

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: Scheduled Inspection

N137439469

FACILITY: TRI-COUNTY CREMATION SERVICE		SRN / ID: N1374
LOCATION: 1100 E MICHIGAN, YPSILANTI		DISTRICT: Jackson
CITY: YPSILANTI		COUNTY: WASHTENAW
CONTACT:		ACTIVITY DATE: 04/20/2017
STAFF: Mike Kovalchick	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MINOR
SUBJECT: Inspection of crematory that is now under new management. New violations were found and the new management was unaware of their Air Permit or Consent Order.		
RESOLVED COMPLAINTS:		

**Minor Source-****Facility Contacts****Mr. Bill Hudson- General Manager**[tricountycremationservicesllc@gmail.com](mailto:tricountycremationservicesllc@gmail.com)

ph 734-482-2024

Website: <http://www.cremations800.com/>**Purpose**

On April 20, 2017, I conducted an unannounced compliance inspection of Tri-County Cremation Service (Company) located in Ypsilanti, Michigan in Washtenaw County. The purpose of the inspection was to determine the facility's compliance status with the applicable federal and state air pollution regulations, particularly Michigan Act 451, Part 55, Air Pollution Control Act and administrative rules, Permit to Install (PTI) # 609-95A which was issued on April 29, 2011 and Consent Order AQD No. 3-2011 that became effective on March 24, 2011.

**Facility Location**

The facility is located in a commercial area of Ypsilanti. See aerial photo dated October 13, 2016.

**Facility Background**

The Company has 2 incinerators used for cremation of human remains.

The facility last had a full inspection on October 3, 2011 and resulted in a VN being issued on October 25, 2011 for a number of violations mostly related to the temperature of the incinerators. This resulted in violations of the Company's Consent Order as well.

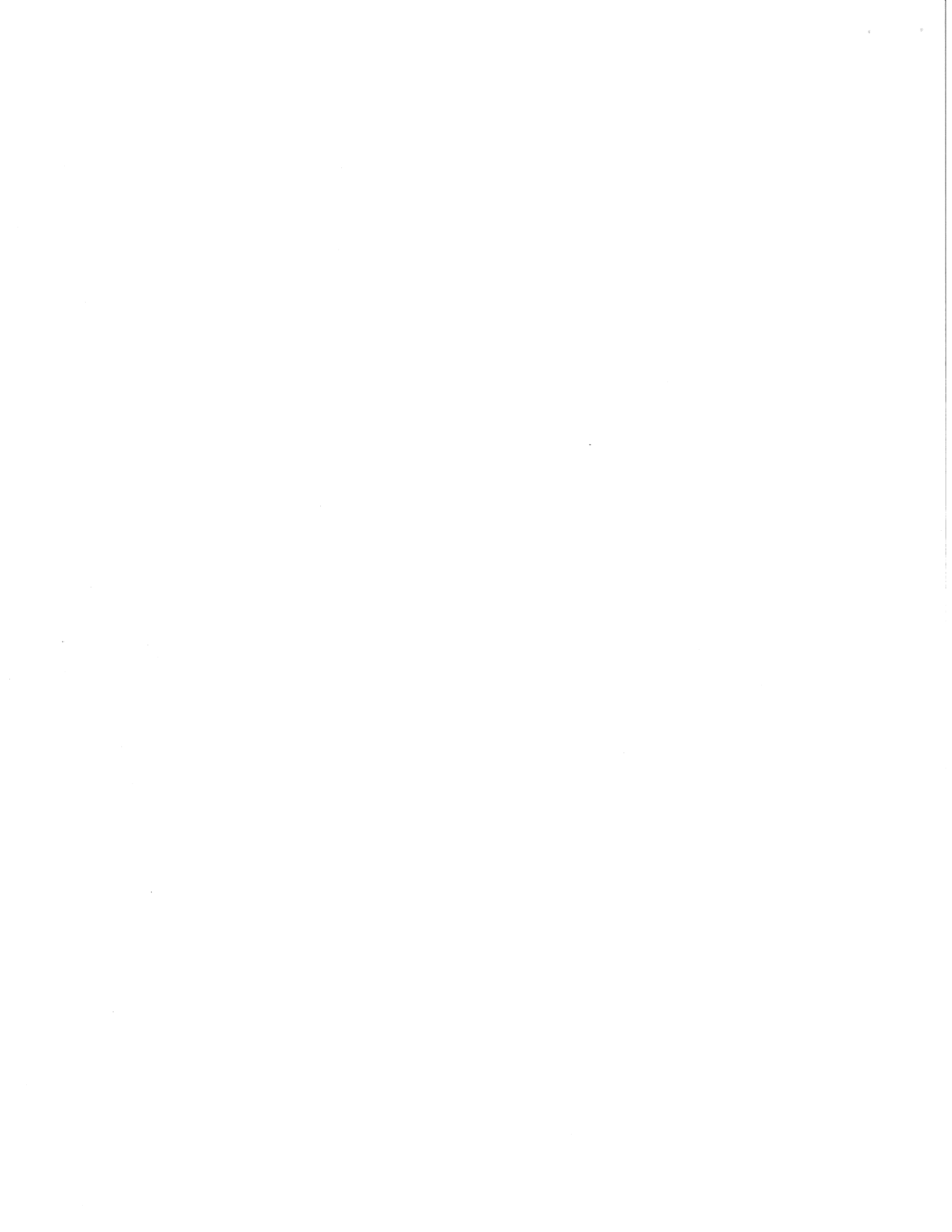
The Consent Order contains a compliance program to resolve violations of conditions of the previous PTI and the Rule 301 for exceeding the visible emissions standard of 20% opacity from both East and West Units over a period of several years. The AQD required the Company to revise permit to accommodate additional restrictions to demonstrate ongoing compliance and resolve violations. In addition a new Permit was required because the Company proposed to replace the West Unit with a new larger Unit as opposed to upgrading/retrofitting the existing Unit. The Company proposed and AQD agreed to the September 30, 2011 deadline to cease operating the existing Unit and have the new Unit installed. The new PTI is an attachment to the Consent Order. The Order requires compliance with the PTI and contains stipulated penalties.

**Regulatory Applicability**

PTI 609-95A covers the entire facility.

**Arrival & Facility Contact**

Visible emissions or odors were not observed upon my approach to the Company's facility. I arrived at



10:10 am, proceeded to the facility office to request access for an inspection, provided my identification and spoke with Bill Hudson (BH)-General Manager of the facility. I informed him of my intent to conduct a facility inspection and to review the various records as necessary.

BH extended his full cooperation and fully addressed my questions.

#### Pre-Inspection Meeting

BH outlined that the facility is operating from 9 to 4:30 pm, 5 days a day, 5 days a week but occasionally on Saturday. There are currently 4 employees. Business remains brisk. The previous owner died 2 years ago. BH was unaware that the facility has an air permit or Consent Order as the previous owner did not pass on this information before he died.

BH indicated that about 200 cremations are taking place per month and 149 had taken place so far in April. The incinerators are warmed up for about 10 to 20 minutes prior to the cremations occur. They can take as little as 45 minutes to as long as most of the day depending on the size of the human remains.

BH indicated that a consulting company Matthews International did an inspection on March 8, 2017 and found numerous problems with both incinerators. They recommended that the interiors of both machines be completely rebuilt. Repair estimate was approximately \$95,000. BH indicated that he probably would have needed work done on May 15, 2017 and they would sign up with the consultant's maintenance plan which includes remotely controlling/operating the incinerators from their office in Florida. BH indicated that they have not been doing required quarterly inspections of the incinerators.

#### Onsite Inspection

BH gave me a tour of the room housing the 2 incinerator units.

Both units were in operation and in the middle of 2 separate cremations of human remains. Outside, no opacity was observed coming from either unit; only heat waves.

The newer unit is called EU-CREMATORY3 "West Unit". It is a Matthews Cremation Division Super Power Pak (IE43-SPPIII) model that has a maximum charge capacity of 750 pounds and a burn rate of 200 pounds/hour. Human remains are first weighed on a scale to make sure the weight is under the 750 pounds PTI weight limit restriction then placed into the incinerator generally inside a wooden casket. Any metal etc. or other unburnable objects are removed. The display console indicated that the temperature of the incinerator was 1619 deg F. with the secondary combustion chamber showing a temperature of 1647 deg F. A paper recorder chart for opacity indicated that opacity was showing 0%.

The older unit is called EU-CREMATORY2 "East Unit". It is a Matthews Cremation Division Power Pak II (IE43-PPII) mode that has a maximum charge capacity of 750 pounds and a burn rate of 150 pounds/hour. There is only a single temperature display and the operator did not know if it was for the main incinerator chamber or the afterburner temperature. The temperature was ranging between 1580 to 1605 deg F. during the inspection. The operator was unaware of the 1600 deg F. permit limit. The paper recorder chart for opacity was not operating properly. The operator indicated that he believes it to be a simple calibration problem but did not know how to calibrate it himself. Otherwise, the outside of the unit looked fine. The inside of both incinerators were not inspected.

Both the operator and BH indicate that they frequently check for smoke both outside looking at the stacks and also using the opacity chart recorders. They both indicated that generally there is no smoke except for very large human remains. They make various air flow/temperature adjustments for these cases to limit smoke generation. Very large human remains also causes problems with temperature control. Occasionally, very high temperatures are generated which damage the inside of the incinerator units and the thermocouple. This last happened approximately 3 months ago which required the replacement of a thermocouple.

#### Recordkeeping/Permit Requirements Review

During the inspection, I indicated to BH that I would require some records to review and to have him email me them by no later than 4/24/17. I requested temperature charts and opacity charts for the first week of March, 2017. I also requested a copy of the latest maintenance inspection that was done by



their consultant.

This is the note I received:

*"Here are the documents you requested. Please let me know if there's anything else I can do for you. Please consider the fact that when Doug Stark passed two years ago we have made every attempt to do what needs to be done to keep the company going so we could pay off his debts. If there are any fines that may be imposed, please let these facts be part of your decision. Also as we discussed, please forward the content agreement on file with the State. Also, when I copied the paperwork you had with you I didn't copy both sides. Please forward a copy of that paperwork also."*

I provided BH with a copy of their PTI and Consent Order.

Attachment (1) is a copy of the temperature/opacity charts for the first week of March. Note that keep a separate chart for each cremation and mark the weight of the cremation on the chart and how long it takes. They did not separate the opacity chart for the older incinerator unit since it not working. The charts show that the temperature does occasionally dip below 1600 degrees during the cremation. The opacity is generally very low.

Attachment (2) is a copy of the Service Report from their consultant.

The following is the summary of the report:

*"I talked to Bill about the condition of both of his units after the PMI. I saw a few things that raised red flags on his PP II while we were there and took pictures that I have attached. He needs to have both machines completely rebuilt, but may be better off with replacing the PP II. There is evidence of damage to the front plate and there are several hot spots on the machine. I did mention VIP care to him, but let him know that it wouldn't be an option until after both machines are rebuilt. The stack on the PP II will also need replacement if we attempt a rebuild on the machine.*

*Bill was very receptive to the information that I was giving him and he was prepared to hear the bad news about both of his units before we arrived. He knows that his machines are both in bad shape and wants to get a fresh start on both of them. I recommended Tech for a day or Tech for days after the rebuilds so that we could get back in there, recalibrate both machines to make sure they are operating as best as they can and also to train their operators on how to properly care for and use their equipment"*

#### Post-Inspection Meeting

I held a brief post-inspection meeting with BH. I indicated that I would be reviewing the records that they submit for compliance. I indicated that several violations of their PTI were already noted and a VN would be forth coming. I also indicated that violations of the PTI would also be considered violations of their Consent Order. I thanked BH for his time and cooperation, and I departed the facility at approximately 11:30 am.

#### Compliance Summary

The Company is out of compliance with their PTI for the following conditions:

For both EU-CREMATORY2 and EU-CREMATORY3

#### III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not combust waste in EU-CREMATORY2/3 unless a minimum temperature of 1600 F. and a minimum retention time of 1.0 seconds in the secondary combustion chamber are maintained. (Temps occasionally drop below 1600 F during the cremations.)
2. The incinerator shall be installed, maintained, and operated in a satisfactory manner to control emissions from EU-CREMATORY2/3. (Per the consultant report, both incinerators are in very poor condition.)

#### IV. DESIGN/EQUIPMENT PARAMETERS.

The Permittee shall no operate EU-CREMATORY2 unless an opacity monitor is installed, maintained and



properly operated. Proper operation includes a maximum alarm set-point of 10% opacity.

**VI. MONITORING/RECORDKEEPING**

The permittee must make inspections, at least quarterly, to check and to service, as necessary, all equipment associated with EU-CREMATORY2/3.

A Violation Notice (VN) will be sent noting the above findings. The Company will be given 21 days to respond.



Image 1(Aerial photo) : Aerial photo.

NAME M. Kovalchuk

DATE 4/24/2017

SUPERVISOR [Signature]