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August 3, 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 July 16, 2018  
Riverview Land Preserve  
MI-ROP-M4469-2015a  
Project Number 180539.001

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 (NOV) letter issued by the Michigan Department of Environmental Quality (MDEQ) dated July 16, 2018 and received July 19, 2018 by the RLP. The letter indicates that Mr. Lamb, of the MDEQ Air Quality Division (AQD), conducted two odor complaint investigations on July 6, 2018, at 3:20 p.m. and at 9:45 p.m. In the report of the investigation, Mr. Lamb confirmed the presence of odors at an intensity of 3 to 4 (on a scale of 4), 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 which states *“The permittee 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 or significant economic value, or property; b) Unreasonable interference with the comfortable enjoyment of life and property.”*

The NOV describes the odor during the 3:20 p.m. investigation as “persistent garbage” at level 3 to 4. The odor detected in the later investigation at 9:45 p.m. is described as “landfill gas/hydrogen sulfide” at level 3. It is our understanding these findings were discussed with Mr. Bobeck, the Landfill Director, at the time of the investigation.

It is believed that the daytime odors were the result of “hot trash” being delivered that day in enclosed containers, during a period of high ambient temperatures. The subsequent handling and compaction of the trash resulted in the garbage odors, but it was covered with daily cover, and sprayed with deodorizer as quickly as possible, and was completely covered before the landfill closed for the night.

The next day, after being notified of the landfill gas odor complaint at night, additional cover soil was taken to the active areas and placed above the daily cover placed the previous day. Immediate additional directive was given to the landfill operators, to continue to supplement the approved alternate daily cover (ADC) consisting of crushed demolition material and wood chips, with additional soil to exceed the cover requirements.

The RLP has an odor prevention program in place to try to mitigate highly odorous loads from being a nuisance. As these “hot loads” are received, the operators are required to handle and cover the odorous material as quickly as possible. Additionally, deodorizer spray is applied to the surface of the waste and to the daily cover materials. All trash is covered with a minimum of 6 inches of daily cover (crushed demolition debris, soil and wood chips) before the site is closed for the night.

The current construction project at the RLP includes two (2) waterless vaporizer systems which will be used to neutralize odors as well. We anticipate one of the systems, on the north side of Cell 7, to be in place relatively quickly (this fall). The second system requires mounting on the proposed fencing so it will not be installed until later in the construction project, but should be in before the end of the year. These systems will be implemented in wind and weather conditions which could carry nuisance odors off site. The systems will be placed strategically to disperse odor neutralizer into the air and across the active area, as well as along the perimeter of the disposal area.

Additional landfill gas collection capacity is also being installed starting in mid-August, which will include an upgrade of a condensate sump, additional gas extraction wells, and additional headers for gas collection. These measures will increase the available vacuum on the hill and will improve landfill gas collection. This additional vacuum and consistent application of vacuum should minimize odors which can occur in the evenings when the barometric pressure changes.

The RLP is committed to proactively identifying potential odor sources and responding quickly to unexpected odor events. In the past year alone, the RLP has contracted three (3) GCCS construction projects to expand the gas wellfield. The routine monitoring program is also utilized as a tool to help identify areas of potential odor sources. The third quarter surface emissions monitoring (SEM) event is scheduled for August 2018 in accordance with

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regulations set forth in the New Source Performance Standard (NSPS), 40 CFR 60.755 (c) and (d).

We trust that the information provided represents a sufficient status report. RLP is actively taking the necessary measures to address the concerns of offsite odors 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.

Sincerely,

Cornerstone Environmental Group, LLC

Geed Salam, P.E.  
Project Manager

Jennifer Bowyer, P.E.  
Project Manager

Enclosure:

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