REGION 5
CHICAGO, IL 60604

MEMORANDUM

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
Vonco II LLC, Becker, Minnesota

FROM: Virginia Galinsky, Environmental Engineer
AECAB (MN/OH)

THRU: Brian Dickens, Section Supervisor
AECAB (MN/OH)

TO: File

BASIC INFORMATION

Facility Name: Vonco II LLC

Facility Location: 15301 140th Avenue, Becker, Minnesota 55308

Date of Inspection: August 15, 2024

EPA Inspector(s):
1. Virginia Galinsky, Environmental Engineer
2. Brianna Fenzl, Environmental Engineer
3. Emma Leeds, Environmental Engineer

Other Attendees:
1. Ryan Hesley, Vonco, Director of Waste Operations
2. Jody Sproessig, Vonco, Landfill Manager
3. Seth Veit, Vonco, Environmental Specialist
4. Luke Taylor, Stantech, via phone
5. Megan Ambuehl, Stantech, via phone
6. Alexandria Clark, MPCA
7. Jenae Carlson, MPCA

Contact Email Address: Aric.Olsen@VoncoUSA.com and RHesley@VoncoUSA.com

Facility Name: Vonco II LLC
Facility Location: 15301 140th Ave., Becker, MN
Date of Inspection: August 15, 2024

Purpose of Inspection: Investigate SO2 emissions as well as adequacy of gas collection and flare system capacity

Facility Type: Industrial and demolition waste landfill

Arrival Time: 8:50 am
Departure Time: 12 pm

Inspection Type:
☒ Unannounced Inspection
☐ Announced Inspection

OPENING CONFERENCE

☒ Presented Credentials
☒ Stated authority and purpose of inspection
☒ Provided Small Business Resource Information Sheet
☒ Provided CBI warning to facility

The following information was obtained verbally from the facility representatives.

Company Ownership: Has not changed within the last 5 years.

Process Description:
Vonco II is an industrial and demolition waste landfill which has been in operation since 2003. The facility receives waste from 6:30 am to 5 pm on weekdays, and from 7 am to noon on Saturdays. It accepts 700,000 to 1 million tons of waste per year. Currently the mix is about 50% construction (e.g. shingles, sheetrock, 2x4s, dimensional lumber, demolition waste from transfer stations, etc.) and 50% industrial (e.g. foundry sand, municipal and industrial wastewater treatment plant sludge, shredder fluff, sandpaper rolls, etc.). The total area of the site is 360 acres, of which 64.4 acres is under final cover and 40 acres is being actively filled or prepared for fill. The facility also performs composting for yard waste.

Staff Interview: There are 10 employees on-site. The following materials have been approved for use as alternative daily cover: transfer station fines, paper mill short fiber residuals, and some foundry sands.

There are currently 24 or 25 groundwater monitoring wells. Quarterly samples are taken at these wells to check for nitrogen, oxygen, hydrogen sulfide, carbon monoxide, carbon dioxide, and methane. They once found indication of gas migration close to the office building. It was due to the first cell lacking a RCRA Subtitle D liner. They dug up the cell to add a liner and that helped address the problem. They have two gas probe locations, one at the parking lot near the building and one at cell 3B.

All of the cells are lined. All stormwater is contained onsite without overflow. There are typically 2-4 cells on each sump to collect leachate in the landfill. The leachate is pumped to three 30,000 gallon underground storage tanks which are periodically emptied and sent to either the St. Cloud or Becker municipal wastewater treatment plant. There is also a 2,500 gallon tank for landfill gas condensate which goes to the main leachate tanks.

There are about 27 landfill gas (LFG) extraction wells at the site, with about 3 more planned to be added later this year or early next year. The wells are monitored quarterly for pressure, temperature, methane and hydrogen sulfide content. Two of the existing LFG wells are not currently connected to the flare, which are currently capped and which are planned to be tied into the flare system within about a month. Vonco did not connect the two wells in order to keep the current LFG flow rate to the flare within the flare's rated capacity of 300 cubic feet per minute (cfm). Previously, both of these wells had a passive candlestick flare to control LFG, but Vonco stopped operating these flares around November 2022 when Vonco began operating an active collection system with a blower.

Prior to 2022 they did not have an air permit because they didn't know that they needed one. They had four candlestick flares (including the aforementioned two flares at the now-disconnected wells), each of which had a capacity of about 100 cfm, and which were passive flow. They did not monitor the flow at those flares. With the new permit, they have one flare which is under vacuum and has 300 cfm of capacity. The blower for the new flare is a variable speed drive, but they determined that it was best for their operation to set it to a certain flow rate. It is currently set at 289 cfm. There is no equipment to control hydrogen sulfide or sulfur dioxide emissions from the flare. Vonco does not plan to increase the capacity of the flare as more waste is added to the landfill because they believe they have to stay under 300 cfm of LFG sent to the flare per their permit. The permit does not require monitoring of temperature of the flare, nor flow rate or composition of gas to the flare. The permit does require verification of the presence of a flame at the flare.

The facility has not accepted any municipal solid waste (MSW) in the past, though it has been working on getting approval to do so for the future. If it starts accepting MSW, it would install a separate landfill gas collection system and flare for the MSW portions of the landfill.

We asked about the permit terminology for fugitive vs. uncontrolled emissions from the landfill. Their guess was that the uncontrolled portion would be the emissions from the working phase area, and the fugitive portion would be the emissions from the leachate cleanout areas and the wells.

They add new LFG extraction wells once they've put the final cover on an area. They had been adding final cover about every other year, but they've slowed down a bit in the past year.

TOUR INFORMATION

EPA Toured the Facility: Yes

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Data Collected and Observations:
We saw the landfill gas flare. The flare is an enclosed flare so we could not see the flame, however, we did observe that the temperature at the flare was 728^{o}F, which is indicative of a flame. We also observed that the flow rate was 291.1 cfm and the vacuum was 15.8 inches of water. With the FLIR camera we observed a plume of uncombusted hydrocarbons from the flare.

We drove around the perimeter of the site. We smelled sulfur compounds around the northeast side of the landfill.

We saw the active area of the landfill, and then we went to GV2, one of the capped gas wells.

Photos and/or Videos: were taken during the inspection and are listed in Appendix A.
See Appendix A for the Photo/Video Log.

Field Measurements: were not taken during this inspection.

CLOSING CONFERENCE

☒ Provided U.S. EPA point of contact to the facility

Requested documents:
1. Last year of results for the quarterly monitoring well tests
2. Last 3 years of results for the gas well tests
3. Hourly average flow (cfm) at the flare since installation
4. Hourly average vacuum (in H2O) measured at the flare
5. History of when wells were added since flare installation
6. Results of testing done of flare header gas (e.g. composition, NHV, VOCs, etc.)
7. Flare/blower/header design documents
8. Permit application that resulted in 2022 permit
9. Emission calculations for SO2 for 2022 and 2023
10. Last year of methane readings from boundary gas probes
11. Calculations which determined that the 300 cfm blower would adequately capture the landfill gas generated
12. Hourly average temperature (^{o}F) at the flare since installation
13. Confirmation of installation date of the flare blower.

Concerns: We noted the sulfur smell on the northeast side of the landfill. We were told that area is where they are planning to get the three wells added in sometime this year. We noted that we had observed a hydrocarbon plume from the flare with the FLIR camera. We also mentioned that the temperature of 700^{o}F at the flare seemed a bit low.

DIGITAL SIGNATURES

Report Author: VIRGINIA GALINSKY Digitally signed by VIRGINIA GALINSKY Date: 2024.10.07 11:52:43 -05'00' _____

Section Supervisor: _____

APPENDICES

1. Appendix A: Digital Image Log and Digital Video Log

Facility Name: Vonco II LLC
Facility Location: 15301 140th Ave., Becker, MN
Date of Inspection: August 15, 2024

APPENDIX A: DIGITAL IMAGE LOG AND DIGITAL VIDEO LOG

Inspector Name: Virginia Galinsky **Archival Record Location:** ERC/AECAB Library/Enf_VoncoII_MN_24/ Enf_VoncoII_MN_24_Inspection/Inspection Photos and Videos

Image/Video Number	File Name	Date and Time (incl. Time zone and DST)	Description of Image
1	IMG_0630.JPG	8/15/2024 11:38	Landfill gas flare and blower
2	IMG_0631.JPG	8/15/2024 11:42	Blower nameplate
3	IMG_0632.JPG	8/15/2024 12:32	Gas well GV2
4	MOV_0023.mp4	8/15/2024 11:45	FLIR video of flare plume
5	MOV_0024.mp4	8/15/2024 11:48	FLIR video of flare plume