STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
SOUTHEAST MICHIGAN DISTRICT OFFICE

GRETCHEN WHITMER
GOVERNOR

LIESL EICHLER CLARK
DIRECTOR

March 25, 2019

Mr. Robb Moore
Environmental Manager
Oakland Heights Development, Inc.
2350 Brown Road
Auburn Hills, MI 48326

SRN: N6008, Oakland County

Dear Mr. Moore:

SECOND VIOLATION NOTICE

On January 29, 2019, the Department of Environmental Quality (DEQ), Air Quality Division (AQD), received an email notification indicating the gas collection system was shut down at Oakland Heights Development (OHD) Inc., located at 2350 Brown Road, Auburn Hills, Michigan, 48326. The proper operation of the gas collection and control system (GCCS) is required as outlined in the facility's Renewable Operating Permit (ROP) number MI-ROP-N6008-2015a, Permit to Install (PTI) 117-16, and the Standards of Performance for Municipal Solid Waste Landfills codified under 40 CFR 60, Subpart WWW.

On February 11, 2019, the AQD sent OHD a Violation Notice citing violations discovered as a result of the landfill's gas collection system being shut down after the facility's control system, the flare, became inoperable due to low ambient outdoor temperatures. The shutdown of the gas collection system due to the flare being inoperable lasted for nearly three (3) full days between January 28-30, 2019. The AQD requested the facility's written response by March 4, 2019.

On March 4, 2019, the AQD received a response via email from OHD for the Violation Notice. The AQD has reviewed the response and determined that the response is not adequate regarding resolving the violations. OHD indicated in the response that this event was a malfunction and did not offer any solutions to prevent this from occurring again. The flare being inoperable due to low ambient outdoor temperatures between January 28-30, 2019, subjects the facility to the compliance provisions of 40 CFR 60.755(e) as outlined in the facility's PTI 117-16, Special Condition IX.1;

> "The duration of start-up, shutdown, or malfunction for the open flare shall not exceed one (1) hour."

Furthermore, the flare being inoperable due to low ambient outdoor temperatures is not an acceptable malfunction event. The DEQ-AQD Air Pollution Control Rules; Part 1 General Provisions; Rule 336.1101; defines malfunction as;

> "Any sudden, infrequent and not reasonably preventable failure of a source, process, process equipment, or air pollution control equipment to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions."

The email notification indicated the flare froze and became inoperable at approximately 1:30 a.m. on January 28, 2019, and hence shut down the gas collection system. At the time the flare became inoperable, historical weather records indicate the ambient outdoor air temperature in the city of Auburn Hills was six (6) degrees Fahrenheit with cloudy skies. OHD has previously discussed possible cold weather measures with the department during past GCCS occurrences that would prevent this exact type of event from occurring.

The DEQ-AQD Air Pollution Control Rules; Part 9 Emission Limitation and Prohibitions-Miscellaneous; Rule 336.1910; Air-cleaning devices states;

> "An air-cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with these rules and existing law."

Maintaining the flare to withstand low ambient outdoor temperatures is a reasonable preventable occurrence.

The facility's ROP process descriptions EULANDFILL Special Condition IV.2(a)(b), EUALGCS Special Condition IV.2, and EUFLARE Special Condition III.9 all reference 40 CFR 60.752(b)(2)(iii) which indicates the collected gas shall be routed to an open flare, control system, or a treatment system for subsequent sale. The gas was not collected at all.

OHD indicated in the response that that no emission exceedances occurred because the GCCS was closed within one (1) hour. The AQD cannot verify this information. Shutting down the gas collection system does not stop landfill gas from being generated within the waste. Given that surface monitoring scans were not performed during the shutdown, OHD cannot state that uncontrolled gas emissions into the atmosphere through active cracks and openings of the landfill cover did not occur.

In addition, process description EUALGCS Special Condition IV.1(c) references 40 CFR 60.752(b)(2)(ii)(A)(3) which indicates the active collection system shall collect gas at a sufficient extraction rate. There was no gas extraction occurring when the gas collection system was shut down due to the flare being inoperable. Recent department inspections in 2016 and 2017 indicate that approximately 3,300 ft^3/min of landfill gas was being collected within the wellfield. This represents a shortage of 3,300 ft^3/min of landfill gas during GCCS shutdown events.

New Source Performance Standards (NSPS) do not require redundancy for gas collection and control systems, however, the NSPS does not recognize gas collection

systems being shut down due to failing to maintain control devices to withstand low ambient outdoor temperatures.

In addition, the AQD does not agree with OHD's assertion that the flare serves only as a back-up control device. The AQD maintains the flare is the primary control device at OHD. The AQD believes the gas pipeline on the property site managed by Waste Management Renewable Energy (WMRE) serves as the back-up control device, which is used to send landfill gas to serve the engines at a nearby General Motors facility.

Until recently, General Motors in-conjunction with WMRE, opted to stop receiving landfill gas from OHD due to the high Hydrogen Sulfide (H_2S) concentration within the landfill the last two years. The pipeline was shut down October 26, 2018, through February 20, 2019, due to the construction of a sulfur removal treatment system by WMRE on the pipeline.

Furthermore, the pipeline is connected in-conjunction to another pipeline nearby at the WMRE owned Eagle Valley Recycle and Disposal Landfill Facility. During the construction of the sulfur removal system by WMRE at the OHD site, General Motors was only receiving landfill gas from Eagle Valley Recycle and Disposal Landfill Facility.

In addition, the General Motors facility primarily only accepts landfill gas when needed during weekday production hours of 6 a.m. through 4 p.m. Past and current records indicate that OHD sends a landfill gas peak flowrate of approximately 1,700 ft^3/min to the General Motors facility during work hours. In other words, OHD can only send landfill gas to the General Motors facility if they're willing to accept it.

Based on the most recent department inspection at OHD and the facility's recent MAERS submittals, landfill gas flowrates to the flare were approximately 3,000 ft^3/min. The last department inspection in 2017 indicated a flowrate of 2,860 ft^3/min to the flare and only 500 ft^3/min to the General Motors facility. Therefore, the assertion made by OHD that the pipeline serves as the facility's "primary control device" is simply not true.

OHD used to have two (2) enclosed flares on site, one (1) primary and one (1) back-up. These flares had total design flowrate of 4,800 ft^3/min, however, OHD chose to dismantle both of these flares in 2015 and replace them with the current one (1) open flare which has a design flowrate of 5,100 ft^3/min.

That decision, combined with the General Motors pipeline being the "true" back-up control device, only further emphasizes the need for OHD to maintain this current open flare to withstand low ambient outdoor temperatures, or install redundancy equipment within the landfill in order to avoid a GCCS shutdown from happening again during future winter seasons.

The DEQ-AQD is requesting OHD take the proactive steps necessary to ensure safe air pollution control practices and to prevent the negative impact of uncontrolled air pollution emissions to the community.

Please be advised that failure to respond in writing and identifying actions Oakland Heights Development Inc. will take or has taken to resolve the cited violations may result in escalated enforcement action by the AQD. Please provide the information requested in our first violation letter by April 8, 2019, which corresponds to 14 days from the date of this letter.

Please submit the written response to the DEQ, AQD, Southeast Michigan District, at 27700 Donald Court, Warren, Michigan 48092 and submit a copy to Ms. Jenine Camilleri, Enforcement Unit Supervisor at the DEQ, AQD, P.O. Box 30260, Lansing, Michigan 48909-7760.

Be further advised that issuance of this Violation Notice does not preclude or limit the DEQ's ability to initiate any other enforcement action under state or federal law as appropriate.

If you have any questions regarding the violation or the action necessary to bring Oakland Heights Development Inc. into compliance, please contact me at the number listed below.

Sincerely,

Robert Joseph

Robert Joseph
Environmental Engineer
Air Quality Division
586-506-9564

cc: Ms. Mary Ann Dolehanty, DEQ
Dr. Eduardo Olaguer, DEQ
Mr. Christopher Ethridge, DEQ
Ms. Jenine Camilleri, DEQ
Ms. Joyce Zhu, DEQ
Mr. Greg Morrow, DEQ
Mr. Alexander Whitlow, DEQ