

3.7.2 GLENDALE LANDFILL

Facility Name: Glendale Landfill

A.K.A.: N/A

Location: North Troy Avenue. East of the railroad and immediately south of the north corporate line of the Village of Glendale.

Parcel(s): 59600010001, 59600010002

Lat, Long: 39.278029 -84.456947

Region: Glendale, OH 45246

Owner: Village of Glendale

Operation (yrs): 1950's ? – 1980's



FACILITY OVERVIEW

Former Glendale Landfill is located in the Village of Glendale, Ohio, at the north end of North Troy Avenue, bordering the railroad tracks. The site is elongated extending approximately 250' to 300' east of the railroad and approximately 1,100' south of the north corporate limit of Glendale.

A well-defined creek or drainage course proceeds from the northwest corner to the southeast corner, flowing south into the tributary of Mill Creek.

An August 29, 1969, letter from the village indicated that combustible waste is burned at an incinerator in Sharonville while non-combustible waste is "*disposed of in the deep ravine in the extreme northeast corner of the village*". The letter also indicates that burning of "*trimmings from shrubs, tree limbs and trunks*" occurs on the "*south end of the dump*". No documentation exists for the site from 1970 through 1985 and therefore activities at the site are unknown. In 1986 an Ohio EPA letter to the village indicates that a solid waste transfer station is operating on the site. The letter also thanks the village for "*your cooperation in closing the old dump and the measures taken to provide a complete earth covering of the site.*" Figure 3.7.2-A shows the progression of filling from 1973 through 1986.

FIGURE 3.7.2-A



Prior to January 2009, the north end of the site had been used to store wood chips by the Village of Glendale. It is unclear when this practice was initiated, but the amount of wood chips increased each year. In a 2003 letter to the Village of Glendale's Ron Hafner, the Health District informed him that the wood chip pile was encroaching on the northern drainage course and the practice of storing the wood chips in such a way was a potential fire hazard.

In early January 2009, the Glendale Fire Department received a call that the wood chip pile was on fire. It was determined that the heat and decomposition of the wood chips sparked a fire deep in the pile. Following the incident, the 5,480 cubic yard wood chip pile was removed from the site. The Village no longer stores wood chips at the site.

SAMPLING RESULTS

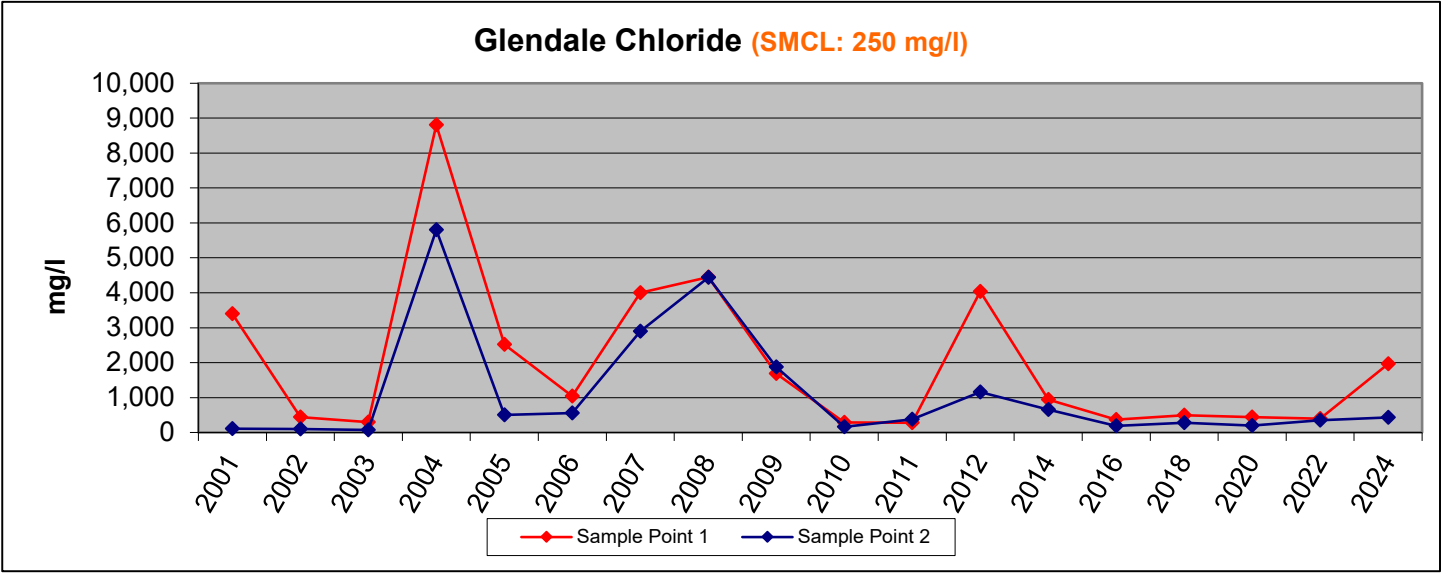
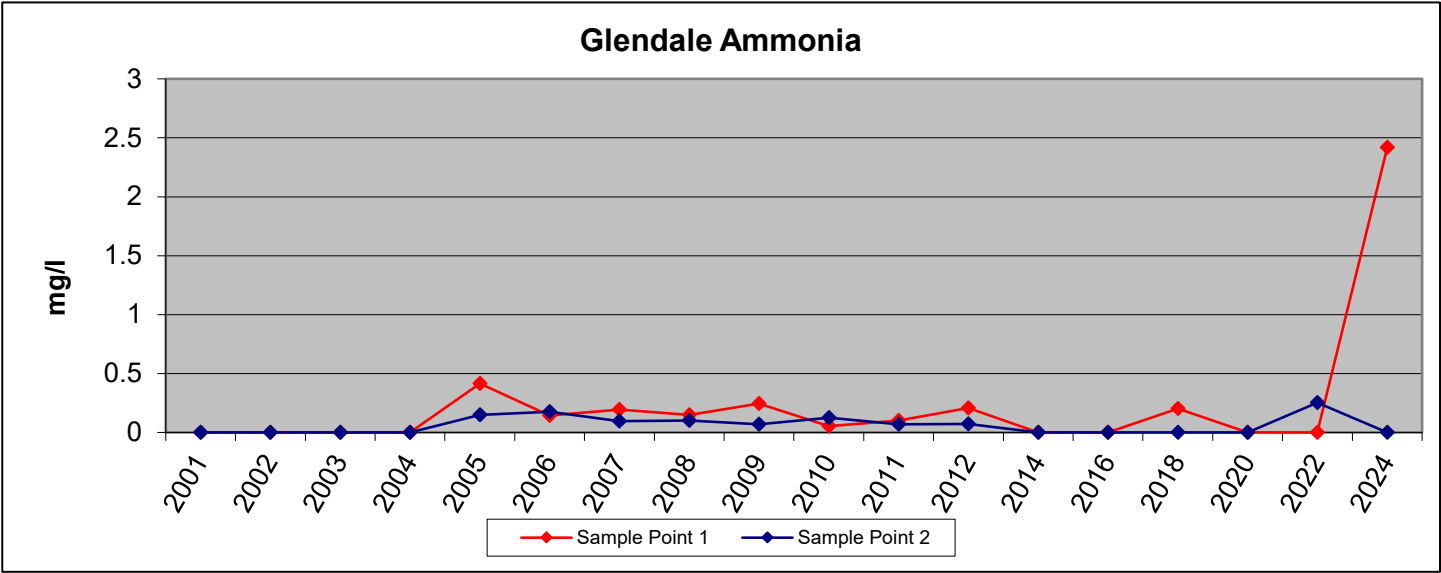
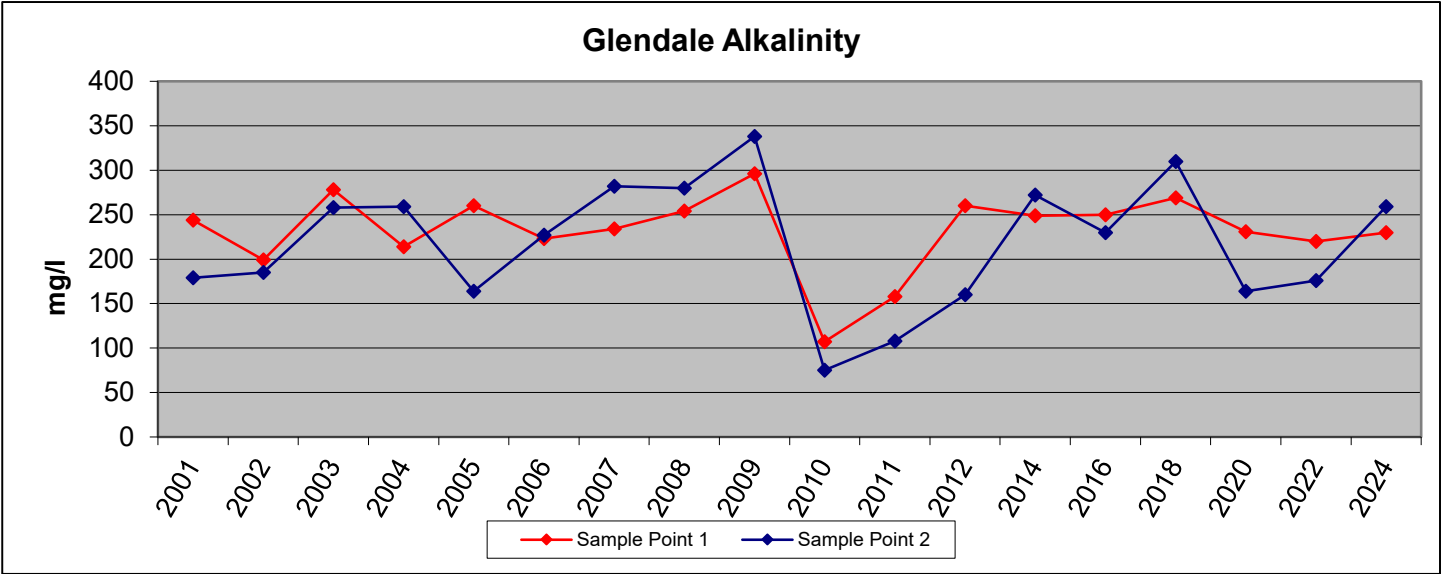
A small, unnamed stream flows from north to south along the eastern side of the Glendale Landfill. Samples are taken near the north end of the landfill (S-1) and below the landfill (S-2). Samples around Glendale Landfill were collected on October 23, 2024 (Appendix A). The northern and southern sample sites are comprised of a series of small, shallow pools and low flow areas over a gravel bottom. A surface water pipe discharges from an upstream area to a pool and then a riffle area north above the landfill. The referenced locations are shown on Figure 3.7.2-B.

Both sample points have historically resulted in elevated concentrations of chloride, sodium, and TDS. From 2004 through 2009, sample points demonstrated high levels of these parameters relative to the secondary drinking water standards. In 2010, concentrations dramatically dropped and were below the drinking water standards at S-2 for the first time in seven years. However, in 2011 concentrations of these parameters were again observed at elevated levels although not quite to the levels seen prior to 2010. These parameters have remained at these high concentrations through 2022 sampling. This trend holds true for S-1 during the 2024 sampling with chloride, sodium and TDS all above their SMCLs. Respective SMCLs were exceeded for Chloride and TDS at sample point S-2. However, sodium was slightly below the SMCL at S-2. All downstream concentrations of these 3 parameters were lower than upstream concentrations.

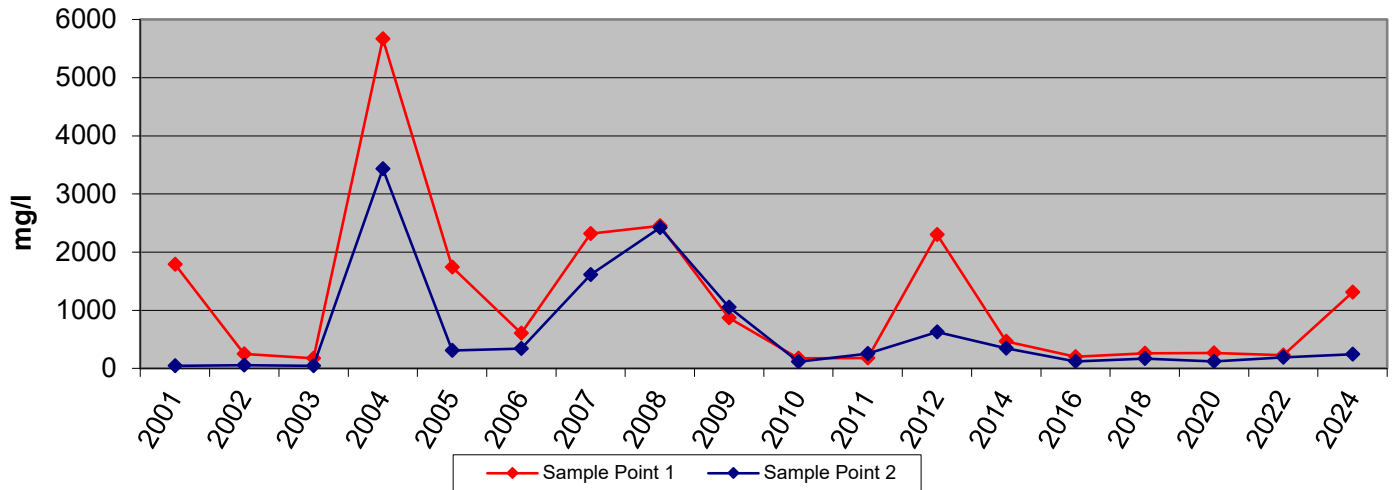
Ammonia was detected upstream of the landfill (S-1) at 2.42 mg/L in 2024. Ammonia was detected at S-2 (0.252 mg/L) just above the detection limit of 0.2 mg/L. during 2022 sampling. After registering historically high concentrations of manganese at both sample points in 2014, concentrations at both locations have returned to levels annually observed across the watershed during the five sampling events completed since. S-1 did exceed the SMCL of 0.05 mg/L with a concentration of 0.254 mg/L in 2024. Iron concentrations have occasionally exceeded the SMCL of 0.3 mg/L at both sampling points. During 2024 monitoring S-1 exceeded the SMCL with a concentration of 0.724 mg/L. Antimony concentrations (0.00975 mg/L) were above the MCL of 0.006 mg/L at sample point S-1 during 2018 but have fell below the detection limit during the three subsequent monitoring events. Sulfate has consistently been well below the SMCL at both sampling points.

The majority of parameters observed at S-2 this year remain equal to or below the levels observed at S-1. Considering both the similarity of results for S-1 at the north end of the landfill and S-2 below the landfill and the fact that majority of parameters actually decrease when comparing S-1 to S-2, Glendale Landfill does not appear to be impacting the water quality of the stream.

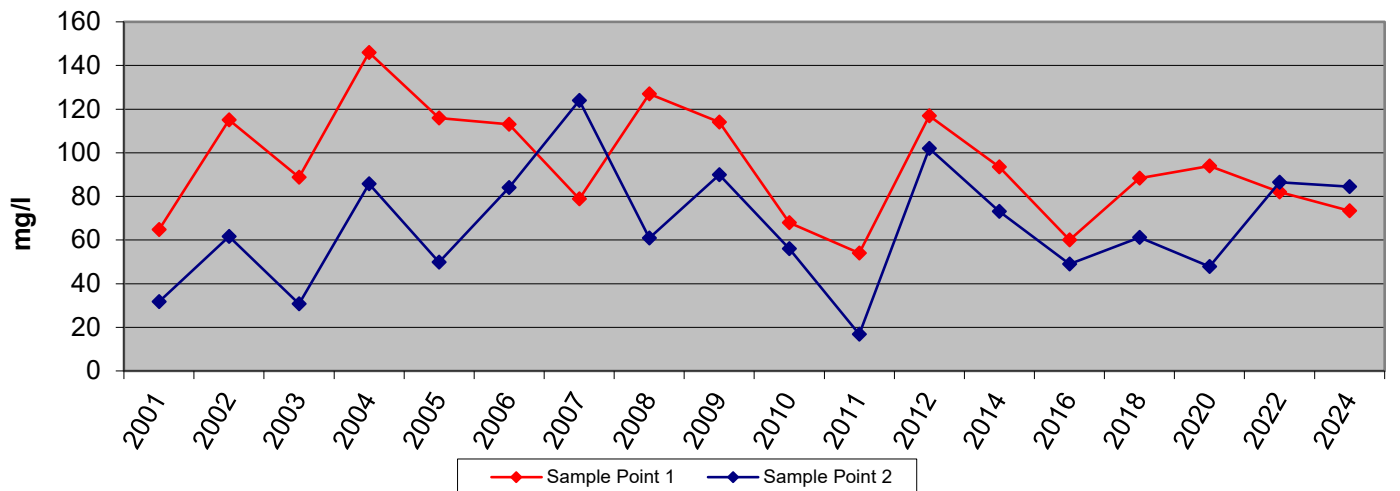
Hamilton County Public Health has hypothesized that the historical cause of generally higher parameters was likely due to an undetermined upstream source. In the past, staff had explored areas, which drain to this stream location, for any other signs of dumping, spills, or misuse. No clear source could be identified at the time. Starting in 2014 Ohio EPA, Springdale Public Works, HCPH's Water Quality Division, and MSD began working to determine the source of the elevated parameters. This work included reviewing processes at businesses and installing monitors in various locations upstream from sample point 1. The investigation did discover some improper discharges from upstream industry which have been corrected. Staff will continue to monitor this stream. Surface water chemical data is illustrated for Glendale Landfill in the graphs on the subsequent pages.



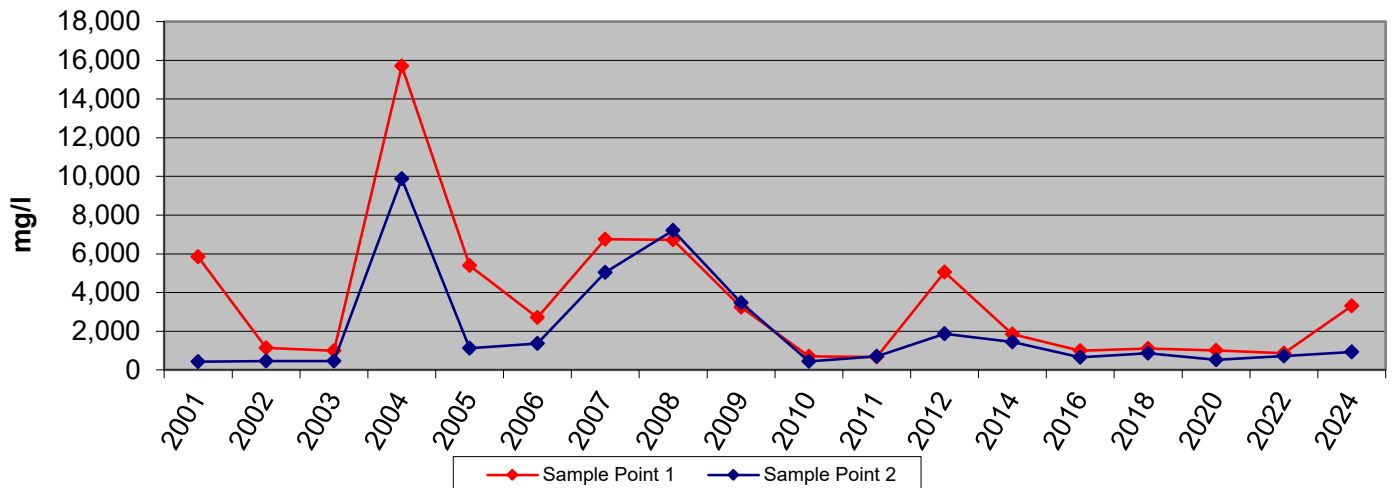
Glendale Sodium (SMCL: 250 mg/l)



Glendale Sulfate (SMCL: 250 mg/l)



Glendale TDS (SMCL: 500 mg/l)



Gas monitoring was conducted along the south and southeast perimeter of Glendale Landfill on December 23, 2025 (Table 3.7.2-B). Punch-bar monitoring is performed along the perimeter of the landfill in areas highlighted in pink (—) on Figure 3.7.2-B. There were no detections of methane during the 2025 sampling. During 2023 there was one detection of methane at a very low level (2% LEL) on the far southeast end of the monitoring area. There were no methane detections from 2019 - 2022. When required, sampling further out from the landfill in these areas has indicated no methane gas. There were no detections of Carbon monoxide (CO) in 2025. There was one detection (2 ppm) of CO at a sample southeast of the landfill in 2023. Carbon monoxide was detected at five sample points in 2022 ranging from 2-10 ppm. Prior to 2022 carbon monoxide (CO) had not been detected since 2016. (*Sampling data for this landfill is in the files at Hamilton County Public Health*)

TABLE 3.7.2-B

Latitude	Longitude	O2 %	LEL %	CH4%	CO ppm	NH3 ppm	H2S ppm
39.276371	-84.456066	20.9%	0	0	0	0	0
39.276478	-84.456218	20.9%	0	0	0	0	0
39.276594	-84.456456	20.4%	0	0	0	0	0
39.27651	-84.456558	20.3%	0	0	8	0	0
39.276559	-84.456742	20.4%	0	0	0	0	0
39.276592	-84.457088	20.9%	0	0	0	0	0
39.276515	-84.457079	20.9%	0	0	6	0	0

SITE INSPECTIONS

The site was inspected by HCPH on December 23, 2025. No violations or nuisance conditions were observed on the site. An area of exposed waste remains on the southeast corner of the former landfill. The area remains unchanged when compared to previous inspections and is already covered with established vegetation therefore removal/re-covering is not practical at this time.

SITE PRESENT DAY

Today, the entrance to the site is gated off. The site is mostly overgrown with trees and honeysuckle on the slopes of the landfill and tall weeds and grass on top of the landfill. The Village occasionally dumps clean hard fill (soil and/or concrete) at the site. A dumpster is maintained on the site for disposal of solid waste generated by the village.



Figure 3.7.2-B
Glendale Closed Landfill
North Troy Avenue

● = Surface Water Sampling Location

— = Approximate Limits of Waste

— = Area where gas monitoring is
conducted approx. every 60 ft.

