

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

B206024894

FACILITY: ANN ARBOR WASTEWATER TREATMT PLT		SRN / ID: B2060
LOCATION: 49 SOUTH DIXBORO ROAD, ANN ARBOR		DISTRICT: Jackson
CITY: ANN ARBOR		COUNTY: WASHTENAW
CONTACT:		ACTIVITY DATE: 03/28/2014
STAFF: Glen Erickson	COMPLIANCE STATUS: Pending	SOURCE CLASS:
SUBJECT: Inspection prompted by odor complaint of 3-21-14 by Pierre Gonyon of St. Joseph Mercy Hospital-Ann Arbor, No. C-14-00494.		
RESOLVED COMPLAINTS:		

Inspection prompted by recent odor complaint, No. C-14-00494 from Pierre Gonyon, St. Joseph Mercy Hospital-Ann Arbor on 3-21-14.

Met with Assistant Manager, Keith Sanders, and Shift Foreman, Lynn Renaud to discuss odor complaint and to inspect processes.

Sanders was not aware of any recent upsets or malfunctions, and he indicated that he had not received any complaints from St. Joe's as he had understood he would directly from their staff if they should experience any odor complaints at their campus. I told him that Gonyon said that he couldn't locate the phone number for A2WWTP, at that time, so he decided to just call AQD. I told him that contacting the plant directly, in addition to calling AQD, is essential in tracking down proximate causes.

Went with Renaud to inspect the possible sources of odors that may have impacted St. Joe's last Friday morning. They are in the midst of a huge construction project involving replacing the west plant, even as they continue to operate the east plant.

The new diesel emergency generators, covered under PTI No. 7-14, two (2) 2,922 hp units subject to Part 60, Subpart IIII have not been installed yet, but portions of the new electrical building is under construction. It is located directly between the Residuals Handling Building and the UV Treatment Building.

Reynaud thought he recalled some sort of problem with one of the primary tanks sometime around the date of the complaint that may have had something to do with the complainant, but he wasn't sure. He showed me the primary tanks, and nothing obvious was amiss and no substantial foul odors were observed around these tanks. He said we could look in Shift Foreman's log in control room to see if anything was recorded about operations on last Friday.

Did not observe any significant foul odors around grit building, or around sludge blending tanks.

Inspected water-based scrubber. They recently changed out the plastic spheres that comprise the packing in the scrubber vessel. Many of the spheres had a whitish, precipitate encrusted on the plastic surfaces. They said they had attempted to power wash the spheres to no effect. Also tried chlorine bleach, again with no positive results. They then replaced the entire set of spheres. The sight glass was in need of cleaning so that staff can more easily see if actual water flow is maintained to scrubber. It appeared that water flow was entering the scrubber.

Inspected the three (3) activated carbon odor control vessels for controlling sulfide/mercaptan-type odors. The central carbon bed was off-line at this time. The south vessel showed 5.6 " w.g. pressure drop. The north vessel showed 5.8 " w.g. pressure drop.

Went to control room to see if we could identify any shift foreman notes that may have been recorded on Friday, 3-21-14, particularly in the early morning, say, 6:00-8:00am that may have identified possible sources of foul odors, such as some malfunction in process operations. No operational conditions were noted that may have resulted in upset conditions, notably in the primary tanks which Renault thought he recalled some mention of.

Found the manufacturer's operation and maintenance manual for the 2 odor control devices, but could not find any specifics regarding recommended change-out schedules for either device, particularly the carbon vessels.

Went back to discuss situation with Keith Sanders. He said that to his recollection the carbon manufacturer told plant staff that there was no specific change-out schedule they could identify for when breakthrough could be predicted to occur because the type and amounts of odorous compounds collected in the carbon was not specifically predictable. The manufacturer provided 3 small-diameter PVC pipes that apparently extend into different areas of the bed such that Draeger tube samples could be taken to identify relative concentrations of a compound like H<sub>2</sub>S, or that could be used simply to sniff by plant staff to attempt to identify if breakthrough has occurred. Sanders said that he regularly opens these pipes to see if he can smell any foul odors, and so far he has not observed any. The carbon has, so far, not been changed out in the 2-3 years of operation.

I told Sanders that he should contact the manufacturer of the carbon control system to see if they have any more specific advise on how to monitor the unit's performance, such as through pressure drop" monitoring, which show a gradual increase in pressure drop, that is still within the general design specifications, which are about 2-8" w.g. Also, that I would be continuing to monitor the off-site impacts that may be associated with their operations.

NAME GLEN ERICKSON

DATE 4-16-14

SUPERVISOR 