

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: Self Initiated Inspection

U13141381727850

FACILITY: West Bay - Rugg 1-7 CPF		SRN / ID: U131413817
LOCATION: , Marshall		DISTRICT: Kalamazoo
CITY: Marshall		COUNTY: CALHOUN
CONTACT: Tim Baker , Operations Manager		ACTIVITY DATE: 10/28/2014
STAFF: Rex Lane	COMPLIANCE STATUS: Compliance	SOURCE CLASS:
SUBJECT: Self Initiated Inspection		
RESOLVED COMPLAINTS:		

On October 28, 2014, Air Quality Division (AQD) staff (Rex Lane) arrived at West Bay Exploration Company (WBECO) – Rugg Central Processing Facility (CPF) located in Sheridan Township, Calhoun County (Section 7; T2S R4W) to conduct an unannounced air quality inspection. CPF means production equipment which has been consolidated at a central location that provides for commingling of oil or gas production, or both, from 2 or more wells. This CPF commenced operations in October 2007 and collects sweet crude oil and natural gas from area wells drilled into the Traverse formation. There was no WBECO staff present on-site during the inspection. There were several contractors at the facility during the inspection servicing an on-site production well. Mr. David Bechler, MDEQ, Office of Oil, Gas and Minerals assisted AQD staff on the inspection.

This facility has two horizontal heater/treaters that separate natural gas and water from the crude oil. Once separated, the crude oil and water are sent to one of four 400 barrel (16,800 gallon capacity each) vertical above ground storage tanks. Natural gas liquids are transferred to a 30,000 gallon horizontal above ground storage tank. The natural gas that flashes off in the heater/treater is sent to an open flare at this facility. The storage tanks are exempt from Permit to Install (PTI) requirement per Rule 284(e). The heater/treater process equipment is exempt from PTI requirements per Rule 288(d). The open flares are exempt from PTI requirement pursuant to Rule 288(c).

There was one compressor engine that is exempt from PTI requirements pursuant to Rule 285(g) (i.e. maximum heat input less than 10,000,000 Btu/hour) based on information provided by WBECO's consultant following the inspection. The compressor engine is rated at 1265 Hp (equivalent to 9.55 MMBtu/hour; based on conversion factor 2,546.7 Btu/HP-HR and an engine specification sheet thermal efficiency of 33.7%). The compressor engine is subject to 40 CFR Part 63, Subpart ZZZZ for reciprocating internal combustion engines based on its 1997 manufacture date. The AQD has not taken delegation authority from USEPA for this federal regulation at area sources of Hazardous Air Pollutants (HAP), therefore, staff did not evaluate compressor engine compliance with 40 CFR Part 63, Subpart ZZZZ.

There was one triethylene glycol (TEG) dehydrator on-site that processes an average of 1.55 MMCF gas/day that is exempt from PTI requirements pursuant to Rule 288(b)(i) based on information provided by WBECO's consultant following the inspection. According to the consultant, the flash vessel vent gas is routed to an open flare on-site and the re-boiler/regeneration vent emissions are captured and recirculated to the re-boiler/regeneration burner which is equivalent to or greater than the condenser control efficiency requirement under Rule 288(b)(i). The TEG dehydration process equipment is considered to be an area source of HAPs under 40 CFR Part 63, Subpart HH for oil and natural gas production facilities based on GRI – GlyCalc emission calculations for total HAP of 0.135 tons/year. The AQD has not taken delegation authority from USEPA for area sources of HAPs under this federal regulation, therefore, staff did not evaluate glycol dehydration process compliance with 40 CFR Part 63, Subpart HH.

At the time of the inspection, it appears that the WBECO – Rugg CPF was in compliance with all applicable state air quality rules and regulations. -RIL

NAME RIL DATE 11/24/14 SUPERVISOR YMA 11/24/2014