

B0785  
MAVIL

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

B078555381

FACILITY: Quaker Chemical Corp.		SRN / ID: B0785
LOCATION: 14301 BIRWOOD AVENUE, DETROIT		DISTRICT: Detroit
CITY: DETROIT		COUNTY: WAYNE
CONTACT: Gerry Myrand , Plant Manager		ACTIVITY DATE: 09/23/2020
STAFF: C. Nazaret Sandoval	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Self initiated inspection to evaluate facility shut down conditions.		
RESOLVED COMPLAINTS:		

## BACKGROUND INFORMATION

On September 15, 2020, the Air Quality Division (AQD), Detroit District Office received via email a copy of a letter originally sent to the AQD Permit Section. The letter from Quaker Chemical Corporation (Quaker) dated September 3, 2020 and postmarked on September 10, 2020 notified AQD of the termination of operations at the manufacturing plant located at 14301 Birwood Avenue, Detroit, MI 48228. In the letter, Quaker's Director of the North America Operations, Mr. Craig Hladik, requested to void permit to install (PTI) 254-98A, issued by AQD on May 2, 2014 which authorizes the facility operations.

Within the next few days after receiving the cited communication I contacted Mr. John Bozick, the Safety, Health and Environment Coordinator (SHE) at the facility and I scheduled a plant visit. The objective of the inspection was to evaluate the state of the equipment at the plant to determine if voiding the PTI was pertinent.

Quaker commenced operations at the current location in 1969. A wide-range of custom-formulated specialty chemicals were manufactured at the facility at any given time for a variety of industries, including manufacturing fluids and oils for the steel, metal working, and fluid power industries. The range of products included rolling oils, stamping fluids, corrosion prevention cleaners, hydraulic fluids, and cutting and grinding oils. However, during the last ten years the operations at the Detroit facility have been significantly scaled back and some of the manufacturing operations were transferred to the Middletown, Ohio plant. The production of rolling oils and hydraulic fluids has ceased, and a great percentage of the manufactured products in the Detroit facility were directed to supply the automotive industry.

Raw materials were mostly liquids in the form of naphtha or oils, waxes, and grease received by rail and tanker in bulk or 55-gallon drums. A variety of chemical powders were also used in the formulations. The manufacturing operations were conducted in one shift, from 7 am to 3:30 pm, Monday through Friday, with a few exceptions when operators worked overtime when there were special orders or if the formulation and manufacture of a product required longer preparation time.

## INSPECTION NARRATIVE

On September 23, 2020 at 2 PM I arrived at the Quaker facility located at the corner of Birwood Avenue and Intervale Street in Detroit.

I checked in with the guard at the south end of the plant entrance located at 10500 Intervale St. and I filled out the COVID-19 health screening questionnaire visitor form. I met with Mr. John Bozick, Quaker SHE, who was waiting at the Parking Area C.

Mr. Bozick directed me to move my car to the Parking Area A, which is near Birwood Avenue; from there, we walked towards the Tank Farm "A" area to meet Mr. Jerry Myrand, Quaker's Production Manager.

The facility can be divided into five main areas identified in the attached layout:

- Manufacturing Production Area (Main Area and High Temp Area)
- Tanks Farms (Storage tanks for raw material, intermediate and product)
- Shipping and Receiving (Unloading/filling, tankers, totes, drums)
- Wastewater Treatment (W Tanks) and Three-Stage Scrubber System
- Boiler Room (Natural gas-fired indirect heating units).

I started the site inspection at the location of the Tank Farm A and the Wastewater Treatment System. I took pictures of the transfer pumps serving the “W” tanks. I observed that all the pumps were disconnected and with locks. They all had hanging tags reading “Danger - do not remove this tag”, indicating no-electric power supply. In addition, I observed that the tanks in the Tank Farms had labels reading “out of service - empty and clean”.

Thereafter, we walked to the scrubber area and I observed that the sections affected by a fire incident reported to AQD in June 2019, which occurred in the blower section of the system, had been rebuilt. All the damaged sections, which included the elbow leading into the blower unit, the blower unit and exhaust stack were replaced. Mr. Myrand recalled that it took about two months to complete the work. The manufacturing operations, which had been suspended, restarted around the end of August and the plant was active until its shutdown on May 31, 2020.

We continue our walk toward the shipping and receiving area and I observed that the whole building was empty, there were no drums with raw material or storage of chemical products. Then, we entered the area that controls the operation of the scrubber system. I took pictures of the control panels that commands the pumps serving the water flow to the scrubber as well as the air flow to the exhaust fan. All control levers had locks and have been tagged with signs reading “do not operate”. There was no electricity, no water supply and all equipment had been turned off.

I checked the main production area down to the east of the building where they have the mixing tanks “V”. All the mixing tanks were empty. I was told that the period of tank cleanup and material disposal occurred from May 31st to August 31st of 2020.

The far east area of the building had the reactors, but those had been abandoned years ago. In our way back we stopped at the boiler room which was also shutdown. There was no water supply and no natural gas supply to the boiler or to the phase heaters.

The building is currently for sale and there are various potential buyers, depending on the final contract Quaker will be selling it “as is”, with all equipment, tanks, tools, etc. They will not be moving the equipment to other Quaker facilities. For the present time, and until the final sale, Quaker must maintain certain essential building services. It was explained to me that the area has a combined sewer system; therefore, the rainwater flow collected by the parking lot’s catch basins is transferred to a tank system that separates the discharge and sends the water to the wastewater collector that ties into the Detroit collection system. Consequently, they must keep the operation of vital equipment such as the storm water pumps to prevent flooding, as well as the general lights and the HVAC system.

I concluded the inspection at about 2:45 pm.

## **MAERS REPORT**

The 2019 MAERS report was received by AQD on 2/3/2020. The submittal included

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14301 Birwood Avenue, Detroit, MI 48238

Inspection Date: 9/23/2020



**General Plant Layout - Google Aerial Photography**



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Inspection Date: 9/23/2020





# Quaker Chemical Corporation

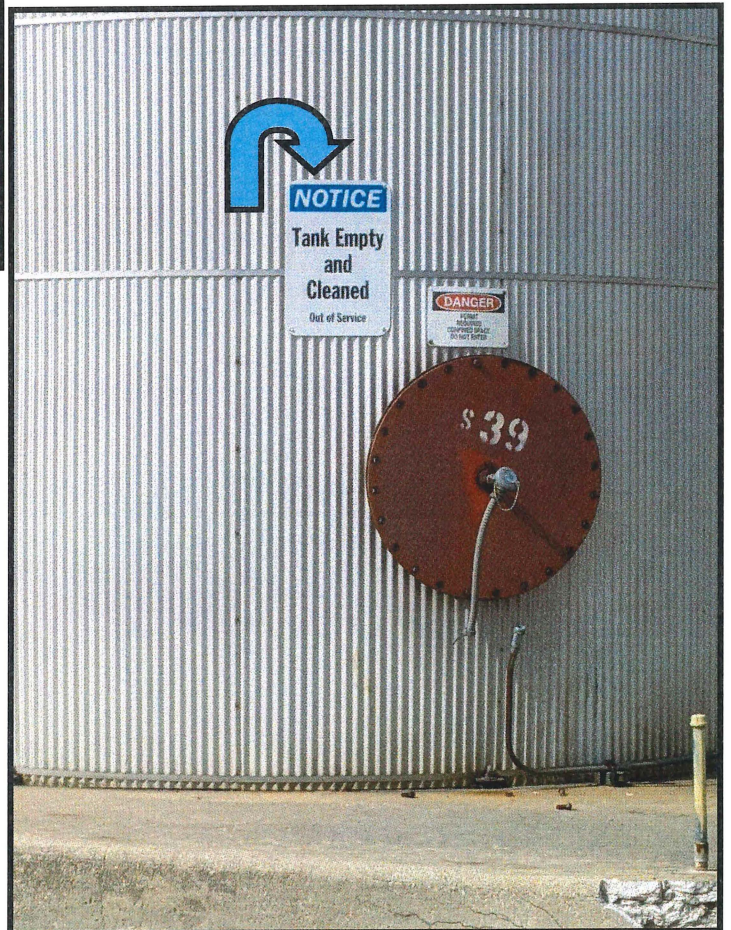
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## Wastewater System Area

Transfer Pump and Wastewater Tank in  
"Tank Farm A"



Tank S39 located in "Tank Farm D"

All tanks had that type of label or similar





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**Shipping and Receiving Area Completely Empty**



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## Scrubber System Operation Controls

Detail - Fan Exhaust System Lever Turned -Off



supporting records for the monthly facility production, 12-month rolling calculations and emissions calculations. The records showed compliance with the required material and emission limits cited for FGFACILITY in PTI 254-98A.

The report was reviewed and passed the audit with no errors. Refer to CA\_B078553420 for audit comments.

## COMPLIANCE DETERMINATION

In this inspection the evaluation of compliance with the special conditions of PTI 252-98A was based on the review of the 2019 records submitted with the MAERS report, which extensively covered information pertaining FGFACILITY, the core of the operations at Quaker. As a result of that evaluation the facility is considered to be in substantial compliance with PTI 252-98A.

In addition, during the site inspection conducted on September 15, 2020 I confirmed that all manufacturing equipment and processes were shut down. There is no plant staff or operators at the site, the only person working at the facility is the guard at the entrance shack. I was informed that the plant has been shut down since May 31, 2020.

AQD permit section will void PTI 254-98A and this report will be transmitted to Quaker's responsible parties. All pictures taken during the site visit are part of the inspection report which will be saved in AQD files for SRN B0785.

NAME

Standal

DATE

10/29/2020

SUPERVISOR

JK

