

ENVIRONMENTAL SAMPLING CORPORATION

Dedicated to Environmental Monitoring, Science & Technology

March 30, 2020

Mr. David Buser
Wisconsin Department of Natural Resources
2300 N. Dr. Martin Luther King Jr. Drive
Milwaukee, WI 53212

**Re: January 2020 Monitoring Event
Advanced Disposal Services Emerald Park Landfill, LLC - WDNR License No. 03290
Waukesha County, Wisconsin**

Dear Mr. Buser:

On behalf of Advanced Disposal Services Emerald Park Landfill, LLC (ADS-EPL), Environmental Sampling Corporation (ESC) is submitting the environmental monitoring data for the January 2020 monitoring event. A CD containing analytical results is also being submitted to the GEMS Data Submittal Contact at the WDNR Central Office. The quarterly monitoring conducted in January 2020 was performed by ADS-EPL personnel.

The January 2020 quarterly event includes the following monitoring:

- Collect one leachate sample,
- Record 16 leachate headwell elevations,
- Collect 13 surface water point samples,
- Measure 25 staff gauge elevations,
- Collect five gradient control sump samples,
- Collect readings from 66 landfill gas extraction wells,
- Collect readings from 11 landfill gas monitoring probes.

Information regarding the monitoring program conducted at ADS-EPL during the January 2020 event is provided in the following sections.

LEACHATE SAMPLE

One leachate sample was collected in January 2020 by ADS-EPL personnel. A grab sample was collected using a Hach Autosampler. One trip blank prepared by the laboratory accompanied the leachate sample from the collection back to the laboratory. Leachate analytical results from the monitoring conducted during the January 2020 event was consistent with historical data. A discussion of leachate quality and trends can be found in the annual report submitted in April each year.

LEACHATE HEAD WELL ELEVATIONS

Leachate head elevation measurements are collected monthly at 16 leachate head wells by Advanced Disposal Services Emerald Park Landfill personnel. During this reporting period, all of leachate head levels were less than the one-foot requirement. The leachate head elevation data is submitted to the WDNR quarterly under separate cover for upload to the GEMS database.

SURFACE WATER MONITORING

No surface water samples were collected and no staff gauge readings were recorded in January 2020 because the locations were frozen.

GRADIENT CONTROL SYSTEM MONITORING

Samples were collected from four of the five gradient control sumps (GSUMP-6E, GSUMP-6W, GSUMP-7N, and GSUMP-7SC) in January 2020. As required, only field parameters (pH, conductivity, temperature, color, odor and turbidity) were collected. The field readings collected from the gradient control system sample locations in January 2020 were consistent with historic data; there is no indication that the landfill has affected the water quality in the gradient control system.

The transducer reading at GSUMP-7SE indicated that liquid was present during the January 2020 sampling event; however, a sample could not be obtained. The presence of a transducer liquid level reading without the ability to pump from the GSUMP suggests that there may be a transducer calibration issue, a pump malfunction, or dry conditions which indicate a faulty transducer reading. Site personnel will further investigate the issue prior to the next quarterly monitoring event in April 2020.

GAS EXTRACTION WELL AND BLOWER MONITORING

The monitoring of the landfill gas blower for percent methane, oxygen, gas temperature, flow and header pressure was conducted at least twice monthly during the reporting period by ADS-EPL personnel. Percent methane, oxygen, gas temperature, flow, well head pressure, and valve settings were measured in the headspace of 66 gas extraction wells using an Envision gas meter in January 2020 by ADS-EPL personnel. The landfill gas blower and gas extraction well data are submitted to the WDNR quarterly under separate cover for upload to the GEMS database.

GAS PROBE MONITORING

Eleven gas monitoring probes were measured by ADS-EPL personnel in January 2020 for percent methane, oxygen, carbon dioxide, ambient air temperature, barometric pressure, trend in barometric pressure, ground conditions and gas pressure using an Envision gas meter. No methane was detected in any of the gas probes during the reporting period. The gas probe monitoring results are submitted to the WDNR quarterly under separate cover for upload to the GEMS database.

CONCLUSIONS AND RECOMMENDATIONS

Results from the gradient control and leachate samples collected during the January 2020 event were consistent with historic data. There was no methane detected in any of the gas probes and no deviations of the solid waste permit monitoring requirements for the vertical gas extraction wells or the gas blower during the January 2020 monitoring event. Any deviations of the air permit requirements during the reporting period, if applicable, are addressed under separate cover and provided to the WDNR Air Management Division. The environmental monitoring data collected in January 2020 is consistent with historic data.

This letter satisfies the reporting requirements for the January 2020 monitoring event. If you have any questions or comments regarding this submittal, please contact me at 414-427-5033.

Sincerely,



Scott Freimark
Hydrogeologist

Attachments

cc: GEMS Data Submittal Contact: WDNR (w/CD)
Ann Bekta: WDNR (electronic copy)
WDNR Waukesha: File Copy
Tim Curry: ADS-Midwest (electronic copy)
Randy Frank: ADS-Midwest (electronic copy)
Anthony Militello: ADS-Midwest (electronic copy)
Kari Rabideau: ADS-Midwest (electronic copy)
ADS-EPL: File Copy
Mike Hackney: ADS-EPL (electronic copy)
Scott Croft: ADS-EPL (electronic copy)
Tyler Field: Tetra Tech (electronic copy)
Jo Spear: JSA Environmental (electronic copy)
Sherren Clark: SCS Engineers (electronic copy)
ADS-EPL Standing Committee (electronic copy)
Frank Perugini: ESC (electronic copy)