

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Site Review

N716454348

FACILITY: Quala		SRN / ID: N7164
LOCATION: 50321 E Russell Schmidt, CHESTERFIELD		DISTRICT: Warren
CITY: CHESTERFIELD		COUNTY: MACOMB
CONTACT: Rob Price , Operations Manager		ACTIVITY DATE: 07/07/2020
STAFF: Kerry Kelly	COMPLIANCE STATUS:	SOURCE CLASS: SM OPT OUT
SUBJECT: Process evaluation for PTI application		
RESOLVED COMPLAINTS:		

On July 7, 2020, I (Kerry Kelly) conducted site review of Quala located at 50321 Russell Schmidt Drive, Chesterfield, Michigan. This facility is identified by the Air Quality Division with the State Registration Number (SRN) N7164 . The purpose of the site review was to evaluate the processes at the facility to ensure the information in PTI application number 79-03C is accurate and the proposed conditions in the PTI are adequate and will be practicably enforceable.

Quala cleans industrial totes used for paint storage. The totes range in size from 200 to 600 gallons. The tote cleaning process involves removing all components (valves, impellers, etc) from the tote, draining residual paint from the inside of the tote, rinsing the interior of each tote and the components with water and solvents at various pressures, re-assembling the tote, and cleaning the exterior of the tote by hand. The interior of each tote goes through four rinse stations. The cleaning solution for each rinse station is collected and reused. The majority of containers are cleaned using a semi-continuous container cleaning process line (FG-PROCESSLINE). The remainder of the containers are cleaned using an "offline" container cleaning process (FG-OFFLINE). Valves, impellers, and other components are cleaned in separate wash cabinets (EUIPELLERWASH and EUVALVEWASH).

In the PTI application, Quala indicated the only volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from heel waste are from a portion of the heel waste that isn't collected at the heel waste station and from the vapor headspace of each container. The amount of heel waste that isn't collected is based on a study conducted at the facility when it was owned by MPW Container Management. From this study it was determined that the highest amount of heel waste entering the facility that wasn't collected in the heel waste station was 14%. Quala, in the PTI application, proposed to use work practice standards to comply with best achievable control technology (BACT) rules and indicated that VOC and HAP emissions are released through two roof vents.

I arrived at Quala at approximately 1:00 PM on July 7, 2020, entered the office, and introduced myself to Emily Zink, Customer Service Coordinator. I signed the visitor log book and Ms. Zink took my temperature. Ms. Zink introduced me to Mr. Rob Price, Facility Manager and Ms. Stacey Thom, Operations Manager. I explained the purpose of my visit to Ms. Zink, Mr. Price, and Ms. Thoms. Mr. Price showed me the processes and the stacks/vents and answered questions.

At the heel waste station, the operator uses a squeegee to push the heel to the drain at the bottom of each tote which is collected in an open trough approximately one foot deep, one foot wide, and ten feet long. There is a drain hole at the west end of the trough. A hose with an electric pump is connected to the trough drain hole. I observed that the hose from the trough was directed to a 300 gallon waste collection tote. I saw another hose on the heel waste collection tote which was diverting air and vapors to a second, slightly smaller, tote with

an approximately eight inch diameter opening. I observed vapors emanating from the second tote. According to Mr. Price, the second tote contained water and the vapors from the heel waste tote were directed into the water to mitigate odors from the heel waste collection tote. This configuration would not comply with FGPROCESSLINE SC III.2 in the most recent draft of the PTI received before this inspection (6/10/2020). SC III.2, established per BACT and toxic air contaminate (TAC) rules, requires all waste materials be captured and shall stored in closed containers. The current PTI (79-03A) for the equipment does not require waste materials from the heeling process be stored in closed containers.

After the heel station, totes are moved along rollers manually to the rinse stations. There are four rinse stations, each with three spray heads. According to PTI 79-03A, Quala is currently using potassium hydroxide and water in the first rinse, de-ionized water in the second rinse, and butyl cellosolve in the third and fourth rinse. The spray heads are attached to the top of each tote and the pressurized cleaning solutions are sprayed into the totes. The rinse solutions continuously drains from the bottom of each tote during the rinse cycle. As the liquids drain, they are collected in an open trough with a sump drain located a couple inches from the bottom of the trough. Heavies/sludge accumulate below the sump drain and the remaining cleaning solution is returned to a holding tank for reuse. At the end of each day, Quala collects the heavies/sludge in waste containers for disposal.

During the inspection I observed an open containment pit between the first and second rinse line and the storage tanks. There appeared to be several inches of liquid in the containment pit. According to Mr. Price, each rinse station has its own catch pit and Quala has a company come in periodically to test and pump out the liquids in the containment pits. Based on the testing, according to Mr. Price, the liquid is classified as liquid industrial waste. Information from EGLE's Material Management Division website indicates liquid industrial waste includes mixed solvents, other waste, and water-based cleaning solutions. Allowing the liquids to remain in the containment pit would also not comply with FGPROCESSLINE SC III.2 in the most recent draft of the PTI received before this inspection.

I observed, during the inspection, two general ventilation roof exhaust fans each with a diameter of approximately 4.5 feet. This corresponds with the stack/vent information provided in the application for PTI 79-03C.

AQD Permit Section staff, Field Operations staff, and representatives from Quala held a conference call on July 15, 2020 to discuss my findings during the inspection with regards to the draft permit. The call included Jeff Khaled, Permit Engineer, EGLE-AQD; me; Chuck Boyd, Environmental Director, Quala; and Rob Price. During this call, Rob indicated that the containment pits had a capacity of 7,900 gallons and were designed to collect liquid that escaped the cleaning system through seal ruptures, valve leaks, and tank mix bubbling over. Quala agreed indicated they were open to including conditions in the PTI requiring inspections of the valves, seals, and to keep tanks covered and to pump liquids out of the containment pits at the end of each operating day. To reduce emissions from heel waste collection, Quala stated they planned to get rid of the water tank, put in a pressure release valve on the heel waste tote, and install a liquid level sensor in the heel waste collection trough that would shut off the pump when the trough was empty. PTI 79-03C was approved August 17, 2020 and included the conditions discussed during the July 15, 2020 call.

Compliance with PTI 79-03C will be evaluated during the next targeted inspection for the facility.

NAME K. Kelly

DATE 07-07-2020

SUPERVISOR Joyce