



June 24, 2022

BY EMAIL

J.R. Giska (JR.giska@deq.oregon.gov)
CAO Program Engineer
Oregon Department of Environmental Quality
700 NE Multnomah St.
Suite 600
Portland, OR 97232-4100

Re: Response to Comments on Cleaner Air Oregon Modeling Protocol and Risk Assessment Work Plan

Dear Mr. Giska:

On May 26, 2022, ENTEK International LLC (ENTEK) received your letter commenting on our Cleaner Air Oregon (CAO) modeling protocol and risk assessment work plan. This letter constitutes our timely response to your questions and comments. Each of your comments is reproduced below in italics and the answer follows. As the modeling protocol precedes the work plan, we address the modeling protocol first.

Modeling Protocol

1. Submit a revised AQ520 CAO Emissions Inventory Form

Section 3.6 'Natural-Gas-Fired Boilers (TEU-2.3 and TEU 2.1)' indicates, "The emission rates shown in Tables 3-1 and 3-2 correct cell reference errors identified in the DEQ-approved emission inventory that incorrectly looked up the annual natural gas fuel usage instead of annual diesel usage to calculate annual emissions." Please submit a revised Emissions Inventory with these corrections.

A revised emissions inventory reflecting the correct boiler emission rates is attached.

2. Emission Rates

Please provide the following information regarding the proposed emission rates:

a. In Table 3-2, the pounds per day [lb/day] emission rates incorrectly match the pounds per year [lb/year] rates in Table 3-1 – please revise.

b. In Table 3-3, the "Acute Risk Equivalent Emission Rate" are derived from the annual emission rates, rather than the daily emission rates – please revise.

A revised modeling protocol with revised tables is attached.

c. In Table 3-5, Acetone emissions from C-STK are allocated at 42%, please provide justification for the allocation of these emissions.

Allocation is based on historical use of acetone facility-wide. Approximately 42% of the acetone usage takes place within the permanent total enclosure and as a result acetone associated emissions are discharged through the main stack (C-STK).

d. Leak Detection and Repair (LDAR) emissions:

i. The LDAR analysis submitted along with the Stipulated Emissions Inventory, 2022 01-11 LDAR Component Emissions Spreadsheet_final.xlsx, indicates that Zone 12B, Solvent Tanks Phase Separator, is a fugitive emissions source that accounts for ~10% of the fugitive emissions; however, Table 3-4 only includes Zone 12A emissions, along with Zone 11, as being released from a modeling ID of STK_Z11 - Zone 12B is not included. Please provide support for this discrepancy.

Zone 12B emissions were excluded in error. The revised modeling protocol now includes Zone 12B as requested.

ii. The total emissions from the LDAR zones of 684.58 pounds per year are consistent between the LDAR analysis submitted with the Stipulate Emissions Inventory and the emission rates in the Modeling Protocol; however, the distribution of the emissions among the emission points, or Zones, is not consistent (see Attachment A). Please substantiate these discrepancies and revise the appropriate document for re-submittal.

Please find enclosed revised modeling protocol including all Zones with the correct distribution among the emission points.

3. Modeling Receptors and Exposure Location Assignment

a. Please address the following concerns related to determining the extent of the facility boundary:

i. Please provide information demonstrating that Taxlot 104 on Map Number 12S2W10B (see Attachment B, Figure 1), the land between the Entek manufacturing facility on Taxlot 1600 and the Entek warehouse located on Taxlot 100, is included on the lease of the warehouse from Western Warehousing LLC and should be considered as part of the Entek source; and

The land making up Tax Lot 104 is owned by an ENTEK affiliate, but is not part of the warehouse lease. ENTEK can remove Tax Lot 104 from consideration as part of the source, but that would leave the warehouse and the manufacturing site non-contiguous thereby calling into question whether the warehouse is appropriately part of the same source as the manufacturing site. To be a single source, the warehouse and the manufacturing facility must be, among other things, contiguous or adjacent. DEQ defines “adjacent” as nearby and interdependent. DEQ has previously defined “interdependent” in guidance as meaning that a manufacturing process is started at one facility and finished at the other. ENTEK performs no manufacturing at the warehouse so the warehouse and the manufacturing site would not be considered interdependent. We have treated the warehouse and the manufacturing sources as contiguous based on Tax Lot 104 being part of the same overall site, but if Tax Lot 104 is removed from the site, this calls into question whether the warehouse should be considered as part of the same risk assessment as the manufacturing facility. We have tentatively removed Tax Lot 104 from the

manufacturing site boundaries and retained the warehouse as part of the manufacturing facility. The new receptor locations are shown in Figure 4-5. However, this leaves open the question as to whether the warehouse should be considered part of the source subject to the risk assessment.

ii. Please provide information demonstrating that the operations and emissions associated with the Entek Manufacturing Inc facility on Taxlot 1100 on Map Number 12S2W10BA (see Attachment B, Figure 1) are included in the current Title V Air Quality permit in order for this facility to be considered as part of the Entek source for the purposes of this Risk Assessment. It is our understanding that Entek Manufacturing is not included in the Entek International TV permit.

ENTEK Manufacturing has been included as part of the ENTEK International Title V permit since August 2012 when the permit was modified to reflect that ENTEK Manufacturing LLC and ENTEK International LLC had recently come under common ownership and control. At that time, the ENTEK Manufacturing LLC emission points (BH-20 and pyrolysis oven) were added to the list of Aggregate Insignificant (AI) emissions units in the Title V permit where they remain today.

The facilities are considered a single source based on the applicable definition of “major source.” Two sources must be considered collocated where they are located on one or more contiguous or adjacent properties and are owned or operated by the same person or persons under common control. Under Title V, but not Title III, the sources must also share a common SIC code or one be a support facility for the other. Where, as here, one of the two sources is a HAP major source, the more prescriptive Title III definition controls. Consistent with the Title III definition, the two facilities are contiguous and are under common control. There is shared management, common ownership and the properties are contiguous. For example, I am an officer of both companies with management responsibility, Mr. Figueroa is the site EHS Director, we have a common safety manager, we have one HR team, one IT team, one accounting team and we all operate on the same ERP platform. The two entities are treated as a single source for purposes of stormwater permitting, Form R reporting, Fire Marshal reporting, SPCC planning, hazardous waste counting/generator status, and Toxic Use and Hazardous Waste Reduction (TUHWR) planning—just to name a few. In short, ENTEK Manufacturing LLC and ENTEK International LLC are contiguous and under common control. As a major HAP source, that means they must be permitted as a single source and hold a joint Title V permit.

b. Regarding the property on Taxlot 1400 on Map Number 12S2W03C (see Attachment B, Figure 1):

i. Please provide documentation that Entek will restrict public access to this area by installing both physical (e.g., fencing) and administrative (e.g., signage) controls; and

ENTEK has engaged a contractor to install fencing around Tax Lot 1400. The fencing installation is expected to be complete this summer at which time signage will be installed. We can submit photos of the project when it is finished if necessary.

ii. Because exposure locations in the CAO program are assessed based on the underlying zoning, which in this case is Exclusive Farm Use, please request an exposure location change using AQ521 & 522 forms for modeling receptors on this taxlot consistent with its use.

We do not understand the basis for this question. We agree that exposure locations in CAO are assessed based on the underlying zoning but there are no exposure locations on Tax Lot 1400 as the public is excluded. This is not different from any other portion of ENTEK's property. Therefore we do not believe that it would be necessary or appropriate to request an exposure location change from Exclusive Farm Use as Tax Lot 1400 is not an exposure location. If there is something that we are not understanding, we welcome your clarification.

c. In Figure 4-9, there are homes labelled as 'Worker' exposure locations directly east of the facility (see Attachment B, Figure 2) – please update these to 'Residential' exposure locations.

A revised modeling protocol with a revised Figure 4-7 showing the requested change is attached.

d. Roadways should only be classified as "risk not evaluated" for receptors within the 25m and 50m spacing grid because further out the receptors are intended to characterize the general exposure location for an area. For example, if a modeling receptor at the 200-meter spacing interval happens to fall on a road inside a residential area, and there are few other receptors that are capturing that residential area, the receptor should be classified as a residential exposure location in order to more accurately characterize the people being exposed in that area. As an example, see the residential area in the southeast portion of figure 4-5. Please revise this figure, and the exposure location assignment of any receptors, accordingly.

A revised modeling protocol with revised figures and exposure location assignment of receptors is attached.

e. Please ensure correspondence between the exposure location figures provided and the modeling receptor/exposure location crosswalk provided.

A revised copy of the modeling receptor/exposure location crosswalk (Table 4-9) is included in the attached revised modeling protocol.

4. Building Downwash Modeling Parameters

In figure 4-3 there are a number of buildings not included in the downwash assessment (e.g., the building the Carbon Stack is attached to) – please substantiate why these buildings were excluded or revise the Modeling Protocol to include them in the downwash assessment.

Figure 4-3 and Table 4-6 in the attached modeling protocol have been updated to account for all downwash structures at the facility. Structures visible in the aerial imagery of the facility that are not identified as downwash structures are either open on two or more sides or are elevated structures that do not extend down to ground level.

5. Meteorological Data

Because on-site meteorological data is available beginning in 2017, please use all available full year meteorological data from 2018-2021 and revise the Modeling Protocol to reflect this update.

We have revised Section 4.2.1 of the modeling protocol to address your question. As it explains, the only available full year of on-site meteorological data is 2018. One requirement in order for meteorological data to be considered valid is that the meteorological station must pass quarterly audits so as to ensure the components are all working. ENTEK's meteorological station passed quarterly audits for all four quarters of 2018 and the first quarter of 2019. After the first quarter of 2019 the meteorological station was no longer maintained and no further audits were performed until August 2021. At that time, the first audit in roughly 2.5 years was performed and the wind sensor was identified as defective and had to be replaced. As a result, neither 2019, 2020 nor 2021 were full years of meteorological data. Section 4.2.1 of the modeling protocol has been revised to reflect this history.

Risk Assessment Work Plan

DEQ made two comments on the risk assessment work plan. The first expressed DEQ's agreement as to potential overstatement of risk and the second relates to acute impacts associated with TCE. In regards to the second comment (Bullet 3), DEQ suggests that ENTEK should not state in its final risk assessment that acute impacts are based on an assumption of 15 to 364 times the actual exposure. ENTEK respectfully disagrees with this comment and cites to the scientific literature as a basis for its comment.

As no changes to the work plan were requested, we have not included a revised work plan.

Please do not hesitate to contact me if you have any questions regarding this submittal.

Very truly yours,



Kimberly Medford
President
ENTEK Manufacturing

Attachments:

Revised Emissions Inventory
Revised Modeling Protocol

cc: Geoff Schiveley
Agustin Figueroa
Tom Wood
Brian Eagle
Andrew Rodgers