

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

M351155153

<b>FACILITY:</b> MACOMB COUNTY ANIMAL CONTROL		<b>SRN / ID:</b> M3511
<b>LOCATION:</b> 21417 DUNHAM, CLINTON TWP		<b>DISTRICT:</b> Warren
<b>CITY:</b> CLINTON TWP		<b>COUNTY:</b> MACOMB
<b>CONTACT:</b> Chief Randazzo , Chief Animal Control Officer		<b>ACTIVITY DATE:</b> 08/18/2020
<b>STAFF:</b> Robert Elmouchi	<b>COMPLIANCE STATUS:</b> Non Compliance	<b>SOURCE CLASS:</b> MINOR
<b>SUBJECT:</b> Scheduled inspection.		
<b>RESOLVED COMPLAINTS:</b>		

On August 18, 2020, I conducted a targeted virtual inspection of Macomb County Animal Control (**SRN: M3511**), located at 21417 Dunham Road, Clinton Township, Michigan 48036. The purpose of this inspection was to determine the facility's compliance with the requirements of the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the administrative rules; and the conditions of Permit to Install (PTI) No. 533-94.

The Macomb County Animal Control (MCAC) division's services include pet adoptions, lost and found for pets, animal cruelty investigations, dog licensing, animal bite reports, and rescue services for domestic animals and injured or sick wildlife. MCAC has achieved an animal survival rate of approximately 90%, which has allowed the facility to dismantle two of the three permitted cremation units with a corresponding reduction in the emission of air contaminants.

I telephoned Chief Randazzo to schedule a virtual inspection. During our conversation, Chief Randazzo sent a video conference invitation so we could conduct the inspection immediately.

This facility has one active PTI. PTIs No. 52-74i and 11-84i have been voided per the inspection I conducted on August 7, 2019.

**PTI No. 533-94**

The cremation unit operating under PTI No. 533-94 was manufactured by JAR Incinerator Service, Incorporated, located at 18614 Fort Street, Riverview, Michigan. Per the permit to install application received October 27, 1994, the following is a list of the emission unit specifications:

Model: J.A.R. M.C.P. 350 – Multiple Chamber controlled-air unit.

Capacity: 300 lb./hr. per PTI application (350 lb./hr., per manufacturer specifications) Type 4 Waste.

Design:

- Three (3) burners in the primary combustion chamber. Each primary burner is rated at a heat input of 800,000 Btu/hr. but are set to operate at approximately 600,000 Btu/hr. for a total of approximately 2.4 MMBtu/hr.
- One (1) burner in the secondary combustion chamber. The secondary burner is rated at a heat input of 1.2 MMBtu/hr. but is set to operate at approximately 1.0 MMBtu/hr.
- 9" thick hearth floor with water-tight stainless-steel pan inside the regular steel housing.
- Front charging door.
- Rear clean-out door.
- Automatic combustion air modulation for both primary and secondary combustion chambers.
- Thermocouple temperature sensors in both primary and secondary combustion chambers.
- Charge Rate: Not to exceed 300 lbs. per hour per permit application.
- Recordkeeping: Start time of cremation and charge weight per permit application charge rate.

**PTI No. 533-94 Special Conditions**

**15.** Rule 331 - The particulate emission from the incinerator shall not exceed 0.20 pound per 1,000 pounds of exhaust gases, corrected to 7% oxygen.

Compliance with this condition requires an emission test, which is not required by this permit and has not been requested by the AQD. Therefore, compliance with this condition has not been evaluated.

**16.** Visible emissions from the incinerator shall not exceed a 6-minute average of 20% opacity, except as specified in Rule 301(1)(a).

During the previous inspection, the observed opacity appeared to indicate compliance with Rule 301(1)(a). Visible emission readings cannot be conducted via video conferencing. Therefore, I could not evaluate visible emissions.

**17.** Applicant shall not operate the incinerator unless the afterburner is installed and operating properly.

Per the previous inspection I conducted on August 7, 2019, Chief Randazzo had verbally committed to contacting a vendor to service the temperature monitor and repair it if indicated.

During the virtual inspection conducted on August 18, 2020, I observed that the temperature chart recorder was inoperable, and I was informed that it could not be repaired. This chart recorder was an original component designed to continuously record the temperature of the secondary combustion chamber. Failure to maintain the temperature chart recorder appears to be a violation of PTI No 533-94, Special Condition 17, and R 336.1910 because it is a component of the air cleaning device. This non-compliance shall be cited in a violation notice.

**18.** The exhaust gases from the incinerator shall be discharged unobstructed vertically upwards to the ambient air from a stack with a maximum diameter of 18 inches at an exit point not less than 30 feet above ground level.

A visual observation during the inspection appears to indicate that the exhaust stack is in compliance with the permit specified dimensions.

**19.** The disposal of collected ash shall be performed in a manner which minimizes the introduction of air contaminants to the outer air.

The cremains are collected but do not undergo further processing. I observed that the cremains were collected in an uncovered container adjacent to the cremation unit. I observed that the ground adjacent to the container did not appear to be impacted by the collected cremains. The permittee appears to be in compliance with this condition.

**20.** Applicant shall not burn any waste in the incinerator other than the following:

Type 4 -- Animal remains, consisting of carcasses, organs and solid organic wastes from hospitals, laboratories, abattoirs, animal pounds, and similar sources.

The permittee only combusts Type 4 waste, which appears to be in compliance with this permit condition.

**21.** Applicant shall not operate the incinerator unless it is equipped with a manual timer switch, with operating instructions, to insure use of the afterburner whenever the incinerator is operated. If it is determined, by the District Supervisor, that such manual timer switch is not being utilized correctly, an automatic afterburner switch shall be required to be installed before a Permit to Operate may be issued.

The crematorium operation is controlled by a timer that controls the initial ignition of the secondary combustion chamber burner and then, after a preset time, ignites the primary combustion chamber burners. The automatic secondary combustion chamber afterburner timer appears to indicate compliance with this permit condition.

**22.** Proper operation and adequate maintenance of the incinerator to control emissions is required. A list of recommended operating and maintenance procedures is enclosed.

This pathological incinerator is located outside and therefore is exposed to the weather. I observed that an exterior metal panel was bent, which would allow water to penetrate the incinerator's shell. I asked Chief Randazzo to have the sheet metal repaired. On August 28, 2020, I received a photo by email that showed the repair had been completed.

**23.** Rules 1001, 1003 and 1004 - Verification of particulate emission rates from the incinerator by testing, at owner's expense, in accordance with Commission requirements, may be required for operating approval. Verification of emission rates includes the submittal of a complete report of the test results. If a test is required, stack testing procedures and the location of stack testing ports must have prior approval by the District Supervisor, Air Quality Division, and results shall be submitted within 120 days of the written requirement for such verification.

The AQD has not requested verification of particulate emission rates. Therefore, the permittee appears to be in compliance with this permit condition.

#### CONCLUSION

Per this inspection, Macomb County Animal Control (MCAC) appears to be a violation of PTI No 533-94, Special Condition 17, and R 336.1910 because the continuous temperature chart recorder has not been maintained. This non-compliance shall be cited in a violation notice.



**Image 1(REPAIRED FACIA)** : Image from permittee demonstrating repair of triangular exterior panel.

NAME Robert Elmarchi

DATE September 22, 2020 SUPERVISOR Joyce Z