EIM Help – Landfill Monitoring Data

Version 1.4 September 2024

Who is Required to Submit Landfill Monitoring Data?

These types of landfills are required to submit data to EIM. Follow the monitoring plan approved by the local health authority.

Landfill Regulation	Submit to EIM?
WAC 173-351 Criteria for Municipal Solid Waste Landfills	Yes
WAC 173-350 Solid Waste Handling Standards	Yes
WAC 173-304 Minimum Functional Standards for Solid Waste Handling	Optional
WAC 173-306 Special Incinerator Ash Management Standards	Optional
WAC 173-340 Model Toxics Control Act—Cleanup	Some - Ask your site manager and follow cleanup site guidance.

Data Types to Submit

Environmental Conditions Data

- Ambient indoor and outdoor air monitoring
- Soil gas monitoring
- Groundwater samples, measurements, and water levels
- Landfill leachate samples

NOT Data From

Treatment or collection systems like air stripping or sparging and soil vapor extraction

Before You Begin

Go to the **EIM Help Center** and download these templates and help documents:

- Location Template and Help document
- Well Water Level Template and Help document
- Results Template and Help document

Use the help documents along with this document to fill out your data templates.

How to Enter Your Data

Below are different landfill data types and instructions for entering them.

Ambient Air, Vapor, or Soil Gas Data

For air, vapor, and soil gas samples and measurements, use the Results Template to enter your data. Download the Air, Vapor, and Soil Gas Data help document for guidance.

Well Water Levels

For well water level measurements, use either the Well Water Level Template or Results Template to enter your data. The Well Water Level Template is easier to fill out. Download the <u>Well Water Level</u> help document for guidance.

HGCS Data

For Hydraulic Gradient Control System (HGCS) data, contact your EIM Data Coordinator.

Landfill Groundwater and Leachate Data

Locations

Below are the main fields and valid values for monitoring locations at landfills. Use this table along with the <u>Location Help document</u> for guidance.

Col	Location Template Field Name	Landfill Location Most common valid values and requirements
С	Location Setting	Land (groundwater)Source-HumanMade (leachate)

Col	Location Template Field Name	Landfill Location Most common valid values and requirements	
D	Location Description	Indicate the type of monitoring location, like leachate collection system.	
F	Is Location A Well	Y (Yes)N (No)	
AX	Groundwater Location Type	Monitoring WellTemporary Well - EIW	

Results

Results data has samples and measurements.

Samples

For discrete samples sent to the lab for analysis, use the Results Template to enter your data.

Below are the main field and valid values for discrete sample data collected at landfills. Use this table along with the <u>Results Help document</u> for guidance.

If you have field replicates, download the <u>Field Replicates help document</u>. If you have laboratory replicates, download the <u>Lab Dilutions and Re-Extractions help document</u>.

Col	Results Template Field Name	Landfill Groundwater Sample Valid Values and Requirements	Landfill Leachate Sample Valid Values and Requirements	
D	Field Collection Type	■ Sample	■ Sample	
Q	Well Water Level Measuring Point or TOC ID	Leave this blank	Leave this blank	
R	Sample ID	Required	Required	
Х	Sample Matrix	■ Water	■ Other Liquid	
Υ	Sample Source	■ Groundwater	■ Landfill Leachate	

Col	Results Template Field Name	Landfill Groundwater Sample Valid Values and Requirements	Landfill Leachate Sample Valid Values and Requirements	
AA	Sample Collection Method	Common valid values:* Bailer-Polyethylene Bailer-PVC Bailer-Stainless Pump-GW-Low-Flow Pump-Bladder Pump-Hydrostar Pump-Inertial-Lift Pump-Peristaltic Pump-Submersible	Common valid values:* Grab-misc Handgrab Pump-GW-Low-Flow Pump-Peristaltic Pump-Submersible	
AB	Sample Preparation Method	Common valid values:* Filter.45um Filter.80um SW3010A SW5030B	Common valid values:* Filter.45um Filter.80um SW3010A SW5030B	
АТ	Fraction Analyzed	TotalDissolvedSuspended (for TSS)	TotalDissolvedSuspended (for TSS)	
AU	Field Filtered Flag	For dissolved (filtered) samples: Y (Yes) N (No) U (Unknown)	For dissolved (filtered) samples: Y (Yes) N (No) U (Unknown)	

^{*}Search for more valid values online in the <u>Methods table</u>. If you can't find what you are looking for, contact your EIM Data Coordinator.

Measurements

For field measurements with a field meter or kit, use the Results template. Includes parameters like pH, temperature, specific conductivity, and dissolved oxygen.

Below are the most common fields and data types for field measurements made at landfills Use this table along with the <u>Results Help document</u> for guidance.

Note: Report your field data for groundwater AND landfill leachate.

Note: If you have **well water level measurements**, use either the Results template or Well Water Level template and help document from the <u>EIM Help Center under Templates & Guidance</u>, <u>Data Entry Documents</u>.

Col	Results Template Field Name	Landfill Groundwater Measurement Valid Values and Requirements	Landfill Leachate Measurement Valid Values and Requirements	
D	Field Collection Type	Measurement	Measurement	
Q	Well Water Level Measuring Point or TOC ID	Leave this blank except for well water levels	Leave this blank except for well water levels	
R	Sample ID	Optional	Optional	
Х	Sample Matrix	■ Water	Other Liquid	
Υ	Sample Source	■ Groundwater	 Landfill Leachate 	
AA	Sample Collection Method	Common valid values:* Bailer-Polyethylene Bailer-PVC Bailer-Stainless Pump-GW-Low-Flow Pump-Bladder Pump-Hydrostar Pump-Inertial-Lift Pump-Peristaltic Pump-Submersible	Common valid values:* Grab-misc Handgrab Pump-Peristaltic Pump-Submersible	
AB	Sample Preparation Method	Optional	Optional	
AJ	Lab Analysis Date	Leave this blank	Leave this blank	
AL	Lab Analysis Time	Leave this blank	Leave this blank	

Col	Results Template Field Name	Landfill Groundwater Measurement Valid Values and Requirements	Landfill Leachate Measurement Valid Values and Requirements
AY	Result Method	Common valid values:* CONDMETER DO-Clark DO-Optical DO-Galvanic EHMETER EPA180.1-F HACH-8146 HACH-CL8P PHMETER SM2550B-F SM4500G TEMPTHERM TURBM	Common valid values:* CONDMETER PHMETER TURBM SM4500H+B EPA120.1

^{*}Search for more valid values online in the <u>Methods table</u>. If you can't find what you are looking for, contact your EIM Data Coordinator.

Document Revision History

Revision Date	Revision No.	Summary of Changes	Reviser(s)
02/27/2018	1.0	Original document	SP
02/20/2019	1.1	Changed sample source of "landfill gas" to "soil gas." Added link for guidance on air, vapor, and soil gas data entry. Updated links. Reorganized structure and reformatted for accessibility. Removed "Entering" from title.	CN, SP
11/10/2020	1.2	Updated "Is Location a Well" to "Is Location A Well" to match template.	КС
03/08/2022	1.3	Updated WAC 173-340 Solid Waste Handling Standards to say Model Toxics Control Act—Cleanup instead. Revised format.	CN
09/04/2024	1.4	Changed "Source-ManMade" to "Source-HumanMade"	КС