



Environmental
Protection Agency

Division of Hazardous Waste Management

Response to Comments

**Project: Vickery Environmental Inc. Ohio Hazardous Waste Facility
Installation and Operation Permit Renewal
Ohio EPA ID #: OHD020273819**

Agency Contacts for this Project

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Ohio EPA initiated a public hearing on October 27, 2011, regarding the renewal of Vickery Environmental Inc.'s Ohio Hazardous Waste Facility Installation and Operation Permit. This document summarizes the comments and questions received at the public hearing and during the associated comment period, which ended on November 8, 2011.

Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Often, public concerns fall outside the scope of that authority. Ohio EPA may respond to those concerns in this document by identifying another government agency with more direct authority over the issue.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format.

Comments from Vickery Environmental Inc.

Comment 1: The text in Permit Condition A.5 does not match the rule or law cited. Please replace the current text with the cited rule.

Response 1: The text provided in Permit Condition A.5 is standard to all permits and is meant to add additional clarity to OAC Rule 3745-50-58(A). As written, the text does not impose any additional requirements beyond what is specified in OAC Rule 3745-50-58(A). No change has been made to the permit with respect to this comment.

Comment 2: **The text in Permit Condition A.6(c) does not match the rule or law cited. Please replace the current text with the cited rule.**

Response 2: This permit language is standard to all permits and is designed to remind the permittee of their corrective action obligations in the event that the facility would cease operations. No change has been made to the permit with respect to this comment.

Comment 3: **The text in Permit Condition A.9 does not match the rule or law cited. Replace “effective management practices” with “effective performance.”**

Response 3: Ohio EPA does not agree with the suggested change. The phrase “effective management practices” is standard permit language and has been included to provide additional clarity to the “Proper Operation and Maintenance” condition. As written, the text does not impose any additional requirements beyond what is specified in OAC Rule 3745-50-58(E). No change has been made to the permit with respect to this comment.

Comment 4: **The text in Permit Condition A.11 does not match the rule or law cited. Correct the condition by removing “and photograph” from A.11(a)(iii) and “document” from A.11(a)(iv).**

Response 4: Ohio EPA does not agree with the suggested change. This permit language is standard to all permits and is intended to articulate inspection techniques that the director or authorized representative may use during an inspection of the facility as is broadly provided for in Sections 3734.07 and 3734.31 of the Ohio Revised Code. No change has been made to the permit with respect to this comment.

Comment 5: **The text in Permit Condition A.12 does not match the rule or law cited. Correct the condition by removing “Further, a sample must be a representative sample; as such term is defined and used in the Ohio hazardous waste rules” and by adding “and additional supplements or editions thereof” after the reference to “Standard Methods for the Examination of Water and Wastewater: Twentieth Edition, 1999.”**

- Response 5: The text, "Further, a sample must be a representative sample; as such term is defined and used in the Ohio hazardous waste rules," is standard permit language that is included in Permit Condition A.12 to ensure that the permittee obtains acceptable samples for monitoring purposes. No change to the permit will be made with respect to this request. Ohio EPA does feel that the request to add "and additional supplements or editions thereof" after the reference to "Standard Methods for the Examination of Water and Wastewater: Twentieth Edition, 1999" would add clarification to the permit and has made the change.
- Comment 6:** **OAC Rule 3745-50-58 states that the director may require the Permittee to establish and maintain an information repository at any time based on factors set forth in paragraph (C)(2) of rule 3745-50-39 of the Administrative Code. The facility has not been required to establish or maintain an information repository in the past and therefore requests that Permit Condition A.14(e) be removed.**
- Response 6: Ohio EPA agrees that the need for an information repository is unwarranted. Therefore, Permit Condition A.14(e) has been changed to Reserved.
- Comment 7:** **Vickery does not understand the intent of Permit Condition A.23 and its connection to the Ohio Administrative Code.**
- Response 7: Permit Condition A.23 is intended to allow Ohio EPA to inspect any newly constructed portion of the facility before it is put into use as outlined in OAC Rule 3745-50-58 (L)(2). The language is included in the permit for hazardous waste treatment, storage and disposal units (ie, tanks and filter press) that have been approved for installation at the facility but have not yet been installed. Permit Condition A.23 has not been changed.
- Comment 8(a):** **The text in Permit Condition A.24 does not match the rule or law cited. Replace the text with the language found in OAC Rule 3745-50-58(L)(11).**
- Response 8(a): The text provided in Permit Condition A.24 is intended to add additional clarity to OAC Rule 3745-50-58(L)(11). As written, the text does not impose any additional requirements

beyond what is specified in OAC Rule 3745-50-58(L)(11).
No change has been made to the permit with respect to this comment.

Comment 8(b): Permit Condition B.3.1 appears to be missing information.

Response 8(b): It appears that text was omitted from Permit Condition B.3.1. Permit Condition B.3.1 should read:

"B.3.1.Waste Profiles

- (a) Prior to accepting a generator's waste stream, the Permittee shall obtain waste profile information about the waste stream so that the Permittee can determine if the material can be managed in accordance with the conditions of the permit and approved Part B Application. This waste profile information shall include, but not be limited to:
 - (i) Generator name, US EPA identification number, profile number;
 - (ii) Common or generic name of the hazardous waste;
 - (iii) Process generating the hazardous waste or the source of the hazardous waste;
 - (iv) Physical description of the hazardous waste;
 - (v) Major chemical or physical components of the hazardous waste by percent of the component per 100 percent of the hazardous waste;
 - (vi) Documentation supporting the generator's knowledge of the waste, analytical data, or a combination of the two which adequately characterizes the waste such that it may be treated, stored, or disposed of in accordance

with this permit, Chapters 3745-54 to 57, 3745-218 and 3745-270 of the Ohio Administrative Code;

- (vii) RCRA hazardous waste description;
 - (viii) Specific handling instructions needed to manage the waste in accordance with the Permittee's permit;
 - (ix) Date and signature of the generator certifying that the information is correct.
- (b) The Permittee must not accept a waste stream if determined that:
- (i) The waste is not among those which the Permittee is authorized to accept by this permit;
 - (ii) Acceptance of the waste is contrary to specific regulation promulgated by Ohio EPA;
 - (iii) Acceptance of the waste would cause harm to the environment or to operations of the facility;
 - (iv) The waste contains Toxic Substances Control Act (TSCA) regulated levels of PCBs;
 - (v) Permit Conditions in B.3.1(a) are not met.
- (c) The Permittee must receive prior approval from Ohio EPA, Northwest District Office before accepting any P-coded waste stream, in accordance with ORC 3734.141. P-coded waste streams must only be streams that follow the derived from or carry through provisions or that the Permittee can treat to render them innocuous prior to deep well injection. Review of a waste stream by Ohio EPA as part of the Waste Product Review

satisfies all notification requirements of ORC 3734.141.”

This language has been incorporated into the final permit.

Comment 9: The facility does not accept ignitable materials. Therefore Permit Condition B.7(e) should be modified to read, “where applicable.”

Response 9: This permit language is standard to all permits and is applied to any facility that manages ignitable, reactive, or incompatible wastes. The language set forth is a general requirement for these waste types and does not imply authorization for acceptance of ignitable wastes. Permit Condition B.7(e) has not been changed.

Comment 10: Please revise the text in Permit Condition B.18 to match the rule. Specifically, the rules require copies to be submitted to Ohio EPA. Ohio EPA can distribute the plan internally to any division it determines.

Response 10: Ohio EPA’s emergency response functions are housed in the Agency’s Division of Environmental Response and Revitalization. Requiring contingency plan submission to this division is consistent with the rule which specifies submittal to “...Ohio EPA and local emergency response teams...” No change has been made to the permit with respect to this comment.

Comment 11: Please correct the reference in Permit Condition B.23 to 3745-54-56(I) instead of 3745-54-56(J) as section J no longer exists and was moved to I.

Response 11: Ohio EPA has corrected the reference.

Comment 12: Prior notification of the Ohio EPA for the disposal or decontamination of equipment, structures or soils is not supported by any rule. Therefore, Permit Condition B.32(b) should be removed.

Response 12: The notification requirement in B.32(b) is specific to soil and rinseate sampling, and not for disposal of equipment, structures and soils as represented in the permittee’s comment. In any case, Section 3734.07 of the Ohio Revised Code provides the director (or authorized representative)

with broad authority to enter a facility at reasonable times to inspect or obtain samples (among other objectives) to determine compliance with applicable laws. As such, establishment of a prior notification requirement for inspection and sampling activities is supportable under the law. Permit Condition B.32(b) has not been changed.

Comment 13: Yard piping materials of construction include fiberglass-reinforced plastic, polyvinylchloride (PVC), chlorinated polyvinylchloride (CPVC), and hasteloy. Please revise the text in Module D Highlights to read: “Yard piping is fiberglass-reinforced plastic, polyvinylchloride (PVC), chlorinated polyvinylchloride (CPVC), and hasteloy.”

Response 13: Ohio EPA has changed the text.

Comment 14: Waste Code K175 is listed twice and Waste Codes K176 and K181 were omitted from the Waste Code List. Please remove the extra K175 and include both K176 and K181.

Response 14: Ohio EPA has corrected the text.

Comment 15: Permit Condition D.5(d) refers to Permit Condition D.4 in error.

Response 15: Ohio EPA agrees with this comment. Permit Condition D.5(d) has been changed to refer to Permit Condition D.5.

Comment 16: On-site surface water management gates A-4, A-5, A-6, A-8, A-9, A-10, B-3, C-2, C-4, E-1, E-3, E-4 and E-6 must be closed when the pipeline from Filter Building #1 to Injection Well #4 is in use. The facility may need to periodically open these gates during times of heavy rainfall or snowmelt.

Response 16: Ohio EPA agrees there may be a need to open these gates to alleviate flooding. Therefore, Permit Condition D.11(e),(f), and (g) have been modified to read:

(e) “The Permittee must ensure that on-site surface water management gates A-4, A-5, A-6, A-8, A-9, A-10, B-3, C-2, C-4, E-1, E-3, E-4, and E-6 are in the closed position prior to beginning the transfer of waste through the pipeline that leads from Filter Building No. 1 to Injection

Well No. 4. The on-site surface water management gates are identified on Drawing 19 of Appendix 14 of the approved Part B application.

(f) "The Permittee must maintain on-site surface water management gates A-4, A-5, A-6, A-8, A-9, A-10, B-3, C-2, C-4, E-1, E-3, E-4, and E-6 in the closed position while transferring waste through the pipeline that leads from Filter Building No. 1 to Injection Well No. 4.

i. The Permittee may open any of the gates listed in this permit condition to prevent surface water flooding with prior notification of Ohio EPA.

(g) "The Permittee must document compliance with permit conditions D.11(a) through D.11(f) in the facility operating record.

Comment 17: **The Permittee has completed the requirement of Permit Condition E.5. Therefore, the corrective action summary in Module E should be changed to reflect the completion of the RFI.**

Response 17: Ohio EPA agrees and has changed the last paragraph of the corrective action summary to read:

"The Permittee must follow the work schedule in this permit beginning with Permit Condition E.6 and submit all required reports to Ohio EPA."

Comment 18: **Waste Code K181 was omitted from the Waste Code List. Please add Waste Code K181 to the list.**

Response 18: Ohio EPA has corrected the text.

Comment 19: **The determination of statistically significant groundwater contamination within 45 days of a groundwater sampling event as required by Permit Condition J.9(f) may be unreasonable if the event starts the day of sampling. A more reasonable timeframe is 45 days from the date of receipt of the laboratory results.**

Response 19: Ohio EPA agrees that the definition of a sampling event is vague. Therefore, Permit Condition J.9(f) has been changed to read:

“The Permittee must determine whether there is statistically significant evidence of contamination for any chemical parameter or hazardous constituent specified in Permit Condition J.9(b) semi-annually within 90 days after completion of each sampling event (For this condition, sampling event is defined as the date the sample was obtained). In determining whether statistically significant evidence of contamination exists, the Permittee must use the methods specified in Permit Condition J.7 to compare data collected at the compliance point(s) to the background ground water quality data.”

Comments from Citizens

Comment 20: A local resident expressed concerns about a chemical leak from the facility that released chemicals into the air. The leaked chemicals formed a large, colored cloud that passed through the eastern county of Fremont into Clyde. The resident believes that the cloud caused harm to people outside on that day and assumes the only way to confirm that the cloud did cause harm to the people is to perform intense testing on the children with cancer in the area and to perform autopsies on the deceased.

Response 20: The resident is referring to a release of nitrogen dioxide that occurred on March 24, 2006, that involved Tank T-5. Ohio EPA evaluated this release and determined that the conservation vent, which acts as a pressure-relief valve for the tank, allowed the release of chemicals into the air. It was later discovered that a chemical reaction had occurred in the tank amongst the wastes being stored. The chemical reaction caused an increase in pressure within the tank and the conservation vent opened automatically to relieve the pressure so as to prevent a tank failure. Waste shipments received by Vickery Environmental are sampled to ensure

the waste received matches the manifest and waste profile. As a response to the release, the sample is tested for compatibility with the waste already stored in the tank that the newly accepted waste will be pumped into. Waste from the tanks is injected into the underground wells as soon as possible to avoid the risk of delayed reactions within the tanks. In addition to procedural changes, Vickery has connected the pressure relief vents from each storage tank to a pollution control device called a scrubber. If pressure builds in the tanks those emissions go to the scrubber to reduce nitrogen oxide emissions. For more information regarding air pollution controls at the facility, please contact: Melanie Ray of Ohio EPA's Division of Air Pollution Control in the Agency's Northwest District Office in Bowling Green at (419) 373-4111 or e-mail Melanie at melanie.ray@epa.ohio.gov.

The March 2006 nitrogen dioxide (NO₂) release at Vickery Environmental was of short duration (approximately 2.5 hours). Authorities conducted a voluntary evacuation of residences within a mile south and southeast of the facility as a precaution. NO₂ is a common chemical produced during combustion of fossil fuels such as automobile exhaust or gas heating and cooking, as well as cigarette smoking and industrial processes including electric power generation and electroplating. According to U.S. EPA, studies have shown short-term, high-level exposure to NO₂ may cause respiratory reactions, particularly among people with asthma or other chronic respiratory conditions. Studies have shown a connection between breathing elevated short-term NO₂ concentrations and increased visits to emergency rooms for respiratory issues. Because of the short duration of the release, the successful evacuation of affected areas, and since NO₂ is not a known carcinogen; no long-term health effects are expected. For more information on the health effects of NO₂ exposures, go to <http://www.epa.gov/air/nitrogenoxides/health.html>.

Comment 21: Multiple residents expressed concerns about hazardous waste deep well injection and were against renewing the facility's permit.

Response 21: In Ohio, any person can apply for a Resource Conservation and Recovery Act (RCRA) permit for the treatment, storage or disposal of hazardous waste. Today's permit renewal specifically authorizes hazardous waste tank treatment and storage, miscellaneous unit treatment, post-closure care and corrective action activities. Although these activities are a precursor to deep-well injection of waste, this specific activity is not authorized by today's action. Hazardous waste deep-well injection is authorized by the Underground Injection Control (UIC) Section of Ohio EPA. The facility has obtained proper authority for deep-well injection of waste in a manner which has been determined to be protective of human health and the environment. For further information on deep-well injection at the facility, please contact Chuck Lowe of the Division of Drinking and Ground Waters at (614) 644-2894 or e-mail Chuck at chuck.lowe@epa.ohio.gov. The facility has submitted a permit application which meets the legal requirements for issuance of a hazardous waste permit renewal. Ohio EPA will issue a hazardous waste permit which contains permit conditions regarding the safe storage and treatment of hazardous waste. The Division of Materials and Waste Management program conducts inspections to ensure that the facility is in compliance with these permit conditions and state rules and regulations, which are designed to protect human health and the environment.

Comment 22: **A local resident expressed support for the permit renewal for continued acceptance, storage, and treatment of toxic waste products on site.**

Response 22: No response required.

Comment 23: **A local resident requested a list of the chemicals of materials received, the volume of those materials, and the date that the materials were received on-site be made available to the citizens of Sandusky County through the Health Department.**

Response 23: Ohio EPA has advised the resident on the process for requesting information from the Agency and is working to gather the requested information.

Typographical Corrections

Please note: Typographical and numbering errors have been corrected throughout Module J. Also, the waste codes listed in tables found in D.1(c) on pages 33/34 and G.1(c) on pages 64/65 have been re-organized so all waste codes are listed in alphabetical order.

End of Response to Comments