*Attachment D*

# RESPONSE TO COMMENTS ON THE FEDERAL DRAFT PERMIT FOR VICKEY ENVIRONMENTAL, INC., VICKERY OHIO, OHD 020 273 819

## I. INTRODUCTION

This summary is issued in response to the comments raised during the public comment period for the draft Resource Conservation and Recovery Act (RCRA) permit issued to Vickery Environmental Inc. (draft permit) for the facility at 3956 State Route 412, Vickery, Ohio 43464 (facility). EPA issued the draft permit on October 5, 2018, and the public comment period for the draft permit lasted from October 5, 2018 to November 23, 2018.

## II. COMMENT AND EPA'S RESPONSE

Vickery Environmental Inc. (Vickery) submitted the following comments during the public comment period. No other person submitted comments during the public comment period or at the public meeting.

The comments below are quoted from Vickery's written comments.

1. **Comment** on Section I.G, REPORTS, NOTIFICATIONS AND SUBMITTALS TO THE DIRECTOR:

   **"The facility requests the ability to submit reports, notification or other submittals electronically in addition to the means listed above. Electronic submissions are more timely than mailed submissions and also support paperwork reduction initiatives."**

   **EPA Response**: The regulation currently requires Permittees to submit certain reports and documents to EPA, signed and certified, and sent by certified mail or other means that establish proof of delivery (specifically, permit modification documents (40 C.F.R. § 270.42(a)(i)), compliance documents (40 C.F.R. § 270.30(l)(2)(i)), and appeal related documents (40 C.F.R. § 124.19)). 40 C.F.R. § 270.30(l), which specifies reporting requirements, has not been updated with the flexibility of allowing submissions of the signed and certified documents noted above in an electronic format. However, it is EPA's general practice to allow facilities to submit most of the requested data, documents and/or reports other than those documents noted above to the agency in electronic formats.

   No changes will be made per this comment.

2. **Comment** on Section I.I, DOCUMENTS TO BE MAINTAINED AT THE FACILITY:

**"The facility maintains records on-site and uses an off-site secure storage location. The facility requests the ability to also use an off-site secure storage location for the maintenance of records. When needed, records are easily returned to the site from the secure off-site storage location."**

**EPA Response**: As required by 40 C.F.R. §§ 264.13, 264.73, 264.1064, 264.1084, 264.1088, and 264.1089, the facility should keep the operating records and other required documents at the facility. 40 C.F.R. § 264.73(a) specifies an owner or operator must keep a written operating record at his facility. It is important for the facility to keep such records at the facility not only to secure the integrity of the records but also to provide timely access for the announced or unannounced inspections by the compliance agencies.

No changes will be made per this comment.

3. **Comment** on Section I.I.2, Notifications:

**"The facility is having a hard time understanding this requirement. The condition requests the facility to maintain LDR notifications from generators until closure despite the fact that the deep-wells at Vickery are LDR exempt. Additionally, 40 CFR Part 268 Subpart C are waste specific prohibitions where the requirements are not applicable if an exemption has been granted. Please provide clarification on what is required or remove condition."**

**EPA Response**: 40 C.F.R. § 268.7 generally requires a generator of hazardous waste to determine if waste has to be treated before it is land disposed and to send a notice on that determination with certain shipments to the receiving treatment, storage or disposal facility. Granting a petition under 40 C.F.R. Part 148 Subpart C to allow injection of prohibited waste, however, does not preclude other permits, licenses approvals or requirements that might govern activities at a Site. See 69 Fed. Reg. 15329, 15388 (Mar. 25, 2004). Generators are not exempted from providing the notices required under 40 C.F.R. § 268.7; and Vickery must still maintain copies of the generator notifications at the Facility as set forth at 40 C.F.R. § 264.73(b)(3).

No changes will be made per this comment.

4. **Comment** on Section II.A, EQUIPMENT LEAKS:

**"Condition II.A is a 40 CFR Part 264, Subpart BB requirement. Vickery does not manage hazardous waste with organic concentrations equal to or greater than 10 percent. The facility does not operate units that are required to be regulated by Subpart BB. The facility requests this condition, along with the entire Section II, be removed because it is not applicable."**

**EPA Response**: As specifically stated in Section II.A of the permit, EPA acknowledges Vickery's contention that it does not have any equipment which contains or contacts hazardous waste with organic concentrations greater than 10 percent by weight. 40 C.F.R. § 264.1050(b) says that except as provided in 40 C.F.R. § 264.1064(k), Subpart BB applies to equipment that contains or contacts hazardous waste with organic concentrations of at least 10 percent by weight managed in certain units. Vickery must demonstrate that the equipment at the facility that manages hazardous waste does not contain or contact hazardous waste with organic concentrations greater than 10 percent by weight, conduct such demonstration in accordance with test methods and procedures specified on 40 C.F.R. § 264.1063 and update and retain the results of such test at the facility as required by 40 C.F.R. § 264.1064(k). As reflected in the Permit, additional requirements apply when the demonstration is not met.

No changes will be made per this comment.

5. **Comment** on Section II.B, TEST METHOD AND PROCEDURES:

**"Condition II.B is a 40 CFR Part 264, Subpart BB requirement. Vickery does not manage hazardous waste with organic concentrations equal to or greater than 10 percent. The facility does not operate units that are required to be regulated by Subpart BB. The facility requests this condition, along with the entire Section II, be removed because it is not applicable."**

**EPA Response**: See the Response for Comment #4.

No changes will be made per this comment.

6. **Comment** on Section II.C, RECORDKEEPING REQUIREMENTS:

**"Condition II.C is a 40 CFR Part 264, Subpart BB requirement. Vickery does not manage hazardous waste with organic concentrations equal to or greater than 10 percent. The facility does not operate units that are required to be regulated by Subpart BB. The facility requests this condition, along with the entire Section II, be removed because it is not applicable."**

**EPA Response**: See the Response for Comment #4.

No changes will be made per this comment.

7. **Comment** on the following language in the second paragraph of SECTION III: *The Application states that tanks T-22, T-23, T-24, and T-25 (each 6,000 gallons) contain an average volatile organic (VO) concentration at the point of waste origination of less than 500 parts per million by weight (ppmw).*

**"The sentence directly above is redundant because it states the same information contained in Condition III.B. The facility requests the removal of the redundant text."**

**EPA Response**: Section III is intended to provide a more general statement of the status of the tanks which are subject to the 40 C.F.R. Part 264, Subpart CC requirements. To address your comment and make this general statement clearer, the second paragraph in Section III can be modified to: "The Application states that tanks T-22, T-23, T-24, and T-25 (each 6,000 gallons) contain an average volatile organic (VO) concentration at the point of waste origination of less than 500 parts per million by weight (ppmw). All other tanks contain an average VO concentration at the point of waste origination of more than 500 ppmw. The Application indicates there are also containers which store hazardous waste in less-than 90-day areas, which are not covered by this permit."

8. **Comment** on Section III.C, LEVEL 1 TANK REQUIREMENTS:

*All hazardous waste tanks specified above, except the 4 tanks (T-22, T-23, T-23, and T-24), must comply with the Level 1 tank standards of 40 C.F.R. § 264.1084(c) and the following requirements.*

**"T-23 is listed twice. The second T-23 needs revised to T-25. The sentence should read: "...the 4 tanks (T-22, T-23, T-24, and T-25), must..."**

**EPA Response**: EPA concurs with this comment and will modify Section III.C as "All hazardous waste tanks specified above, except the 4 tanks (T-22, T-23, T-24, and T-25), must comply with the Level 1 tank standards of 40 C.F.R. § 264.1084(c) and the following requirements:"

9. **Comment** on III.C.5(a):

**"Condition III.C.5 includes additional language not found in 40 CFR 264.1084(c). The additional language is: "Gaskets used for closure devices or piping systems must be of suitable materials compatible with the hazardous wastes and must be in accordance with good engineering practices." The facility requests the removal of the additional language."**

**EPA Response**: The gasket and piping system are important devices associated with the tanks' closure devices. 40 C.F.R. § 264.1084(c)(2)(iv) requires that a tank's fixed roof and its closure devices shall be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere. The requirement specified in Condition III.5 is meant to apply this requirement to gaskets in as far as they are incorporated into a closure device and piping system of tanks that contain hazardous waste. If the gasket and/or piping system are not made of suitable materials compatible with hazardous waste, and in

accordance with good engineering practices, then the facility would not be minimizing exposure of the hazardous waste to the atmosphere as required under 40 C.F.R. § 264.1084(c)(2)(iv).

No changes will be made per this comment.

10. **Comment** on the ending of III.C.6: .... *in accordance with the tank design specifications as set for the at 40 C.F.R. § 264.1084(c)(3).*

**"the underlined text area appears to be a typo."**

**EPA Response**: EPA concurs with this comment and will modify the underlined language as follows: ". ..... as set forth at 40 C.F.R. § 264.1084(c)(3)."

11. **Comment** on III.C.8: *You must control the air emissions from the tanks (T-1, T-2, T-5, T-6, T-9, and T-10), in accordance with 40 C.F.R. § 264.1084(c)(2)(iii)(B) by venting the tanks through closed vent systems to scrubber unit designed and operated to remove the organic vapors vented to them with an efficiency of 95 percent or greater by weight.*

**"Condition III.C.8 is not applicable. Condition III.C.5.c already addresses compliance required by 40 CFR 264.1084(c)(2)(iii) with which the facility is already in compliance with. 40 CFR 264.1084(c)(2)(iii) states: (iii) Each opening in the fixed roof, and any manifold system associated with the fixed roof, shall be either:(VEI emphasis) (A) Equipped with a closure device designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the opening and the closure device; or (VEI emphasis) (B) Connected by a closed-vent system that is vented to a control device. The control device shall remove or destroy organics in the vent stream and shall be operating whenever hazardous waste is managed in the tank, except as provided for in paragraphs (c)(2)(iii)(B) (1) and (2) of this section.**

**The facility complies using 40 CFR 264.1084(c)(2)(iii)(A) because the tanks are equipped with closure devices designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the opening and the closure device. The openings in the roof are connected to conservation vents as allowed by 40 CFR 264. The condition is not applicable and the facility requests this condition be removed."**

**EPA Response**: Part B Permit Renewal Application, Section D.2.2.5, states that tanks (T-1, T-2, T-5, T-6, T-9, and T-10) "have in their roofs a vent connection, an inert gas supply connection, and a pressure/relief valve. The vents are manifolded in a single line that is included on the above-ground pipe rack and that eventually leads to scrubber described previously." In other words, the tanks are currently configured to comply with

the option set forth at 40 C.F.R. § 264.1084(c)(2)(iii)(B). These tanks are currently operating with a closed-vent system that connects to a control device. As currently configured, the tanks do not comply with 40 C.F.R. § 264.1084(c)(2)(iii)(A) because the tanks are not equipped with closure devices designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the opening and the closure device.

The Application says these 6 tanks will comply with Level 1 requirements. As the comment indicates, there are two options to comply with Level 1 requirements, 40 C.F.R. § 264.1084(c)(2)(iii)(A) or (B). The opening in the fixed roof and any manifold associated with it shall either be equipped with a closure device with no visible cracks, holes, gaps, or other open spaces when secured in the closed position or connected by a closed-vent system that is vented to an operating control device.

Tanks (T-1, T-2, T-5, T-6, T-9, and T-10) were designed and installed, and currently operate with a closed-vent system that is vented to a control device. Since these tanks are configured and operating in a such way, they are considered as complying with 40 C.F.R. § 264.1084(c)(2)(iii) only if the control device is operating.

As specified in the preamble to the Subpart CC Organic Air Emission Standards, "The owner or operator of a tank that qualifies for the Level 1 controls may choose to use Level 2 controls. A tank that does not qualify for the Level 1 controls is subject to the Level 2 controls." 61 Fed. Reg. 59932, 59944 (Nov. 25, 1996). The Permittee can select Level 2 tank controls for the Level 1 tanks. However, once Vickery installed tanks with a closed-vent system connected to a control device, these tanks must comply with all of the requirements associated with proper operation of the closed-vent and control device (e.g., Level 2 requirements).

Since the net exhaust of head gas from these tanks (T-1, T-2, T-5, T-6, T-9, and T-10) will only be vented to the atmosphere through the scrubber, as specified in Section D.2.2.5 of the Part B Application, EPA must regulate the closed-vent system and control device (scrubber) to control the vapor emissions from the tanks. Without complying with the requirements of the closed-vent and control device, there is no guarantee that vapors vented from these tanks are properly controlled. Unless the vent connections are sealed off (discussed below), Level 1 tanks that are built with Level 2 controls must comply with the requirements associated with the installed controls. In this case, the subject tanks and the associated closed-vent and control device must comply with 40 C.F.R. § 264.1084(g). The closed-vent and scrubber must also comply with other requirement related to the Level 2 control requirements such as the standard requirements (40 C.F.R. § 264.1087), design and operation requirements (40 C.F.R. § 264.1033(k)), inspection requirements (40 C.F.R. §§ 264.1033(l), 264.1084(g)(3) and 264.1087(c)(7)), performance requirement (40 C.F.R. § 264.1087(c)(1)), maintenance requirements (40 C.F.R. § 264.1087(c)(2)), and other repair and recordkeeping requirements.

40 C.F.R. § 264.1084(c)(2)(iii) clearly states that the facility has two options to comply with each opening in the fixed roof and any manifold system associated with the fixed roof. Vickery has selected second option (40 C.F.R. § 264.1084(c)(2)(iii)(B)) and has been operating under this approach.

Therefore, Vickery must comply with the second option, which is a Level 2 control option and other associated requirements of the Level 2 tank control.

As currently configured, if Vickery does not properly operate the closed-vent system vented to a control device, the tanks would not be in compliance with requirement that its closure devices are secured in the closed position where there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the opening and the closure device. However, EPA acknowledges that Vickery has an option of closing the shut-off valve in the closed-vent or dismantling the closed-vent and control device and complying with the first option set forth in 40 C.F.R. § 264.1084(c)(2)(iii)(A).

To acknowledge Vickery's option of compliance with 40 C.F.R. § 264.1084(c)(2)(iii)(A), EPA will modify the permit by changing the Condition III.C.11 from "You must process a Class 2 permit modification and obtain approval from the Director if you plan to operate or to modify the tank systems to comply with Level 2 standards." to "You must process a Class 2 permit modification if you plan to operate or to modify tanks (T-1, T-2, T-5, T-6, T-9, and T-10) in accordance with 40 C.F.R. § 264.1084(c)(2)(iii)(A) with no closed-vent system connected to a control device. You must also process a Class 2 permit modification if you plan to operate or to modify tanks (T-500, T-300, and Lab Waste Tank) to comply with Level 2 standards." In accordance with Appendix I to 40 C.F.R. § 270.42, the appropriate class of the permit modification for the tank unit modification is updated as class 2.

12. **Comment** on III.C.8.a: *The tanks must be covered by a fixed roof and vented directly through the closed vent system to a control device in accordance with the requirements specified in 40 C.F.R. § 264.1084(g), (j), (k), and (l).*

**"Condition III.C.8.a is not applicable. 40 CFR 264.1084(g), (j), (k), and (l) are control requirements for tanks that are required to use Tank Level 2 controls. VEI's tanks meet the requirements for Tank Level 1 controls as required by 40 CFR 264.1084(c) and as outlined in Condition III.C.1 through Condition III.C.7. The requirements specified in 40 C.F.R. § 264.1084(g), (j), (k), and (l) do not apply and the facility requests this condition be removed."**

**EPA Response**: See the Response of Comment #11.

13. **Comment** on III.C.8.b: *You must comply with the specification, monitoring, inspection, and repair requirement of the closed-vent system and scrubber unit specified in Section III.C.9, below.*

**"Condition III.C.9 references 40 CFR 264.1084(g). 40 CFR 264.1084(g) is a control requirement for tanks that are required to use Tank Level 2 controls. VEI's tanks meet the requirements for Tank Level 1 controls as required by 40 CFR 264.1084(c) and as outlined in Condition III.C.1 through Condition III.C.7. Closed-vent systems are not a requirement for tanks controlling emissions using Tank Level 1 controls that are in compliance with 40 CFR 264.1084(c)(2)(iii)(A). Condition III.C.8.a is not applicable and the facility requests this condition be removed."**

**EPA Response**: See the Response of Comment #11.

14. **Comment** on III.C.9: *The air emissions from tanks referenced in Section III.C.8, above, must be controlled as required by 40 C.F.R. § 264.1084(g). The emission control must consist of: (1) a closed vent system, including an exhaust fan with a capacity to maintain a negative pressure inside the closed system and (2) a scrubber unit functioning as the control device. The closed vent system and scrubber system must comply with the following requirements:*

**"40 CFR 264.1084(g) is a control requirement for tanks that are required to use Tank Level 2 controls. VEI's tanks meet the requirements for Tank Level 1 controls as required by 40 CFR 264.1084(c) and as outlined in Condition III.C.1 through Condition III.C.7. Since the tanks at VEI are following 40 CFR 264.1084(c), the requirements specified in 40 CFR 264.1084(g) do not apply. Condition III.C.9. and sub-Conditions III.C.9.a through sub-Condition III.C.9.i are not applicable because they are Tank Level 2 requirements. The condition is not applicable and the facility requests this condition be removed."**

**EPA Response**: See the Response of Comment #11.

15. **Comment** on III.C.9.a: *The closed vent system must meet the requirements of 40 C.F.R. § 264.1087(b). The closed vent system must route the gases, vapors, and fumes emitted from hazardous waste in the tanks to a scrubber unit that meets the requirements specified in 40 C.F.R. § 264.1087(c).*

**"Condition III.C.9.a. is an extension of Condition III.C.9. VEI's tanks meet the requirements for Tank Level 1 controls as required by 40 CFR 264.1084(c) and as outlined in Condition III.C.1 through Condition III.C.7. This control requirement is for tanks that are required to use Tank Level 2 controls. The condition is not applicable, and the facility requests this condition be removed."**

**EPA Response**: See the Response of Comment #11.

16. **Comment** on III.C.9.b: *The closed vent system must comply with the design and operation requirements of 40 C.F.R. § 264.1033(k).*

*A closed vent system must meet either of the following design requirements:*

*(i) each closed vent system must be designed to operate with no detectable emissions, as indicated by an instrument reading of less than 500 ppm by volume above background as determined by the procedure in 40 C.F.R. § 264.1034(b) and by visual inspections; or*

*(ii) each closed vent system must be designed to operate at a pressure below atmospheric pressure. The system must be equipped with at least one pressure gauge or other pressure measurement device that can be read from a readily accessible location to verify that negative pressure is being maintained in the closed vent system when the control device is operating.*

**"Condition III.C.9.b. is an extension of Condition III.C.9. VEI's tanks meet the requirements for Tank Level 1 controls as required by 40 CFR 264.1084(c) and as outlined in Condition III.C.1 through Condition III.C.7. This control requirement is for tanks that are required to use Tank Level 2 controls. The condition is not applicable, and the facility requests this condition be removed."**

**EPA Response**: See the Response of Comment #11.

17. **Comment** on III.C.9.c: *The closed vent system must not include any bypass devices that could be used to divert the gas or vapor stream to the atmosphere before entering the control device, unless equipped with either a flow indicator or a seal or locking device as specified in 40 C.F.R. § 264.1087(b)(3).*

**"Condition III.C.9.c. is an extension of Condition III.C.9. VEI's tanks meet the requirements for Tank Level 1 controls as required by 40 CFR 264.1084(c) and as outlined in Condition III.C.1 through Condition III.C.7. This control requirement is for tanks that are required to use Tank Level 2 controls. The condition is not applicable, and the facility requests this condition be removed."**

**EPA Response**: See the Response of Comment #11.

18. **Comment** on III.C.9.d: *You must inspect and monitor each closed vent system as specified in 40 C.F.R. § 264.1033(l). Each closed vent system that is used to comply with III.C.9.b(i) above must be inspected and monitored in accordance with the requirements of 40 C.F.R. § 264.1033(l)(1). Each closed vent system that is used to comply with III.C.9.b(ii) above must be inspected and monitored in accordance with the requirements of 40 C.F.R. § 264.1033(l)(2). You must comply with the requirements at 40 C.F.R. § 264.1033(l)(3).*

**"Condition III.C.9.d. is an extension of Condition III.C.9. VEI's tanks meet the requirements for Tank Level 1 controls as required by 40 CFR 264.1084(c) and as outlined in Condition III.C.1 through Condition III.C.7. This control requirement is for tanks that are required to use Tank Level 2 controls. Additionally, there are no monitoring requirements for tanks using Tank Level 1 controls. The condition is not applicable, and the facility requests this condition be removed."**

**EPA Response**: See the Response of Comment #11.

19. **Comment** on III.C.9.e: *The scrubber unit must have a minimum removal efficiency of 95 percent by weight in accordance with 40 C.F.R. § 264.1087(c)(1)(i). You must demonstrate that the scrubber unit achieves this performance standard as specified in 40 C.F.R. § 264.1087(c)(5). For any disagreement of a demonstration of control device performance using a design analysis, then the results of a performance test performed by the facility in accordance with the requirements of 40 C.F.R. § 264.1087(c)(5)(iii) must be utilized to resolve the disagreement as specified in 40 C.F.R. § 264.1087(c)(6).*

**"Condition III.C.9.e. is an extension of Condition III.C.9. VEI's tanks meet the requirements for Tank Level 1 controls as required by 40 CFR 264.1084(c) and as outlined in Condition III.C.1 through Condition III.C.7. This control requirement is for tanks that are required to use Tank Level 2 controls. Additionally, there are no performance standards specified for tanks using Tank Level 1 controls in compliance with 40 CFR 264.1084(c)(2)(iii)(A). The condition is not applicable, and the facility requests this condition be removed."**

**EPA Response**: See the Response of Comment #11.

20. **Comment** on III.C.9.f: *You must comply with the requirements specified in 40 C.F.R. § 264.1087(c)(2)(i). The planned routine maintenance of the scrubber, during which the 95 percent removal efficiency does not meet the specifications in 40 C.F.R. § 264.1087(c)(1)(i), must not exceed 240 hours per year. (40 C.F.R. § 264.1087(c)(2)(i))*

**"Condition III.C.9.f. is an extension of Condition III.C.9. VEI's tanks meet the requirements for Tank Level 1 controls as required by 40 CFR 264.1084(c) and as outlined in Condition III.C.1 through Condition III.C.7. This control requirement is for tanks that are required to use Tank Level 2 controls. The condition is not applicable, and the facility requests this condition be removed."**

**EPA Response**: See the Response of Comment #11.

21. **Comment** on III.C.9.g: *You must comply with the requirements specified in 40 C.F.R. § 264.1087(c)(2)(ii) through (c)(2)(vi), including requirements concerning the planned routine maintenance, control system device malfunction, record keeping, correction of device system malfunction, venting restrictions, and other operating requirements.*

**"Condition III.C.9.g. is an extension of Condition III.C.9. VEI's tanks meet the requirements for Tank Level 1 controls as required by 40 CFR 264.1084(c) and as outlined in Condition III.C.1 through Condition III.C.7. This control requirement is for tanks that are required to use Tank Level 2 controls. The condition is not applicable, and the facility requests this condition be removed."**

**EPA Response**: See the Response of Comment #11.

22. **Comment** on III.C.9.h: *You must inspect and monitor the air emission control device scrubber unit, in accordance with the procedures and requirements specified in 40 C.F.R. §§ 264.1084(g)(3) and 264.1087(c)(7).*

**"Condition III.C.9.h. is an extension of Condition III.C.9. VEI's tanks meet the requirements for Tank Level 1 controls as required by 40 CFR 264.1084(c) and as outlined in Condition III.C.1 through Condition III.C.7. This control requirement is for tanks that are required to use Tank Level 2 controls. The condition is not applicable, and the facility requests this condition be removed."**

**EPA Response**: See the Response of Comment #11.

23. **Comment** on III.C.9.i: *You must operate a backup scrubber recirculation pump in case the primary pump is inactive. You must also operate backup scrubber blower in case the primary blower is offline.*

**"Condition III.C.9.i. is an extension of Condition III.C.9. VEI's tanks meet the requirements for Tank Level 1 controls as required by 40 CFR 264.1084(c) and as outlined in Condition III.C.1 through Condition III.C.7. This control requirement is for tanks that are required to use Tank Level 2 controls. The condition is not applicable, and the facility requests this condition be removed."**

**EPA Response**: See the Response of Comment #11.

24. **Comment** on III.C.10: *Closed vent systems and control devices used to comply with this permit must be operated at all times when emissions may be vented to them. (40 C.F.R. § 264.1033(m))*

**"Condition III.C.10 is a continuation of conditions referring back to 40 CFR 264.1084(g); a control requirement for tanks that are required to use Tank Level 2 controls. Closed-vent systems are not a requirement for tanks controlling emissions using Tank Level 1 controls in compliance with 40 CFR 264.1084(c)(2)(iii)(A). The facility controls emissions from tanks that are already equipped with a closure device designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the opening and the closure device in compliance with 40 CFR 264.1084(c)(2)(iii)(A). Making Condition C.10 not applicable. The facility requests this condition be removed."**

**EPA Response**: See the Response of Comment #11. As noted above, Section D.2.2.5 of the Application indicates that these tanks (T-1, T-2, T-5, T-6, T-9, and T-10) " ... have in their roofs a vent connection, an inert gas supply connection, and a pressure/relief valve. The vents are manifolded in a single line that is included on the above-ground pipe rack and that eventually leads to scrubber ..." Even with the closure device is secured in the closed position, the vapors generated from tanks will flow through the vent connection to the control device (scrubber). As noted above, without complying with the requirements of the closed-vent and control device, there is no guarantee that vapors vented from these tanks are properly controlled.

25. **Comment** on III.D: *MISCELLANEOUS UNITS REQUIREMENTS*

*According to your Application, your facility operates 7 types of miscellaneous units which process hazardous waste. These miscellaneous units are: 1) 4 Basket Strainer units, 2) 2 Bag Filter units, 3) 1 Filter Press unit, 4) 4 Primary Cartridge Filter units, 5) 4 Secondary Cartridge Filter units, 6) 5 Bypass Cartridge Filter units, and 7) 1 Thief Pole Rinsing unit. These 7 types of units are considered as "miscellaneous units" defined in 40 C.F.R. Part 264, Subpart X. The miscellaneous units are subject to and must comply with the requirements set forth in 40 C.F.R. Part 264, Subpart CC. (40 C.F.R. § 264.601).*

*III.D.1 You must operate the 4 Basket Strainer, 2 Bag Filter, 4 Primary Cartridge Filter, 4 Secondary Cartridge Filter, and 5 Bypass Cartridge Filter units in a closed system. While in operation, there must be no openings in these units to emit vapors into the atmosphere. You must comply with the following specifications:*

*(a) The closure devices must be designed and constructed to form a continuous barrier over the entire surface area of the unit.*

*(b) The units must be designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces.*

*(c) The unit must be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the closure devices throughout their intended service life.*

*(d) Whenever a hazardous waste is in the unit, all openings must be securely closed to prevent releases of vapors into the atmosphere, except for routine inspections, maintenance, and other approved activities.*

*(e) You must inspect these miscellaneous units at least once per year, or retest the units to ascertain that the air emissions from these units comply with the design and with the requirements specified in 40 C.F.R. § 264.1084(c)(4).*

*(f) You are allowed to open these units during the maintenance, cleaning, and/or inspection. You must not operate these units during the maintenance, cleaning, and/or inspection, and when the maintenance, cleaning, and/or inspection is completed, the units' closure devices must be promptly secured in the closed position and the operations must be resumed.*

**"The facilities Filter Press Unit should be included in the list of units."**

**EPA Response**: This permit did not include the Filter Press (FP) unit in Section III.D.1 because EPA has determined the FP unit must comply with additional requirements to protect human health and the environment and specifies the requirements for the FP unit separately specified in Section III.D.3. As discussed below, EPA reviewed data Vickery provided and determined that volatile organic compounds can be emitted when employees open the FP unit to remove solid cake by scraping it with a steel rod as described in the Application; and has added conditions to monitor emissions, signal elevated levels, limit worker exposure to vapors, and assess the adequacy of the vapor removal.

No changes will be made per this comment.

26. **Comment** on III.D.2*: The Thief Pole Rinsing unit includes an open-top container which contains residual of the poles from sampling of the hazardous waste in the tanks. You must control organic air emissions from the Thief Pole Rinsing unit. For the storage of the residual hazardous waste from the poles and its rinsing water waste in the top-opened container unit, you must prepare a procedure to control organic air emissions from this unit.*

**"The facility will be submitting a Class 1 Permit modification dated 11/30/2018 to Ohio EPA for changes made to the thief pole rinsing unit that holds thief poles used for sampling waste receipts. The new thief pole container has a design capacity less than or equal to 0.1m3 (26.4 gallons), making the new thief pole container exempt from Subpart CC requirements. The new thief pole dimensions are 6" diameter by 97 inches high, making the design capacity of the container 0.045m3 (11.9 gallons). VEI will email a copy of the permit modification to US EPA for proof of the change once the modification has been submitted to Ohio EPA."**

**EPA Response**: EPA concurs with this comment. On December 7, 2018, Ohio Environmental Protection Agency issued an acknowledgement and approval letter for the Class 1 permit modification request submitted by Vickery, dated as November 30, 2018. The permit modification includes a reduction of the open-top container which contains residual of the thief poles from sampling of the hazardous waste in the tanks. The volume of the reduced thief poles container is 12 gallons. In accordance with 40 C.F.R. § 264.1086(b), a container less than 0.1 cubic meter ($m^3$) (264.4 gallons) is exempted from the requirements of the Air Emission Standards from Container (40 C.F.R. Part 264, Subpart CC). Therefore, Section III.D.2 will be modified to read:

*"The Thief Pole Rinsing unit includes an open-top container which contains residual of the poles from sampling of the hazardous waste in the tanks. Since the design capacity of the newly constructed Thief Pole unit is less than 0.1 $m^3$ (26.4 gallons), the control of the organic air emissions from the Thief Pole Rinsing unit is exempted. (40 C.F.R. § 264.1086(b)). For any changes of the capacity of the Thief Pole unit for the storage of the residual hazardous waste from the poles and its rinsing water waste, you must submit an appropriate permit modification to EPA for the potential compliance with air emission standards."*

27. **Comment** on III.D.3(a): *You must operate the Filter press (FP) to comply with the following specifications:*

*(a) You must operate FP unit in accordance with requirements specified in Section III.D.1, above.*

**"the requirements specified in Condition III.D.1 above are Tank Level 1 Controls. The facility agrees that the filter press should operate in accordance with those requirements. The Filter Press (FP) unit should be added to the list of units listed in Condition III.D.1."**

**EPA Response**: Unlike the six types of miscellaneous units described in Section III.D, the FP is opened to remove solid cakes from the unit. While opening the FP to remove cakes from the unit manually, there is concern of the potential vapor emissions from such removal activity, as detailed below. Therefore, there is a need to separate the FP from other miscellaneous units to impose additional requirements on operation, worker protection, and emission controls.

No changes will be made per this comment.

28. **Comment** on III.D.3(b):

*(b) You must prepare and equip the necessary Personal Protection Equipment (PPE), including Self-Contained Breathing Apparatus (SCBA), for the workers who station in the FP area, to manually remove the solid cakes from the FP unit, to comply with the appropriate Occupational Safety and Health Administration (OSHA) regulations.*

**"VEI has performed a review of the applicable RCRA standards and cannot identify any requirement that requires a determination of compliance with 29 CFR regulations. This request is outside the scope and authority of 40 CFR. The facility requests this condition be removed."**

**EPA Response**: Section 3005(c)(3) of RCRA (codified at 40 C.F.R. § 270.32(b)(2)) requires that each hazardous waste facility permit contain the terms and conditions necessary to protect human health and the environment. This provision is commonly referred to as the "omnibus authority" or "omnibus provision." Section 3004(n) of RCRA also requires EPA to develop standards to control air emissions from hazardous waste treatment, storage, and disposal facilities as may be necessary to protect human health and the environment. This requirement echoes the general requirement in section 3004(a) and section 3005(a)(3) to develop standards to control hazardous waste management activities as may be necessary to protect human health and the environment. The Agency has issued a series of regulations to implement the section 3004(n) mandate; these regulations control air emissions from certain tanks, containers, surface impoundments, and miscellaneous units (40 C.F.R. Part 264 and Part 265 Subpart CC standards). The regulations may not capture all aspects of the operation of a unit subject to RCRA, however. Based on the vapor level data from the Facility discussed immediately below, EPA believes it is justified in setting out requirements to mitigate inhalation exposure to vapors from volatile organic compounds (VOCs) such as benzene when workers manually remove solid cakes from the FP unit.

Information provided by Vickery supports this position. Benzene is a hazardous VOC of concern. Reflecting this concern is the fact that the Occupational Safety and Health Administration (OSHA) and the National Institute for Occupational Safety and Health (NIOSH) have established exposure limits for the occupational health and safety for workers. As published by the Center for Disease Control and Prevention (CDC), OSHA's maximum time-weighted average (TWA) Permissible Exposure Limit (PEL) for benzene is 1 ppm for an 8-hour workday, and the TWA Recommended Exposure Limit (REL) of

the National Institute for Occupational Safety and Health (NIOSH) is 0.1 ppm for an 8-hour workday. Also published by the CDC are short-term exposure limits (STEL) for benzene for any 15-minute period; OSHA's STEL for benzene is 5 ppm, and the NIOSH STEL is 1 ppm. Vickery has indicated that the average duration that the FP is open during manual solid cake cleaning is approximately 43 minutes.

In general, OSHA acts in a regulatory capacity while NIOSH acts in a research capacity. NIOSH's RELs are occupational exposure limits, that, based on its ongoing research, are recommended by NIOSH to OSHA to adopt as a PEL. The REL is a level that NIOSH believes would be protective of workplace safety and employee health over a working lifetime.

On April 30, 2018, Vickery provided photoionization detector (PID) data from a rented PID which purported to measure VOCs in the enclosure room while removing solid cake from the FP on April 18, 2017. The maximum detected concentration of VOCs was recorded at 6 ppm when the FP was opened for cleaning. EPA cannot verify the quality-control prospect of this one-time monitoring data set using a rented PID device and, based on the information provided, cannot determine which compounds constituted the total VOC amount measured by the PID. Considering a realistic worst-case scenario (such as the measured VOC including a more toxic compound such as benzene), the impact to the exposed worker would be severe, since the short-term exposure OSHA PEL limit for benzene is 1 ppm, and the NIOSH REL is 0.1 ppm.

Vickery also provided personal industrial hygiene monitoring data collected with sampling pumps located on an employee, which is not location specific, over 8-hour working time period, in 1998-1999. These general monitoring data recorded concentrations of benzene of 0.44 ppm, which, while not exceeding the OSHA PEL of 1 ppm, does exceed the NIOSH REL of 0.1 ppm.

As noted in the "OSWER Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air, US EPA, June 2015", OSHA's PELs are enforceable occupational exposure standards to protect workers from adverse effects of occupational exposure to airborne chemicals. However, this Technical Guide notes that PELs are not intended to protect sensitive workers. Therefore, due to this and other reasons, this Guide states that EPA recommends human health risk assessments to determine risks posed by vapor exposures.

These historical data show support for the need to protect the worker(s) who will be exposed to the organic vapor emissions from the opened FP unit while manually removing solid cakes from the FP by scraping with a steel rod. Specifically, it is necessary to require the facility to prepare and implement a Personal Protection Equipment requirement for the worker(s) who engage in this scraping activity. EPA believes this requirement meets the purpose of the 40 C.F.R. Part 264 Subpart CC Air Emission regulations and is an appropriate application of the omnibus authority to protect human health.

Also, as discussed below, these historical data support the need to install a monitoring device with a set of alarm limits not only to protect human health from harmful levels of vapors but also to assess the adequacy of vapor removal performance (blow-down) of the solid cakes. This monitoring and alarm will help ensure that the health of all workers working around the vicinity of the FP area is protected.

However, in light of Vickery's comment, EPA will modify the permit by changing the Condition III.D.3(b) from "You must prepare and equip the necessary Personal Protection Equipment (PPE), including Self-Contained Breathing Apparatus (SCBA), for the workers who station in the FP area, to manually remove the solid cakes from the FP unit, to comply with the appropriate Occupational Safety and Health Administration (OSHA) regulations." to "You must equip workers manually removing solid cakes from the FP unit with Personal Protection Equipment (PPE), including Self-Contained Breathing Apparatus (SCBA), for their use during this work. Separate Occupational Safety and Health Administration (OSHA) regulations set forth applicable respirator equipment requirements for worker safety."

29. **Comment** on III.D.3(c):

*(c) You must conduct an air purging process (i.e., blow-down process) in the FP unit, before opening the FP unit for each removal activity of the solid cakes, using an air compressor. The purging process must be conducted at least 20 minutes for each blow-down in order to remove potential volatile organic compounds contained in the solid cakes in the FP unit. The blow-down process must utilize an air compressor which has a design capacity of minimum 215 actual cubic feet per minute (ACFM). The purged volatile organic compounds from the solid cakes in the FP must be routed through the closed-vent system and to the scrubber for control in accordance with Section III.C.9. You must record the purging power (such as purging time and compressor capacity) data during each purging process and retain such recorded data at the facility.*

**"This condition is above and beyond the requirement at 40 CFR 264.1084(c) as summarized in Condition III.D.1. Additionally, the Condition at Section III.C.9 references 40 CFR 264.1084(g) which is a control requirement for tanks that are required to use Tank Level 2 controls. Again, VEI's tanks meet the requirements for Tank Level 1 controls as required by 40 CFR 264.1084(c), which is recognized in Condition III.C.1 through Condition III.C.7 and Condition III.D.1. The 20 minute blow down (purging) the site performs and the 215 acfm were provided to US EPA so they had a better understanding of our process. These values are approximate values. There are no performance standards for Tank Level 1 controls nor are there monitoring requirements. The facility requests this condition be removed."**

**EPA Response**: As discussed above, because there is a potential vapor emission issue from the scraping operation of the solid cakes of the FP unit, there is a need to reduce or minimize the vapor emissions. Vickery indicates that the facility is conducting air purging process (blow-down) to remove volatile organic compounds contained in the solid cakes. The blow down process includes a minimum 20-minute operation by compressor with capability of delivering power of 215 actual cubic feet per minute (ACFM). Since Vickery indicates that the compressor engaged in the purging process has a design capacity of 215 ACFM and Vickery operates such blow down activity at a minimum 20 minutes as a normal blow down activity to remove vapors from the cakes, EPA believes that this can be considered as a normal operation that Vickery should engage in for the reduction or minimization of the potential vapor emissions. The requirements specified in Section III.D.3.(c) can be utilized as performance standards for the blow down process.

Vickery indicates that the purged vapors from the FP unit are routed to the Tank # 5, which eventually is routed to the wet scrubber through the closed-vent system. As our response to Comment #11 indicates, above, the tank is required to comply with the closed-vent and control device requirements of 40 C.F.R. §264.1084(c).

No changes will be made per this comment.

30. **Comment** on III.D.3(d):

*(d) You must install a vapor and gas monitoring device (such as a photoionization detector (PID), a flame ionization detector (FID, or other similar unit) in the FP area to continuously monitor volatile organic compounds in the air emitted from the FP during cake removal activities. You must set the alarm on the monitoring device to the appropriate level to protect the worker safety and to record the volatile organic emissions from the FP unit.*

**"VEI has performed a review of the applicable RCRA standards and cannot identify any requirement that requires a determination of compliance with 29 CFR regulations or authority to require such a devise to determine compliance with 29 CFR regulations. VEI did provide US EPA information with respect to industrial hygiene monitoring that demonstrated no OSHA PEL's were exceeded, thus workers are protected.**

**Additionally, the requirements of 40 CFR Part 264.1084(c)(3)(i)(A) and (B) (Condition III.C.6 in this draft permit) allow the opening of the filter press for performing routine inspection, maintenance, or other activities needed for normal operations and to remove accumulated residue. The removal of the solid cake is an activity designed to remove accumulated residue. The regulations do not require VOC's to be monitored during those periods of time.**

**Also, there are no performance standards for Tank Level 1 controls nor are there monitoring requirements specified at 40 CFR 264.1084(c) as summarized in Condition III.D.1. The facility requests this condition be removed."**

**EPA Response**: As our response to Comment #28, above, indicates, EPA has responsibility to protect human health, including worker(s) who can be exposed to the organic vapor emissions that take place during the routine manual performance of the scraping activities. In addition to the PPE, the monitoring device in the enclosed room and its alarm capability will operate to protect the worker(s). The monitoring device will also provide the facility an alarm for potential excess vapor emissions from the FP unit. The monitored vapor emission data will provide information for the facility to determine whether the blow-down performance standards imposed by Section III.D.3.(c) would be adequate in removing organic vapors from the solid cakes or if additional vapor removal action is necessary.

Vickery, on April 30, 2018, provided photoionization detector (PID) data from a rented PID which purported to measure VOCs in the enclosure room while removing solid cake from the FP on April 18, 2017. The maximum detected concentration of VOCs was recorded at 6 ppm when the FP was opened for cleaning. EPA cannot verify the quality-control prospect of this one-time monitoring data set using a rented PID device and based on the information provided, cannot determine which compounds constituted the total VOC amount measured by the PID.

Considering a realistic worst-case scenario (such as the measured VOC including a more toxic compound such as benzene), the impact to the exposed worker would be severe since the maximum STEL for benzene is 5 ppm for any 15-minute period. (Vickery indicated that the average duration that the FP is open during solid cake cleaning is approximately 43 minutes.)

Vickery also provided personal industrial hygiene monitoring data collected with sampling pumps located on the employee, which is not location specific, over 8-hour working time period, in 1998-1999. This data shows that, although recorded benzene data (0.44 ppm) did not exceed the Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit (PEL) (1 ppm), it did exceed the National Institute for Occupational Safety and Health (NIOSH) REL (0.1.ppm).

Therefore, it is important to install a monitoring device with a set of alarm limits not only to protect human health from harmful levels of vapors but also to assess the adequacy of vapor removal performance (blow-down) of the filter cakes.

These historical data also show that there is need to generate more monitoring data to make sure that the health of all workers working around the vicinity of the FP area is protected.

No changes will be made per this comment.

31. **Comment** on III.E.1 and 2: *RECORDKEEPING AND REPORTING REQUIREMENTS*

*III.E.1 For tanks and miscellaneous units, you must comply with all applicable recordkeeping and reporting requirements described in 40 C.F.R. §§ 264.1089 and 264.1090.*

*III.E.2 You must prepare and maintain records for miscellaneous units in the same manner as required for tanks under 40 C.F.R. § 264.1089, including but not limited to 40 C.F.R. §§ 264.1089(a), (b)(1) and (2)(iv). You must prepare and maintain records for the vent system and the scrubber unit in the manner described in 40 C.F.R. § 264.1089, including 40 C.F.R. §§ 264.1089(a), (b)(2)(iv), and (e).*

**"40 CFR 264.1089 (b)(2)(iv) and (e) are record keeping requirements related to tanks controlling emission using Tank Level 2 controls. The applicable recordkeeping requirements are found at 40 CFR 264.1089(b)(1) and (b)(2)(i) for tanks and miscellaneous units controlling emission using Tank Level 1 Controls. These requirements are not applicable. The facility requests this condition be removed."**

**EPA Response**: See the Response of Comment #11.

32. **Comment** on III.E.3: *You must comply with all reporting requirements for the scrubber under 40 C.F.R. § 264.1090(c) and (d). Such reports must be sent to EPA (at the address specified in Section I.G, above). You must also report to EPA (at the address specified in Section I.G, above) each occurrence when hazardous waste is managed in tanks or miscellaneous units in noncompliance with the conditions specified in Sections III.C and III.D of this permit, in the manner specified in 40 C.F.R. § 264.1090(b).*

**"The facility complies using 40 CFR 264.1084(c)(2)(iii)(A) because the tanks are equipped with closure devices designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the opening and the closure device. The openings in the roof are connected to conservation vents as allowed by 40 CFR 264. The part of this condition requesting compliance with the requirements of 40 CFR 264.1090(c) and (d) do not apply. The facility requests that part of the condition be removed."**

**EPA Response**: See the Response of Comment #11.

** The following minor changes to the permit were also made:

1. Changes necessary to identify that the permit has been finalized.
2. Names of EPA's RCRA Branch and Division were updated.
3. U.S. EPA was changed to EPA.
4. Other minor typographical corrections and page number updates were made.