



39395 W. Twelve Mile Road, Suite 103, Farmington Hills, MI 48331
T 877.633.5520 F 248.994.5456 W www.cornerstoneeg.com

January 24, 2018

Mr. Jonathan Lamb
MDEQ - Detroit Field Office
Cadillac Place,
3058 West Grand Boulevard
Suite 2-300
Detroit, MI 48202-6058

Re: Response to Notice of Violation Letter dated January 3, 2018
Riverview Land Preserve
MI-ROP-M4469-2015a
Project Number 170474.006

On behalf of the City of Riverview and Riverview Land Preserve (RLP), Cornerstone Environmental Group, LLC (Cornerstone) is submitting this response to the Notice of Violation letter issued by the Michigan Department of Environmental Quality (MDEQ) dated January 3, 2018 and received by email on January 4, 2018 by the RLP. The letter indicates Mr. Jonathan Lamb of the MDEQ Air Quality Division (AQD) conducted an odor complaint investigation on December 20, 2017 and December 31, 2017. The Inspector reported confirmation of odors on these two days at an intensity of 3 on the 1 to 4 scale, in the areas where the complaints had been received. As a result, the AQD concluded that the RLP was in violation of Michigan Rule R336.1901(b) and Section 2, General Condition 12(b) of ROP No. MI-ROP-M4469-2015a.

In response to onsite observations prior to any complaints, the RLP had already commenced an action plan to prevent future odor issues as discussed in the following paragraphs.

For instance, on December 19, prior to receiving the odor complaint report from Mr. Lamb, on-site personnel had noted an odor condition present within the property and near the active area. The RLP directed the wellfield operator ("RGP" or Riverview Gas Producers, a subsidiary of DTE Energy) to locate the source of the condition and complete corrective

actions. That night, the MDEQ and Wayne County received complaints from the neighborhood to the south.

Land Preserve Director Robert Bobeck received notice of the complaints on December 20. Immediately, RGP, the wellfield operator, was directed to increase the vacuum applied to the wellfield from the typical operating pressure of -40 inches water column (inches) to -50 inches as an immediate response. This action was completed by turning up the blowers on the 4,000 cfm flare as well as increasing vacuum from the turbines at the gas plant.

During this time period, the wellfield operator continued its investigation and found a defective well and promptly installed a new lateral line to correct the defect.

In response to the odor complaints of December 20, the City directed Cornerstone to accelerate planning for the 2018 wellfield expansion (originally planned to occur in late spring 2018), and began scheduling drilling of additional wells and installation of vacuum laterals for January and February. A routine review of the wellfield data revealed several wells in the active area with low vacuum or less than ideal gas quality impacting extraction capacity. These wells were included in the wellfield expansion plan being developed by the City and Cornerstone.

On January 4, with receipt of the NOV letter, RLP was made aware of further complaints received on December 31, 2017. RLP immediately mobilized their own wellfield repair crew supplemented with field staff from Cornerstone and ordered materials to install a new 12-inch diameter header to provide better vacuum to the upper active area of the landfill. The new header is connected to the new 12-inch header installed around Cell 7 Phase 2 (in November 2017), and goes west over the top of the landfill (shown on the construction plans, attached). New lateral lines were installed from the new header to gas extraction wells including but not limited to GW-1110, 1111R, 1120, 1121, and vacuum lines are prepared for connection at GW-1011 and 1012. Other repairs may be completed as needed.

Currently, the RLP has scheduled additional well drilling activities, header extensions, and new lateral vacuum lines as the 2018 Phase I GCCS Construction. Please refer to the attached construction plans for specifics concerning this proactive approach. The plan currently proposes drilling 25 new or replacement gas extraction wells and connecting the new wells to the appropriate vacuum source. The drilling program includes ten (10) new vertical collectors, nine (9) new wells to supplement existing wells, and replacement of six (6) existing wells. At this time, we expect to have materials on site by early February 2018, and the drilling work should take about three (3) weeks to complete. These twenty-five (25) wells are expected to be operational by mid-March 2018.

In addition to these immediate response activities, the RLP is planning to proceed with their annual wellfield expansion, referred to as the 2018 Phase 2 GCCS Construction, later in 2018. We anticipate this program to include installation of horizontal collectors and

headers in Cell 7, and supplementing wellfield coverage in Cells 1 through 6. We do not yet have an estimated start date for Phase II.

The RLP will continue to monitor the wellfield on a monthly basis, and tune each well to maximize gas extraction while maintaining appropriate operating parameters. The RLP has been and remains committed to preventing offsite odors. Odor management and prevention has been a topmost priority for the RLP and a number one management priority. The RLP has demonstrated pre-complaint responsiveness to any and all conditions, and continues to improve onsite controls and collection to prevent offsite odors.

At this time, the RLP does not believe the reported odor complaints from December 20, 2017 and December 31, 2017 are on-going concerns and will continue to monitor and make improvements as necessary. Nor does the RLP believe that such complaints actually result in a violation of the Rule cited. R 336.1901 states that "a person shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following: (a) Injurious effects to human health or safety, animal life, plant life of significant economic value, or property. (b) Unreasonable interference with the comfortable enjoyment of life and property."

From the facts stated in the NOV, the RLP does not believe that odors experienced by the Inspector were sufficient to establish "injurious effects to human health or safety, animal life, plant life of significant economic value, or property." Moreover, the "Unreasonable interference with the comfortable enjoyment of life and property" standard requires more than a "temporary and evanescent" detection of an odor recorded by the inspector's limited 1 hour on-site visit on December 19 and 31. This limited detection does not meet the unreasonable interference threshold envisioned by the Rule. The NOV's description of the odor condition states at best, only a de-minimus annoyance, which is not a violation of the Rule or law (see *Adkins v. Thomas Solvent Company*, 440 Mich. 293, 487 NW2d 715 (1992)). The City and the RLP, therefore, request the NOV be withdrawn.

As the proactive measures articulated herein demonstrate, the RLP's commitment is to operate in such a manner as to preclude off-site gas emission, whether or not they constitute a violation of the Rules or Permit. Moreover, as part of the continued routine monitoring program to identify areas of potential odor sources, the RLP will perform the first quarter 2018 surface emissions monitoring (SEM) during March 2018.

We trust that the information provided represents a sufficient status report. RLP is actively taking the necessary measures to address the concerns of offsite emissions and demonstrate RLP's commitment to controlling landfill gas and minimizing its offsite impacts. If you require further information please contact the undersigned below at 630.633.5520.

Mr. Jonathan Lamb
January 24, 2018
Page 4



Sincerely,

Cornerstone Environmental Group, LLC

A handwritten signature in blue ink that reads 'Geed Salam'.

Geed Salam, P.E.
Project Manager

A handwritten signature in blue ink that reads 'Jennifer Bowyer'.

Jennifer Bowyer, P.E.
Project Manager

Enclosure: Proposed 2018 Phase I GCCS Construction plan set

cc: Robert Bobeck, Karley Weber - Riverview Land Preserve
Douglas Drysdale - City of Riverview (Electronically)
Randall Pentiuik - City of Riverview Counsel (Electronically)
Mr. Greg Morrow - MDEQ (Electronically)
Mr. Patrick Cullen - WCDPS (Electronically)