

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection

P115060054

FACILITY: Daisy Hill, Inc.		SRN / ID: P1150
LOCATION: 3737 South Isabella Road, MOUNT PLEASANT		DISTRICT: Bay City
CITY: MOUNT PLEASANT		COUNTY: ISABELLA
CONTACT: Jane Clark , Owner		ACTIVITY DATE: 09/14/2021
STAFF: Nathanael Gentle	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled on-site inspection.		
RESOLVED COMPLAINTS:		

On September 14, 2021, AQD staff conducted a scheduled onsite inspection at Daisy Hill, Inc, SRN P1150. Staff arrived onsite at 2:00 PM and departed at 3:00 PM. The purpose of the inspection was to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451; Michigan Department of Environment Great Lakes and Energy, Air Quality Division (AQD) Administrative Rules; and to evaluate compliance with the facilities Permit to Install (PTI) No. 127-20. EGLE staff were assisted onsite by the owner of Daisy Hill Crematory, Miss. Jane Clark, and facility manager, Mr. Steven Keckeissen. At the time of inspection, the facility was found to be in compliance.

Facility Description and History

Daisy Hill, Inc is a crematory, located at 3737 South Isabella Road Mount Pleasant, MI 48858. The facility provides cremation services for human remains. A single Permit to Install (PTI) is associated with the facility. PTI No. 127-20 was issued to the facility on December 18, 2020. One emission unit is permitted for the facility, EUCREMATORY1. The cremator is a Matthews Power Pak I (IE-43- PPI). The unit is natural gas fired with a maximum charge of 750 lbs and capable of burning 150 lbs/hr. The designated charge type is human remains. Daisy Hill Crematory first began operating in February 2021. The facility is a true minor source for all pollutants.

Evaluation of Emission Units

EUCREMATORY1

During the onsite inspection, the cremator was not in operation; therefore, visual verification of stack opacity was not able to be verified. A particulate matter (PM) emission limit of 0.20/1000 lbs of gas is in place for the unit, Special Condition (S.C.) I. 1. Performance testing to demonstrate compliance with this condition is not required unless requested by the Department, General Condition (G.C.) 13. The cremator is equipped with an opacity sensor which monitors the opacity exiting the stack. The sensor is set at the manufacturer setting and an alarm will sound if excess opacity is detected. In addition to the opacity sensor, the facility has a live camera feed installed at the exit point of the unit's stack. The camera provides live feed to a screen in the employee work area, allowing employees to visually monitor opacity exiting the units stack regularly. In the event excess opacity were to be detected, staff report they would first visually verify excess opacity. Staff would then contact instance support provided by the cremator manufacturer and correct the matter.

The fuel source for EUCREMATORY1 is natural gas, S.C. II. 3. Facility personnel report human pathological waste and associated materials are the only materials burned in the unit, S.C. II. 2. The facility maintains and utilizes a scale to verify the weight of charges, S.C. III. 3. Charges are weighed when they first arrive to the facility and again before they are loaded into the cremator. Facility personnel report the largest charge they have cremated to date was just over 400 lbs, well below the permitted limit of 750 lbs, S.C. II. 2. Records detailing the date, time (duration of burn), description, and weight of each charge combusted in the unit are maintained, S.C. VI. 3. Daily records were requested and provided for the months of March 2021, April 2021, and May 2021. During the reviewed period, the largest charge combusted weighed 409 lbs, well below the permitted limit of 750 lbs, S.C. II. 2. In addition to the record requirements of PTI No. 127-20, information including gender, container types, case numbers and names are maintained for each individual cremated in the unit.

EUCREMATORY1 is equipped with a device to continuously monitor and record the temperature in the secondary combustion chamber of the unit, S.C. IV. 2. Records of secondary combustion chamber temperature for the months of March 2021, April 2021, and May 2021 were requested and provided. Appropriate records appear to be in place. While the cremator is operating, the temperature is continually recorded on a paper disc. Each disc has a 24-hour time scale. During the record period reviewed, discs were being used for multiple days. Each new burn is labeled on the discs with identifying information. Using this method, the duration and temperature of each burn are recorded. During the onsite portion of the inspection, facility personnel reported they had since switched procedures to changing discs every 24 hours. By doing this, the time markers on the disc will match the time in which the charge is in the unit. To ensure the required minimum temperature of 1600°F in the secondary combustion chamber is maintained, the unit is preprogrammed to a manufacturer set minimum temperature between 1600°F and 1650°F, S.C. III. 1. The unit is allowed heat up prior to a charge being loaded. Staff report this typically takes around 15 to 20 minutes for the first load of the day. A notification will sound once the unit is heated up and a charge can be loaded.

During the reviewed records period, while a charge was being combusted, temperatures of the secondary combustion chamber remained above the minimum temperature requirement of 1600°F, except for a few isolated instances. In the reviewed records, there were two charge combustions where secondary combustion chamber temperatures dropped below the minimum required temperature requirement of 1600°F. The first instance occurred during the combustion of charge number 00039 on 4/8/2021. During the combustion of the charge, temperature records indicate the temperature of the secondary combustion chamber dropped briefly to approximately 1525°F. Additionally, during the combustion of charge 00082 on 5/19/2021, temperature records indicate the temperature of the secondary internal combustion chamber dropped briefly again to approximately 1525°F. Instances in which the temperature dropped were brief and infrequent. During the time period of records reviewed, 79 charges were combusted in the unit. Of those 79 charges, 2 charges had instances where the temperature of the secondary combustion chamber dropped to approximately 1525°F. The instances were brought to the attention of facility personnel during the onsite portion of the inspection. Personnel said they would review their records and follow up with the manufacturer of the unit. At this time a Violation Notice (VN) is not being sent. Facility personnel were made aware of the observations and informed that if the secondary combustion chamber temperature dips below the minimum temperature requirement were to become more frequent, it could lead to

compliance issues in the future. In addition to the burns on temperature discs being labeled with identifying information, annotations are included for periods in which maintenance or malfunctions occurred. Examples of such instances that occurred during the reviewed period of records include auto loader maintenance and heat pen malfunction.

A daily checklist and operating instructions are posted on the wall next to the cremator and are followed by the certified individuals that operate the unit. Grates within the cremator are cleaned after every charge. Staff use a combination of brooms and a high temperature vacuum to ensure as much of the cremated remains are collected as possible.

Routine service and maintenance are conducted on the unit, S.C. III. 2. Service and maintenance are conducted by either the certified operators on staff, or the manufacturer, depending on the procedures required. Records of service and maintenance are maintained. Service and maintenance records were provided and reviewed for the period of January 2021 to July 2021. Depending on the maintenance, activities are conducted on weekly, monthly, or quarterly intervals. Records are maintained detailing the date activities were completed, the activities completed and who the activities were completed by. Records of repairs performed by the manufacturer are also maintained. Based on the records reviewed, appropriate service and maintenance appears to be conducted and proper records are maintained, S.C. VI. 3. Daisy Hill Crematory has access to 24/7 support from the cremator manufacturer. Operating variables can be viewed remotely by service personnel. Should malfunctions occurs with the unit, Daisy Hill staff are able to talk with a representative at the company and get assistance anytime.

At the time of inspection, Daisy Hill Crematory only conducts human cremations onsite. Any pets brought in for cremation are sent offsite to a third-party pet crematory. Onsite personnel said there is potential for a pet cremator to be installed at the facility in the future. Additionally, personnel said there is potential for a second human cremator to be installed at the facility. At this time, no construction has been commenced for any additional cremators. AQD staff reminded facility personnel to obtain a PTI prior to any construction.

Summary

AQD District Staff conducted a scheduled onsite inspection of Daisy Hill Crematory, SRN P1150, on September 14, 2021. Located in Isabella County, MI, Daisy Hill offers human cremation services. The facility operates one cremation unit, a Matthews Power Pak I (IE-43- PPI). One PTI is associated with the facility, PTI No. 127-20. The facility is a true minor source for all pollutants. At this time, the facility appears to be in compliance.



NAME

DATE 9/28/2021

SUPERVISOR 