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Intel/DEQ Hearing testimony for Permit number 34-2681

The inadequacy of the existing monitoring program was demonstrated when Intel admitted that one of its pollutions control system was shut down for a period of 3.5 months, during which they claimed to have been unaware of the malfunction. (in New Mexico)

As counter-intuitive as it might seem, the permit approval process includes no attempt to determine whether breathing the proposed limits of HAP contaminated air is safe, certainly if a release of their yearly allotment was to happen over a shorter term levels could reach many times what is considered a safe limit.

Intel's use of "emissions factors" is highly suspect. With out any continuous monitoring or empirical evidence using controlled experimental conditions, with known control samples. These Emissions factors are at best an educated guess and may not represent actual emissions particularly at a given moment in time, a factor which is far more important than currently given yearly estimates. Furthmore In a recent 2010 EPA investigation (New Mexico), the EPA readily found two emission factors that were in error, many more errors are likely to exist, bring into doubt Intel's entire method for determining pollution release.

VOC Increase

From Paragraph 28 of "Oregon department of environmental quality Oregon title V operating permit review report".

28. Intel has requested a PSEL (Plant Site Emission Limit) for VOC (Volatile Organic Compounds) of 178 tons per year because of the D1X expansion will increase the use of VOC solvent. The requested increase is 39 tons per year over the current VOC netting basis of the 139 tons per year. The increase is less than the VOC

SER (Significant Emission Rate) of 40 tons per year. Since the requested emissions increase is less than the VOC SER over the netting basis, the request is approvable without having to meet any special requirements (such as an air quality analysis) per OAR 340-222-0041(3)(a)

Question:

Isn't it suspicious that Intel's new permit is an increase of 39 tons per year where the threshold is 40 tons per year? Looking at Intel's previous permit amount of 99 tons per year and Intel's new permit amount of 178 tons per year it appears that Intel's increase of VOC's is 79 tons per year. Looking at the Oregon department of environmental quality Oregon title V operating permit review report, page 18, is a table for significant emission rates, Why does Intel's new air quality permit request an increase in pollutant release that falls just below the Significant Emissions Rate (SER) threshold?

What is "VOC netting basis"?

Is Intel allowed to increase their VOC emissions 39 tons per year?

What are the "Special requirements" (per OAR 340-222-0041(3)(a))?

Why doesn't Intel perform an air quality analysis even if not required by OAR?

Fluoride

From Paragraph 41 of "Oregon department of environmental quality Oregon title V operating permit review report".

41. The SER (Significant Emission Rate) for fluoride is 3 tons per year, and the proposed fluoride PSEL (Plant Site Emission Limit) is more than the significant emission rate over the fluoride netting basis. As a result of GHG (Green House Gasses) becoming a regulated pollutant on January 1, 2011, Intel became a major source for Title V on that date, and also became a "federal major source" as defined in OAR 340-200-0020(55). Facilities classified as federal

major sources are subject to the PSD (Prevention of Significant Deterioration) program when they make physical changes that increase emissions by the SER (Significant Emission Rate) or more. However, the D1X expansion was approved in December of 2010, before Intel became a federal major source, so Intel was not subject to PSD (Prevention of Significant Deterioration) program at the time the D1X project was approved and PSD was not triggered.

Question:

Does it matter if Intel had their permit approved before their inclusion to as a “Federal major source”? Now that Intel is recognized as a “Federal Major Source” shouldn’t Intel be subject to PSD programs?

EPA/Federal

1. Why are there no DEQ monitoring stations in Hillsboro and Aloha? (Nearest DEQ monitoring stations are in Oregon city and SE Portland)
2. Why is Intel allowed to monitor emissions without DEQ oversight or compliance verification?

VOC’s/HAP’s

1. What accounts for the increase of 78% in VOC (Volatile Organic Compounds) emissions?
2. Is it possible to increase VOC capture/reclaim/destroy efficiency? Are there additional controls that could be use to decrease VOC and HAP emissions?
3. Have all possible avenues been explored for reducing manufacturing preprocess solvent use?
4. Have alternative manufacturing processing that use less VOC or substitute compounds been explored?
5. How are VOC emissions measured and what is the demonstrated accuracy of those measurements?
6. How are VOC off site being managed? Specifically off site vendors and service providers?
7. How were the limits for HAP (Hazardous Air Pollutants) determined? Specifically how was it determined that 9 tons per year for a individual HAP and 24 tons per year for all aggregate HAP’s was

an acceptable release amount?

8. If assuming a capture/destroy efficiency of VOC's is 95% is it accurate that the reported PSEL (Plant Site Emission Limit) is 1/20 of the total VOC's used at Intel?

9. Limits are set at tons per year, what are short term limits? Amount per day for example?

Boilers

1. What are the boilers efficiency rating? What is or could be done to improve there efficiency?

2. Why are their boilers without NOx reduction systems in place?

Thermodynamics

1. Intel uses a large amount of electricity and numerous thermally intense processes. What is the thermal load on the surrounding area? Will the D1X expansion significantly increase the thermal load on the surrounding area?

Hydrodynamics

1. What is the water use at Intel? Can the local water supply support the expansions at Intel?

2. What monitoring systems are in place to test water from Intel?

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