



received
12-19-16
email
gm

December 16, 2016

Ms. Gina McCann
Michigan Department of Environmental Quality
Air Quality Division
401 Ketchum Street, Suite B
Bay City, Michigan 48708

Re: Response to the December 6, 2016 Violation Notice
City of Midland Landfill

Ms. McCann:

On December 6, 2016 you sent the City of Midland a Violation Notice related to an inspection on November 29, 2016. The key issues noted were delayed submittal of alternative timeline requests, temperature readings appearing to be measurement of ambient instead of landfill gas, and construction integrity of wells in a settling waste mass. Attached to this letter are data for the wells and timeframe in question, with dates of non-compliances marked in black. Specifically you noted eight process violations, all related to EU-ACTIVECOLL, in your letter.

The first four process violations pertain to above-ground gas collection pipes added to the relatively flat, closed waste area of Cells 1-8. These pipes freeze each winter season, and we have previously received alternative timeline approval for "seasonal operation." June 5, 2014 we received approval through June 30, 2015. We did not submit a new alternative timeline request for winter of 2016, but operated the area as though we had received approval as in the prior year. There is confusion whether we discussed not needing to submit alternative timeline request, due to these being redundant collection pipes and not part of the original design. Since we have no documented exemption, we should have submitted an alternative timeline request.

- Item #1 addresses MLVDW wells -05, -06, -07, -10, and -11. Worth noting is that VDW-11 had issues, but never reached 15 consecutive days out of compliance.
- Item #2 for MLVDW-11 appears to be a restatement of part of Item #1.
- Item #3 is for MLVW-11.
- Item #4 is for MLVW-14. While it had an instance of greater than 15 days out of compliance, it was a shorter duration for both positive pressure and oxygen issues than noted. The well was very sensitive to adjustments, leading to alternation between high oxygen and positive pressure (not simultaneous).

Other issues:

- Item #5 addresses instances of gas well measurement of temperature appearing to be ambient instead of temperature of gas. As we discussed at the time of audit, we measure gas flow from a

thermometer installed in each gas well, above grade. If gas flow is low, its warmth does not overtake the impact of cold ambient air in the surrounding pipe. Separately, I have addressed with our gas field technicians the importance of documenting accurate temperature. There were instances, as you noted, where no temperature was recorded or it was entered incorrectly.

- Item #6 references MLGW-20A and MLGW-013.
 - MLGW-20A had an issue beginning in late December of 2015. I emailed you on January 5, 2016, within the 15 day window, to alert you of our issue with the well (copy attached). We included in our semi-annual reporting that the well had been out of compliance, but was resolved well within 120 days. We actively chased hoses, air lines, pump, Fernco fitting, threaded fittings, and even dug down to a recent electrofuse weld (connection buried below 8' of soil/waste to raise the well) until we finally found a hidden crack in the well cap. The crack allowed air/oxygen to enter the pipeline if we applied vacuum.
 - MLGW-013 was alternating between positive pressure and high oxygen, very sensitive to minor adjustments to the valve. Eventually identified a faulty dewatering pump cycle counter. It erroneously shown the pump working while actually out of service. The water in the well prevented proper gas flow, resulting in the sensitivity to valve adjustments. An alternative timeline should have been requested.
- Item #7 references MLGW wells -019, -010, and -012 collapsing below grade, apparently violating a construction integrity rule. These three wells received approval for alternative timelines June 5, 2014, about 30 months ago. We installed new wells near these before having compliance issues. The wells were still functional but the presumed collapse prevented us from servicing the well pumps. MLGW-012 was taken offline, with a 12/16/2015 MDEQ approval to abandon. MLGW-019 (and -19A) were taken offline as a precaution for a subsurface smoldering waste issue relatively close to the well. The smolder never reached any gas collection pipes. An alternative timeline for MLGW-19 and -19A should have been requested.
- Item #8 appears to be a summary restatement of Items #1-7.

All of the wells have been compliant for months. With the very cold weather we now face, I expect the above-ground pipes mentioned in Items #1-4 to again freeze. We will submit alternative timeline requests as appropriate for these wells going forward.

The City of Midland is working with CTI and Associates to ensure timely data review and alternative timeline submittals. If you have any questions concerning the enclosed information, please feel free to contact me at (989) 837-6989.

Sincerely,



Scott O'Laughlin
City of Midland Landfill Superintendent

Cc: Beth Benoit, CTI and Associates; Joseph Sova, City of Midland Utilities Director