



**Waste Management Environmental  
Monitoring Group**  
N96 W13600 County Line Road  
Germantown, WI 53022

April 25, 2024

GEMS Data Submittal Contact-WA/5  
Bureau of Solid Waste Management  
Wisconsin Department of Natural Resources  
P.O. Box 7921  
Madison, WI 53707-7921

Re: **BOUNDARY ROAD LANDFILL  
FIRST QUARTER 2024 ENVIRONMENTAL SUBMITTAL  
LICENSE NO. 00011 - FID #268152390**

Dear GEMS Data Submittal Contact:

Enclosed are the first quarter 2024 groundwater, leachate and gas monitoring data for the Boundary Road Landfill. As per Department of Natural Resources Proposed Long Term Sampling and Analysis Plan for the Boundary Road Landfill, October 2013, all parameters for the wells indicated have been completed. This submittal includes final, certified hard copy reports and electronic data files from Waste Management Incorporated (WMI's) contract laboratory, TestAmerica for the period of March 2024. This quarter's information is being submitted as a file (mar24-00011.txt) on the enclosed diskette. Also attached is a printout of the data that is on the diskette.

As required by NR 140, the exceedances of the Preventive Action Limits (PAL) or Enforcement Standards (ES) are denoted as P or E respectively on the submittal. A 'P\*' is used when the concentration of a tested parameter exceeds the ES, but since the well meets the point of standards criteria as identified in NR 140.22, the ES does not apply. Please refer to Attachment II for identification and possible explanations of NR 140 exceedances.

Please note the following:

1. Environmental monitoring is now being done in accordance with the Proposed Modifications to the Long-Term Sampling and Analysis Plan – Boundary Road Landfill, October 2013 that was approved by Thomas Wentland on April 2, 2014.
2. The performance of the landfill gas extraction system was intermittent for the period of January 2024 through March.2024. Not enough gas could be collected to keep the flare running since gas wells G03, G04, G05, G08, G09, and G10 have been abandoned as construction of the Orchard Ridge Eastern Expansion Southern Unit has proceeded south.
3. Descriptive codes for barometric trend, ground conditions, exceedances, and J-Flag Qualifiers can be found on the cover sheet of the submittal.

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4. Groundwater wells P101, TW02R, and TW03R as well as leachate headwells LHW01 and LHW04 have been abandoned for construction of the Orchard Ridge Eastern Expansion Southern Unit and are no longer monitored for the Boundary Road Landfill monitoring program. Groundwater wells MW110, MW111, MW117, P103R, P117, TW16R, and TW24R are being monitored and reported under the Orchard Ridge Eastern Expansion Southern Unit license number 04491 since they are also on that sites monitoring program and the wells are linked to Boundary Road Landfill license number 00011.

Should you have any questions regarding the information submitted, please contact me at (414) 405-6785.

Sincerely



Greg Konsionowski  
Chemist

Enclosures

cc: Larry Buechel - WMWI / Boundary Road Master File  
BJ Leroy - WDNR Southeast Region  
Greg Konsionowski – WMWI / Boundary Road Monitoring File

ATTACHMENT I

LICENSE #s. 00011

BOUNDARY ROAD LANDFILL

FID #s. 268262940

Identification of NR140 Exceedances (page 1)

Well	Sample Date	Parameter	Sample Concentration	NR140 Standards PAL / ES	Units	Type of Standard	Type Of Exceedance	Qualifier	RL	LDD	LOQ
MW107	240301	ARSENIC-DISSOLVED AS AS	1.4000	1.0000	10.0000	UG/L	NR140	P	1.000	0.2700	0.9000
	240301	CHLORIDE-DISSOLVED AS CL	186.0000	125.0000	250.0000	MG/L	NR140	P	2.500	1.4000	4.7000
	240301	ARSENIC-DISSOLVED AS AS	2.4000	1.0000	10.0000	UG/L	NR140	P	1.000	0.2700	0.9000
MW116	240301	CHLORIDE-DISSOLVED AS CL	138.0000	125.0000	250.0000	MG/L	NR140	P	2.500	1.4000	4.7000
	240301	SULFATE-DISSOLVED AS SO4	132.0000	125.0000	250.0000	MG/L	NR140	P	10.000	1.7000	5.8000
	240301	ARSENIC-DISSOLVED AS AS	3.5000	1.0000	10.0000	UG/L	NR140	P	1.000	0.2700	0.9000
P102	240301	ARSENIC-DISSOLVED AS AS	4.5000	1.0000	10.0000	UG/L	NR140	P	1.000	0.2700	0.9000
	240301	BORON-DISSOLVED AS B	0.2100	0.2000	1.0000	MG/L	NR140	P	0.020	0.0040	0.0130
	240301	FLUORIDE-DISSOLVED AS F	0.8900	0.8000	4.0000	MG/L	NR140	P	0.050	0.0260	0.0870
P104R	240301	ARSENIC-DISSOLVED AS AS	5.5000	1.0000	10.0000	UG/L	NR140	P	1.000	0.2700	0.9000
	240301	BORON-DISSOLVED AS B	0.2000	0.2000	1.0000	MG/L	NR140	P*	0.040	0.0080	0.0270
	240301	CHLORIDE-DISSOLVED AS CL	152.0000	125.0000	250.0000	MG/L	NR140	P	2.500	1.4000	4.7000
P107	240301	FLUORIDE-DISSOLVED AS F	0.9800	0.8000	4.0000	MG/L	NR140	P	0.250	0.1300	0.4300
	240301	BORON-DISSOLVED AS B	0.3500	0.2000	1.0000	MG/L	NR140	P	0.020	0.0040	0.0130
	240301	CHLORIDE-DISSOLVED AS CL	524.0000	125.0000	250.0000	MG/L	NR140	E	5.000	2.8000	9.4000
TW05R	240301	ARSENIC-DISSOLVED AS AS	6.7000	1.0000	10.0000	UG/L	NR140	P	1.000	0.2700	0.9000
	240301	BORON-DISSOLVED AS B	0.7300	0.2000	1.0000	MG/L	NR140	P	0.020	0.0040	0.0130
	240301	CHLORIDE-DISSOLVED AS CL	139.0000	125.0000	250.0000	MG/L	NR140	P	2.500	1.4000	4.7000

|| P\* = within the Design Management Zone (DMZ) and property boundary  
 || P = NR140 Preventative Action Limit or NR500 Alternate Concentration Limit exceedance  
 || E = NR140 Enforcement Standard exceedance  
 || J = Sample Concentration is between the Limit of Detection (LOD) and the Limit of Quantification (LOQ)  
 || and the Limit of Quantification (LOQ)  
 || EX = NR140.28 (NR508.19) Exemptions granted for exceedance

SPECIAL NOTE: J-Flags are detections of an analyte between the Limit of Detection (LOD) and the Limit of Quantification (LOQ). It is MWX-Technologies' opinion that J-Flag detections as well as PAL exceedances below the reporting limit (RL) are not quantifiable numbers and should not constitute exceedances; however these values are being reported in compliance with NR 507.26 (3)(b) and NR 140.16.

**ATTACHMENT II  
BOUNDARY ROAD LANDFILL  
FIRST QUARTER 2024**

Preliminary Cause and Significance of the Exceedances.

Arsenic

Arsenic exceeded the NR 140 PAL in wells MW107, MW116, P102, P104R, P107, and TW09RR. Arsenic has been historically high in background sampling around Boundary Road Landfill. The arsenic exceedances are likely due to natural hydrogeologic conditions.

Boron

Boron exceeded the NR 140 PAL in wells P104R, P107, TW05R, and TW09RR. Boron has been historically high in background sampling around Boundary Road Landfill. The boron NR140 PAL exceedances are likely due to natural hydrogeologic conditions.

Chloride

Chloride exceeded the NR 140 PAL in wells MW107, MW116, P107, and TW09RR. Chloride also exceeded the NR 140 ES in well TW05R. Chloride concentrations have been historically high at these wells. The chloride exceedances are possibly due to the upgradient Boundary Road Landfill or road salt. Remedial measures have been implemented at the site.

Fluoride

Fluoride exceeded the NR 140 PAL in wells P104R and P107. Fluoride concentrations have been historically high in these wells. The fluoride exceedances are likely due to natural hydrogeologic conditions.

Sulfate

Sulfate exceeded the NR 140 PAL in well MW116. Sulfate concentrations have been historically high in this well. The sulfate exceedance is likely due to natural hydrogeologic conditions.

**Notice:** Personally identifiable information collected will be used for program administration and enforcement purposes. The Department may also provide this information to requesters as required under Wisconsin's Open Records law, ss. 19.31 to 19.39, Wis. Stats. When submitting monitoring data, the owner or operator of the facility, practice or activity is required to notify the Department in writing that a groundwater standard or an explosive gas level has been attained or exceeded, as specified in ss. NR 140.24(1)(a); NR 140.26(1)(a); NR 507.30NR 635.14(9)(a); NR 635.18(20) and NR 507.30, Wis. Adm. Code. Failure to report may result in fines, forfeitures or other penalties resulting from enforcement under ss. 289.97, 291.97 or 299.95, Wis. Stats

**Instructions:**

- Prepare one form for each license or monitoring ID.
- Please type or print legibly.
- Attach a notification of any values that attain or exceed groundwater standards (that is, preventive action limits, enforcement standards or alternative concentration limits). The notification must include a preliminary analysis of the cause and significance of each value.
- Attach a notification of any gas values that attain or exceed explosive gas levels.
- Send the original signed form, any notification, and Electronic Data Deliverable [EDD] to:

GEMS Data Submittal Contact - WA/5  
Wisconsin Department of Natural Resources  
P.O. Box 7921  
Madison, WI 53707-7921

### Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner)

Waste Management of Wisconsin Inc.

Contact for questions about data formatting. Include data preparer's name, telephone number and Email address:

Name: Greg Konsionowski Phone No. (include area code): (414) 405-6785

Email: gkonsion@wm.com

Facility Name: Boundary Road Landfill

License # / Monitoring ID: 00011 Facility ID (FID): 268152390

Actual sampling dates (e.g., July 2-6, 2003): October 19, 2023 through March 21, 2024  
The enclosed results are for sampling required in the month(s) of: (e.g., June 2003) October 2023 through March 2024

Type of Data Submitted (Check all that apply):

- Groundwater monitoring data from monitoring wells
- Groundwater monitoring data from private water supply wells
- Leachate monitoring data
- Gas monitoring data
- Air monitoring data
- Other (specify):

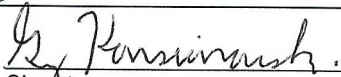
Notification attached?

- No. No groundwater standards or explosive gas limits were exceeded.
- Yes, a notification of values exceeding a groundwater standard is attached. It includes a list of monitoring points, dates, sample values, groundwater standard and preliminary analysis of the cause and significance of any concentration.
- Yes, a notification of values exceeding an explosive gas limit is attached. It includes the monitoring points, dates, sample values and explosive gas limits.

### Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards.

Facility Representative Name (Print): Greg Konsionowski Title: Chemist Phone No. (include area code): (414) 405-6785

  
Signature

04/25/2024  
Date Signed (mm/dd/yyyy)

### For DNR Use Only

Check action taken, and record date and your initials. Describe on back side if necessary.

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- EDD format(s):  Diskette  CD (initial submittal and follow-up)  E-mail (follow-up only)  Other: \_\_\_\_\_