

3.3.3 CHEVIOT LANDFILL

Facility Name: Cheviot Closed Landfill

A.K.A: N/A

Location: Approximately 275 feet south of 7305-7257 Southpointe Drive

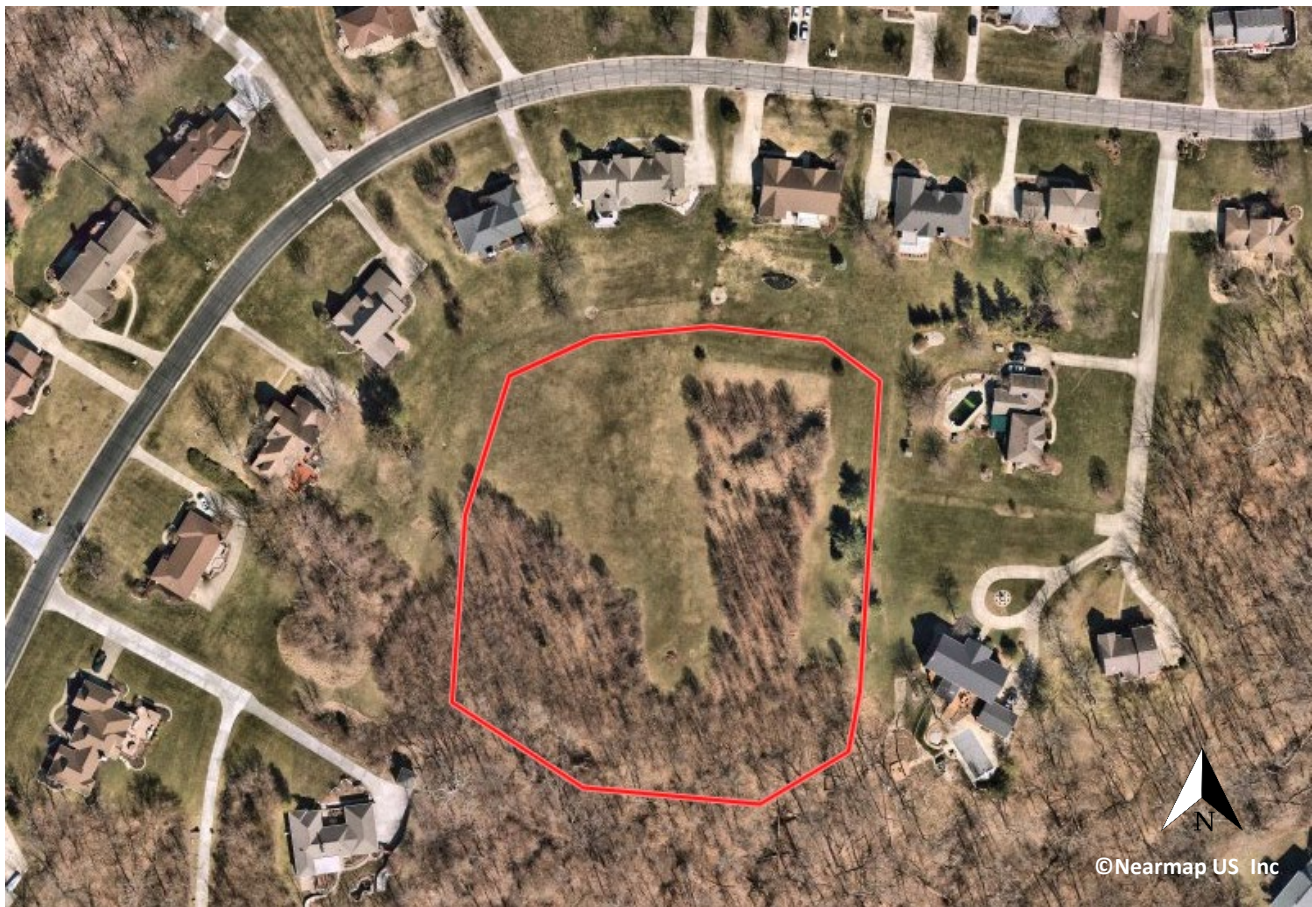
Parcel(s): See Facility Overview

Lat/Long: 39.132154 -84.688996

Region: Green Township

Owners: Various (several parcels)

Operation (yrs): 1954 – 1975



FACILITY OVERVIEW

The landfill is approximately located on the following 11 parcels:

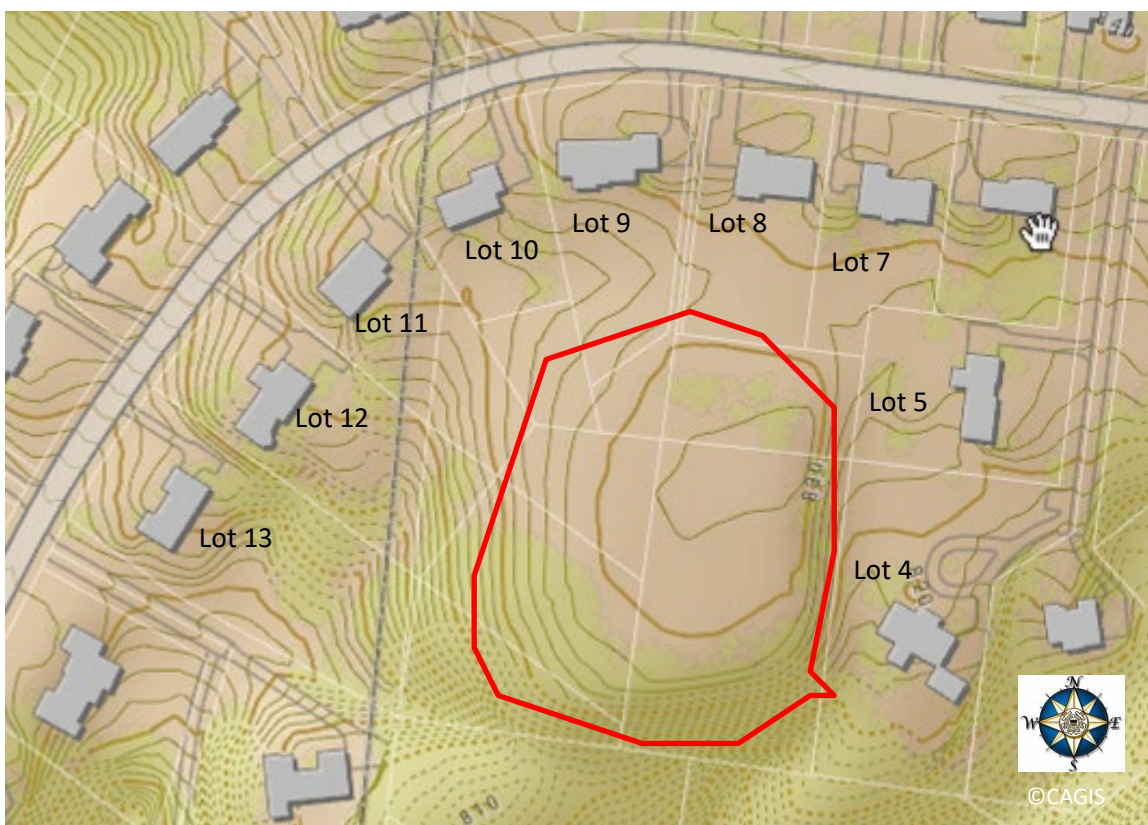
550-0270-0217-00	550-0270-0218-00	550-0270-0235-00	550-0270-0237-00
550-0270-0238-00	550-0270-0240-00	550-0270-0242-00	550-0270-0243-00
550-0270-0244-00	550-0270-0245-00	550-0270-0246-00	

Cheviot Landfill was operated and owned by the City of Cheviot, Ohio off South Road (7269 Southpointe Drive) from approximately 1954 to 1975. The City of Cheviot bought the property on South Road for an incinerator

from Mr. George Kirk in 1951. The facility was a licensed facility as a landfill and incinerator. The landfill was mainly an ash landfill although there is evidence that solid waste was disposed in this landfill.

Dr. Ferd Niehaus purchased 65 acres on the west side of the landfill off South Road from a Mr. Moser and Mr. George Kirk in 1967. For many years Dr. Niehaus fought to close the incinerator/landfill and the landfill was finally closed in 1975. Dr. Niehaus bought the landfill property at auction in March, 1976. Niehaus Industries bought the landfill property from Dr. Niehaus and developed the Southpointe Subdivision from 1984 to 1988. During the 1980's Mr. John Niehaus, the developer and owner of Niehaus Industries and Dr. Ferd Niehaus' brother, were permitted to build on lots around the landfill by Hamilton County Regional Planning except for Lots 7, 8, and 9. Figure 3.3.3-A shows the location of these lots in reference to the approximate location of the landfill. These lots had evidence of methane gas production in work conducted by SCS Engineers at that time. It was recommended by OEPA and documented by Hamilton County Regional Planning that the lots should not be built on.

FIGURE 3.3.3-A



Mr. John Niehaus petitioned to have these lots eliminated from the building freeze. After several years back and forth with Hamilton County Regional Planning and OEPA, through a study by SCS, and construction of a passive gas trench and vent system in 1987, he obtained permission to build houses on lots 7, 8, and 9. The trench was installed by Mr. Niehaus behind Lots 4, 5, 7, 8, 9, 10, and possibly 11 (see figure 3.4-B for approximate location of trench). The ownership of the landfill proper apparently was still supposed to be retained by Mr. Niehaus according to file information.

By 1989, new rules required licensed landfills, which stopped accepting waste prior to June, 1994 and after July 1, 1970, to submit explosive gas monitoring plans. This particularly applies to closed landfills that have occupied structures within 1000 feet of the limits of waste.

OEPA requested this information from Mr. Niehaus in a letter dated October 20, 1989. On October 31, 1989, Mr. Niehaus informed OEPA that he no longer owned any of the property. According to Mr. Niehaus some of the original residents wanted the landfill property, so he sold it to them. Therefore, the present owners are some of the residents in the subdivision. Mr. Niehaus did indicate that the landfill was covered with 6 to 8 feet of soil cover.

SAMPLING RESULTS

No surface water sampling or biological sampling is performed at this landfill due to the lack of bodies of water immediately adjacent to the landfill.

The Cheviot Closed Landfill was monitored for methane gas four times during 2021 (Tables 3.3.3-A through 3.3.3-D). The Cheviot landfill is monitored along a passive gas vent trench installed at the site in the early 1990's. Figure 3.3.3-B indicates the sample locations, which were two vent pipes along the passive gas trench and six locations along the storm sewers to the north and west of the landfill. No detections of methane occurred during 2021 monitoring. Methane has occasionally been detected in the vents of the passive trench in the past. During 2018 monitoring methane was detected in Vent #2 on June 19, 2018, at a concentration of 0.1% and in Vent #1 on December 26, 2018, at a concentration of 0.25% methane. Methane was detected in Vent #2 during both March 2017 and March 2016 at a concentration of 0.15% methane. There was a detection of 0.05% methane in Vent #2 during the August 2014 sampling and methane gas was detected in Vent #1 at 5% methane during a January 2010 sampling. Based on these results it appears as though the passive vent system is operating as designed. HCPH will continue to monitor these locations on a quarterly basis since houses are close to this area. *(Sampling data for this landfill is in the files at Hamilton County Public Health).*

TABLE 3.3.3-A (3/4/21)

Sample Number	Time	Hydrogen Sulfide (ppm)	Carbon Monoxide (ppm)	LEL (%)	Methane (%)	Oxygen (%)
Vent #1	12:36 PM	0	0	0	0	20.9
Vent #2	12:38 PM	0	0	0	0	20.8
Sewer #1	12:42 PM	0	0	0	0	20.9
Sewer #2	12:44 PM	0	0	0	0	20.9
Sewer #3	12:46 PM	0	0	0	0	20.9
Sewer #4	12:48 PM	0	0	0	0	20.9
Sewer #5	12:30 PM	0	0	0	0	20.9
Sewer #6	12:32 PM	0	0	0	0	20.9

TABLE 3.3.3-B (5/27/21)

Sample Number	Time	Hydrogen Sulfide (ppm)	Carbon Monoxide (ppm)	LEL (%)	Methane (%)	Oxygen (%)
Vent #1	1:09 PM	0	0	0	0	20.9
Vent #2	1:11 PM	0	0	0	0	19.7
Sewer #1	1:07 PM	0	0	0	0	20.7
Sewer #2	1:04 PM	0	0	0	0	20.9
Sewer #3	1:02 PM	0	0	0	0	20.9
Sewer #4	12:57 PM	0	0	0	0	20.8
Sewer #5	12:53 PM	0	0	0	0	20.9
Sewer #6	12:55 PM	0	0	0	0	20.9

TABLE 3.3.3-C (9/30/21)

Sample Number	Time	Hydrogen Sulfide (ppm)	Carbon Monoxide (ppm)	LEL (%)	Methane (%)	Oxygen (%)
Vent #1	12:59 PM	0	0	0	0	20.9
Vent #2	1:01 PM	0	0	0	0	20.4
Sewer #1	12:57 PM	0	0	0	0	20.9
Sewer #2	12:55 PM	0	0	0	0	20.9
Sewer #3	12:53 PM	0	0	0	0	20.9
Sewer #4	12:51 PM	0	0	0	0	20.9
Sewer #5	12:47 PM	0	0	0	0	20.8
Sewer #6	12:49 PM	0	0	0	0	20.9

TABLE 3.3.3-D (12/27/21)

Sample Number	Time	Hydrogen Sulfide (ppm)	Carbon Monoxide (ppm)	LEL (%)	Methane (%)	Oxygen (%)
Vent #1	1:28 PM	0	0	0	0	20.8
Vent #2	1:31 PM	0	0	2	0.1	19.3
Sewer #1	1:26 PM	0	0	0	0	20.8
Sewer #2	1:24 PM	0	0	0	0	20.8
Sewer #3	1:21 PM	0	0	0	0	20.8
Sewer #4	1:19 PM	0	0	0	0	20.8
Sewer #5	1:15 PM	0	0	0	0	20.9
Sewer #6	1:17 PM	0	0	0	0	20.8

Ohio EPA conducted an explosive gas investigation at the landfill on November 17, 2021. Gas monitoring was conducted at 13 punch bar locations around the former landfill. Methane was detected at two locations in low concentrations (0.8 – 1.0% methane).

FACILITY INSPECTIONS

The site was inspected by HCPH on December 27, 2021. No violations or nuisance conditions were observed on the site.

SITE PRESENT DAY

Currently, the property is vacant green space and wooded areas owned by the surrounding homeowners. The current state of the landfill includes areas of short maintained grass, areas of long unmaintained grass, and areas of trees and honeysuckle.



Figure 3.3.3-B
Cheviot Closed Landfill
Southpoint Drive

- = Approximate Limits of Waste
- ▲ = Gas Monitoring Location

