DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

ACTIVITY REPORT: Scheduled Inspection

FACILITY: JBS Plainwell, Inc.		SRN / ID: B7244
LOCATION: PO BOX 247, PLAINWELL		DISTRICT: Kalamazoo
CITY: PLAINWELL		COUNTY: ALLEGAN
CONTACT: Abe Anderson , Environmental Manager		ACTIVITY DATE: 08/01/2018
STAFF: Cody Yazzie	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled Inspec	lion	
RESOLVED COMPLAINTS:		

On August 1, 2018 Air Quality Division (AQD) staff (Cody Yazzie) arrived at 11 11th Street, Plainwell, Michigan at 9:40 AM to conduct an unannounced air quality inspection of JBS Plainwell (hereafter JBS). Staff made initial contact with the office receptionist and provided him with a business card and stated the purpose of the visit. Abe Anderson, JBS, Environmental Manager, arrived shortly thereafter and took staff to his office for further discussions.

This facility is a meat processing and packaging facility. JBS only processes cattle to produce shelf ready ground beef and various cuts of meat that are sent to a warehouse for further processing. JBS has around 1,200 staff members at the facility. The facility operates two shifts, a manufacturing shift from 6 AM - 5 PM and a sanitation shift during the night.

The facility has a barn where the cattle is stored before they are harvest. After the harvest they are stored in a refrigeration room for 24-hours before they begin the cleaning process. After the cleaning and deboning takes place. The meat is transported to the trimming and fabrication area. In this area the facility will produce the different cuts of meat. Meat that is cut to a specification is then sent to packaging. While meat that is used to produce ground beef is sent to a grinder before packaging.

The facility also has an area that is used to process hide. The hide is cleaned further while undergoing a dehydration process. For the dehydration process the hide is soaked in salt water and stretched. The facility stores the salt for this operation outside under a structure with only one open face, so it can be loaded and unloaded.

JBS was last inspected by the AQD on November 27, 2012 and was determined to be in Compliance at that time with PTI No. 71-03C. Staff asked, and Mr. Anderson stated that the facility does not have any emergency generators or cold cleaners.

Mr. Anderson gave staff a tour of the facility. Required personal protective equipment are hard hat, steel toe boots, ear plugs, and safety glasses. Staff observations and review of records provided during and following the inspection are summarized below:

FGBOILERS&FLARE:

This flexible group includes all the boilers on site and the flare. EUJBOILER001 and EUJBOILER002 were dismantled on October 1, 2016. This was reflected in the 2017 MAERS report that was submitted. EUCLBOILER1 and EUCLBOILER2 were installed on October 1, 2016. A letter of the installation was not available during the inspection, but Staff was provided the notification of installation dates and anticipated annual capacity factors of the boilers. This flexible group is also subject to 40 CFR Part 60 Subparts A & Dc.

Many of the boilers are currently only using a specific fuel type even though they maybe also permitted to operate burning another fuel. Fuel oil is not used to fire EUCLBOILER1 AND EUCLBOILER2. This means that these boilers are currently only operating on natural gas. EUHURSTBOILER firing only biogas and not currently using any natural gas. EUFLARE is still being operated as a back up flare for burning biogas when the supply exceeds the demand from the heaters and boilers. All the boilers are currently operating using only fuel that they are permitted for.

JBS has installed flowmeters to track biogas usage. These flowmeters are calibrated annually. JBS was able to provide documentation that Process Control Services, Inc. last calibrated the equipment on August 8, 2017. Mr. Anderson also stated that they were scheduled for recalibration next month.

This flexible group has material limits for each type of fuel that. JBS is required to keep a 12-month rolling material usage to show compliance with these limits. The facility was able to provide accurate 12-month rolling records for biogas and natural gas throughput. The records showed that since 2016 the largest annual throughput for natural gas to FGBOILERS&FLARE occurred in February 2016 which used 195 MMCF. The average throughput of natural gas in the time period is around 170 MMCF. These are well below the limit of 660 MMCF of natural gas used in FGBOILERS&FLARE. The 12-month rolling annual biogas throughput to EUFLARE averaged around 105 MMCF since 2016. This is well below the permit limit of 389 MMCF.

The flexible group also is required to track the NOx and SO2 emissions. Since the facility is no longer burning fuel oil the SO2 emissions are well below there permit limit. Over the past few years the largest 12-month rolling NOx emissions occurred in February of 2016 at 8.27 TPY. The average 12-month rolling NOx emissions are around 7.25 TPY. The NOx emissions are well below the 65 TPY emission limit. JBS uses the fuel usage and the AP-42 emission factors to calculate the NOx and SO2 emissions from natural gas and biogas.

There were no visible emissions that were observed from any of these emission units during the inspection.

FGHEATERS:

This flexible group is comprised of three Armstrong direct fired heaters with a heat input capacity of 10 MMBTU/hour. These heaters were all installed February 8, 2008. These are designed to burn both natural gas and biogas. JBS tries to operate the heaters as much as possible on biogas. Typically, two heaters are running on biogas and the third is running on natural gas. These heaters are also subject to 40 CFR Part 60 Subparts A & Dc.

This flexible group has a material limit for the combined gaseous fuel that is used in the direct fired heaters. JBS is required to keep a 12-month rolling material usage to show compliance with these limits. The average 12month rolling gas usage for the direct fired boilers is around 150 MMCF between both natural gas and biogas since 2016. This is well below the permit limit of 375 MMCF.

The flexible group also is required to track the NOx emissions. Over the past few years the largest 12-month rolling NOx emissions occurred in March of 2016 at 7.80 TPY. The average 12-month rolling NOx emissions are around 7.3 TPY. The NOx emissions are well below the 18.75 TPY emission limit. JBS uses the fuel usage and the AP-42 emission factors to calculate the NOx emissions from natural gas and biogas.

There were no visible emissions that were observed from any of these emission units during the inspection. JBS uses the flowmeters to track biogas usage for this flexible group. The last calibration of the flowmeters was August 8, 2017.

At the time of the inspection and based on a review of records obtained during or following the inspection, the facility appears to be in compliance with PTI No. 71-03C. Staff stated to Mr. Anderson that a report of the inspection would be sent to the facility for their records. Staff concluded the inspection at 12:00 PM.-GJY