



United States Environmental Protection Agency
Region 7
Enforcement and Compliance Assurance Division

Air Branch

Air Branch Inspection Report
Unannounced Full Compliance Evaluation
Metro Park West
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Perry, Iowa 50220
FRS# 110043961460

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Inspection Date(s):
September 19, 2022

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- A Construction Permits (31 pages)
- B Photo log and photos (16 pages)
- C Landfill Gas Collection System and Flare information (377 pages)
- D 2021 Gas Monitor Report (5 pages)
- E Pilot Program for the coil/flare hood evaporation (7 pages)

**This Contents page shows all the sections contained in this report
and provides a clear indication of the end of this report.**

INSPECTION OVERVIEW

INSPECTION OBJECTIVE

The objective of the full compliance evaluation (FCE) inspection was to determine compliance of the facility with the Clean Air Act, Section 111, New Source Performance Standards (NSPS) and implementing regulations in the code of federal regulations (CFR). Staff from EPA's National Enforcement Investigations Center (NEIC) also came to the facility to conduct Geospatial Measurements of Air Pollution (GMAP). Their objective was to use a vehicle to monitor air pollutants in real-time over a large geographic area. The GMAP vehicle integrates geospatial data and emission monitoring readings to provide visual representations of emissions data. GMAP was conducted independently of this inspection report; information from the survey will be provided in a separate report.

Table 1 lists the inspection team members.

Table 1. PROJECT TEAM MEMBERS		
Team Member	Organization	Project Role
Avery Bowers	EPA, Region 7, ECAD, Air Branch	Lead Inspector
Joe Terriquez	EPA, Region 7, ECAD Air Branch	GMAP field team member
Richard Helmich	EPA, NEIC	GMAP team leader
Phillip Myers	EPA, NEIC	GMAP trainee

FACILITY CONTACT INFORMATION

Table 2. FACILITY CONTACT INFORMATION		
Name, Title	Phone No.	Email Address
Arthur Kern, Compliance Coordinator	(515)-333-4450	ake@mwatoday.com
Sonya Mann, substitute receptionist		
Brian Wambold, work informant		

FACILITY OVERVIEW

Metro Park West Landfill (Metro Park West) has a Standard Industrial Classification (SIC) code 4953 categorized as refuse system and a North American Industry Classification System (NAICS) code 562212 categorized as solid waste landfill. EPA and Iowa Department of Natural Resources (IDNR) personnel had not been at the facility within the past five years, according to the Enforcement Compliance History Online (ECHO) database. **Appendix A** contains the air and

construction permits the facility has been issued. **Table 3** lists the facility's permits and applicability documents with the dates they were issued. Metro Park West is not required to have a Title V permit because it is not a major source as defined by 40 CFR Part 70.2 and its design capacity is below the 2.5 million megagrams threshold in §62.16711(e). All permits were issued by IDNR. The facility is subject to the federal regulations and standards in **Table 4**:

Table 3. PERMITS and APPLICABILITY documents	
Permit /Document Name	Date Issued
NSPS, Title V, and Construction Permit Applicability	August 5, 2010
Air Construction Permit Application Project #11-020	January 6, 2011
Air Construction Permit 11-A-556	September 7, 2011
Air Quality construction permit modification Leachate Volume Reduction System Project #12-188	May 7, 2012
Landfill Gas Flare Air Construction Permit Project # 14-006	February 13, 2014
18-A-427-S1	November 27, 2018
Pilot Program for the coil/flare hood evaporation Project # 08-SDP-03-84	June 4, 2018
Determination of Leachate Volume Reduction System Project # 19-173	June 19, 2019

Table 4. APPLICABLE REGULATIONS AND STANDARDS	
Code of Federal Regulation	Standard Name
40 CFR Part 62	Subpart OOO, Federal Plan Requirements for Municipal Solid Waste Landfills That Commenced Construction On or Before July 17, 2014 and Have Not Been Modified or Reconstructed Since July 17, 2014

FACILITY OPERATIONS SUMMARY

Metro Park West is a municipal solid waste landfill that began construction in 1975 and started accepting waste after its completion. In 2009, Metro Waste Authority became the parent company of the facility. Even though Metro Park West does not meet the 2.5 million megagrams threshold in Subpart OOO, the facility installed a gas collection and control system (GCCS) in 2013 and installed a flare in 2014. The facility also received two construction permits for a leachate volume reduction system (LVRS) in 2012 and 2019. On November 27, 2018, the facility received a permit modification to allow a portable Vermeer grinder for yard waste and creosote treated railroad ties to be used on site. The equipment installed helps the landfill mitigate methane emissions produced from decomposing waste. The facility is a minor source of hazardous air pollutants and has a design capacity less than 2.5 million megagrams by mass. The facility is required by §62.16714(d) to submit an initial design capacity. On September 17, 2021,

the facility submitted an initial design capacity report which was re-submitted electronically on September 14, 2022.

FIELD ACTIVITIES SUMMARY

Mr. Terriquez, Mr. Helmich, Mr. Myers, and I arrived at the facility on September 19, 2022, and made entry at the front office at 9:39 am. At 9:49 am I introduced myself as the sole inspector and allowed Mr. Helmich to explain the presence of the GMAP Team on the site. I presented my credentials and provided my business card to Mr. Wambold. I conducted an opening conference during which I explained that the purpose of the visit was to conduct an inspection to determine compliance with the CAA, specifically, to determine compliance with the conditions of the permits listed in Table 3. I explained that after asking for some general business information, I would observe work practices, process units, emission units, control equipment and review associated records demonstrating compliance with the standard, permits, and regulations. Mr. Wambold informed me that Mr. Arthur Kern would be the main contact for all compliance information. After calling Mr. Kern, Mr. Wambold stated Mr. Kern would meet with me in an hour. When Mr. Kern arrived, I reiterated the purpose of my visit and explained to Mr. Kern that the facility could make a claim of business confidentiality.

I began asking general business information questions. I asked Mr. Kern about the different equipment and systems that were listed on the subsequent permits the facility applied for after they were issued their original air permit. Metro Park West is not subject to records requirements.

At 11:48 am, I was given a tour by Mr. Kern. He told me that wearing steel toed boots and a high visibility vest was facility protocol for personal protective equipment, so I complied. I reviewed the equipment that was discussed in our earlier conversation and confirmed that all equipment was properly permitted. I observed the operating status of the equipment on site. While on tour, I took photos of the equipment and landscape (**Appendix B**). At 12:11 pm, the tour was concluded, and I gave a brief closing conference. I explained the next steps and gave Mr. Kern the opportunity to claim anything as Confidential Business Information, to which he declined. I told Mr. Kern that I would send a follow-up email to acquire documentation regarding the installation of the GCCS and flare.

On September 30, 2022, I sent a follow-up email to Mr. Kern requesting the information listed below.

- 1) Year gas collection and control system was installed
- 2) Year the flare was installed
- 3) What was the justification/reasoning for not constructing the leachate volume reduction system?

- 4) Is the coil around the flare still being used? Can you explain and provide a process flow diagram for the intended purpose of the coil if its use has been discontinued?
- 5) Can you provide the waste tonnage acceptance rates the facility uses to calculate the design capacity?
- 6) Can you provide the last year's gas collection and control system monitoring that was done if it has been?

I received a response for the information regarding items 1-4 and 6 requested on October 3, 2022. To date I have not received a response for item 5.

I did not issue a Notice of Potential Findings to the facility.

INVESTIGATION OBSERVATIONS AND POTENTIAL FINDINGS

Ambient weather, site conditions and activities were documented in field records. All photographs are attached as **Appendix B**. I made the following observations during the inspection. I discussed all observations with facility representatives during the closeout meeting unless otherwise noted in the observation description. The inspection was conducted and photographs were taken in accordance with Region 7's standard operating procedure *Clean Air Act Stationary Source Compliance Monitoring Inspections*, SOP 2312.01E.

These observations are not final compliance determinations. The EPA Region 7 Air Branch case review team will make the final compliance determinations based on its review of this report and other technical, regulatory, and facility information.

August 2010 NSPS applicability document

A 39.1 horsepower generator was listed on the August 5, 2010, applicability document but when I went on my facility tour, I did not see one. During our discussion, Mr. Kern confirmed that they did not install it.

Leachate Volume Reduction System Project #12-188 (2011)

Mr. Kern stated that the leachate volume reduction system was not installed. In a follow-up email dated October 3, 2022, Mr. Kern stated that it was not installed due to cost and scheduling issues. While on the facility tour, I did not see the LVRS on-site. Mr. Kern also confirmed that the Weil-McLain GV-6 boiler was not installed; I did not see it on-site.

Landfill Gas Flare Air Construction Permit Project # 14-006 (2014)

On the facility tour, I confirmed that the facility did install a voluntary GCCS. Photos 1-3 depict the flare that was installed and photo 13 depicts the well heads used to collect the landfill gas. According to the documents submitted by Mr. Kern via email on October 3, 2022, nine vertical

landfill gas extraction wells were constructed between August 22, 2013, and October 2, 2013. The horizontal piping was constructed from September 27, 2013, until October 18, 2013. The flare's construction was completed late April 2014. and utilization began in May 2014 (**Appendix C**). Mr. Kern states that no surface emissions were found during the 2021 monitoring report (**Appendix D**) in the October 03, 2022, email.

Pilot Program for the coil/flare hood evaporation (2018)

In the October 3, 2022, email, Mr. Kern stated that “after the LVRS construction permit was submitted, the project was then reevaluated by SCS Engineers, and the engineers stated that the coil over flare hood evaporation method would be more cost effective.” Metro Park West then submitted a request to IDNR (**Appendix E**) to do a pilot project for the coil to determine its effectiveness. **Appendix E** describes the system installed as a “leachate conveyance piping from the leachate storage lagoon to the volume reduction pool and from the pool to the flare. A pump...was to convey the leachate from the volume reduction pool through the coil that was attached to the outside of the flare (see photos 3&4). The leachate in the coil would be heated and then returned to the volume reduction pool which would discharge into stainless-steel bowl. At the bottom of the bowl was a temperature sensor and any overflow of leachate would be returned to the volume reduction pool which would further promote evaporation.”

Determination of Leachate Volume Reduction System Project # 19-173 (2019)

The facility resubmitted the LVRS application in June 2019, but when I was on-site, I confirmed that the system was not in place. During my conversation with Mr. Kern, he stated the facility discontinued its use of the coil because, internally, there was too much sediment build up from the leachate evaporation process. The maintenance and cleaning cost would exceed what the facility can dedicate to the system. Since the timeframe for beginning construction of the LVRS has passed, the construction permit is void and the facility will have to submit a new request if it wants to build the system. I did not ask what the facility's intentions were for the system.

No potential findings were observed.