

3.12.4 LOVELAND HARPER AVENUE LANDFILL

Facility Name: Harper Avenue Landfill

A.K.A.: Loveland Harper Landfill

Location: 236 Wall St.; Eastern Terminus of Harper Avenue Loveland, Ohio; Adjacent to west bank of the Little Miami River, Immediately North of Kealhofers's Run Creek.

Parcel(s): 62100020001

Lat/Long: 39.273066 -84.260486

Region: Loveland

Owner: City of Loveland

Operation (yrs): 1968 – 1980



FACILITY OVERVIEW

Harper Avenue landfill began accepting waste in 1968 in an old gravel pit on the east end of Harper Avenue in Loveland, OH. Burning and burying of the waste had been the means of disposal until April of 1971 when the city was told by health officials to stop burning waste, stop accepting household garbage, and to build a levee

In October of 1988 Aeromex Inc. signed an agreement with the city to reopen the Harper Avenue Landfill. On January 5, 1989, Aeromex requested approval from the OEPA to commence filling on top of the closed landfill. On May 12, 1989, Aeromex was granted authorization to fill on top of the closed landfill in accordance with the plans submitted. Aeromex was authorized to accept clean hard fill, tree debris only from the city of Loveland, and demolition debris from special projects could be accepted from the city of Loveland only after concurrence from the OEPA. In a July 25, 1989, letter the OEPA notified Aeromex that they were accepting demolition debris without prior approval and were operating outside the approved hours. This was a final warning to operate within the Directors Findings and Orders or face enforcement. On May 31, 1990, the authorization was revoked because "Aeromex failed to properly screen the fill material." Aeromex was required to cease accepting waste, post closure signs, and submit a closure plan. On June 27, 1990, the city requested a stay from the orders to allow the city to submit its own request to continue filling. However, due to public opposition the city decided to keep the landfill closed and submitted the required closure plan.

A closure plan was submitted by the City of Loveland and was approved on January 19, 1995. The city was ordered to complete closure activities by October 30, 1995. On December 4, 1996, the OEPA sent the city a letter informing them of conditions at the landfill that were still in violation of the closure plan. The final closure certification report was approved on December 16, 1997, by the OEPA. Present day topography is shown in Figure 3.12.4-B.

FIGURE 3.12.4-B

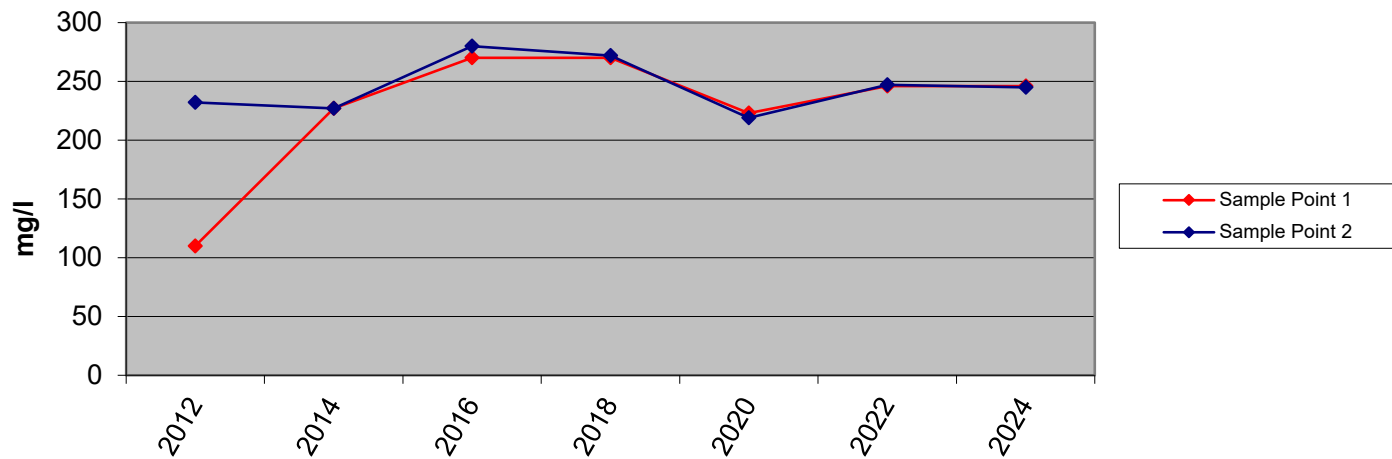


SAMPLING RESULTS

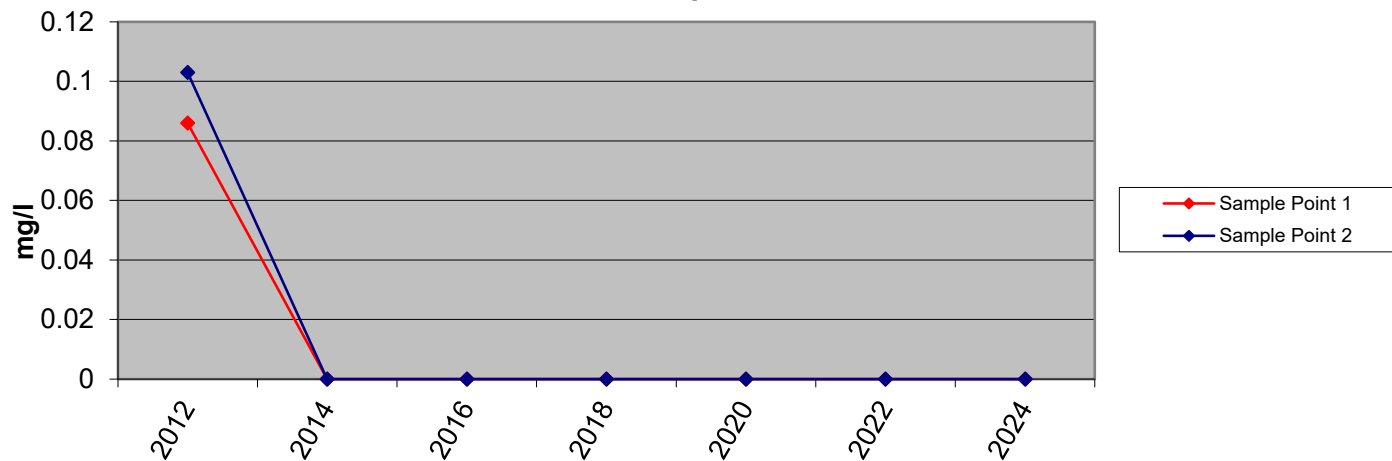
The Little Miami River runs along the east side of the Loveland Harper Landfill. Samples are taken above and below the landfill (Appendix A). Samples around Loveland Harper Landfill were collected on October 23, 2024. The river had below average flow on the day of sampling. The upstream and downstream samples were in shallow (1'), gravelly, rocky riffle areas of the river. The shallow areas had rapid flow across the rocks. The referenced locations are shown on Figure 3.12.4-C.

During 2022 sampling TDS exceeded the SMCL (500 mg/L) at the upstream location only with a concentration of 520 mg/L. In 2024, TDS was below the SMCL at both sampling locations. Ammonia has been non-detect at both sampling locations during each of the last six sampling events. Chloride and sodium have shown a slightly increasing trend at both sampling points over the last four sampling events but remain well below their SMCL of 250 mg/L. Sulfate has remained well below its SMCL at both sampling locations during each sampling event from 2012 through 2024. During 2020 sampling S-1 was slightly above the iron SMCL of 0.3 mg/L with a concentration of 0.311 mg/L. During the next two sampling events (2022 & 2024) iron concentrations have been below the SMCL at sample point S-1. Iron concentrations have remained below the SMCL at S-2 during all sampling events. All other parameters sampled have been below their respective Maximum contaminant level (MCL) or Secondary Maximum Contaminant Level (SMCL) during each of the seven sampling events from 2012 through 2024. No significant differences were observed when comparing results from the downstream sample to the results from the upstream sample. In 2014, a difference was noted between the upstream and downstream concentrations of chloride. However, both S-1 (42.1 mg/L) and S-2 (84.2 mg/L) had concentrations well below the SMCL of 250 mg/L. Surface water chemical data is illustrated for Loveland Harper Landfill in the graphs on the subsequent pages.

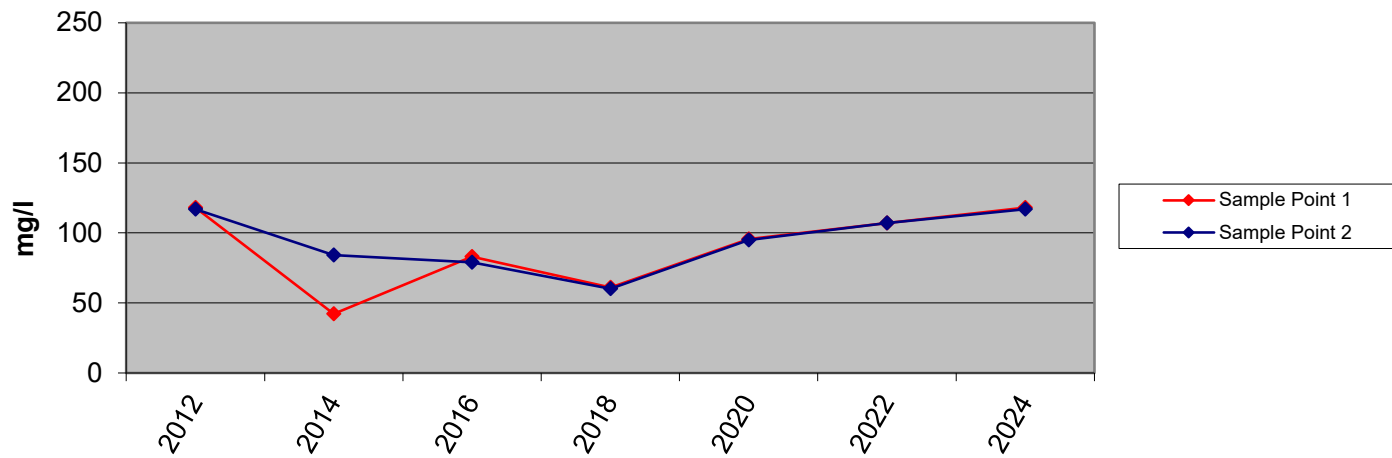
Loveland Harper Alkalinity



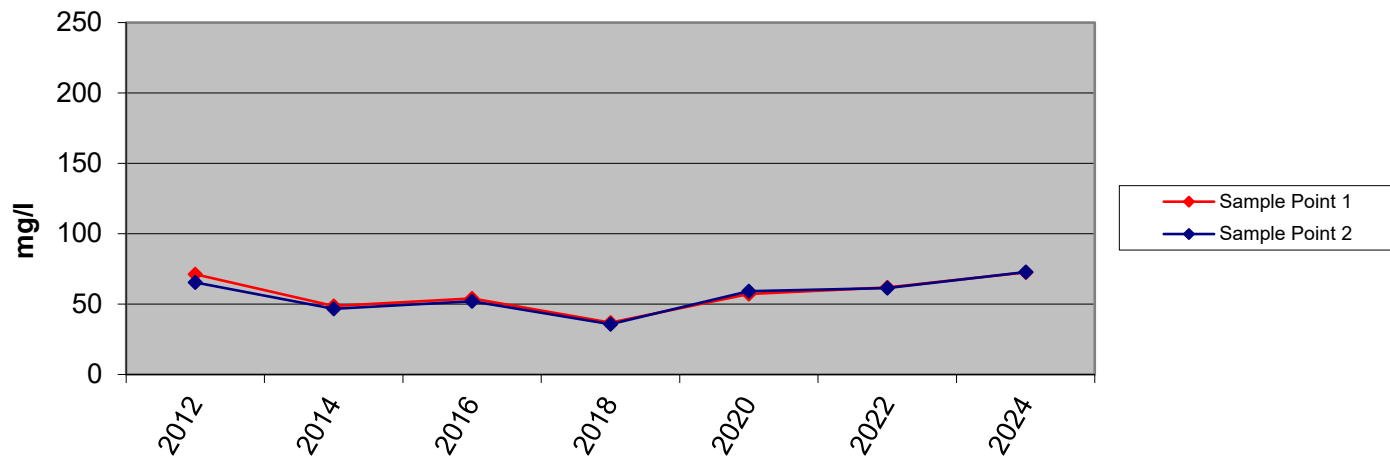
Loveland Harper Ammonia



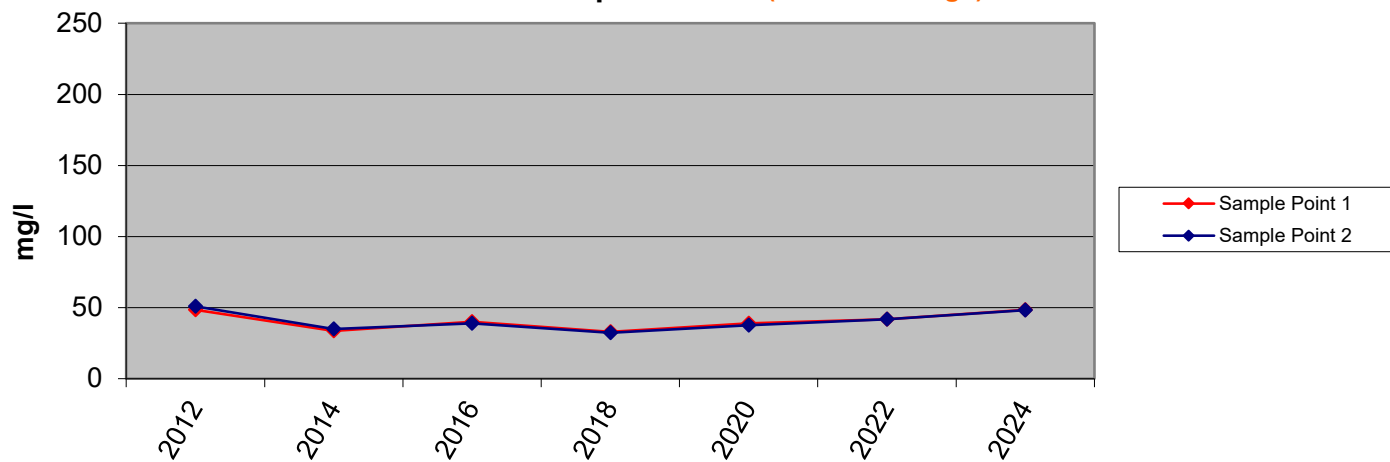
Loveland Harper Chloride (SMCL: 250 mg/l)



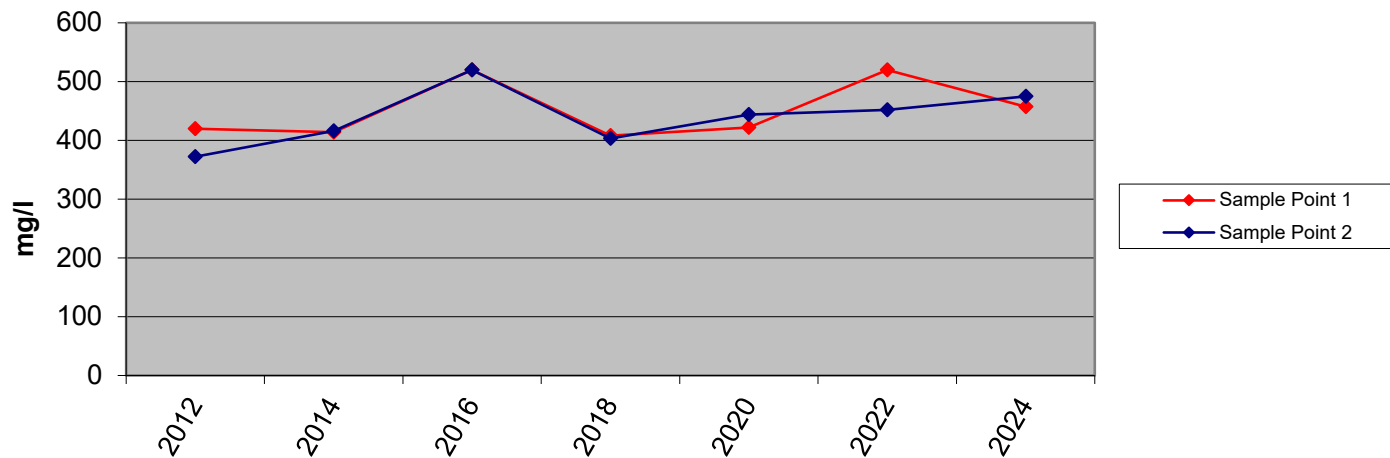
Loveland Harper Sodium (SMCL: 250 mg/l)



Loveland Harper Sulfate (SMCL: 250 mg/l)



Loveland Harper TDS (SMCL: 500 mg/l)



Mayfly, caddisfly, damselfly, water pennies, and snails have been the dominant organisms encountered at both locations since sampling began in 2012 (Table 3.12.4-A). All of the previously mentioned organisms indicate high or moderate water quality. The number of types of organisms observed in 2024 at the upstream sample (S-1) and the downstream sample (S-2) was nine. In 2022, nine organisms were observed at S-1 while ten organisms were observed at S-2.

Table 3.12.4-A

	GROUP 1 (Higher Quality)														GROUP 2 (Moderate Quality)														GROUP 3 (Lower Quality)														Non-indicative																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
	Ray Finned Fish	Perciformes	Darter	Etheostoma	Plethodontinae (Salamander)	Amphibia	Lymnaea (Snail)	Gastropoda	Planorbidae (Snail)	Gastropoda	Dytiscidae (Crawling Water Beetle)	Coleoptera	Hydrophilidae (Beetle Larva)	Coleoptera	Psephenidae (Water Penny)	Coleoptera	Elmidae (Adult Riffle)	Coleoptera	Dobsonfly Larva	Megaloptera	Caddis Fly	Trichoptera	Mayfly	Ephemeroptera	Stonefly Nymph	Plecoptera	Stonefly Adult	Plecoptera	Snapping Turtle	Chelydra	Minnow	Pimephales	Ranidae (Frogs)	Amphibia	Mussel	Pelecypoda	Fingernail Clam	Pelecypoda	Other Clams	Pelecypoda	Crane Fly Larvae	Diptera	Crane Fly Adult	Diptera	Ptychopteridae (Phantom Crane Fly)	Sialidae (Alderfly)	Hemiptera	Odonata	Dragonfly Nymph	Odonata	Dragonfly Adult	Odonata	Damselfly Nymph	Odonata	Damselfly Adult	Odonata	Sow Bug	Isopoda	Amphipoda	Decapoda	Crayfish	Fiat Worm	Turbellaria	Round Worm	Nematoda	Oligochaeta (Aquatic Worm)	Annelida	Hirudinea (Leech)	Annelida	Physa (Pouch Snail)	Gastropoda	Simuliidae (Blackfly)	Diptera	Tendipedidae Tendipes (Midge)	Diptera	Tendipedidae Psychoda (Northfly)	Diptera	Culex (Mosquito Larva)	Diptera	Culex (Mosquito)	Diptera	Tubifera (Rat-Tailed Maggot)	Diptera	Unknown Larva	Diptera	Gerridae (Water Strider)	Hemiptera	Notonectidae (Back Swimmer)	Hemiptera	Corixidae (Water Boatman)	Hemiptera	Belostomatidae (Giant Water Bug)	Hemiptera																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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* - Observed while sampling

The city had their current explosive gas monitoring plan (EGMP) approved on December 4, 2023. Gas monitoring is conducted by City of Loveland personnel. Monitoring consists of sampling each of the fourteen permanent gas monitoring wells on-site (Figure 3.12.4-C). Prior to 2020 gas monitoring had been completed monthly for more than 15 years. In a December 27, 2019, letter to the City of Loveland Ohio EPA noted that the facility has been conducting monthly gas monitoring of the landfill to meet the requirements of contingency monitoring per Section 8.6.2 of the EGMP. The letter indicated that requirements for cessation of the contingency monitoring have been met and the city may return to semi-annual monitoring. However, the facility failed to complete the first semi-annual gas monitoring event during 2020 and 2021 resulting in notice of violations from Ohio EPA.

The landfill was monitored one time in 2025 and one time in early 2026 (Table 3.12.4-B & 3.12.4-C). No detections of methane occurred during either monitoring event. The landfill was monitored three times throughout 2024 during which there were no detections of methane. Additionally, the landfill was monitored once during 2023 during which there were no detections of methane. The most recent detection of methane occurred during 2019 monitoring. Methane was detected during 3 of the 12 monitoring events. During these three monitoring events (Jan, Feb, Mar) methane was detected in various probes (1, 2R, 3R, 5, 6, 7, 8, 9) at concentrations between 1 and 42% LEL. The highest concentration of 42% LEL occurred in monitoring well 1. Detections of methane at concentrations below 100% LEL occasionally occurred during monthly monitoring events completed prior to 2019. *(Data for this landfill is in the files at the Health District).*

TABLE 3.12.4-B (6/11/2025)

Probe No.	Reference Depth (feet below surface)	Screen Depth (feet below top of case)	Location	Gas Pressure (inches H ₂ O or Hg)	Initial % LEL	Sustained or Repeat % LEL	Calculated Combustible Gas Concentration (% v/v) (%LEL x 0.05)	Water Level
1	27	17	SE Corner	0	0	0	0	Dry
2R	30	28	South Side, W of #1, S of Drive	0	0	0	0	Dry
3R	28	26	South Side, W of #2, S of Drive	0	0	0	0	25.100
4R	29.5	27.5	South Side, W of #3, S of Drive	0	0	0	0	22.500
5	31	25	SW Corner	0	0	0	0	Dry
6	23.5	17	West Side, N of #5	0	0	0	0	Dry
7	31	17	West Side, W of #6	0	0	0	0	Dry
8	13	7	West Side, N of #6	0	0	0	0	Dry
9	41	37	NW Corner, Top of Slope	0	0	0	0	Dry
10	13.5	7	NW Corner, E of #9	0	0	0	0	Dry
11	15	11	North Side, E of #10	0	0	0	0	Dry
12	15	11	North Side, E of #11	0	0	0	0	Dry
13	15	13	North Side, E of #12	0	0	0	0	Dry
14	15	9	NE Corner	0	0	0	0	Dry

TABLE 3.12.4-C (1/6/2026)

Probe No.	Reference Depth (feet below surface)	Screen Depth (feet below top of case)	Location	Gas Pressure (inches H ₂ O or Hg)	Initial % LEL	Sustained or Repeat % LEL	Calculated Combustible Gas Concentration (% v/v) (%LEL x 0.05)	Water Level
1	27	17	SE Corner	0	0	0	0	Dry
2R	30	28	South Side, W of #1, S of Drive	0	0	0	0	Dry
3R	28	26	South Side, W of #2, S of Drive	0	0	0	0	Dry
4R	29.5	27.5	South Side, W of #3, S of Drive	0	0	0	0	25.350
5	31	25	SW Corner	0	0	0	0	Dry
6	23.5	17	West Side, N of #5	0	0	0	0	Dry
7	31	17	West Side, W of #6	0	0	0	0	Dry
8	13	7	West Side, N of #6	0	0	0	0	Dry
9	41	37	NW Corner, Top of Slope	0	0	0	0	Dry
10	13.5	7	NW Corner, E of #9	0	0	0	0	Dry
11	15	11	North Side, E of #10	0	0	0	0	Dry
12	15	11	North Side, E of #11	0	0	0	0	Dry
13	15	13	North Side, E of #12	0	0	0	0	Dry
14	15	9	NE Corner	0	0	0	0	Dry

FACILITY INSPECTIONS

The site was inspected by HCPH on December 30, 2025. The inspector observed several of the gas monitoring probes and both surface water sampling locations. No violations or nuisance conditions were observed on the site.

SITE PRESENT DAY

The is currently used as an open space park with a baseball field and dog park. The remainder of the site is paved parking lots or open space covered in established grass.



Figure 3.12.4-C
Loveland Closed Landfill
Harper Avenue

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

