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

B739426187

FACILITY: Quantum Resources Mgmt. Rich Field Tank Battery		**SRN / ID:** B7394
LOCATION: 7259 MOWATT RD, NORTH BRANCH		**DISTRICT:** Lansing
CITY: NORTH BRANCH		**COUNTY:** LAPEER
CONTACT: Justin Thompson , Regional Safety and Environmental Coordinator		**ACTIVITY DATE:** 07/09/2014
STAFF: Michelle Luplow	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MINOR
SUBJECT: Announced, scheduled compliance inspection of facility.		
RESOLVED COMPLAINTS:		

Inspected by: Michelle Luplow
Personnel Present: Ken Bodmer, Foreman (kbodmer@qracq.com)
Other relevant personnel: Justin Thompson (jthompson@qracq.com)

Purpose
Conduct an announced, scheduled compliance inspection by determining compliance with Quantum Resources Rich Field Tank Battery Permit to Install (PTI) No. 205-76E for a tank battery and an emergency flare.

Facility Background/Regulatory Overview
Quantum Resources Rich Field Tank Battery is an oil handling facility: pumping oil, water and gas out of the ground and separating these components from each other. Ken Bodmer explained that the oil gets sold and the gas is sent to the B5462 Quantum Resources site to get processed/sweetened. Once the majority of the gas has been separated from the oil/water mixture the oil and water get separated in "heat treaters" that are run at 125°F. These would be exempt from a PTI per Rule 282(b)(i). Natural gas that is both produced at the plant and natural gas that is purchased is used to run the heat treaters.

Inspection
At approximately 9:30 a.m. on July 9, 2014, I met with Ken Bodmer, the facility's foreman. I explained to K. Bodmer the purpose of the inspection and provided him with a DEQ "Environmental Inspections: Rights and Responsibilities" brochure to illustrate a typical inspection procedure. There is a warning sign upon entering the property warning of possible toxic emissions.

Quantum has 2 sweet brine tanks (100-barrel and 210-barrel capacity) that are used to hold water that was removed from their onsite sweet gas well. This brine solution is used to "kill the well" or stop production from a well by holding in the H2S gas. These containers are exempt from a PTI per Rule 284(h) for storage of water solutions of inorganic salts.

A 500 gallon methanol tank is also onsite, exempt from a PTI per Rule 284(n). K. Bodmer said the methanol is injected into the gas stream during the winter months to ensure ice doesn't form within the gas/oil lines.

While onsite, there were odors present, but only near the flare and the heat treaters. I did not smell any odors offsite. The odors from the heat treaters, had they been as strong as they were at the heat treaters outside the property line near residences, had the potential for being a Rule 901 violation. K. Bodmer said that odor upsets are likely the result of an upset at the plant, fugitive emissions from the storage tanks, or loading of oil into a tanker truck.

H2S monitors are located throughout the site: in the pump building (for the salt water) and in the header building where the injection lines go underground. K. Bodmer said the monitors are in these locations rather than around the exterior of the plant because they are considered confined spaces. I did not enter these locations. K. Bodmer checked the H2S monitor in the pump building for me and he said that the monitor was reading 0.

PTI No. 205-76E
Special condition 10 requires that opacity not exceed a 6-minute average of 20% opacity. There were no signs of opacity while onsite during the inspection.

Special condition 11 requires that all storage tanks be vented to a vapor recovery unit (VRU). K. Bodmer showed me the 2 oil storage tanks which are 3000 barrels each. He said that only one of the tanks is being used because they no longer produce the volumes that they once did (right now he said the field produces approximately 80-90 barrels of oil per day). He also said that when the pressure at the top of the tank reaches 2.5 ounces the VRU automatically kicks on and at 1 ounce of pressure turns off. VRU is pulls off the vapors from the tanks. There is

piping running from both the storage tanks to the VRU as well as the flare. K. Bodmer said that the relief valves are also connected to the flare, so when the VRU is down, the gas will eventually get sent to the flare. Quantum is in compliance with condition 11.

Special condition 12 requires that Quantum maintain records required by NSPS Subpart K; however, Quantum is not subject to Subpart K because Subpart K does not apply to storage vessels for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer.

K. Bodmer allowed me to leaf through his maintenance and flare records logbook. He said that they haven't sent gas to the flare in quite a while and I verified, via the logbook, that gas was not sent to the flare since 2006, where they only flared once the entire year. K. Bodmer makes one entry per month for all months when the flare wasn't used. Quantum is in compliance with condition 12 which requires that all source operating data and records of the number of times the emergency flare is used be kept on file. They are also in compliance with condition 15 which only allows the flare to be operated for not more than 6.5 hours per day nor 323 hours per year, for emergency conditions only. K. Bodmer does not record hours that the flare was operating, but rather records "small flare" for instances when the flare was used. I sent an email to him explaining that the hours the flare is operating should be recorded rather than a general statement.

K. Bodmer and I verified that the pilot flame was lit, although hard to see at times. Quantum does have a thermocouple with a digital display to read the flare temperature, but K. Bodmer said that the thermocouple hasn't been working properly for some time. He said that they determine whether the flare is on by visual inspection. Quantum is required to have a continuously burning pilot flame at the flare per condition 14; Quantum is in compliance with this condition.

Quantum Resources is currently in compliance with all state and federal regulations at this time.

NAME Michael M Lyons DATE 8-1-14 SUPERVISOR M. McCo