

3.15.3 OLD NEWTOWN LANDFILL

Facility Name: Old Newtown Landfill
A.K.A.: N/A
Location: North/Northeast of Broadwell Road, East of Round Bottom Road
Parcel(s): 50001630001
Lat, Long: 39.142076 -84.325561
Region: Anderson Township
Owner: Martin Marietta Materials Inc.
Operation (yrs): 1980's and 1990's

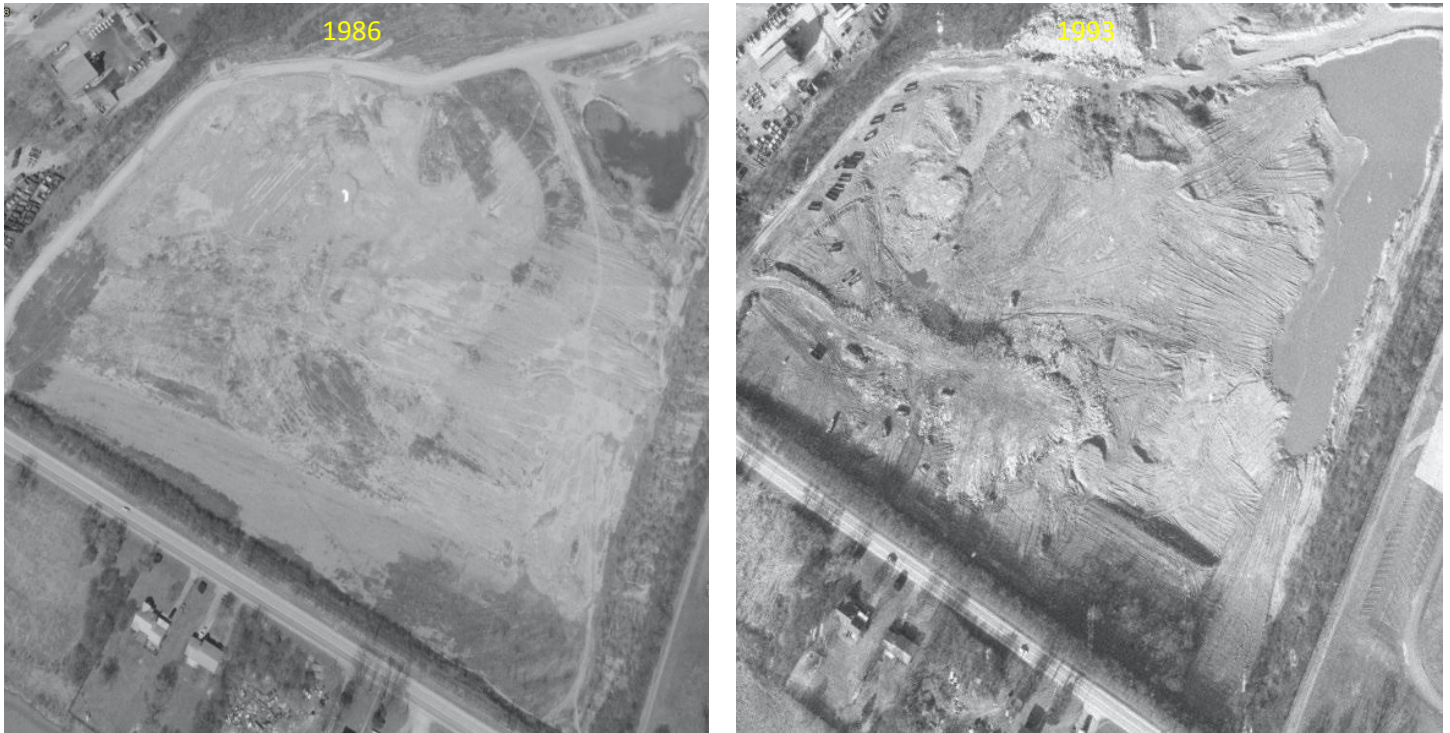


FACILITY OVERVIEW

The landfill borders Broadwell Road to the south/southwest. A parking lot and staging area for Evans Landscaping is situated between the landfill and Round Bottom Road to the west and a wooded area is situated between the landfill and Round Bottom Road to the north. A pond (former gravel pit operation) borders the property to the east. Access to the landfill can be obtained off Broadwell Road, on the far southwestern corner of the site.

From review of aerials, it appears the gravel pit was mined in the 1970's. Filling of the former gravel pit began in the 1980's. Aerials from the 80's appear to show filling with soil. However, aerials from the 1990's appear to show filling with C&DD (Figure 3.15.3-A). An inspection completed by HCPH in 1995 described the facility as a closed C&DD landfill.

FIGURE 3.15.3-A



During the 2006 purchase of the property by Martin Marietta Materials Inc., a combination plat was created from a group of parcels surrounding the landfill. The created parcel, Parcel #50001630001, encompasses approximately 488 acres. Figure 3.15.3-B illustrates the location of the landfill within Parcel #50001630001:

FIGURE 3.15.3-B

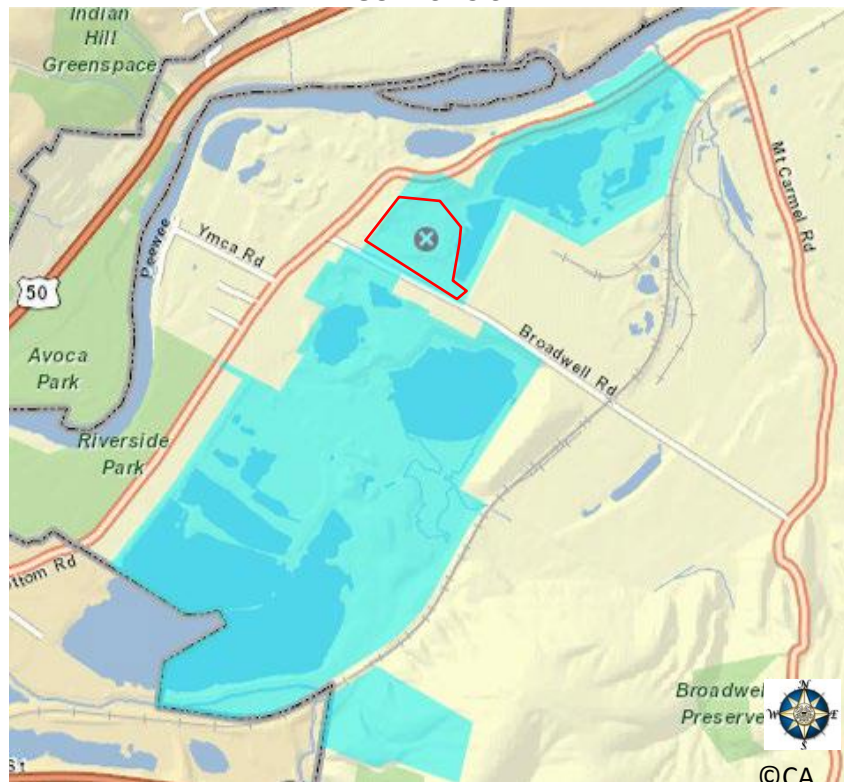
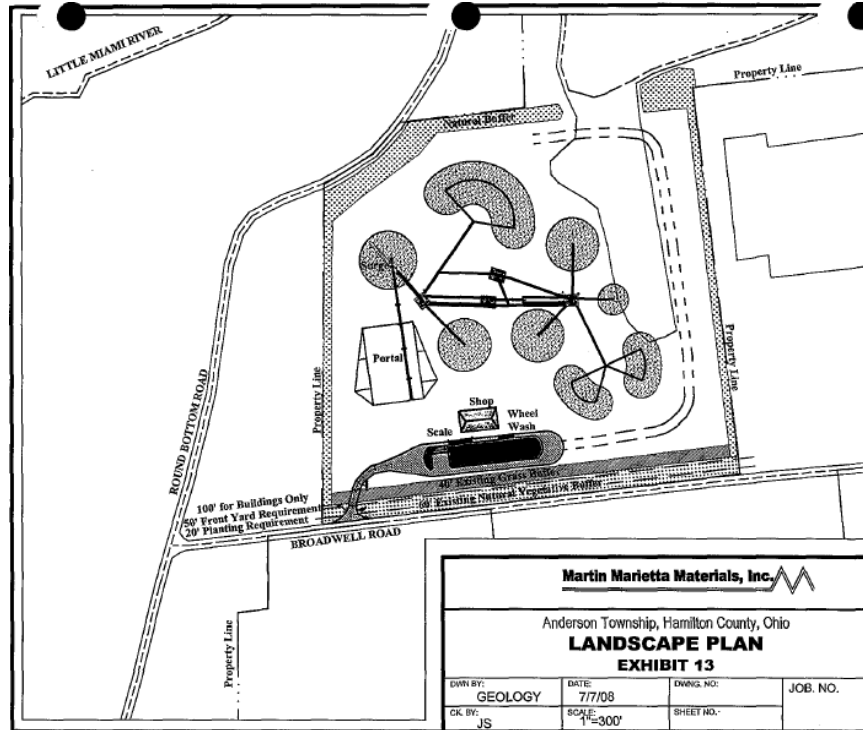


FIGURE 3.15.3-D

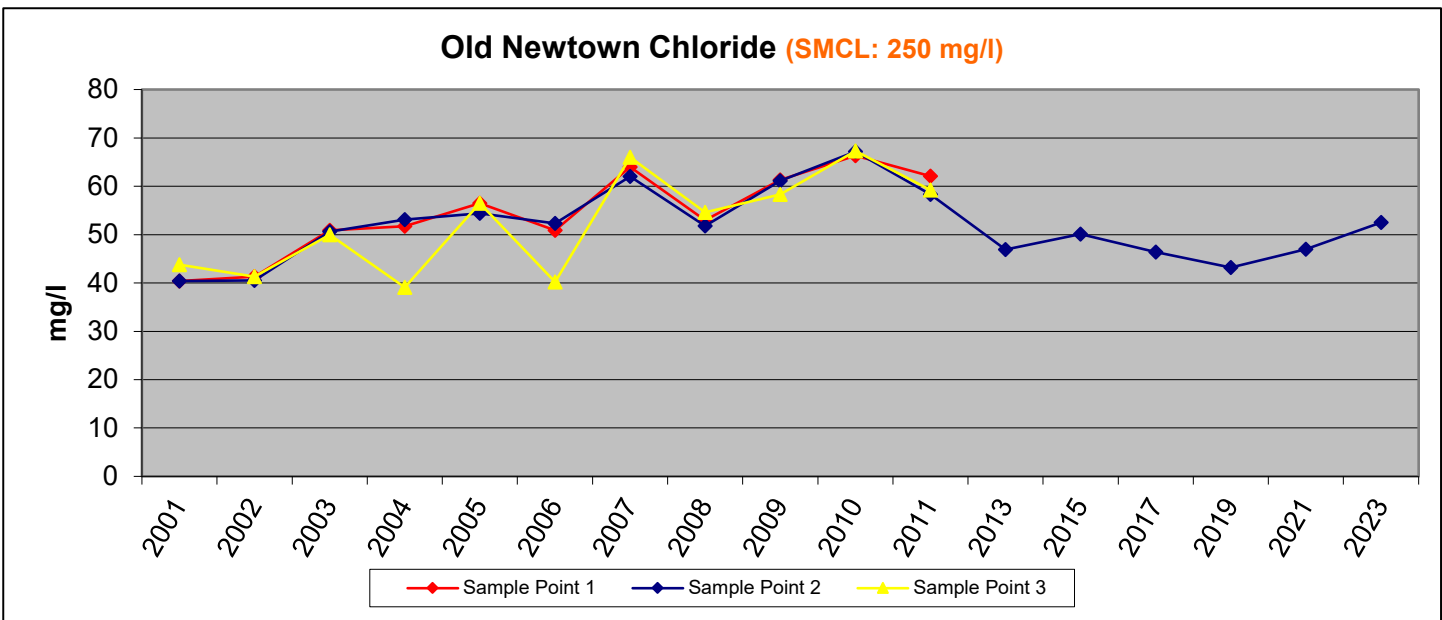
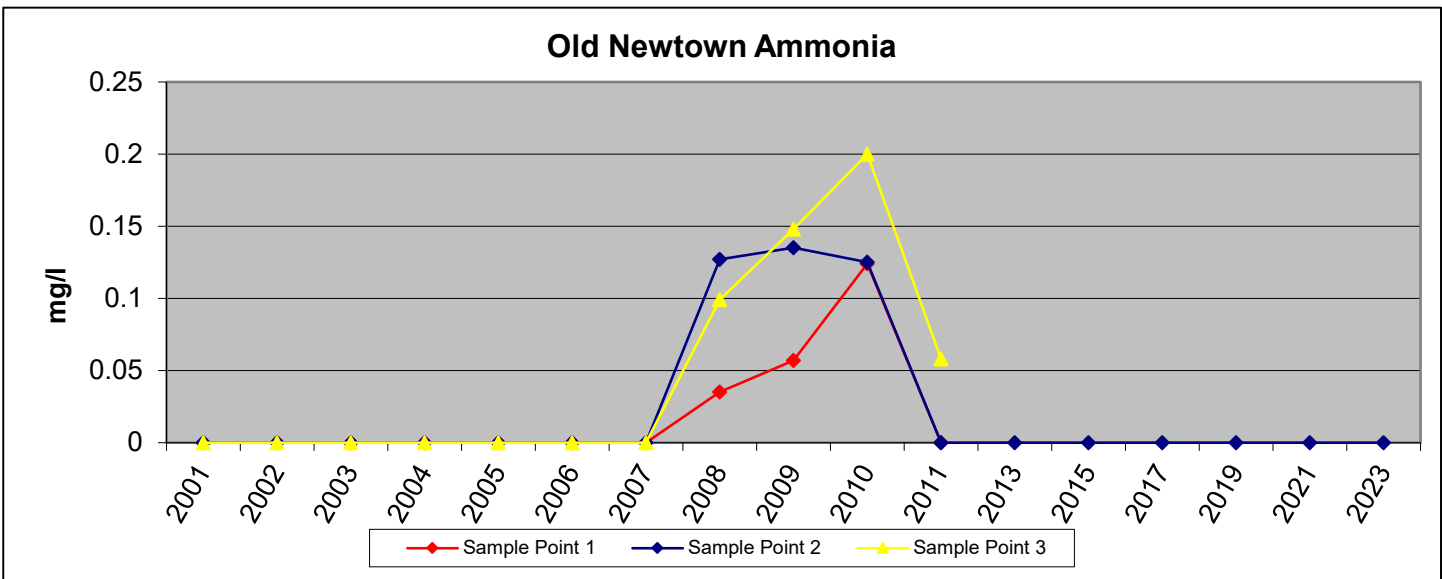
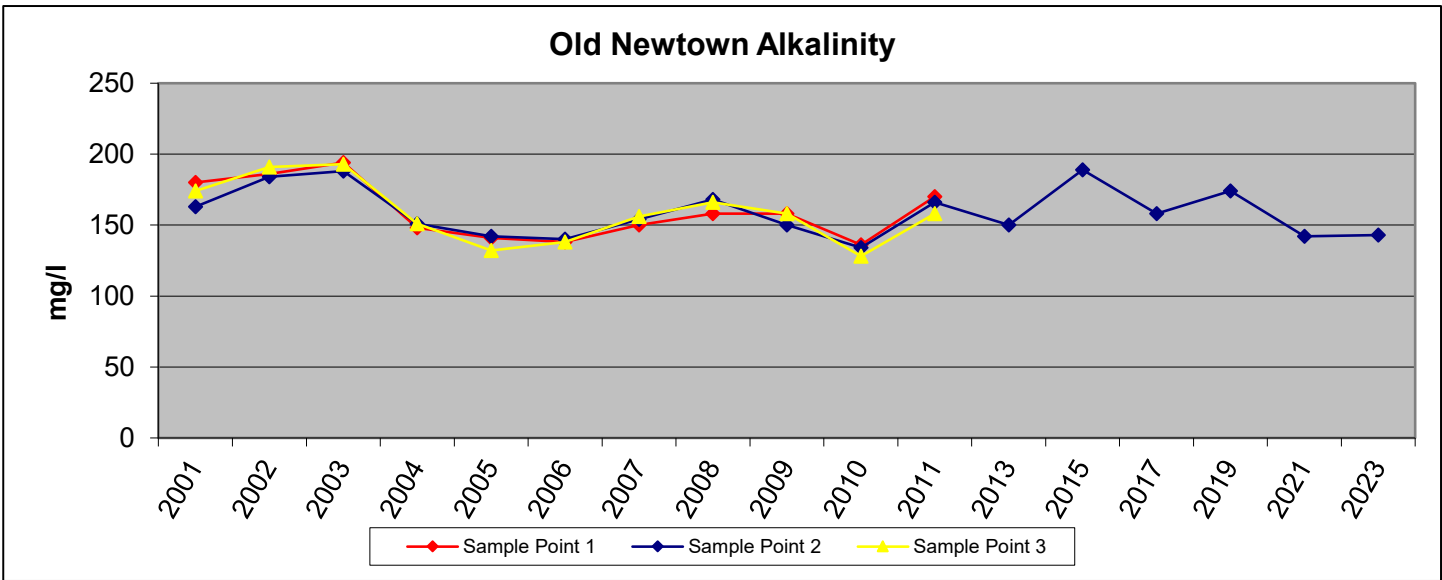


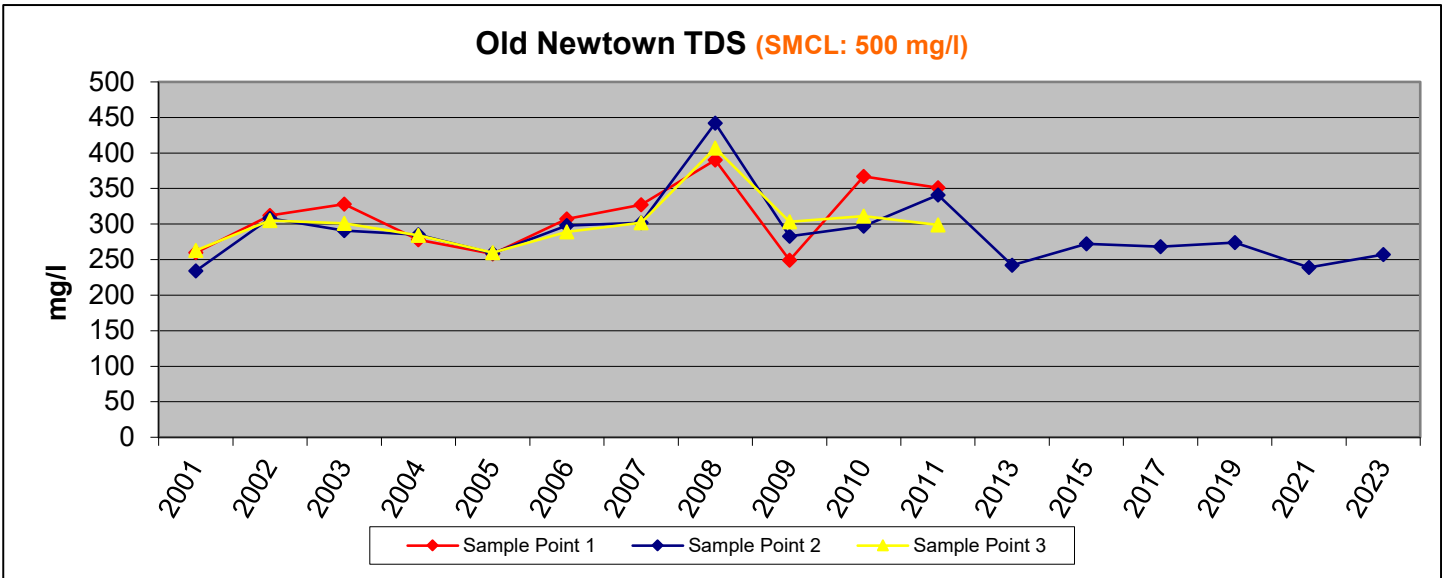
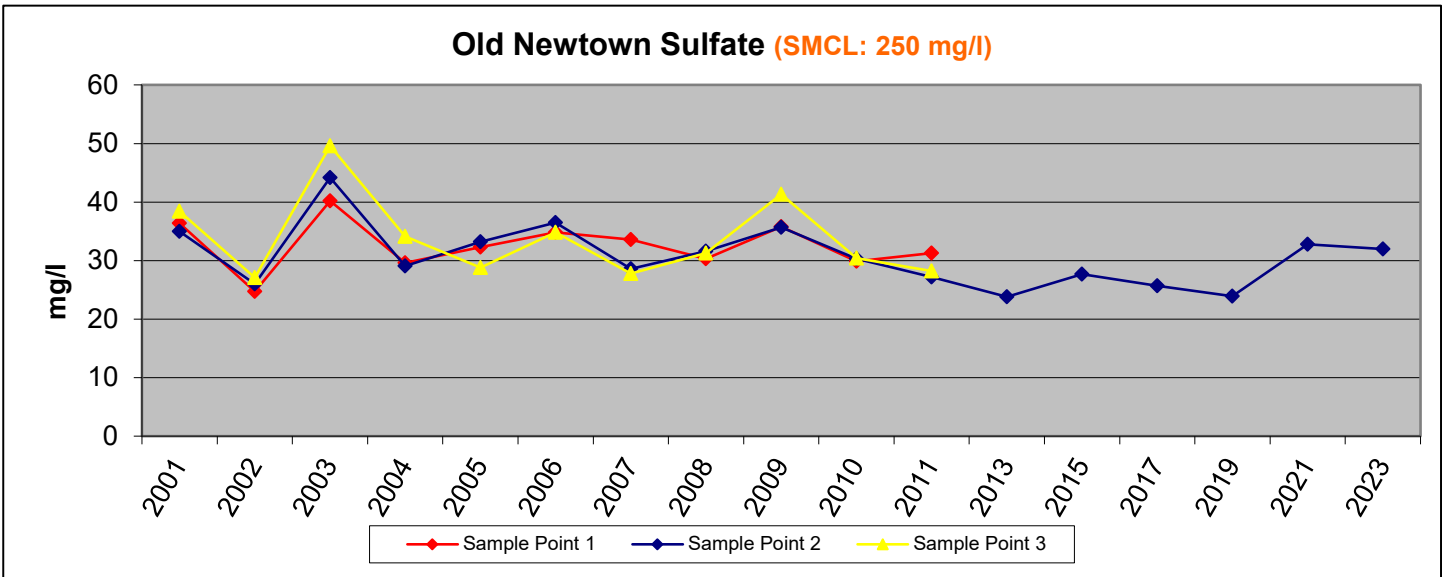
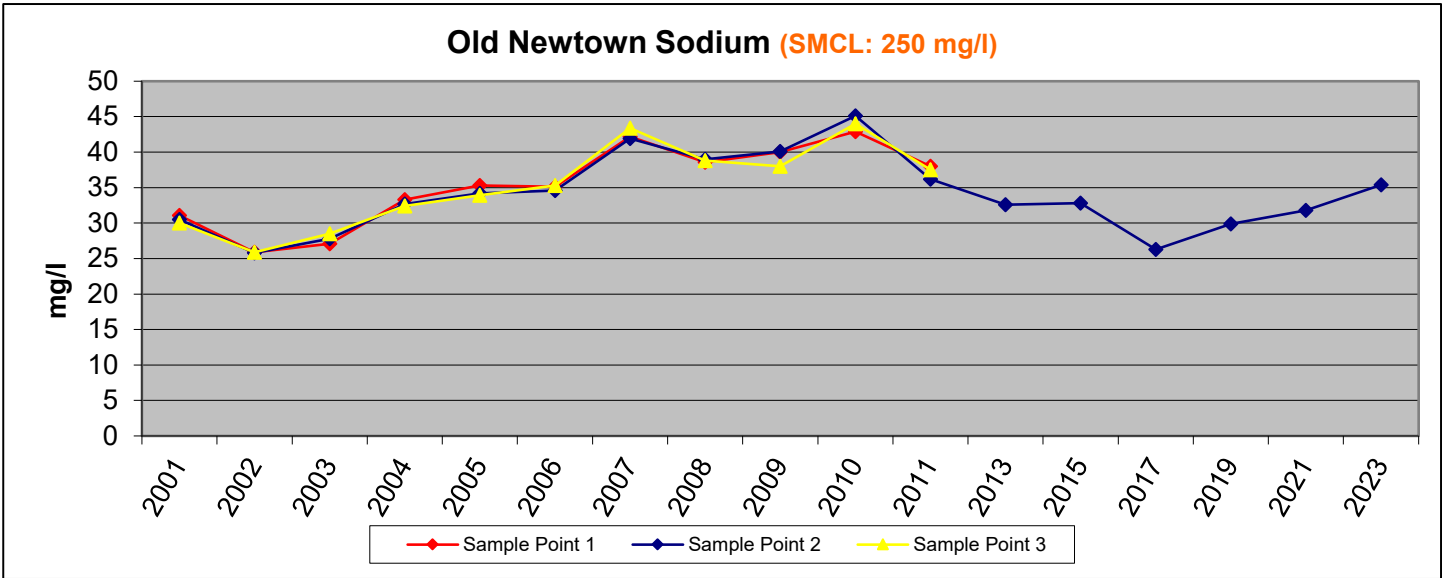
In 2010 the zoning board approved the request. In response township residents, business owners, and various municipalities appealed the decision to Hamilton County Common Pleas Court. Blasting and truck traffic were some of the concerns in the community. The local court determined that the Board of Zoning and Appeals acted illegally and reversed the board’s decision. However, the case was then appealed to the First District Court of appeals where the lower court’s decision was reversed, and the zoning decision was reaffirmed. The Ohio Supreme Court declined jurisdiction on the case in March 2016.

SAMPLING RESULTS

There is a large quarry pond located on the eastside of the Old Newtown Landfill. The pond was historically sampled in three locations. Given the steady findings at all three locations, sample sites S-1 and S-3 were removed from the sampling protocol in 2013. Samples around Old Newtown Landfill were collected on November 6, 2023. The samples were collected when pond levels were very low. The S-2 pond sample location has a rocky/gravelly bottom with aquatic vegetation. The samples were collected in shallow water less than one foot deep. The referenced locations are shown on Figure 3.15.3-F.

Results for all parameters (Appendix A) sampled in 2023 indicate acceptable water quality, where no MCLs, SMCL’s, or action levels were exceeded. Sodium has been trending upwards over the last 3 sampling events but remains well below the SMCL of 250 mg/L. Similarly, chloride has been on an increasing trend for the last two sampling events, but concentrations remain well below the SMCL of 250 mg/L. During 2015 sampling alkalinity results were the highest ever recorded at sampling point 2. Subsequent results have shown alkalinity returning within the range previously observed at the site. All other parameters were within the ranges previously observed at the site. Surface water chemical data is illustrated for Old Newtown Landfill in the graphs on the subsequent pages.





Gas monitoring was conducted on December 27, 2023 (Table 3.15.3-B) primarily along the southern perimeter of Old Newtown Landfill along Broadwell Road, where the closest (<200 feet) occupied structures are located. A low concentration of methane (2% LEL) was detected at sample point 1 during 2023 monitoring. During 2022 monitoring methane was detected at sample points 1 and 3 at 2% and 5% respectively. In 2021 methane was detected in one sample point (7) at 2% LEL. The last several sampling events have continued a trend of methane detections, in low concentrations, at sampling points 1, 2, 3, and 21 which are located on interior portions of the landfill (Figure 3.15.3-F).

In 2023 carbon monoxide (CO) was detected in one sample location (#24) at a concentration of 6 ppm. This continues a pattern of detecting low levels of CO at various sample points since 2010. There were 8 detections of carbon monoxide during 2022 gas monitoring ranging from 2 – 9 ppm. In 2021 there were 4 detections of carbon monoxide at levels of 2 or 3 ppm. There was one detection of carbon monoxide during 2020 monitoring at sample point 22. There were 6 detections of carbon monoxide during the 2019 monitoring ranging from 1 to 5 ppm. All concentrations observed have been below levels of concern. Sampling was not conducted toward the northern perimeter of the landfill because it appears that waste was not deposited within 500 feet of any occupied structures. (*Sampling data for this landfill is in the files at Hamilton County Public Health*)

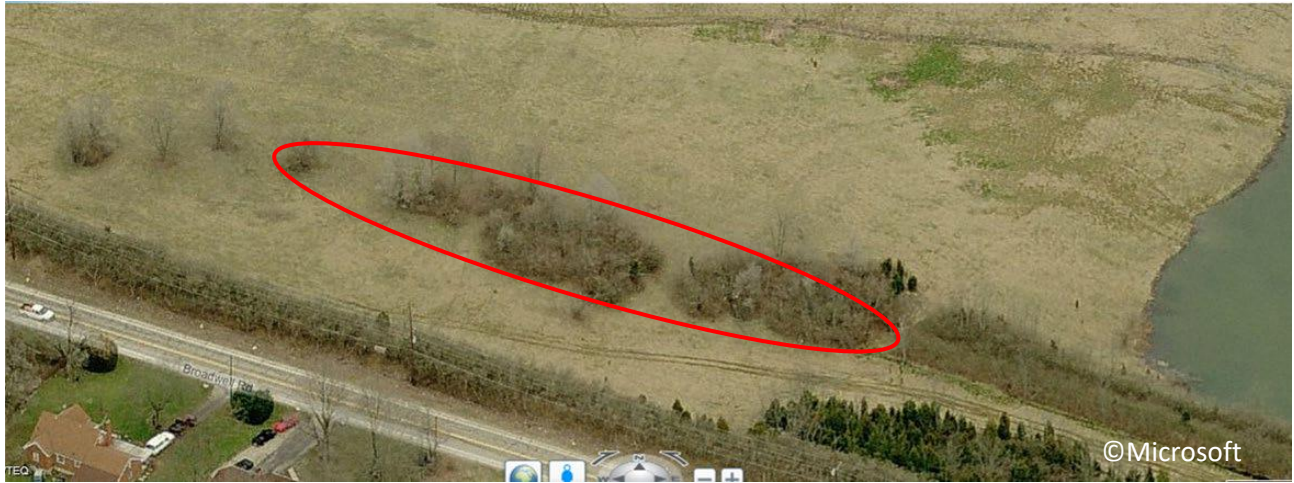
Table 3.15.3-B (12/27/2023)

Sample #	Date and Time	O2 %	LEL %	CH4%	CO ppm	NH3 ppm	H2S ppm
1	12/27/2023 12:22 PM	19.9%	2	0.1	0	0	0
2	12/27/2023 12:23 PM	20.9%	0	0	0	0	0
3	12/27/2023 12:25 PM	20.7%	0	0	0	0	0
4	12/27/2023 12:26 PM	20.7%	0	0	0	0	0
5	12/27/2023 12:27 PM	20.8%	0	0	0	0	0
6	12/27/2023 12:28 PM	20.9%	0	0	0	0	0
7	12/27/2023 12:29 PM	20.9%	0	0	0	0	0
8	12/27/2023 12:29 PM	20.9%	0	0	0	0	0
9	12/27/2023 12:31 PM	20.9%	0	0	0	0	0
10	12/27/2023 12:32 PM	20.8%	0	0	0	0	0
11	12/27/2023 12:33 PM	20.8%	0	0	0	0	0
12	12/27/2023 12:34 PM	20.9%	0	0	0	0	0
13	12/27/2023 12:36 PM	20.7%	0	0	0	0	0
14	12/27/2023 12:37 PM	20.8%	0	0	0	0	0
15	12/27/2023 12:39 PM	20.9%	0	0	0	0	0
16	12/27/2023 12:41 PM	20.7%	0	0	0	0	0
17	12/27/2023 12:40 PM	20.9%	0	0	0	0	0
18	12/27/2023 12:42 PM	20.7%	0	0	0	0	0
19	12/27/2023 12:43 PM	20.8%	0	0	0	0	0
20	12/27/2023 12:44 PM	20.9%	0	0	0	0	0
21	12/27/2023 12:21 PM	20.8%	0	0	0	0	0
22	12/27/2023 12:18 PM	20.6%	0	0	0	0	0
23	12/27/2023 12:16 PM	20.9%	0	0	0	0	0
24	12/27/2023 12:15 PM	20.6%	0	0	6	0	0
25	12/27/2023 12:13 PM	20.9%	0	0	0	0	0

SITE INSPECTIONS

The site was inspected by HCPH on December 27, 2023. The south end of the property has become increasingly overgrown with honeysuckle, trees, and grass over the last 15 years making it more difficult to access and inspect. Areas of exposed waste which have been identified during previous inspections are still present. Some of the materials appear to be exposed from former landfill activities and other materials may be a result of past open dumping. The areas of exposed waste are completely covered with trees and Honeysuckle. Seeps have also been identified in the same general area during previous inspections but were not present at the time. Whether the seeps are naturally occurring or related to former landfill activities is unclear. The debris and seeps are located in the wooded areas on the Southern portion of the site as depicted in Figure 3.15.3-E.

FIGURE 3.15.3-E



Seeps - 3/24/2010



Exposed waste/open dumping – 12/14/2018



SITE PRESENT DAY

Today, the landfill area sits vacant with little to no activity at the site. The former landfill is covered with established grass, honeysuckle, and trees.





Figure 3.15.3-F
Old Newtown Closed Landfill
Broadwell Road

- ◆ = Surface Water Sampling Location
- = Approximate Limits of Waste
- ▲ = Gas Monitoring Location

