August 30, 2017

Pinnacle Gas Producers, LLC
ATTN: Charles B. Miller
4220 Pinnacle Road
Moraine, OH 45439

Re: Pinnacle Gas Producers, LLC
Director's Final Findings and Orders (DFFO)
DFFO
RCRA C - Hazardous Waste
Montgomery County
OHR000030346

Subject: Final Findings and Orders of the Director

Dear Sir:

Transmitted herewith are the Final Findings and Orders of the Director concerning the matter indicated for Pinnacle Gas Producers, LLC.

If you have any questions, please contact Andrea Smoktonowicz at (614) 644-3037.

Sincerely,

Tonya Andrews, Administrative Professional 3
Division of Environmental Response & Revitalization

Enclosure

cc: Mitch Mathews, DERR, CO
Randy Kirkland, DERR, CDO
Andrea Smoktonowicz, Legal
David Edelstein, dmedelstein@vorys.com
BEFORE THE
OHIO ENVIRONMENTAL PROTECTION AGENCY

In the Matter of:

Pinnacle Gas Producers, LLC
4220 Pinnacle Road
Moraine, Ohio 45439

Respondent

Director's Final
Findings and Orders

PREAMBLE

It is agreed by the parties hereto as follows:

I. JURISDICTION

These Director's Final Findings and Orders (Orders) are issued to Pinnacle Gas Producers, LLC (Respondent) pursuant to the authority vested in the Director of the Ohio Environmental Protection Agency (Ohio EPA) under Ohio Revised Code (ORC) §§ 3734.02(G), 3734.13 and 3745.01.

II. PARTIES BOUND

These Orders shall apply to and be binding upon Respondent and successors in interest liable under Ohio law. No change in ownership of Respondent or of the Facility shall in any way alter Respondent's obligations under these Orders.

III. DEFINITIONS

Unless otherwise stated, all terms used in these Orders shall have the same meaning as defined in ORC Chapter 3734 and the rules promulgated thereunder.

IV. FINDINGS

Nothing in the findings shall be considered to be an acknowledgment, statement, or admission by Respondent of any matter of law or fact. These findings are not considered evidence. The Director of Ohio EPA has determined the following findings:
1. Pursuant to ORC § 3734.02(G) and Ohio Administrative Code (OAC) rule 3745-50-31, the Director may by order exempt any person generating, collecting, storing, treating, disposing of, or transporting hazardous wastes in such quantities or under such circumstances that, in the determination of the Director, are unlikely to adversely affect the public health or safety or the environment, from any requirement to obtain a hazardous waste facility installation and operation permit or comply with other requirements of ORC Chapter 3734. Any such exemption shall be consistent with and equivalent to rules promulgated under the Resource Conservation and Recovery Act of 1976, 90 Stat. 2806, 41 U.S.C. § 6921 et seq., as amended.

2. Respondent is a "person" as defined in ORC § 3734.01(G) and Ohio Administrative Code (OAC) rule 3745-50-10(A).

3. Respondent operates a "facility" as defined under OAC rule 3745-50-10(A), located at 4220 Pinnacle Road, Moraine, Montgomery County, Ohio (Facility) which includes Knockout #1, Knockout #2, and a gathering line, where it beneficially uses landfill gas from adjacent Stony Hollow landfill and converts it into renewable energy. At the Facility, Respondent receives "hazardous waste", as that term is defined in OAC rules 3745-50-10(A) and 3745-51-03, that is landfill gas condensate (LGC) (D001 — ignitability, as described under OAC rule 3745-51-21) from the Stony Hollow landfill as well as generates LGC during processing of the landfill gas which drops out during conveyance and accumulates in amounts greater than 1,000 kilograms per month, classifying Respondent as a large quantity generator of hazardous waste subject to the requirements in OAC rule 3745-52-34(A). Respondent has also stored and accumulated (and will accumulate) the hazardous waste LGC in hazardous waste "tanks," as that term is defined in OAC rule 3745-50-10(A)(114) and is therefore subject to the hazardous waste tank rules in OAC rules 3745-55-90 through 3745-55-99/3745-66-90 through 3745-66-101. Respondent has been assigned U.S. EPA identification number OHR000030346.

4. The LGC has historically been non-hazardous and was collected and handled at the Facility as wastewater using a condensate treatment system and then discharged to the municipal sanitary sewer. It is believed by Respondent that changes to the composition of the landfill gas from Stony Hollow Landfill has caused the characteristics of the LGC to become ignitable hazardous waste (D001). Respondent’s generator status and tank storage has only come into light recently given the nature of the LGC.
5. On March 3, 2016, the Moraine Fire Department notified Ohio EPA of a spill at the Facility, at the request of Respondent, and Ohio EPA responded, met Respondent at the Facility, and initially observed the release of LGC from an in-ground sump/knockout tank (known as Knockout #2) near the Facility's fence line.

6. Sampling was conducted of soil and LGC on March 3 and March 4, 2016. Soil sampling did not exceed TCLP limits. One sample of LGC contained benzene and ethylbenzene exceeding TCLP limits. Excavation of a 15' x 20' x 15' pit around Knockout #2 occurred. During excavation, Ohio EPA observed free phase LGC and landfill gas bubbling. The landfill gas that leaked into the LGC was what likely contributed to the benzene and ethylbenzene exceedances in the sample, however.

7. On March 4, March 8, and March 11, 2016, Ohio EPA performed site visits and compliance inspections at the Facility and observed the following violations involving four hazardous waste tanks (i.e., Knockout #2, a poly tank in the condensate building, and an inlet sump and a compressor sump located on either side of the condensate building). The violations were:
   a. OAC rule 3745-52-34(A)(3) for failure to label each tank with the words "hazardous waste";
   b. OAC rule 3745-66-94(B) for failure to have spill prevention controls and overfill prevention controls at the tanks or secondary containment;
   c. OAC rule 3745-66-95 for failure to inspect tanks and ancillary equipment daily and document inspections;
   d. OAC rule 3745-66-93(A) and (F) for failure to provide adequate secondary containment for the tanks and ancillary equipment; and
   e. OAC rule 3745-66-98(B) for failure to maintain a protective distance between Knockout #2, which stored D001 ignitable hazardous waste LGC, and a public street.

8. The violations, inter alia, were documented in notice of violation (NOV) letters dated March 10 and April 22, 2016, to Respondent. In the NOV letters, Ohio EPA also requested a written tank assessment for the hazardous waste tanks in accordance with OAC rule 3745-66-92.

9. On April 6, 2016, Respondent responded to the March 10, 2016, NOV in which it stated the poly tank had been taken out of service and replaced with a double-wall

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1 Only this NOV documented the OAC rule 3745-66-98(B) violation.
10. On April 8, 2016, Ohio EPA received Respondent’s *Hydrogeologic Work Plan* to investigate rate and extent of the release of LGC to soil and ground water that occurred at Knockout #2. Respondent developed this plan as a precursor to developing a closure plan for the sump.

11. In the April 22, 2016, NOV letter, Ohio EPA also cited Respondent for violation of ORC § 3734.02(E) and (F) based on the release of hazardous waste LGC (D001) at Knockout #2 to the environment, which is disposal of hazardous waste without a hazardous waste permit.

12. In a letter dated April 29, 2016, Ohio EPA provided ground water comments to Respondent on its *Hydrogeologic Work Plan*.

13. On May 6, 2016, Respondent and Ohio EPA met to discuss hazardous waste closure and design for the tanks at the Facility. At this meeting, Respondent informed Ohio EPA that it will design and install a new double-wall, approximately 17,000-gallon hazardous waste tank (new LGC Storage Tank) to replace the temporary frac tank to be used to store hazardous waste LGC, and that there is a Knockout #1 near the Stony Hollow landfill that it plans to investigate. For purposes of these Orders, the hazardous waste tanks subject to closure as hazardous waste units where hazardous waste was stored and/or disposed without a hazardous waste permit are Knockout #1, Knockout #2, the inlet sump, and the compressor sump. Also, for purposes of these Orders, the new LGC Storage Tank will be subject to the hazardous waste tank rules in OAC rule 3745-66-90 through 3745-66-101.

14. During the months of May through August 2016, Respondent has worked cooperatively with Ohio EPA and has provided a series of responses and a draft design and closure plan to Ohio EPA as well as has participated in several conference calls with Ohio EPA to bring the Facility back into compliance. This includes a draft *Landfill Gas Condensate Management and Sump Closure Plan* dated and received by Ohio EPA on May 20, 2016.

15. In the same submittal received May 20, 2016, Respondent informed Ohio EPA that Knockout #1 had not been used for several years, Knockout #2 was taken out of service, and the inlet sump and compressor sump were going to be taken out of service and all were no longer going to be used to store LGC.
16. Based on the information provided by Respondent to date, the Director has determined that the poly tank, Knockout #1, Knockout #2, the inlet sump, and the compressor sump did not meet the requirements for hazardous waste tanks including but not limited to, having a hazardous waste tank assessment, meeting the general operating requirements of a hazardous waste tank, and did not meet the special requirements for ignitable wastes, in violation of OAC rules 3745-66-91, 3745-66-94, and 3745-66-98, respectively.

17. Because Respondent has ceased or will cease using the poly tank, Knockout #1, Knockout #2, the inlet sump, and the compressor sump for the accumulation of hazardous waste LGC, and will perform closure on Knockout #1, Knockout #2, the inlet sump, and the compressor sump, the Director has determined that no further action is required of Respondent at this time with regard to the violations referenced in Finding No. 16 of these Orders.

18. By letter dated June 17, 2016, Ohio EPA notified Respondent that it had resolved violations referenced in Findings Nos. 7.a, c, and e. Ohio EPA also provided design comments to the new LGC Storage Tank and gathering line as described under The Landfill Gas Condensate Management Plan and Sump Closure Plan. Ohio EPA stated that the gathering line met the definition of a tank or ancillary equipment under OAC rule 3745-50-10 and needed to have secondary containment as per OAC rule 3745-66-93. Nevertheless, Ohio EPA informed Respondent that, in the alternative to secondary containment for the gathering line, Respondent could provide specifics on the testing or procedures conducted at the gathering line to detect leaks, including periodic inspections.


20. On July 8, 2016, Respondent submitted to Ohio EPA a revised Landfill Gas Condensate Management and Sump Closure Plan, which included operating and inspection standards for gathering line as an alternative to secondary containment, and Ohio EPA has hereby approved that plan as it relates to the gathering line inspection operating standards.

21. Due to Respondent's establishment and operation of a hazardous waste storage and disposal facility as described in Findings Nos. 11 and 13 of these Orders (i.e., Knockout #1, Knockout #2, the inlet sump, and the compressor sump), Respondent is required to have a hazardous waste facility and installation permit and is subject to all general facility standards found in OAC Chapter 3745-54 and
55, including but not limited to, closure in accordance with OAC rules 3745-55-11 through 3745-55-20, the financial assurance for closure requirements contained in OAC rules 3745-55-42 through 3745-55-51 and corrective action for waste management units in accordance with OAC rule 3745-54-101. To obtain a hazardous waste facility installation and operation permit, Respondent is required to submit “Parts A and B” of the application in accordance with OAC Chapter 3745-50.

22. Respondent’s submittal of a Closure Plan(s) for all units where hazardous waste was stored and/or disposed, in lieu of the submittal of an application for a hazardous waste facility installation and operation permit, is unlikely to adversely affect the public health or safety or the environment. The Closure Plan(s) shall comply with the administrative requirements of OAC Chapters 3745-65 and 66 and the substantive requirements of OAC Chapters 3745-54 and 55 including but not limited to the ground water protection program in accordance with OAC rules 3745-54-90 through 3745-54-100. Therefore, the Director finds that the issuance to Respondent of an exemption from the requirement to submit an application for a hazardous waste facility installation and operation permit is unlikely to adversely affect the public health or safety or the environment within the meaning of ORC § 3734.02(G) provided Respondent meets the conditions set forth in the Orders.

V. ORDERS

Respondent shall achieve compliance with Chapter 3734 of the ORC and the regulations promulgated thereunder according to the following compliance schedule:

1. Within 30 days after the effective date of these Orders, Respondent shall implement the revised Landfill Gas Condensate Management Plan and Sump Closure Plan submitted July 8, 2016, as referenced in Finding No. 20 of these Orders as it relates to inspections of the gathering line, which is an approved alternative to secondary containment.

2. By December 31, 2017, Respondent shall submit documentation demonstrating that the new LGC Storage Tank being used to store hazardous waste at the Facility is in compliance with the hazardous waste tank standards in OAC rules 3745-66-90 through 3745-66-99. This documentation shall include but not be limited to, a written assessment for the tank system that addresses the requirements of OAC rule 3745-66-92. This documentation shall be submitted in accordance with Paragraph X. of these Orders. Compliance with this Order will abate the remaining violations referenced in Finding Nos. 7.b and d of these Orders.
3. Within 90 days after the effective date of these Orders, Respondent shall submit to Ohio EPA for review and approval a Closure Plan for Knockout #1, Knockout #2, the inlet sump, and the compressor sump at the Facility where hazardous waste was managed as described in Finding No. 13 of these Orders. A copy of the Closure Plan shall be submitted in accordance with Section X. of these Orders and an additional copy submitted to Ohio EPA, Division of Environmental Response and Revitalization, Manager, Engineering Section, P.O. Box 1049, Columbus, Ohio 43216-1049.

4. This Closure Plan shall comply with the administrative requirements of OAC Chapters 3745-65 and 3745-66 and the substantive requirements of OAC Chapters 3745-54 and 3745-55, including but not limited to, the groundwater protection program in accordance with OAC rules 3745-54-90 through 54-100. The Closure Plan is subject to approval by Ohio EPA. If Ohio EPA does not approve the Closure Plan and provides Respondent with a written statement of deficiencies, Respondent shall submit a revised Closure Plan for approval addressing the deficiencies within 30 days of receiving such written statement. If Ohio EPA modifies the Closure Plan, the modified Closure Plan becomes the approved plan. Upon Ohio EPA's written approval of the Closure Plan, Respondent shall implement the approved Closure Plan in the manner and pursuant to the time frames set forth in the approved Closure Plan and OAC rules 3745-55-13/3745-66-13.

5. Within 90 days after approval of the Closure Plan pursuant to Order No. 4., Respondent shall submit a closure cost estimate and documentation demonstrating that Respondent has established financial assurance and liability coverage for the areas of the Facility subject to closure, in accordance with OAC rules 3745-55-42 through 3745-55-47.

6. Within 60 days after completion of closure, Respondent shall submit certification of closure to Ohio EPA in accordance with OAC rules 3745-55-15. Ohio EPA's acceptance of the closure certification shall abate the violations referenced in Finding Nos. 11 and 13 of these Orders.

VI. TERMINATION

Respondent's obligations under these Orders shall terminate when Respondent certifies in writing and demonstrates to the satisfaction of Ohio EPA that Respondent has performed all obligations under these Orders and the Chief of Ohio EPA's Division of Environmental Response and Revitalization acknowledges, in writing, the termination of these Orders. If Ohio EPA does not agree that all obligations have been performed, then
Ohio EPA will notify Respondent of the specific obligations that have not been performed in a timely manner of Respondent's submission, in which case Respondent shall have an opportunity to address any such deficiencies and seek termination as described above.

The certification shall contain the following attestation: "I certify that the information contained in or accompanying this certification is true, accurate and complete."

This certification shall be submitted by Respondent to Ohio EPA and shall be signed by a responsible official of Respondent. For purposes of these Orders, a responsible official is a [e.g., corporate officer] who is in charge of a principal business function of Respondent.

**VII. OTHER CLAIMS**

Nothing in these Orders shall constitute or be construed as a release from any claim, cause of action or demand in law or equity against any person, firm, partnership or corporation, not a party to these Orders, for any liability arising from, or related to, the operation of Respondent's Facility.

**VIII. OTHER APPLICABLE LAWS**

All actions required to be taken pursuant to these Orders shall be undertaken in accordance with the requirements of all applicable local, state and federal laws and regulations. These Orders do not waive or compromise the applicability and enforcement of any other statutes or regulations applicable to Respondent.

**IX. MODIFICATIONS**

These Orders may be modified by agreement of the parties hereto. Modifications shall be in writing and shall be effective on the date entered in the journal of the Director of Ohio EPA.

**X. NOTICE**

All documents required to be submitted by Respondent pursuant to these Orders shall be addressed to:
XI. RESERVATION OF RIGHTS

Ohio EPA reserves its rights to exercise its lawful authority to require Respondent to perform corrective action at the Facility, at some time in the future, pursuant to ORC Chapter 3734 or any other applicable law. Respondent reserves its rights to raise any administrative, legal or equitable claim or defense with respect to performing such corrective action. Ohio EPA and Respondent each reserve all other rights, privileges and causes of action, except as specifically waived in Section XII of these Orders.
XII. WAIVER

In order to resolve disputed claims, without admission of fact, violation or liability, and in lieu of further enforcement action by Ohio EPA for only the violations specifically cited in these Orders, Respondent consents to the issuance of these Orders and agrees to comply with these Orders. Compliance with these Orders shall be a full accord and satisfaction for Respondent’s liability for the violations specifically cited herein.

Respondent hereby waives the right to appeal the issuance, terms and conditions, and service of these Orders, and Respondent hereby waives any and all rights Respondent may have to seek administrative or judicial review of these Orders either in law or equity.

Notwithstanding the preceding, Ohio EPA and Respondent agree that if these Orders are appealed by any other party to the Environmental Review Appeals Commission, or any court, Respondent retains the right to intervene and participate in such appeal. In such an event, Respondent shall continue to comply with these Orders notwithstanding such appeal and intervention unless these Orders are stayed, vacated or modified.

XIII. EFFECTIVE DATE

The effective date of these Orders is the date these Orders are entered into the Ohio EPA Director’s journal.

XIV. SIGNATORY AUTHORITY

Each undersigned representative of a party to these Orders certifies that he or she is fully authorized to enter into these Orders and to legally bind such party to these Orders.

IT IS SO ORDERED AND AGREED:

Ohio Environmental Protection Agency

Craig W. Butler
Director
IT IS SO AGREED:

Pinnacle Gas Producers, LLC

Signature

Date

Printed or Typed Name

Title