



June 26, 2026

Mr. Michael Smith
Land Quality Bureau
Iowa Department of Natural Resources
6200 Park Avenue, Suite 200
Des Moines, IA 50321

**RE: Metro Park East Sanitary Landfill – Phase II Unit and CWTS
Permit No. #77-SDP-01-72
Response to Comments on 2025 Annual Water Quality Report (IDNR Document No. 115946)**

Dear Mr. Smith,

On behalf of Metro Waste Authority (MWA), HDR Engineering, Inc. (HDR) has prepared this letter to respond to the Iowa Department of Natural Resources (IDNR) comments (provided to MWA in the letter dated April 30, 2026), pertaining to the 2025 Annual Water Quality Report (AWQR) for the Metro Park East (MPE) Phase II municipal solid waste landfill (MSWLF) and former Constructed Wetlands Treatment System (CWTS). This response acknowledges comments listed in IDNR's letter and provides responses on behalf of MWA. Please see the responses in bold to the comments in italics as follows:

Leachate Control System Performance Evaluation Report

- 1. The DNR appreciates the detailed information and maps to describe the system. However, due to the expansive and complex nature of the system and different nomenclature used by Superior Jetting, Inc. (see Appendix D), it is unclear what lines were inspected and cleaned, if any lines were unable to be inspected and cleaned, if noted blockages or other issues were resolved, and if not resolved, what the proposed resolution is. A summary table or similar, along with a cross-reference for the nomenclature, is requested to clarify these items.*

Response: Table 1 is attached which summarizes the identifications of access points for jetting and cleaning of leachate lines at both the Phase I and Phase II areas at the site. The locations of the access points for jetting equipment are summarized on Table 1 with grid coordinates which are applicable to the attached Figure 1.

Per discussions with Superior Jetting, certain leachate lines were noted as having issues with being cleaned during the 2025 event at the closed Phase I unit. The leachate lines that had blockages or an unforeseen situation that limited the extent of jetting in the line are the following access points:

- PICO3N
- PICO4N
- PICO8N.

Leachate lines associated with PICO3N, PICO4N, and PICO8N are located on the northeast side of the Phase I unit. Leachate gauging conducted in this general area includes monitoring point DEW-57. Historical leachate levels from this monitoring point was graphed to identify if leachate levels are influenced by the inability to clean the referenced leachate lines. Based on the leachate gauging data at DEW-57, which is depicted on the attached Graph 1 for the period from June 2021 through March 2026, leachate levels have varied by intervals ranging eight feet during the period. Measurements during the last five semiannual sampling events were more consistent with variation ranging approximately 0.5 feet. DEW-57 is located near the leachate line with



access point PICO8N. Leachate levels at DEW-57 appear to be consistent with historical ranges and do not appear to be increasing in elevation.

Leachate line cleaning for the Phase II leachate lines was conducted by No Limits Plumbing and Drains. Jetting was conducted on each of these lines from both the east access points and west access points. Sections of the Phase II leachate lines that were not accessed during the jetting event in 2025 are summarized on the attached Table 1.

2. *In addition, the report includes terms, such as AP, HZ, PIA, and PS, but there are not explanations on what these mean nor is it clear where these are on the figures/maps. Related to this, it is unclear if PS1 and PS2 refer to Leachate No. 1 and Leachate No. 2, respectively. Please clarify.*

Response: To address terms and acronyms, a table will be included in each future Leachate Collection System Performance Evaluation Report (LCSPER) for MPE summarizing the definitions and descriptions. For the 2025 LCSPER, the terms and acronyms are defined and described on the attached Table 2 to this letter. Terms and acronyms that define a feature or structure at the MPE Landfill are depicted on the attached Figure 1.

PS1 and PS2 are acronyms for Pump Station #1 and Pump Station #2. PS1 and PS2 are the same locations as Leachate No. 1 and Leachate No. 2 locations, respectively.

3. *Lastly, in Appendix B it is unclear on how compliance, less than one foot of head on liner, is achieved. For example, at Phase I Sump 1A East the compliance elevation is approximately 836.5, so the liner elevation is assumed to be one foot lower (i.e. 835.5). However, the leachate head measurements indicate elevations ranging between 826 and 828 during the reporting period, which are below the assumed liner elevation. Please provide additional information and calculations to resolve this apparent discrepancy for this point as well as for the other graphs in Appendix B. In addition, please clarify the location of Phase I Sump 1A East and other sumps on the figures.*

Response: With regard to the Phase I Sump 1A East compliance elevation, this was previously addressed in HDR's response letter dated February 28, 2023 (IDNR Document No. 105973). The response letter was drafted to address IDNR's comments on the 2022 Annual Water Quality Report which were provided in a letter dated January 31, 2023 (IDNR Document No. 105568). Both the Phase I Sump 1A East and Phase I Sump 1A West were designed, permitted, and constructed in 1995 and 1996. Each sump was placed in an excavation to focus leachate migration to the sump and the extraction pump. The installation of the sumps in these excavations place them lower than the common liner elevation where waste is deposited and where the compliance threshold is calculated.

The Phase I Sump 1B was constructed in 2003 with the construction of the Phase 1B landfill expansion. Similar to Phase I Sump 1A East and Phase I Sump 1A West, the Phase 1B sump measurement point is lower than the common liner elevation where waste is deposited. Details regarding the Phase 1B landfill expansion are detailed in the Minor Permit Revisions to Closure/Post-Closure Plan and Phase 1B Permit Application dated April 16, 2004 (IDNR Document No. 55733)

The Phase II sumps (A1, A2, A3, B1, B2, and B3) and the leachate head riser (LHR-B) were constructed with shallower monitoring points relative to the common liner elevation. Thus, the difference between the compliance elevation and the measurement point is narrower at the Phase II monitoring locations when compared to the Phase I monitoring locations. The Phase II sumps as indicated in the August 2007 Construction Quality Assurance Report (IDNR Document No. 6785) were constructed with a bottom that is approximately two feet lower than the common liner elevation where the waste is deposited.



LHR-B was installed in the Phase II unit to measure leachate thickness directly on the liner in the lease conductive drainage material outside of the sumps. Construction of LHR-B is noted in the P-31 Cell IIB West Liner and Leachate System – Landfill Construction Observation Report dated September 2009 (IDNR Document No. 47210).

For reference, the Graphs from Appendix B of the 2025 LCSPER have been attached to this document with updates indicating either the bottom of the sump or transducer measurement elevation and the common liner elevation where waste is deposited adjacent to the sumps. For spatial reference, the locations of the Phase I and Phase II sumps and LHR-B are depicted on the attached Figure 1.

This response is provided as an electronic copy. Hard copies will be furnished to IDNR upon request. If there are any questions regarding this submittal, please do not hesitate to contact Richard Wilson at (402) 392-6714.

Sincerely,
HDR Engineering, Inc.

A handwritten signature in blue ink, appearing to read 'Richard Wilson'.

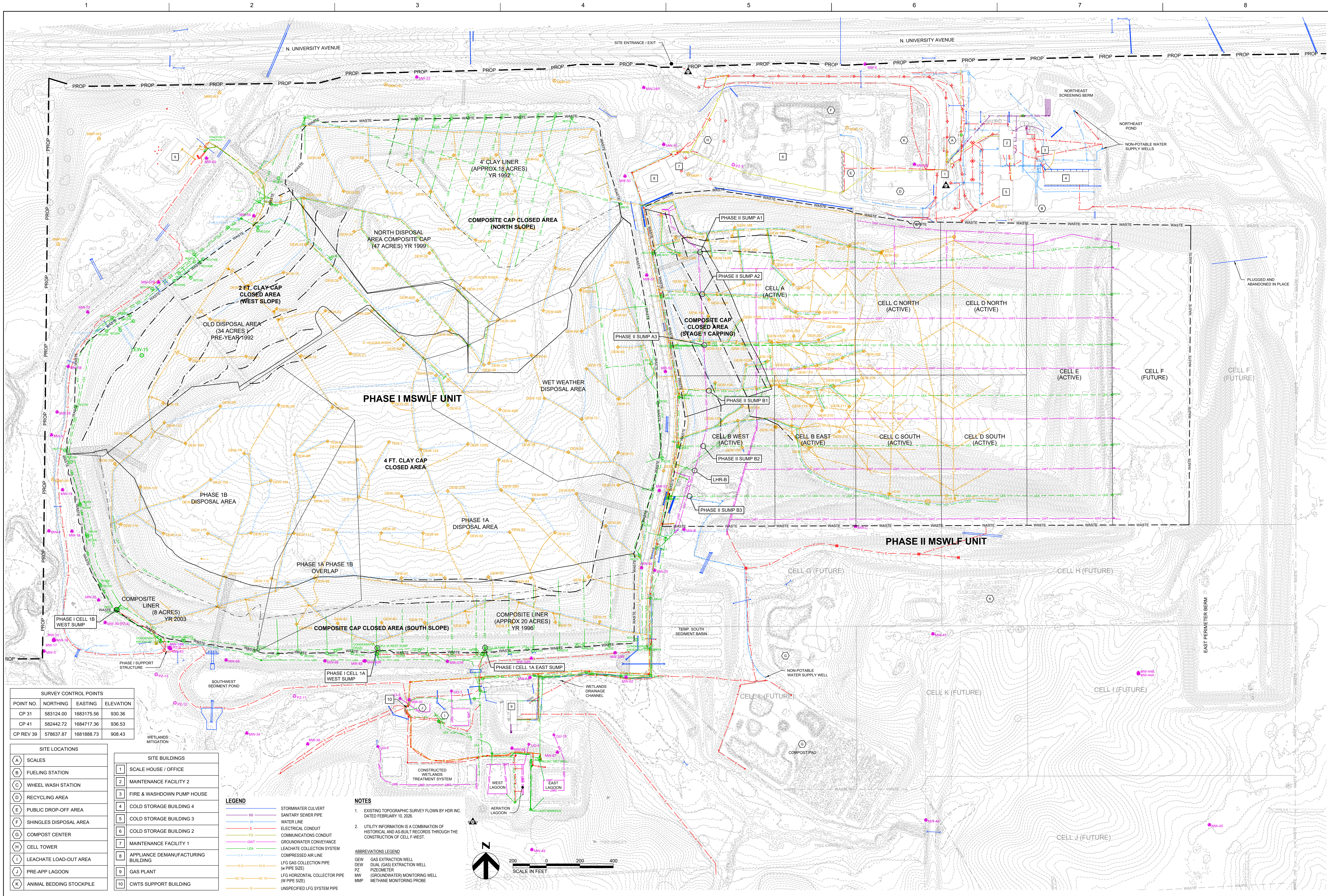
Richard Wilson
Environmental Project Manager (Solid Waste)

A handwritten signature in blue ink, appearing to read 'Dan Bacehowski'.

Dan Bacehowski
Environmental Practice Lead (Solid Waste)

cc: Mr. Andrew Phillips, Metro Waste Authority
Mr. Matt Morris, Metro Waste Authority

C:\working\metro\2025\25175\WMA\WMA Site Utility Map.dwg, Layout1, 02/25/2025 3:56:20 PM, M:\COPRHD



SURVEY CONTROL POINTS			
POINT NO.	NORTHING	EASTING	ELEVATION
CP 31	583124.00	1683175.56	930.36
CP 41	582442.72	1684717.36	936.53
CP REV 39	578637.87	1681888.73	908.43

SITE LOCATIONS	
(A)	SCALES
(B)	FUELING STATION
(C)	WHEEL WASH STATION
(D)	RECYCLING AREA
(E)	PUBLIC DROP-OFF AREA
(F)	SHINGLES DISPOSAL AREA
(G)	COMPOST CENTER
(H)	CELL TOWER
(I)	LEACHATE LOAD-OUT AREA
(J)	PRE-APP LAGOON
(K)	ANIMAL BEDDING STOCKPILE

SITE BUILDINGS	
1	SCALE HOUSE / OFFICE
2	MAINTENANCE FACILITY 2
3	FIRE & WASHDOWN PUMP HOUSE
4	COLD STORAGE BUILDING 4
5	COLD STORAGE BUILDING 3
6	COLD STORAGE BUILDING 2
7	MAINTENANCE FACILITY 1
8	APPLIANCE DEMANUFACTURING BUILDING
9	GAS PLANT
10	CWTS SUPPORT BUILDING

LEGEND	
SS	STORMWATER CULVERT
W	SANITARY SEWER PIPE
E	WATER LINE
FO	ELECTRICAL CONDUIT
GWT	COMMUNICATIONS CONDUIT
LEA	GROUNDWATER CONVEYANCE
2-A	LEACHATE COLLECTION SYSTEM
10-G	COMPRESSED AIR LINE
10-G	LFG GAS COLLECTION PIPE (W/ PIPE SIZE)
HC 10	LFG HORIZONTAL COLLECTOR PIPE (W/ PIPE SIZE)
G	UNSPECIFIED LFG SYSTEM PIPE

NOTES	
1.	EXISTING TOPOGRAPHIC SURVEY FLOWN BY HDR INC. DATED FEBRUARY 10, 2026.
2.	UTILITY INFORMATION IS A COMBINATION OF HISTORICAL AND AS-BUILT RECORDS THROUGH THE CONSTRUCTION OF CELL F-WEST.

ABBREVIATIONS LEGEND	
GEW	GAS EXTRACTION WELL
DEW	DUAL (GAS) EXTRACTION WELL
PZ	PIEZOMETER
MW	(GROUNDWATER) MONITORING WELL
MMP	METHANE MONITORING PROBE



PROJECT MANAGER		
A	06/2026	ISSUED FOR CLEINT USE
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	
PROJECT NUMBER	10378580



METRO WASTE AUTHORITY
METO PARK EAST LANDFILL

EXISTING SITE
UTILITY MAP

0 1" 200'
SCALE 1" = 200'

FILENAME SHEET

Table 1
2025 Leachate Collection System Cleaning Jetting Summary
Metro Park East Landfill
Permit No. 77-SDP-01-72P

MWA ID	Contractor ID	Location of Inlet Depicted on Figure 1 ^(A)	Length Jetted/Cleaned (feet)	Cleaning Contractor Comments	MWA Comments & Resolutions
MH #1	MH #1	D4	--	No access, need confined space to enter	
PIC01N	PIC01N	D4	650		
PIC02N	PIC02N	D4	400		
PIC03N	PIC03N	D4	15	Could not advance, pipe potentially separated	
PIC04N	PIC04N	D4	40	Mud on hose, could not advance, pipe potentially separated	
PIC05N	PIC05N	D4	350		
PIC06N	PIC06N	D3	300		
PIC07N	PIC07N	D3	300		
PIC08N	PIC08N	D3	25	Mud on hose, could not advance	
PIC09N	PIC09N	D3	350	Jet through blockage at 150'	
PIC010N	PIC010N	D3	250		
PIC011N	PIC011N	D3	200		
MH #2	MH #2	D2	500	Sediment in manhole	Jetting from MH #2 toward MH #1
MH #2	MH #2	D2	500	Jet through 23w	
PIC023W	PIC023W	D2	600	Jet through 22w	
PIC022W	PIC022W	D2	500	Jet through 18w	
PIC021W	PIC021W	C2	--	Cannot access	Jetting to PIC021W occurred from cleanout PIC019W
PIC020W	PIC020W	D2	100		
PIC019W	PIC019W	D2	600	Jet to 21w	
PIC018W	PIC018W	C2	400	Jet through MH 14W	
PIC017W	PIC017W	C2	150		
PIC015W	PIC015W	C2	200	Jet through 16w	
PIC014W	PIC014W	C1	400		
PIC013W	PIC013W	C1	500		
PIC012W	PIC012W	C1	400	Jet through 11w	
PIC011W	PIC011W	C1	500	Jet through 9w	
PIC010W	PIC010W	C1	500		
PIC09W	PIC09W	B1	550	Jet through 5w	
PIC08W	PIC08W	B1	500		
PIC07W	PIC07W	B1	500	Jet to 1w	
PIC06W	PIC06W	B1	200	Jet to 10w	
PIC05W	PIC05W	B1	500		
PIC04W	PIC04W	B1	480		
PIC03W	PIC03W	B1	500	Jet through 20s and 21s	
PIC01W	PIC01W	B1	600	Jet to 7w and 6w	
PIC021S	PIC021S	B2	480	Jet to 19s	
PIC020S	PIC020S	B2	200	Cleanout Mislabeled	
PIC019S	PIC019S	B2	200		
PIC018S	PIC018S	B2	700		
PIC017S	PIC017S	B2	200	Map shows approx. 200' pipe	
PIC016S	PIC016S	B2	200		
PIC015S	PIC015S	B2	225		
PIC014S	PIC014S	B3	225	Heavy oil in pipe	
PIC013S	PIC013S	B3	50	Stopped jetting because leachate was backflowing out of pipe	
PIC012S	PIC012S	B3	250		
PIC011S	PIC011S	B3	300		
PIC010S	PIC010S	B3	350	Jet through multiple blockages	
PIC09S	PIC09S	B3	350	Jet through multiple blockages	
PIC08S	PIC08S	B3	600	Jet towards 18s Header Pipe	
PIC07S	PIC07S	B3	350	Heavy mud came out of pipe	
PIC06S	PIC06S	B4	380		
PIC05S	PIC05S	B4	410	Heavy oil in pipe	
PIC04S	PIC04S	B4	425		
PIC03S	PIC03S	B4	425		
PIC02S	PIC02S	B4	450		
PIC01S	PIC01S	B4	650	Header pipe, hose continually went up PICO 3S CO	
PIC01E	PIC01E	B4	50		
PIC02E	PIC02E	B4	575		
PIC03E	PIC03E	B4	--	Cannot access	
PIC04E	PIC04E	B4	600		

Table 1
2025 Leachate Collection System Cleaning Jetting Summary
Metro Park East Landfill
Permit No. 77-SDP-01-72P

MWA ID	Contractor ID	Location of Inlet Depicted on Figure 1 ^(A)	Length Jetted/Cleaned (feet)	Cleaning Contractor Comments	MWA Comments & Resolutions
PIC05E	PIC05E	C4	500		
PIC06E	PIC06E	C4	600		
PIC07E	PIC07E	C4	50		
LMH2	LMH2	C4	350	Jet to LMH1	
LMH3	LMH3	C5	400	Jet to LMH2	
LMH4	LMH4	C5	400	Jet to LMH3	
LMH5	LMH5	C5	400	Jet to LMH4	
LMH6	LMH6	B5	400	Jet to LMH5	
LMH7	LMH7	B4	350	Jet to LMH6	
LMH8	LMH8	B4	350	Jet to LMH7	
LMH9	LMH9	B4	350	Jet to LMH8	
LMH10	LMH10	B4	165	Jet to LMH9	
LMH11	LMH11	B4	600	Jet to LMH 13	
PS2	PS2	B3	400	Jet towards MH 11	
Influent Manhole	Influent Manhole	A4	650	Jet towards lift station	
PIICO1W	Line 1 West	C4	1,400		Fully jetted due to advancement lengths from PIICO1W and PIIC01E.
PIICO2W	Line 2 West	C4	1,300		Jetted PIICO2W and PIIC02E except for 100 foot section in Cell C North Section
PIICO3W	Line 3 West	C5	1,300		Jetted PIICO3W and PIIC03E except for 40 foot section in Cell C North Section
PIICO4W	Line 4 West	C5	1,000		Jetted PIICO4W and PIIC04E except for 230 foot section in parts of Cell B East and Cell C South Sections
PIICO5W	Line 5 West	C5	1,000		Jetted PIICO5W and PIIC05E except for 350 foot section in parts of Cell B East and Cell C South Sections
PIICO6W	Line 6 West	B5	1,000		Jetted PIICO6W and PIIC06E except for 1,160 foot section in parts of Cell B East, Cell C South, and Cell D South Sections
PIICO1E	Line 1 East	C7	1,400		Fully jetted due to advancement lengths from PIICO1W and PIIC01E.
PIICO2E	Line 2 East	C7	1,300		Jetted PIICO2W and PIIC02E except for 100 foot section in Cell C North Section
PIICO3E	Line 3 East	C7	1,300		Jetted PIICO3W and PIIC03E except for 40 foot section in Cell C North Section
PIICO4E	Line 4 East	C7	1,350		Jetted PIICO4W and PIIC04E except for 230 foot section in parts of Cell B East and Cell C South Sections
PIICO5E	Line 5 East	C7	1,250		Jetted PIICO5W and PIIC05E except for 350 foot section in parts of Cell B East and Cell C South Sections
PIICO6E	Line 6 East	B7	500	Access was tight	Jetted PIICO6W and PIIC06E except for 1,160 foot section in parts of Cell B East, Cell C South, and Cell D South Sections

Notes:

(A) - The grid coordinate notes the general location of the feature identified under the MWA ID and Contractor ID columns on the attached Figure 1.

Table 2
Terms, Definitions, and Details
Metro Park East Landfill
Permit No. 77-SDP-01-72P

Terms	Definition & Details
AP2	QED Automatic Air Pump Model
AMSL	Above Mean Sea Level
AWQR	Annual Water Quality Report
CC	Cycle Counter
CPAR	Corrective/Preventive Action Request
CWTS	Constructed Wetland Treatment System
CY	Calendar Year
DEW	Dual-Extraction Well
DMWRA	Des Moines Wastewater Reclamation Authority
GEW	Gas Extraction Well
GU	Groundwater Underdrain
HZ	Horizontal Collector Sump for Gas Collection System
IAC	Iowa Administrative Code
IDNR	Iowa Department of Natural Resources
LCS	Leachate Collection System
LCSPER	Leachate Control System Performance Evaluation Report
LEW	Leachate Extraction Well
LHR	Leachate Head Riser
MPE	Metro Park East (Landfill)
MSWLF	Municipal Solid Waste Landfill
MWA	Metro Waste Authority
PIA	Phase IA
POTW	Publicly Owned Treatment Works
PS-1	Pump Station #1 - Leachate #1
PS-2	Pump Station #2 - Leachate #2
RWH	Remote Wellhead
SCADA	Supervisory Control and Data Acquisition
SP	Standpipe
SS	Stainless Steel
WM	Waste Management
WRA	Wastewater Reclamation Authority

Graph 1: Liquids Elevations - MPE Phase I



