

RECEIVED DEC 2 1 2021 Air Quality Division Detroit Office

December 17, 2021

Wayne County Department of Public Services Environmental Services Division (ESD) 3600 Commerce Court Wayne, Michigan 48184

AND

Michigan Department of Environment, Great Lakes and Energy (EGLE) Air Quality Division – Detroit District 3058 West Grand Blvd., Suite 2-300 Detroit, MI 48202

Re: Notice of Violation Response Notification Riverview Land Preserve Facility Title V Permit No.: MI-ROP-M4469-2015a (Section 2)

On behalf of the City of Riverview, Cornerstone Environmental Group, LLC (a wholly owned subsidiary of Tetra Tech, Inc., hereafter referred to as Tetra Tech), respectfully submits this response to two Notice of Violations (NOV) issued by the ESD and EGLE on December 9, 2021 for Riverview Land Preserve (RLP). Both NOVs pertained to one incidence occurring on December 4, 2021, between approximately 6:55 p.m. and 8:30 p.m., during which ESD and EGLE reported alleged off-site odors in the vicinity of RLP.

Pursuant to Section 301.3 of the Wayne County Ordinance and NOV provided by ESD, RLP is required to submit an explanation of the violation and compliance plan within ten (10) days of the receipt of the written notice of violation. The ESD NOV states, "the facility was determined to be non-compliant by ESD staff for level 3 gas odors detected at and around complainants' homes that were causing unreasonable interference with the comfortable enjoyment of life and property."

The violation references Section 180.3 and 210.1 of the Wayne County Ordinance:

Ordinance Section 180.3 which states "The owner/operator of a sanitary landfill shall assure that the decomposition gases which are generated within the Sanitary Landfill do not cause a hazard or nuisance to health, safety, and welfare of the public."

Ordinance Section 210.1 which states in part "All solid waste disposal areas shall be designed, constructed and operated so that fugitive dust, noxious odors, noise and blowing debris are controlled and do not cause off-site problems or nuisances."

Pursuant to the NOV issued by EGLE, RLP is required to initiate corrective actions and submit written response to the agency by December 30, 2021. The EGLE NOV states, "AQD staff detected moderate to strong, persistent landfill gas odors in residential areas downwind of Riverview Land Preserve which were determined to be attributable to the facility's operations."

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The violation references general condition R 336.1901(b) of the RLP Title V Permit:

"A person shall not cause or permit the emission of an air contaminant in the quantities that cause injurious effects to human health and property, or the unreasonable interference with the comfortable enjoyment of life and property."

Specifics regarding the origin or nature of the alleged off-site odors were not provided in either NOV. The ESD and EGLE staff contacted facility personnel after concluding their investigation on December 4, and informed RLP the complaints originated in the Forest neighborhood, near Coachwood Road and approximately 0.75 miles east of the Landfill. Unfortunately, the timing of the odor complaints occurred outside of normal business hours when no facility personnel were on-site to assess the odor situation in real time and perform corrective action to mitigate the issues. Under normal operating hours the facility makes regular odor investigations to prevent such gas migration from occurring. RLP personnel were not notified of the odors and NOV issuance until after the conclusion of ESD and EGLE's investigation, and thus RLP staff were not afforded the opportunity to investigate and remediate in a timely manner.

The RLP is subject to the ROP and federal conditions which limit the landfill surface emissions to 500 parts per million (ppm) above background concentrations at the surface of the landfill. The facility had been in the process of conducting rechecks for the 4th Quarter Surface Emissions Monitoring (SEM) event at the time of the NOV issuance. The RLP was aware of four exceedances found from the initial SEM event and was actively working to address them. These exceedances could have contributed to the detectable odors noted by ESD and EGLE. One exceedance, located at the Manhole 4 penetration on the Northwest corner of Cell 2, failed the recheck events of the SEM re-monitoring protocol thus triggering the gas collection and control system (GCCS) expansion requirement of the ROP. All other exceedances were resolved in accordance with the ROP by additional soil coverage and tuning of adjacent gas wells.

Since the NOV did not provide specifics about the origin of the odors, RLP immediately began conducting its own investigation into the causes of the complaints. It was assumed the SEM exceedances could have contributed to the odors noted off-site. In addition, the facility checked several areas located outside the waste boundary, and thus not covered by the SEM event, to ensure no odors were being emitted from areas not explicitly captured by the SEM. The results of the investigation and probable causes of off-site odors are as follows:

- Manhole 4 penetration SEM exceedance which was not resolved by initial corrective action
- Need for additional gas collection along the east slope (Cell 7, Phases 1-3) of RLP near the active working face
- Need for a vacuum source applied to a manhole located outside the waste boundary at the maintenance shed adjacent to the LFGTE Plant.

REMEDIAL ACTION:

RLP employs several methods of odor control above the regulatory requirements for daily cover and landfill gas collection. The RLP uses alternate daily cover materials, including foam, tire chips, wood chips, and approved c-soil products daily. These materials are applied starting at mid-day to cover morning waste intake. At the end of each day, the remaining area uncovered by soil or chips is sprayed with the Rusmar foam. The foam is reviewed weekly for performance, and the formula is adjusted periodically to improve performance.

The RLP also operates deodorizing systems which use chemical application to reduce odors. These systems are located at the top plateau (misting system), along the fence posts (granules in tubes), around the perimeter at the base of Cell 7 (vapor system) and a portable system for use where needed.

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The RLP also recognizes the limitations of such systems and odor control methods when gas generated by waste decomposition is not being adequately captured by the GCCS. As such, the facility has acted in good faith by investing in the GCCS expansion as a corrective action to resolve the failed SEM exceedance and in response to the NOVs received. By December 8, 2021, within four days of receiving notice from ESD and EGLE, RLP had installed a 350', east-west running horizontal collector on the Southwest corner of Cell 7 near the active working face. RLP also installed vacuum laterals to Manhole 4 and the manhole located behind the maintenance shed. These will serve to capture any generated gas accumulating in the manholes before they migrate off-site. One additional 500' horizontal collector is being installed the week of December 19 in another section of Cell 7 to further aid in gas collection. Since this work has been done, and to the best of RLP's knowledge, no further odor complaints have been noted by facility personnel or from the nearby community.

RLP will continue taking active measures to control odors on site so the facility is not a discomfort to residents. The City's desire remains to work collaboratively with ESD and EGLE, as demonstrated by past efforts to be proactive in addressing complaints, and respectively requests that we be notified in real time when complaints come in rather than after the fact when facility personnel are unable to observe the transitory evidence or given the opportunity to resolve the issues in a timely manner. RLP previously proposed to host and set up a website where residents can enter their address and complaint, and the website would auto-generate a time-stamped tracking number and email (or text) all the regulatory personnel as well as the site operator(s) and manager(s) in real time. The RLP would then use this data from the complaints to determine if there are commonalities and seek ways to eliminate events causing or contributing to odor complaints. RLP has not received comment from ESD or EGLE regarding this proposal at the time of this notification.

We trust that this response is sufficient to address the concerns raised by the issuance of the NOVs and will be accepted by ESD and EGLE.

Sincerely,

CORNERSTONE ENVIRONMENTAL GROUP, LLC – A TETRA TECH COMPANY

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Enclosure:

cc: Jeffrey Dobek, Erika Herrera, Kevin Sisk – Riverview Land Preserve Randall Pentiuk, Douglas Drysdale, Andrew Swift – City of Riverview Greg Morrow – EGLE - MMD Jonathan Lamb, Jenine Camilleri – EGLE – AQD Patrick Cullen, Elmeka Steele – Wayne County DPS James Jernigan – Wayne County Corporation Counsel