

December 10, 2021

Jenny Filipy  
Environmental Engineer-Air Quality  
Washington Department of Ecology Eastern Region  
Spokane, WA 99205

This letter is from Danna Dal Porto, 16651 Road 3 NW, Quincy, Washington, and it is the Public Comment regarding the permitting of H5 Data Center, Quincy, Washington.

The location of the H5 Data Center is within the boundary of the City of Quincy, Washington. This small Eastern Washington community has been the preferred location for many Data Centers. The supporting documents for this facility suggest the location of these Data Centers is because of the reliable electrical power from Grant County Public Utility. Other reasons for this choice are the land is relatively inexpensive, the community accepts the construction of these industrial plants within the City limits, and the City government is delighted with the tax income for community projects. Most importantly, because these buildings are within the City limits, the Data Centers can use City Water. These Data Centers do not have to apply for permits to drill wells and withdraw enormous amounts of precious, clean ground water.

I bring up the question of water use because I think it is extremely important. I have mentioned this before in statements to Ecology but I suspect I will receive the same message that this permit is for air quality, not water use. I consider this tunnel vision, especially in this time of drought and limited water. I will comment for the record that the excessive water use by Data Centers should be a concern to Ecology and local officials. Not only the millions of gallons of water used but the corresponding problem of what to do with the resulting millions of gallons of used, contaminated water.

The water use is a murky issue. I repeat this background information just in case someone reading this document might not know some of these details. I suspect Ecology is all too aware of the problem with water. The first Data Centers constructed in Quincy made some kind of arrangement with the Bureau of Reclamation to discharge the used water into the West Canal. This canal is one part of the enormous 1930's project that provided Columbia river water to irrigate the desert in this part of eastern Washington State. Turns out that the millions of gallons of water taken from Quincy City wells can only be used once in the evaporative towers to cool the many servers inside the Data Center. The water starts out very hard, full of minerals, and the use in the cooling towers adds other materials to make the water unusable for agriculture without treatment. Recently, the Bureau of Reclamation has rescinded their permission to discharge into the West Canal and this huge amount of used water needs a place to go. Many of the creative suggestions to "use" the water are not feasible and currently the City of Quincy is working with Microsoft to recycle the used water in some kind of closed loop system. Each of the Data Centers is working on their own plan for water use. Considering the projected life of these facilities is measured in decades, not to consider water use is irresponsible. I do not want the aquifer below Quincy to be depleted like the Omak aquifer

I will describe Quincy to explain why I consider the location of these industrial facilities a violation of Environmental Justice. Environmental Justice is the careful inclusion of all people in decision making regarding their surroundings and advocates for land use and use of renewable resources responsibility and ethically. The Environmental Justice movement came in the 1980's when it became obvious that minority communities were many of the places where industrial, therefore potentially dangerous, facilities were located. Environmental Justice became an issue to distribute environmental burdens among all people regardless of their background. A basic principle of Environmental Justice is that your health should not suffer because of the environment where you live, work, play or learn. I believe the residents of Quincy and the surrounding area are being negatively impacted by the emissions of the Data Centers, including H5. I am asking if Ecology knows about the principles of Environmental Justice and applies these ethical considerations to the permitting of potentially hazardous facilities. Just looking at the construction of these data center facilities in a very small low-income community, it appears that the State of Washington can do better for its low-income citizens.

Reading through the H5 documents, it is obvious that this facility has some potential to damage the health of Quincy citizens. The two items of gravest concern are DEEP and NO2. The largest part of the permit application discusses the dangers of these, and other TAPs, such as CO, VOCs, NOx and SO2. Looking at modeled emission maps, most of these materials drift over most or some of Quincy. All of the schools are covered in emission clouds with Quincy High School and Quincy Middle School being around one mile from many of the emitting facilities. (H5 Second Tier Review Recommendation, Figure 1, October 2021, page 21) As one of the principles of Environmental Justice is that a citizen should not "suffer because of the environment where you live, work, play or learn", the clouds of dangerous emissions over the town does affect all of those conditions for adults and children where they live, work, play or learn.

#### Quincy Statistics...

City numbers from the US 2020 census.

School numbers from the 2021 Office of Public Instruction report for K-12

Population	8,033
City Hispanic	80.3%
Poverty level	21%
Per Capita income	\$18,952
No health insurance	20.6%
Quincy Students	3,171 (The School District draws from a large area, not just the City)
Minority	87.9%
Low-income	81.1%
Homeless	2.3%
Migrant	11.7%

As you can see, Quincy does qualify as a low-income, minority community. This is the type of community that is the focus of Environmental Justice. The residents of Quincy should not be

subject to environmental hazards because they live in Quincy. The various arms of the State and National environmental agencies should be protecting this community, but they do not. The Washington State Department of Ecology has permitted 361 diesel engines to be placed in Quincy and makes, in my opinion, little effort to protect the residents.

The H5 permit is allowing the best available control technology (BACT) to be the emission limitations consistent with EPA's Tier 2 emission standards. The document reads: "The basis for this recommendation is that the cost of EPA Tier 4-compliant emission controls is disproportionate to the benefit (i.e., emission reduction) achieved." (Revised Notice of Construction Application Supporting Information Report, Landau, July 15, 2021, page 1-2) Landau repeats the assertion that the controls are too expensive in the Revised Second-Tier Health Impact Assessment, H5 Data Center, Quincy, Washington, Landau, July 15, 2021, page 4-1. The same reference, page 4-1, writes the cost of controls: "The BACT/tBACT analyses concluded that all of the add-on control technology options...are technically feasible, but each of them failed the BACT cost-effectiveness evaluation".

To summarize, the evaluation of additional controls for the permit is that there are controls that would help reduce emissions but the controls are too expensive for the benefit. Who is the benefit for? The benefit for Quincy residents would be healthy air, the benefit for the Data Center developer is the ability to construct a facility in the cheapest possible way. I have read almost all of the permitting documents for Quincy data Center construction and all of the 361 permits use excessive cost as the rationale for allowing the Tier 2 engines to be the controls. In other plain language, emission controls can be added to reduce hazardous emissions but those are disregarded because they cost too much money for the developer. It is true that the additional emission controls are expensive but the developer of these facilities knew the costs before they applied for the permit. The developer also knew that historically the Washington State Department of Ecology would allow the Tier-2 (cheaper) engines to be the BACT. The developer is betting that they can get by on the cheap. These Data Centers are built to last for a very long time. I do not have the monetary amounts available to figure out how the "excessive cost" would average out over time, but I do know that purchasing emission controls is a small price to pay to protect human health and the environment. Allowing these massive amounts of hazardous material to drift over a community, knowing that those emissions can be controlled to some extent, is a dereliction of duty and dark spot on the reputation of the Washington State Department of Ecology.

I want to point to a statement in the H5 documents. "Revised Second-Tier Health Impact Assessment, H5 Data Center, Quincy, Washington, Landau, July 15, 2021, page 3-1."

"In evaluating a second-tier petition, background concentrations of the applicable TAPs must be considered. Ecology sets no numerical limit on cumulative impacts from a facility, local background and regional background levels."

This has always bothered me about the Ecology permitting process. Quincy has 361 locomotive sized diesel engines. The many data centers built in Quincy are so close together that a person

can stand in various places in town and see almost all of these industrial structures at ground level. Each facility is permitted but, as the statement above notices, Ecology has not set a limit on the cumulative impacts of these facilities on one another. The emission plumes overlap. Several emission plumes overlap each other in a sandwich of emissions. How can Ecology not set a limit on the cumulative effects of these emissions? The permit allows for a death rate of a set number out of a thousand /million, per facility, but those numbers are not added up as far as I can tell. If Vantage's death rate is 6 out of a thousand/million, and Yahoo! (forgot new name) is 8 out of a huge number, why aren't these numbers added together to really see the damaging effect of these emissions as a whole? Ecology acts as if the emissions are separate, each cloud not intersecting with another, but they are not separate in the air. Logic tells me these clouds do mingle and make one BIG cloud. How can Ecology contend that a specific facility can cause specific harm but that the cumulative harm does not result from the aggregate of the cloud? Very confusing for me. (I will remind Ecology that many years ago the death rate was an arbitrary number to limit emissions. As far as I know, no study was made to verify that number.) Explain to me how you can allow each of these data centers to have a specific death rate and not add them all together to form a whole picture of the emissions over Quincy.

Several additional items in my comments. (Revised Second-Tier Health Assessment, H5 Data Center, Quincy, Washington, Landau, July 15, 2021, page 6-3) The document reads that "possible" chemicals in DEEP will build up in food crops and drinking water sources downwind. I believe that statement should read that DEEP "WILL" build up on surfaces and crops. Most housewives will tell you that the dust in local houses is black, not brown like it was years ago. The black stuff is DEEP. Apples in and around Quincy have dark material around the stem of the fruit. I have been told that dark stuff is DEEP. The data center emissions are affecting the health of people, animals and crops in this valuable agricultural area.

Revised Second-Tier Health Impact Assessment, H5 Data Center, Quincy, Washington, Landau Associates, July 15, 2021, page 6-2. (6.1.2 Overview of NO<sub>2</sub> Toxicity) has a section specific to NO<sub>2</sub>. The opening sentence is important. "NO<sub>2</sub> is a red-brown gas that is present diesel exhaust." This section of Overview of NO<sub>2</sub> Toxicity continues to explain how the introduction of NO<sub>x</sub> into the air "produces a chain of reactions responsible for the formation of ground-level ozone". The remaining section of the Health Impact Assessment continues to describe the short and long-term effects of NO<sub>2</sub>. Working through the details, the result is NO<sub>2</sub> is dangerous stuff, dangerous to adults as well as children. From my home south of Quincy, I have seen the red-brown clouds over the town of Quincy. I have tried to photograph these sightings but digital images do not capture the semi-transparent cloud of gas. Since this is an electronic transmission of my comments, I will mail in my photographs to Ecology as a record of my observations. As an aside, two people have asked me about those clouds. Those clouds of NO<sub>2</sub> are over town, especially in times of weather inversions, specifically during the summer.

I looked at the supporting documents for sections of this report and I was interested to see that many of the references are from many years ago.

CalEpa Document... 1998  
 EPA Diesel Exhaust ...2002  
 EPA Diesel Exhaust...2003  
 Office of Environmental Health Hazard Assessment... 2008  
 Ecology Health Effects ...2008

I certainly would not accept documents this dated if I was going in for a medical procedure. Giant advances in technology and research have been made over the intervening years. I think Ecology should look for the latest in research for permitting diesel engines.

In summary, I offer some statistics.

2020 US Census Quincy population	8,033	
2021 total Data Center Diesel engines	361	
Number of Quincy Residents per Engine	22.52	Engines for every town resident
2020 Quincy District Students	3,171	
2021 total Data Center Diesel engines	361	
Number of Quincy Students per Engine	8.7	Engines for every school student

To look at those numbers is to realize how the number of permitted locomotive sized diesel engines has almost out-numbered local residents. The future looks about the same with continued development of Data Centers in Quincy. The conditions here are perfect for these wealthy international companies: cheap land, good electrical connectivity, almost free water and compliant officials at every level to continue this environmental invasion.

To conclude, I object to the H5 permit on the grounds that this permit from the Washington State Department of Ecology does not do enough to protect the residents of Quincy, Washington. I believe that additional emission controls must be added to any construction to reduce environmental hazards for local low-income people.

I have specific questions.

1. I am asking the question if Ecology is considering the principles of Environmental Justice in permitting hazardous facilities. What is the policy of permitting hazardous stuff in low-income communities?
2. I am asking if Ecology is considering the addition of advanced emission controls to any permit applications. If not, why not?
3. I am asking if Ecology is considering the cumulative emissions of TAPs over Quincy. The current practice of considering each facility separately does not give the public an accurate picture of the total emission cloud. I want the cumulative emission cloud data.

4. Does Ecology have a plan to compensate local farmers for damage to crops resulting from emission particulate. Does Ecology have any data on crop damage from particulate?
5. Does Ecology have any plans to moderate the development of Data Center construction in Quincy in light of the density and danger of these facilities to human health and the environment?
6. I am asking for a map of emissions that covers the entire City of Quincy. I would like the schools identified, the Senior Center, and the Hospital. Identify the data centers on this map.

Comments in addition to the specific information regarding H5.

The H5 permit documents were very complete. The Landau documents were full of numbers and facts, overwhelming in their complexity, almost as if the excessive details were designed to confuse. I was told several years ago that the permitting documents were supposed to be understandable by the "average" person. The Ecology documents were much more comprehensible and easier to read.

Quincy has an air monitor in place. Unfortunately, I do not know how to use it to access data, specifically data from the summer of 2021. The AQI was really high during the summer of 2021 with huge numbers. Most of that was caused by local wildfires but I would like to know how to use this website. Please give me a reference person in Ecology to teach me how to use the air monitor. I complained for many years that Quincy did not have a monitor and I thank you for installing this device. I apologize for not learning more about this useful tool.

I am asking if Ecology is monitoring the water use by the Data Centers in Quincy. I know this is an air quality permit but I would like a reference to the person in Ecology to reach for answer my question. Water will become a big problem in the future and Washington residents must do everything necessary to preserve and protect existing water.

I and others have observed that Ecology has a habit of asking for Comments during a busy time for citizens. This Comment period bracketed Thanksgiving. In the past, Comments were due right after Christmas. I trust this an accidental and not a purposeful attempt to discourage Comments. Please, pay attention to the time periods requesting citizen Comments.

I am learning about the "StoryMap" and how to access this new feature of the Ecology website. Thank you for this additional program to share Ecology data.

I want to complement Jenny Filipiy for her help in assembling information for my comments. I want to thank Gary Palcisko for his continued service to the citizens of Washington.

Danna Dal Porto  
16651 Road 3 NW  
Quincy, Washington 98848

