Genentech A Member of the Roche Group

Aug 23, 2019

Joshua Alexander Air Permits and Compliance Oregon Department of Environmental Quality 700 NE Multnomah Street, Suite #600 Portland, OR 97232-4100

Dear Mr. Alexander:

Following our August 8, 2019 meeting with you and DEQ staff to review the Genentech Building 20 & 21 Project Simple ACDP Application and initial Cleaner Air Oregon submittals, we are transmitting with this letter the following supplemental information:

- A response to your August 6, 2019 email regarding boiler installation dates and clarifications on the applicability and requirements of 40 CFR Part 61 Subpart FF.
- Revised Diesel Particulate Matter (DPM) emission estimates.
- A revised Modeling Protocol with supplemental information.
- A Level 1 Source Risk Assessment
- Form AQ101 Fee Information Sheet Public Hearing Request

Each of these items are addressed in more detail below.

August 6, 2019 email

Install dates for the following air contaminant sources:

Two (2) – 24.5 MMBtu/hr Cleaver Brooks low NO_x boilers (BR-1 and BR-2).

Install Dates: May 2008

Three (3) – 2.5 MMBtu/hr Lochinvar (or equivalent) low NO_x boilers (BR-3, BR-4, and BR-5).

Install Dates (future – approximate): Q4 2019

One (1) – 2000 kW Caterpillar emergency generator (EG-2).

Install Date (future – approximate): Q4 2019

Applicability and Requirements of 40 CFR 61 Subpart FF-

We also have reviewed our legal obligations regarding the applicability of 40 CFR 61 Subpart FF to the Genentech Building 20 & 21 Project, and our analysis is summarized below:

The Subpart FF NESHAP will apply to the facility but there are no substantive requirements. The Subpart FF NESHAP applies to "owners and operators of chemical manufacturing plants" [§61.340(a)]. According to the Subpart FF definitions, chemical manufacturing plant includes "pharmaceutical preparations" [§61.341]. So, this "Benzene Waste Operation" NESHAP can apply to a facility that does not use, process or intend to generate as a waste benzene; a pharmaceutical manufacturer with absolutely no benzene in its waste would still be subject to Subpart FF, it would just not have any substantive requirements.

Subpart FF consists of three different sets of requirements depending on the total annual benzene quantity present in facility wastes. Subpart FF differentiates between facilities that have "total annual benzene quantity from facility wastes" of (a) less than 1.1 tons/year, (b) 1.1 tons/year or more, but less than 11 tons/year, and (c) 11 tons/year or more. No substantive (i.e., control) requirements are imposed on facilities that fit into one of the first two categories [§61.342(a)].

Genentech's proposed facility will not use benzene as a process chemical and nor does the company expect to have benzene in its waste except perhaps as a trace contaminant. As a result, the total annual benzene quantity from facility wastes will be below the 1.1 ton/year threshold. As a result, no control requirements apply. However, Subpart FF does impose recordkeeping and reporting requirements, even to sources with little or no benzene in their waste. These de minimis sources still have to (a) comply with the recordkeeping requirements of §61.356 and reporting requirements of §61.357 and (b) repeat the determination of total annual benzene quantity from facility waste whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 1.1 ton/year or more [§61.355(a)(5)]. The recordkeeping requirements consist of documenting the basis for concluding that the facility has a total annual benzene quantity from facility wastes of less than 1.1 tons/year [§61.356(b)]. The reporting requirements consist of an initial notice upon startup of the facility to EPA and DEQ [§61.357(a)] and a subsequent report whenever there is a change in a process generating a waste stream that could cause the total annual benzene quantity from facility waste to increase to 1.1 ton/year or more [§61.357(b)].

The requirements do not make much sense in the context of a facility like Genentech's, but Subpart FF is defined so broadly that the facility is subject to Subpart FF's requirements for de minimis sources of benzene. We believe this response clears up our intent of including a discussion of Subpart FF in the Regulatory Review section of the application and also answers questions regarding benzene waste volumes, storage, containment and treatment.

Revised Diesel Particulate Matter (DPM) Emission Estimates

As discussed during our August 8th meeting the DPM emission estimates have been updated to include condensable PM as being entirely derived from hydrocarbon emissions based on hydrocarbon emissions factors provided by the emergency engine manufacturers. In addition, assumed operating hours was revised downward based upon actual practice. A revised Table 3-4 from the original application and sample calculations are provided in Attachment A. A revised DEQ Form AQ405CAO with the new DPM emission estimates will be provided to the Department via email.

Revised Modeling Protocol

A revised Modeling Protocol is provided with Attachment B and includes the following updates:

• Updated exposure locations, e.g., property line receptors at the Industrial/Commercial zoned area to the

north of the facility.

- New Table 2-3 which provides a Crosswalk for the Zoning Land Use to Cleaner Air Oregon category as used in the Risk Assessment.
- Clarification on the meaning of and land use designation for "Future Urban Development".

Level 1 Risk Assessment

Attachment C provides summary tables of the Level 1 Source Risk Assessment conducted for the facility. For each Toxic Emission Unit (TEU) the summary table includes emission rates, stack discharge heights, receptor distances, dispersion factors and risk calculations such that the Department can verify the assessment.

Using the very conservative Level 1 Risk Assessment approach the calculated total facility excess cancer risk and the total chronic noncancer Hazard Index are both well below the Risk Action Levels established in the Cleaner Air Oregon rule. The calculated acute noncancer Hazard Index is 1.

Form AQ101 Fee Information Sheet - Public Hearing Request

Per our previous discussions Genentech is requesting a Public Hearing. Funding for this request is being processed and will be delivered in the near term.

Should you have any questions, comments or require additional information regarding this submittal, please contact me at 503-704-9543 or by email at boynton.bryan@gene.com.

Sincerely,

Bryan Boynton

Genentech SHE Manager

Enclosures:

Supplemental Information Packet Form AQ101 Fee Information Sheet for Public Hearing Request

cc: JR Giska – OR DEQ (via email)

John Browning – Bridgewater Group (via email)