate - Main Gensets - Worst Case - Building E (New Project)

Pollutant	Emission Factor	Maximum Engine Emission Rate Across Any Load/Vendor ^a			Annual Total for All Engines (tpy)
		Warm Engine (lb/hr/engine)	Cold-Start (lb/hr/engine)	(tpy/engine) ^a	
Particulate Matter (PM) ^b	Maximum Vendor Hourly Emission Rate	1.12	4.76	0.06	0.78
Condensable PM ^b	Maximum Vendor Hourly Emission Rate for Total Hydrocarbon	1.79	7.76	0.10	1.27
Particulate Matter <10 microns (PM ₁₀) ^b	Maximum Vendor Hourly Emission Rate	2.90	12.52	0.16	2.04
Particulate Matter < 2.5 microns (PM _{2.5}) ^b	Maximum Vendor Hourly Emission Rate	2.90	12.52	0.16	2.04

This omission is documented to have occurred in the previous issued permits as well.

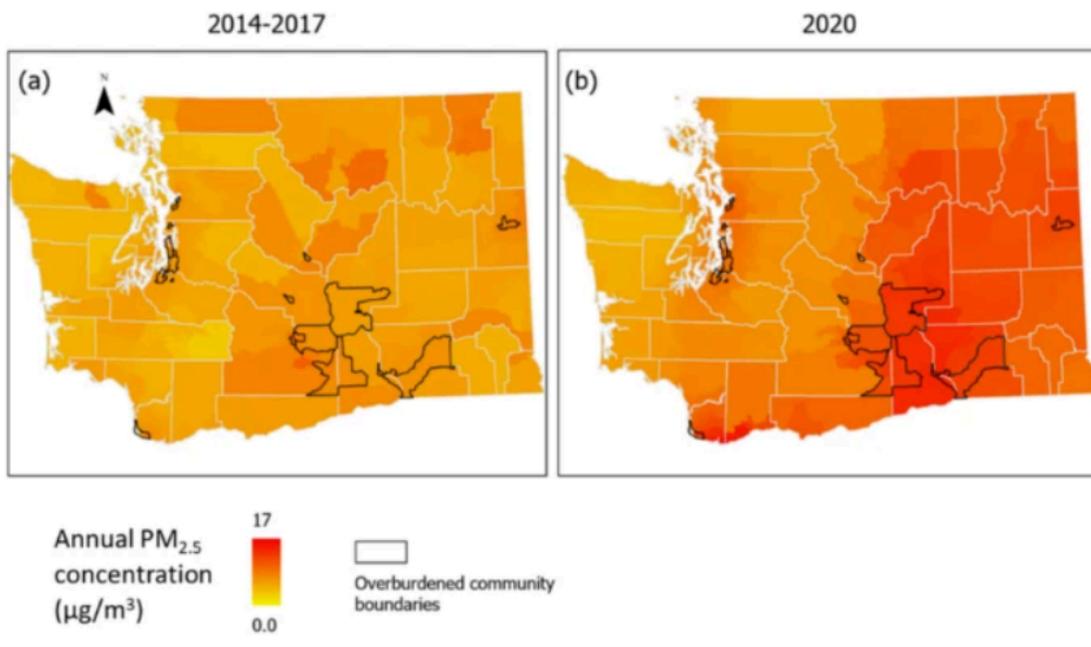
It should be noted that during the prelude to December 8th's Public Hearing, I specifically asked whether diesel engines produced PM₁₀ and, as I recall, Ecology was not able to answer the question. Because Quincy is rapidly approaching the PM₁₀ NAAQS, this omission is unconscionable, and potentially a violation of the NAAQS.

Engine Shut Downs are not accounted for in the emission estimates. Ecology was remiss in earlier permits by not accounting for cold-start emissions, i.e., start-up, and is equally remiss in not accounting for shut-down emissions. During shut-down, products of incomplete combustion increase, i.e., particulate matter, carbon monoxide and hydrocarbons. Every engine start has a shut-down that must be accounted for. This is especially important since there are no controls on any of the engines permitted at the Sabey data center. Please require these emissions to be included in the permit.

Shut down emissions have not been accounted for in any of Ecology’s past permits issued for data centers in Quincy.

PM_{2.5} Background Levels are higher than cities in Western Washington. Ultra fine particulate matter triggers cardiovascular, respiratory and other health affects, and disproportionately impacts communities of color like Quincy. According to the EJScreen, Quincy is in the 92nd percentile for PM_{2.5}. Adding to the community’s burden by permitting additional uncontrolled diesel engines is irresponsible, especially from an agency charged with protecting human health.

Fig. 3



<https://link.springer.com/article/10.1007/s11869-024-01664-6>

Annual NAAQS criteria pollutants. The draft permit does not account for annual PM_{2.5}, and NO₂. Are the annual standards for these criteria pollutants being met? Please provide evidence, Since the background for NO₂ exceeds the annual standard of 53 ppb, is the NAAQS being violated?

Table 6-4. Background Concentrations for NAAQS Analysis

Pollutant	Averaging Period	Background Concentration		NAAQS (µg/m³)
PM ₁₀	24-hour	77.9	µg/m ³	150
PM _{2.5}	24-hour	18.5	µg/m ³	35
NO ₂	1-hour	55.6	µg/m ³	188

Manufacturer guaranteed emission rates underestimate emissions. Using the 5-load weighted average to guarantee engines can meet the Tier 2 standards is misleading at best. During the testing, a 5-load weighted average is used obscuring the real emissions at any given load. Additionally, as part of the testing manufacturers use to guarantee emissions, start-up, shut-down and malfunctions are excluded. Additionally, the emission tests always begin after a 30 minute warmup period. Relying on guaranteed emission rates for modeling purposes, underestimates the emissions released. Ecology should use data from engine tests that are conducted by trusted Ecology, EPA or CARB employees to ascertain the real emissions at any given load.

Monte Carlo analysis used for dispersion modeling. Please provide documentation of EPA's support for the use of the Monte Carlo analysis for NAAQS criteria pollutants and citation to its adoption into Appendix W of 40 Part 51.

Best Available Control Technology. The BACT process involves the impact on the environment, which includes the airshed and the surrounding community. As Quincy's air quality is approaching the NAAQS for PM2.5 and others, it is imperative that Ecology insist that controls be placed on all diesel engines used by the data centers. Contrary to Ecology's assertion that they cannot require controls, WAC 173-400-030(13) states otherwise:

(13) "**Best available control technology (BACT)**" means an emission limitation based on the maximum degree of reduction for each air pollutant subject to regulation under chapter **70A.15** RCW emitted from or which results from any new or modified stationary source, **which the permitting authority**, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, **determines** is achievable for such source ... (emphasis added)

Since BACT is based on a cost/ton of pollutant emitted, and with technologies becoming more affordable over time, please provide the cost estimations used for DPFs, DOCs and SCRs in the BACT analysis applied in Quincy in 2010 and in 2025, as well as, the "acceptable" BACT cost/ton for those years.

Changes to air modeling and NAAQS. There have been changes to several of the air quality models, e.g., AERMOD, etc., that are used for compliance purposes. Please list the models Sabey used in its modeling, and the year the model was last updated.

Finally, Quincy is a largely minority community that must trust Ecology to protect them. Instead it appears that Ecology will continue to allow diesel and other hazardous air polluting facilities to contaminate Quincy's airshed until it is out of attainment. Quincy being held to a less protective cancer-rate standard than other communities reeks of environmental injustice.

Environmental laws were established such that the polluter was to pay to protect the surrounding community, rather than “externalizing” the cost of pollution on existing residents, leading to increased health problems and expense.

The pressure Ecology is undoubtedly under to permit these facilities must not override the mission of the agency to protect the citizens of Washington State. Please keep the mission front and centered.

Thank you for considering my comments. I look forward to your response.

Sincerely,

Patricia Martin
Quincy, WA

