



Oregon

Kate Brown, Governor

Department of Environmental Quality

Agency Headquarters

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October 8, 2019

ENTEK International LLC
250 Hansard Ave
Lebanon, OR 97355

RE: Warning Letter with Opportunity to Correct
ENTEK International LLC
2019-WLOTC-4992
22-6024-TV-01
Linn County

Dear Mr. Hanawalt:

ENTEK International LLC (Entek) was called in to the Cleaner Air Oregon (CAO) program on March 4, 2019. Pursuant to OAR 340-245-0030(1)(a)(A) Entek submitted an emissions inventory (EI) to the Department of Environmental Quality (DEQ) on June 3, 2019. Per OAR 340-245-0030(2), on August 8, 2019, DEQ provided Entek a written request for clarifications and additional information to address deficiencies in Entek's June 3, 2019 submittal. Entek provided a response to DEQ on September 6, 2019 to address specific comments outlined in DEQ's comment letter, as well as providing some additional information.

DEQ has completed review of Entek's response. Based on this review, and additional observations made by DEQ during the recent compliance inspection at your facility led by the Environmental Protection Agency (EPA) in May 2019, we have significant concerns regarding inaccuracies and discrepancies contained in your response. When coupled with instrument readings taken by EPA of onsite emissions, these responses appear to substantially mischaracterize your facility's emissions. It is critical for DEQ to expeditiously obtain more accurate information so that we can correctly assess emissions from facility operations and the related potential risks to the community, and reduce those risks as appropriate.

The following are DEQ's determinations following review of Entek's EI submittals to date:

In response to DEQ's request that Entek provide "...any and all background data..." needed to substantiate calculations and methodologies used by Entek to report Toxic Air Contaminant (TAC) emissions associated with "fugitives and non-fugitives" from EU-1 Separator Production Lines, DEQ finds the following:

1. Entek indicated that for the purposes of CAO, it will no longer calculate emissions using the material balance method required by conditions 32(d) & 32(e) of its current Title V permit. Instead, Entek indicated TAC emissions will be reported using the Continuous

Emissions Monitors (CEMs) data for non-fugitive emissions and will assume no fugitive emissions based on 100% containment of emissions within the production facility. DEQ notes the following:

- a. Entek did not provide any reporting methodology changes prior to the EI submittal and therefore DEQ has not reviewed nor approved the emissions reporting approach as outlined by Entek. Additionally it is unclear why emissions would be calculated differently for CAO than as required by your Title V operating permit.
 - b. In Entek's 2018 Annual Report, the facility reported 33.27 tons of Trichloroethylene (TCE) purchased and added to the system in 2018, and accounted for 15.47 tons of TCE as "Estimated Credit for TCE in Battery Separator Shipped Off-site." Although Entek has presented DEQ with data on studies related to this estimate in the past, the results did not provide DEQ with confidence in the estimates. Further, it is unclear how Entek is accounting for this mass of TCE as reported in the CAO EI submittal.
 - c. Entek did not provide CEMs data for review in substantiating the reported emissions as requested in DEQ's comment letter to Entek on August 8, 2019. The letter requested that Entek's response include "any and all background data".
 - d. DEQ finds the assertion by Entek that there are no fugitive emissions from production based on 100% containment within the production facility to be unsubstantiated and inaccurate (see section 3(a) below).
2. In regards to fugitive emissions associated with leaks from piping, valves, and fittings, Entek indicated that the Leak Detection and Repair (LDAR) program required in the facility's Title V permit was sufficient for reporting zero fugitive emissions from these potential sources; DEQ finds this to be an inaccurate representation of fugitive emissions associated with leaks from these sources, noting the following:
- a. The LDAR program requires annual reporting of detected leaks on a monthly basis, and as indicated by Entek's 2018 annual report, there were on average approximately nine leaks reported per month at levels greater than 200 ppm_v TCE; and
 - b. During the compliance inspection performed by the EPA in May 2019, DEQ and EPA observed multiple readings taken with a photoionization detector (PID) that indicated the presence of leaks on piping, valves, and fittings external to the production facilities, with multiple measured values greater than 800 ppm_v of TCE.
3. In addressing fugitive emissions from the "Warehouse and staging area," Entek asserts that, "At each stage prior to being trucked out of the line 11 building, the separator material is in a PTE." (PTE here stands for Permanent Total Enclosure.) Entek also asserts that fugitive emissions from the "Trimmed/Wound product staging for transfer to warehouse" are maintained within a PTE and are routed to controls. DEQ finds this to be an inaccurate representation of fugitive emissions associated with these sources, noting the following:
- a. According to the EPA Air Pollution Control Technology Fact Sheet (EPA-452/F-03-033), in order to qualify as a PTE, "an enclosure must meet EPA Method 204 Criteria for and Verification of a Permanent or Temporary Permanent Enclosure." To date the only enclosure at this site where the Method 204 criteria have been met and verified is the western warehouse product storage facility that is not contiguous with the production facilities. Therefore, DEQ finds the assertion of

- PTE for these fugitive emissions, and any other fugitive emissions not emitted from the warehouse that has demonstrated PTE by EPA Method 204, to be unsubstantiated; and
- b. During the May 2019 compliance inspection, facility personnel stated that the temporary warehouse storage area for product from Line 5A/11 is not kept under negative pressure and the air is not routed to any control device. Further, the TCE concentrations in this area were measured by EPA and ranged from 50-500 ppbv.
4. Entek claimed that interim storage warehouse annual emissions (reported in accordance with conditions in the Title V permit) are exempt from CAO reporting as they fall under the Categorically Insignificant Activity (CIA) of “warehouse activities” [OAR 340-200-0020(23)(s)]. This claimed exemption omits roughly 3.74 tons of TCE emissions from the CAO EI that were reported in the 2018 Annual Report associated with warehouse emissions. DEQ rejects the exemption of these emissions from CAO reporting as CIA based on the following:
- a. CIAs are submitted during Title V permit application using the DEQ “ED601 Categorically Insignificant Activities” form, and the instructions for this form are located in the “ED600 Instructions” form. These instructions outline DEQ’s policy in regards to CIA:
 - i. DEQ will not regulate emissions from CIA because they are likely to be “insignificant.” DEQ does not consider the release of over three tons of TCE into the air to be insignificant; and
 - ii. An activity listed is only considered CIA *provided* they are not part of the facility’s primary business or production activities. DEQ considers fugitive TCE emission off-gassing of the product as part of the facility’s production activities.

Based upon your September 6, 2019 submittal and review of submitted responses by Entek in conjunction with findings from the May 2019 compliance inspection, the Department has concluded that Entek is responsible for the following violation of Oregon environmental law:

VIOLATION:

- (1) Entek failed to submit to DEQ all necessary information to complete the emission inventory required by OAR 340-245-0040(1) and (3). Specifically, Entek failed to adequately satisfy the information request outlined in the August 8, 2019 DEQ comment letter, and failed to substantiate the claims Entek made in its September 6, 2019 response to DEQ regarding fugitive emissions. This is a Class II violation according to OAR 340-012-0054(2)(i).

TCE emissions are the primary TAC of concern emitted by Entek. TCE is a regulated TAC under the CAO program with Risk Based Concentrations (RBCs) for both cancer and noncancer health effects. It is a known carcinogen, with non-cancer effects including developmental, reproductive and neurological health impacts (ATSDR 2019). Such emissions could pose serious health risks to the surrounding community. Understanding and controlling potential risks from such emissions is the key goal of the Cleaner Air Oregon program.

Because Entek has not provided the information described above, DEQ is not able to approve Entek's emissions inventory submittal. According to OAR 340-245-0030(4)(b), DEQ is informing Entek of the deficiencies and providing a revised deadline to submit the needed information.

Corrective Action(s) Required. By 30 days of the date of this letter, Entek must submit to DEQ the following:

- 1) **Material balance emission calculation methodology:** A revised EI based on the material balance calculations for the 2018 annual reporting year, including detailed calculations, methodologies, and assumptions used to claim the 15.47 tons of TCE remaining in the product and shipped off-site. If Entek wishes to use an alternative emissions reporting methodology the facility must also submit a detailed discussion of this methodology, with all supporting data – this is required in addition to the material balance calculation methods noted above.
- 2) **CEMs emission data:** 1-minute CEMs data as Excel files, showing every minute (including the times during the drying cycles). This data should include the concentration of TCE (ppm_{vw}), stack flow rate (scfm), and the TCE mass rate (lb/hr). Provide this data for the following emission points:
 - a. VARA CEMs – for the period 9/12/2018 to 9/26/2019.
 - b. Warehouse CEMs – for the period 5/1/2019 to present.
- 3) **Warehouse storage emissions:** As noted above, these product off-gassing fugitive emissions must be accounted for and included in the revised EI.
- 4) **Fugitive emission estimates:** Fugitive emission estimates for all emission points not located in a PTE (i.e., located in the western warehouse) must be accounted for and included in a revised EI, including but not limited to:
 - a. Piping, valve, and fitting leaks
 - i. Provide a component list for all potential fugitive emission points at the facility; and
 - ii. Provide a Piping and Instrumentation Diagram (P&ID) for the facility with the listed components from (i) clearly labelled
 - b. Production facility warehouse
 - c. All staging areas and material handling

Should these violations remain uncorrected or should you repeat any of these violations, this matter may be referred to the Department's Office of Compliance and Enforcement for formal enforcement action, including assessment of civil penalties and/or a Department order. Civil penalties can be assessed for each day of violation. Further, pursuant to OAR 340-245-0030(4)(a), DEQ may modify the information that has been submitted and provide Entek with a final approved EI for use in completing the CAO process.

The Department endeavors to assist you in your compliance efforts, however since call-in to the program, Entek has not contacted DEQ to clarify or address any comments or information requests made by the Department. Should you have any questions about the content of this letter, please feel free to contact me in writing or by phone at 503.229.6431. In addition, if you desire any follow-up technical assistance, please contact J.R. Giska at 503.229.5178.

Sincerely,

Keith Johnson
Cleaner Air Oregon Program Manager

cc:

Kim Medford, Entek
Tom Wood, Stoel Rives
Karen White-Fallon, DEQ
Claudia Davis, DEQ
J.R. Giska, DEQ