

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

N322847317

FACILITY: TUSCOLA ENERGY - BOYCE B		SRN / ID: N3228
LOCATION: GARNER RD, JUST NORTH OF CASS CITY RD, AKRON		DISTRICT: Saginaw Bay
CITY: AKRON		COUNTY: TUSCOLA
CONTACT: Jeff Adler, President		ACTIVITY DATE: 12/04/2018
STAFF: Matthew Karl	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled inspection to determine compliance with PTI 116-12A.		
RESOLVED COMPLAINTS:		

On Tuesday (12/4/18) I (Matt Karl) conducted a compliance inspection at Tuscola Energy, Inc. – Boyce Farms located on Garner Road, North of Cass City Road, Wisner Township, Michigan. The purpose of the inspection was to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451; Michigan Department of Environmental Quality, Air Quality Division (MDEQ-AQD) Administrative Rules; Permit to Install (PTI) No. 116-12A. Mr. Jeff Adler, President, assisted by providing requested records. Mr. Andrew Kent and Mr. Derek Timmermann, MDEQ-OGMD, assisted me during the site inspection.

Facility Description:

The Boyce Farms Facility is an existing oil production facility that consists of two sour gas wells. A sour gas well is defined as a well in which hydrogen sulfide (H₂S) is present. Each well has an associated pump to bring the oil and gas to the surface. The two wells comingle their oil and gas and send it to a series of two separators (EUSEPARATOR1, EUSEPARATOR2), a 6-foot followed by a 10-foot separator, where the oil is separated from the gas. The oil is sent to a single storage tank (EUBOYCETANK) and the gas is routed to the flare. The wells that are associated with this facility are included in the table below:

Well Identification	Well Type
B1-23	Sour Well
B2-23	Sour Well

Site Inspection:

Andrew Kent, Derek Timmermann and I arrived on site at approximately 10:45. At the time of our inspection there was three flares on site, and the shortest was flare was lit. There was also a cherry picker bucket truck on site to maintenance the flares. The storage tank and separators were on site and appeared to be in good order at the time of our inspection.

Records Review:

I sent Jeff Adler a records request on Wednesday (12/5/18) via email. Jeff Adler suggested we meet at his office early the following week so that he could finish entering the data for November. On Monday (12/10/18) I met with Jeff Adler and obtained the following records, which are available in the District office files:

- Flow, H₂S emissions Boyce B1 B2 (N3228) from 8/1/17 to 12/2/18
- Maintenance Log Boyce B1 B2 (N3228)

FGOILPRODUCTION:

SC VI.1. The permittee shall monitor and record all of the following at the frequency indicated:

- a) Volumetric flow rate of sour gas going to the flare- daily
- b) Annual readings of the concentration of hydrogen sulfide in the produced sour gas from the wells while being pumped which is representative of the three wells sending the highest volume of gas to the flare- annually. Both of the following are acceptable means of determining the concentration of hydrogen sulfide in the sour gas:
 - I) Colorimetric detector tube
 - II) Laboratory gas analysis

I reviewed the record "Flow, H2S emissions Boyce B1 B2 (N3228) from 8/1/17 to 12/2/18." The volumetric flow rate of sour gas going to the flare ranged from 0 to 80.592 MSCF, with an average flow rate of 16.790 MSCF over the time period of the records reviewed. The latest annual reading of the concentration of H2S in the sour gas was performed on 10/1/18 and was 7.0% H2S.

SC VI.2. Each calendar month the permittee shall calculate the mass flow rate of hydrogen sulfide (H2S) that went to the flare each day using all of the following:

- a) The most recently determined concentration of hydrogen sulfide in the sour gas
- b) The individual daily volume of sour gas that went to the flare

I reviewed the record "Flow, H2S emissions Boyce B1 B2 (N3228) from 8/1/17 to 12/2/18." The most recent annual reading of the concentration of H2S was performed on 10/1/18 and was 7.0% H2S. The mass flow rate of hydrogen sulfide (H2S) that went to the flare each day ranged from 0 to 550.883 lbs./day and averaged 114.770 lbs./day over the time period of the records reviewed. SC II.1. specifies that the mass flow rate of hydrogen sulfide going to the flare shall not exceed 974 lbs./day. The maximum mass flow rate of H2S of 550.883 lbs./day represents approximately 57% of the 974 lbs./day emission limit.

SC VI.3. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period H2S emission calculation records for FGOILPRODUCTION, as required by SC II.2.

I reviewed the record "Flow, H2S emissions Boyce B1 B2 (N3228) from 8/1/17 to 12/2/18." The 12-month rolling emission rate ranged from 19.768 to 27.425 tons/year and averaged 24.506 tons/year over the time period of the records reviewed. The maximum 12-month rolling mass emission rate of H2S of 27.425 tons/year represents approximately 55% of the permit limit SC II.2. of 50 tons/year.

SC VI.6. The permittee shall maintain a log of all maintenance activities conducted according to the PM / MAP (pursuant to SC III.2).

I reviewed the record "Maintenance Log Boyce B1 B2 (N3228)." There is a category on the log for the "B1 B2 Flare" with blanks for the date of maintenance work and a description of the maintenance activities taken. There has been no maintenance recorded for the "B1 B2 Flare" to date.

Summary:

At the time of our 12/4/18 inspection it appeared that Tuscola Energy, Inc. – Boyce Farms was in compliance with PTI No. 116-12A.

NAME Matthew R. Koel

DATE 12/19/18

SUPERVISOR C. Hae