

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

B857055581

FACILITY: THE ANDERSONS MARATHON HOLDINGS LLC		SRN / ID: B8570
LOCATION: 26250 B DR N, SHERIDAN TWP		DISTRICT: Kalamazoo
CITY: SHERIDAN TWP		COUNTY: CALHOUN
CONTACT: Evan Dankert , Safety & Compliance Administrator		ACTIVITY DATE: 08/31/2020
STAFF: Amanda Chapel	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT:		
RESOLVED COMPLAINTS:		

On August 31, 2020, AQD's Amanda Chapel (staff) conducted an announced air quality inspection of The Andersons Marathon Holdings LLC formerly named The Andersons Albion Ethanol, LLC located at 26250 B Drive North, Sheridan Township, Calhoun County. This was an announced inspection due to the COVID-19 pandemic. This report contains a description of the walkthrough only. The records review portion was done remotely. The purpose of the inspection was to determine compliance with MI-ROP-B8570-2015b, permits to install (PTIs) 114-15D, 144-15E, and 199-19, and all other applicable state and federal regulations.

The Andersons Marathon Holdings facility consists of a grain (corn) receiving and storage area and a dry mill corn processing ethanol plant. The stationary source is considered to be a major source of carbon monoxide, nitrogen oxides, volatile organic compounds, and greenhouse gases. The facility is subject to federal New Source Performance Standards (NSPS), 40 CFR Part 60 Subpart Db, Kb, VV, VVa, IIII, and KKKK and federal National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63, Subpart ZZZZ. There are multiple emission units at the facility that are subject to federal Compliance Assurance Monitoring (CAM) regulations under 40 CFR Part 64, including EU-COOLINGDRUM, FGCORNHAND, FGFERM, FGFERM2, FGMILL, FGMILL2, FGOXID, and FGOXID2.

The initial ethanol plant commenced operations in August 2006. An expansion to the existing ethanol plant along with a combined heat and power (CHP) facility commenced operations in February 2017. The facility current operates under MI-ROP-B8570-2015b, permits to install (PTIs) 114-15D, 144-15E, and 199-19. The ROP is currently under renewal.

Mr. Evan Dankert was the staff contact for the walk-through inspection. Staff called Mr. Dankert when I arrived on site and he met me outside the training room. I had previously provided him with a list of the permitted equipment on site. We walked through the facility based on the layout of the buildings. The following will discuss the walk through and observations.

FG-CHP (PTI 144-15D)

Combined heat and power (CHP) system to generate electricity and steam for the facility. Consists of EU-CT (combustion turbine) and EU-DB (duct burner) with a HRSG (heat recovery steam generator) to generate steam from the heat provided. There are three modes of operation, turbine only, turbine and duct burner, and duct burner only. Control equipment is a dry low NOx burner for NOx control on the turbine. Only natural gas is used in the turbine and duct burner.

This unit is stack tested every five years. The facility is tracking the sulfur content of the fuel. The records were provided during the records request. Since the facility is stack testing as required, they are not operating a continuous monitoring system on this flexible group.

The facility is tracking hours the train runs in various modes as well as start-up, shutdown, and the temperature during the run time. They are also tracking the amount of natural gas used during these various run operations.

EU-GRAINRECEIVE (119-19A)

Two truck unloading enclosures and receiving pit located at the grain elevator. Controlled by baghouse C-201. Baghouse C-200 was removed in 2019. Only one of the truck bays was in use during the walkthrough. The enclosure has a tarping and plastic barriers to close off as much as possible to prevent fugitive dust.

The baghouse was in operation during the time of the inspection. The magnehelic gauge read 0.51" H₂O. There were no visible emissions observed from the baghouse or from the grain receiving operations. The area around the baghouse appears clean. Mr. Dankert indicated that the baghouses are checked daily and swept as needed.

Visible emissions readings are taken once a month and recorded. Records were provided via email by Mr. Dankert. Records show visible emissions are typically zero from this emission unit. Visible emission sheet includes name of reader, date and time of observations, notation of certification, visible emissions, and any corrective action taken. All VE observations include this information.

The facility is tracking the monthly and 12-month rolling amount of grain received at the facility. This emission unit has a limit of 34 million bushels for a 12-month rolling time period. Records show the highest 12-month rolling number recorded was in February 2020 with 24,129,066 bushels of grain received. The highest single month of grain received was December 2019 with 3,971,490.7 bushels.

EU-GRAINSHIPPED (MI-ROP-B8570-2015B)

Railcar loading area and one truck loading area located at the grain elevator. This was removed in 2019. The facility no longer ships out corn as they use it all in their process. This should be removed from the ROP when it's renewed.

The facility is tracking the monthly and 12-month rolling amount of grain shipped, which does not include grain shipped to the ethanol plant. The facility reports that no grain has been shipped out of the facility and everything has been transferred to the ethanol plant.

EU-INTERNALOP (144-15D)

Internal operations specifically storage and internal handling of grain at the grain elevator. All conveyors in this area are covered and there did not appear to be debris from receiving operations. Mr. Dankert and I walked between the internal operation of the corn storage silos. Corn was actively being loaded and transferred during the inspection. There were no visible emissions observed. Particulate matter collected from the cleaning operation portion is removed and disposed of in a manner which minimizes fugitive emissions.

The facility is tracking the monthly and 12-month rolling amount of grain handled internally at the facility. This emission unit has a limit of 55 million bushels for a 12-month rolling time period. Records show the highest 12-month rolling number recorded was in May 2020 with 31,960,043 bushels of grain handled internally. The highest single month of grain handled internally was March 2020 with 4,186,530 bushels.

EU-GRAINDRY (144-15D)

One 62.1 MMBtu/hr natural gas fired grain dryer at the grain elevator. The dryer is designed so that the corn and hot air are separated by a cylinder in the dryer. Hot air is forced up and the corn is dropped down, drying the corn. Exhaust gasses are passed through column plate perforations.

At the time of the inspection, the dryer was being cleaned. There was some detritus around the base of the dryer, in the form of dried chunks of corn. Very little appeared to be fine particulate dust. Mr. Dankert said this would be cleaned up after the cleaning was complete. Cleaning is done periodically to clean out old corn that has fallen through to the bottom of the dryer and is unusable in the ethanol process.

Visible emissions readings are taken once a month and recorded. Records show visible emissions are typically zero from this emission unit.

The facility is tracking monthly and 12-month rolling amount of cubic feet of natural gas burned in EU-GRAINDRY as well as the monthly and 12-month rolling amount of grain dried in the emission unit. In the past 12 months, the highest monthly amount of natural gas used was in January 2020 and was 3,312 MCF. The highest 12-month rolling total was in January 2020 and was 11,622 MCF. The limit is 125 million cubic feet.

The highest monthly amount of grain dried in the emission unit was in November 2019 of 2,698,511.7 bushels and 12-month rolling amounts of grain dried was in May 2019 at 7,842,997 bushels. The limit is 10 million bushels of grain dried.

EU-DAYBIN3 (119-19A)

This is a corn surge/day bin #3 installed in 2015 which is completely enclosed.

There are no specific recordkeeping requirements associated with EU-DAYBIN3

FG-CORNHAND (MI-ROP-B8570-2015b)

This flexible group consisted of corn receiving and handling operations including EU-TRUCKPIT, EU-RECEIVINGCONV, and EU-CORNELEV1 which is controlled by baghouse C-20. This was removed in the permit issuance of 199-19A. EU-TRUCKPIT and EU-CORNELEV1 were moved to FGC-20 as they are controlled by baghouse C-20. EU-RECEIVINGCONV was moved to FG-ENCLOSEDCONV.

The facility submitted documentation of the preventative maintenance performed on the baghouses including replacing the magnehelic gauges and general required maintenance. The facility also submitted records for October 2019 and February 2020 to demonstrate daily magnehelic gauge readings of the baghouse. The records show that the baghouse magnehelic readings were within the acceptable range.

Visible emissions readings are taken once a month and recorded. Records show visible emissions are typically zero from this emission unit.

FGC-20 (PTI 119-19A)

Corn receiving, storage, and handling operations controlled by baghouse C-20. This emission unit contains EU-TRUCKPIT, EU-CORNELEV1, EU-CORNELEV2, and EU-DAYBIN1. During the inspection, no visible emission were observed. The baghouse was mostly clean. The differential pressure reading was 2" H₂O during the inspection.

Trucks come into the facility and unload their corn into one of the corn-receiving areas at the facility. The facility expanded in 2017 and contain two separate, but very similar, corn processing methods. If necessary, the corn is dried and conveyed to the associated hammer mills for further processing before being combined into a slurry and added to the fermentation tanks.

Visible emissions readings are taken once a month and recorded. Records show visible emissions are typically zero from this emission unit.

The facility also submitted records for October 2019 and February 2020 to demonstrate daily magnehelic gauge readings of the baghouse. The records show that the baghouse magnehelic readings were within the acceptable range.

FG-CORNBINS (PTI 119-19A)

This flexible group contains EU-CORNBIN1 and EU-CORNBIN2. The emission unit in the ROP contained EU-DAYBIN as well. EU-DAYBIN was renamed to EU-DAYBIN1 and was moved into the FGC-20 flexible group as it's controlled by baghouse C-20.

Mr. Dankert walked to the top of corn bin 1 and 2. The facility recently applied for and obtained an amended permit to increase the visible emission limit from the FG-CORNBINS from 5% to 20%. There were consistent visible emissions coming from the vents at about 5-10%. The facility tries to keep the area clean and removes dust accumulated as needed. Mr. Dankert indicated that they have approval to add filters to these vents to reduce the emissions from the process.

Visible emissions readings are taken once a month and recorded. Records show visible emissions are typically zero from this emission unit.

FG-NEWCONV (MI-ROP-B8570-2015B)

Flexible group contains EU-CORNELEV3, EU-TRANSCONV1, and EU-TRANSCONV2. EU-CORNELEV3 was never constructed and was removed from the permit in PTI 119-19. EU-TRANSCONV1/2 were moved to FGENCLOSEDCONV.

There are no specific recordkeeping requirements for FG-NEWCONV.

FGENCLOSEDCONV (PTI119-19A)

This flexible group contains EU-RECEIVINGCONV, EU-BINEMPTCONV1,2, EU-TRANSCONV1,2, and EU-REDIRECTCONV. EU-REDIRECTCONV was added as part of this permit to be rolled into the ROP.

These conveyors are part of the 2017 expansion of the facility. They are enclosed and conditions appears maintained and checked daily.

FGMILL (MI-ROP-B8570-2015B)

In the ROP, this flexible group contains EU-CORNELEV2, EU-SCREEN, EU-BINEMPTCONV, EU-MILL1,2,3,4, EU-FEED.

EU-CORNELEV2 was moved to FGC-20 as it's controlled by that baghouse. EU-SCREEN was renamed to EU-SCALPER1. A second scalper was added to the permit as a second one was installed along with the first. When testing was last performed, both were operating, and the facility met the emission limits in the permit. EU-BINEMPTCONV was moved to FG-ENCLOSEDCONV along with a second bin empty conveyor which was installed, enclosed, in 2006.

FGC-30 (PTI 119-19A)

This flexible group consists of EU-SCALPER1,2, EU-DAYBIN2, EU-MILL1,2,3,4, and EU-FEED. All emission units are controlled by the C-30 baghouse. EU-DAYBIN2 was installed at the same time as EU-DAYBIN1 and was operating at the time of the stack test.

This flexible group is part of the 2017 expansion for processing received corn for the fermentation process. There were no visible emissions from baghouse C-30 observed during the inspection. The differential pressure reading was 1" H2O during the inspection. The area around the baghouse was clean and free from particulate and dust.

Visible emissions readings are taken once a month and recorded. Records show visible emissions are typically zero from this emission unit.

Monthly pressure drop checks were submitted with the record request as well. The records show the magnehelic readings typically range between 1"-3" H2O which is within the acceptable range of readings.

FG-MILL2 (MI-ROP-B8570-2015B)

This flexible group consists of EU-MILL5,6,7,8 which are controlled by milling baghouses C-30A-1,2,3,4. Mr. Dankert and I walked up to the milling area and looked at the operating hammer mills. They are fully contained inside. Baghouse C-30A is a four-cell baghouse. The differential pressure readings were as follows during the inspection:

C-30A-1: 0.5" H2O

C-30A-2: 1.0" H2O

C-30A-3: 3.0" H2O

C-30A-4: 0.5" H2O

No visible emissions were seen during the inspection. The area around the baghouse appeared slightly dusty. It is located next to the truck receiving area for the plant expansion.

From here, Mr. Dankert walked to the tank farm to walk through the area.

FG-MILL/FG-MILL2 (MI-ROP-B8570-2015B)

Facility submitted records showing that monthly magnehelic readings are being recorded for the “mill air filter” and “mill 5/6/7/8 filter blower”. These reading appear to be done at the beginning of the month. Records show that the magnehelic gauges typically read between 0” and 3”. In June 2019, the magnehelic for Mill 7 read 8”. The following month it had returned to reading within normal range. This is not an excursion but a reading at the highest end of the allowable range.

The facility also provided information on the calibration schedule for the magnehelic gauges. They were all calibrated on May 29, 2020. This is required to be done once per year.

Visible emissions readings are taken once a month and recorded. Records show visible emissions are typically zero from this emission unit.

FGNSPSTANKS (MI-ROP-B8570-2015b)

Flexible group consists of ethanol, denaturant, and denatured ethanol storage tanks. Emissions units are EU-190PROOF, EU-200PROOF, EU-DENATTANK1,2,3, and EU-DENATURANT. These are controlled by internal floating roofs.

Mr. Dankert confirmed the tanks contain a floating roof inside the tanks. Some of the tanks had small amounts of rust on the outside of some of the tanks. Dewatering was occurring during the inspection to remove standing water from the sunken tank farm area.

FGNSPSVV (MI-ROP-B8570-2015B)/ FGNSPSVVA (MI-ROP-B8570-2015b)

All pumps, valves, and pressure relief devices in light liquid and heavy liquid service and gas/vapor service and all pumps, valves, and pressure relief devices in light liquid and heavy liquid service and gas/vapor service constructed after November 7, 2006.

According to Mr. Dankert, the facility has 75 pressure relief valve (PRVs) and readings are taken off each vessel. There are 13 PRVs in distillation. The readings taken off the distillation vessels are monitored by the minute. If the PRV readers failed, the plant is designed to shut down. All the tanks were recertified in the fall of 2019. There are sealed roofs with no venting. The design of the floating roof prevents over fuming.

For NSPSVVA, the tanks are subject to leak detection and repair (LDAR) procedures. Per the previous inspection, the facility hired a company to update the device inventory in August 2017. Monitoring is performed, in-house. There are monthly checks of the tanks including checks of pumps, valves, and other parts of the tanks. LDAR monitoring reports were supplied for the records review. According to the contracted third party, it appears no leaks were found.

EU-NH3STGTANK (MI-ROP-B8570-2015B)

An 18,000-gallon anhydrous ammonia storage tank. Facility indicates that this has been taken out of service.

FG-FERM (PTI144-15D)

This flexible group contains all the fermenters at the facility (1-10) and the beer well (EU-BEERWELL). These are controlled by a pre-condenser and fermentation CO2 scrubbers C-40 and C-40A. The PTI 144-15D rolled the fermenters 6,7,8,9, and 10 into this emission unit as well, making FG-FERM2 unnecessary in the new ROP. The fermenters take a few hours to fill with slurry and about 60 hours to ferment before they are drained.

The CO2 recovery facility was operating during the inspection. Mr. Dankert said the facility runs scrubbers C-40 and C-40A if the system is running. FG-PURGE scrubber is only run as needed and was not running at the time of the inspection, despite the CO2 recovery facility running next door. The pre-condenser was in operation at the time of the inspection.

Scrubber flow rates and exhaust gas temperature were obtained at the end of the inspection from the main control room.

C-40: 73.9 gpm

C-40A: 54.7 gpm
Exhaust gas temperate:
C-40: 58.76 F
C-40A: 62.1 F

FG-FERM2

These emission units have been included with FG-FERM in the PTI 144-15D and these conditions are obsolete.

FG-FERM/FG-FERM2

The facility provided records showing the monthly and 12-month rolling emissions for VOC and acetaldehyde emissions from scrubber C-40 and C-40a as well as the purge scrubber VOC and acetaldehyde emissions. The records show the highest 12-month rolling VOC emissions were in May 2019 at 20.31 tons. The highest single month emissions were in January 2019 at 1.87 tons. Acetaldehyde is being tracked in the same way. May 2019 had the highest 12-month rolling acetaldehyde emissions of 1.17 tpy. January 2019 had the highest single month emissions of 0.13 tons.

Records for C-40a scrubber are being recorded in the same way as the C-40 scrubber. Highest 12-month rolling VOC emissions are in August and September 2019 at 44.57 tpy. The highest monthly emissions for VOC were in July and August 2019 with 3.88 tons. The highest acetaldehyde 12-month rolling emissions were 1.68 tpy and the highest monthly emissions was 0.15 tons which occurred in a number of months throughout 2019 and 2020.

The facility is also tracking the monthly hours of operation for FG-FERM and FG-FERM2. According to the records, the highest number of hours the flexible group operates is 744 hours per month.

A purge scrubber is also being tracked in this emission unit for VOC. The highest 12-month rolling emissions is 5.8 tpy in December 2019 and single monthly emissions are 0.48 tons which occurs on at least 3 different occasions in 2019 and 2020.

The facility submitted graphs as an example showing the Distributed Controls System (DCS) continuously monitoring the scrubber flow rate, as required by the ROP. The facility also submitted a spreadsheet showing the monthly pre-condenser exhaust temperature readings and fan amperage readings. The exhaust gas temperature appears to be lower in those months that are colder. The fan amperage appears to be higher in the colder months and higher in the summer.

FG-PURGE (PTI 144-15D)

Flexible group consists of EU-FERMENTER1,2,3,4,5,6,7,8,9, and 10 controlled by purge scrubber C-120. According to Mr. Dankert, this is run, as needed, for the CO2 facility next door. At the time of the inspection, this was not running. The liquid flow rate control panel read 0.0 gpm.

The facility is tracking monthly hours that emissions vent through the purge scrubber C-120. According to the 12-month rolling hours of operation, in April 2020 the hours vented through C-120 were 3,464 hours and May 2020 were 3,431 hours. These were the only full 12-month rolling total months. This is below the 5,000-hour limit established in the permit.

Mr. Dankert provided records showing the monthly maintenance schedule of the purge scrubber. This documentation details the total run time of the month for the purge scrubber. Since the purge scrubber is not run continuously, the run time of the scrubber is recorded, monthly. He also provided an example record of the liquid flow rate which is continuously monitored throughout the day.

FG-METH (MI-ROP-B8570-2015B)

This equipment has been removed from the facility. Flexible group consisted of EU-METHANATOR1 and 2 and was controlled by thermal oxidizer C-10 and methanator flare P-60. These biomethanators were for wastewater treatment controlled by DDGS dryers or the flare or the thermal oxidizer while the dryers were not operating.

FG-OXID (PTI 144-15E)

This flexible group consists of the EU-RECTIFIER, EU-SIDESTRIPPER, EU-BEERCOLUMN, EU-YEASTANK,2, EU-DRYER1,2, EU-TO&WHRB, EU-CENTRIFUGE1,2,3,4, EU-190PROOFCONDENSER, and EU-200PROOFCONDENSER. All these emission units are controlled by the thermal oxidizer C-10. All units vent to a heat recovery steam generator (HRSG) which is subject to 40 CFR Part 60 Subpart Db.

Mr. Dankert noted that the control equipment associated with this flexible group is a thermal oxidizer (TO). The newer side of the operation has a regenerative thermal oxidizer (RTO). The dryers are natural gas dryers only. Both were running at the time of the inspection. No other fuel is used in the dryers. At the time of the inspection, there were no visible emissions from the stacks of the TO. The condition around the dryers was clean and well maintained.

At the time of the inspection, the TO combustion chamber temperature was 1520 F. Inlet temperature was 213.6 F and outlet was 442 F. NOx emissions are monitored with a continuous emission monitoring system (CEMs). The NOx CEMs unit read 40.96 ppm and O2 was 3.6% instantaneously.

Visible emissions readings are taken once a month and recorded. Records show visible emissions are typically zero from this emission unit. The highest 12-month rolling NOx emissions recorded by the facility was in June 2019 64.31 tpy NOx.

Records submitted show the facility is tracking use of the biomethanator flare, CO, NOx, PM10, VOC, acetaldehyde, and acrolein emissions, hours of operation monthly. Temperature is monitored continuously. CEMs records were submitted to show hours of startup and shutdown tracked by the facility.

Mr. Dankert supplied a printout of the CEMs showing the 24-hour averages calculated daily for the month of February 2020. This is an example of the NOx CEMs monitoring the 24-hour NOx average continuously.

The diesel fuel SDS was also provided identifying the fuel as ultra-low sulfur fuel at less than 0.0015% sulfur.

FG-OXID2 (MI-ROP-B8570-2015b)

This flexible group consists of the EU-RECTIFIER2, EU-SIDESTRIPPER2, EU-BEERCOLUMN2, EU-DRYER3,4, EU-CENTRIFUGE5,6,7,8, EU-190PROOFCOND2, and EU-RTO2. All these emission units are controlled by the thermal oxidizer C-10A. The process underwent testing in July 2017 and demonstrated compliance with hourly emission limits for PM10, PM2.5, VOC, NOx, CO, SO2, and acetaldehyde.

These dryers are also natural gas only dryers. They were both running at the time of the inspection. These dryers are routed through an RTO, C-10A. There were no visible emissions observed from the RTO during the inspection. The RTO combustion chamber temperature was 1649 F, outlet temp was 363 F, and inlet temp was 203 F. These were obtained from the main control room at the facility.

Monthly and 12-month rolling emission records were provided for CO, NOx, PM10, VOC, SO2, and acetaldehyde. Temperature records are kept for combustion chamber temperature. Hours of operation are also being recorded. Visible emissions readings are taken once a month and recorded. Records show visible emissions are typically zero from this emission unit.

Mr. Dankert provided documentation showing the OXID/OXID2 thermocouple was replaced on April 9, 2020 during the shutdown. This is noted as an annual replacement.

EU-COOLINGDRUM (MI-ROP-B8570-2015B)

This emission unit is a cooling drum which is controlled by baghouse C-70A. It was in operation during the inspection. There were no visible emissions seen during the inspection. The differential pressure gauge is up a ladder on this baghouse. The reading was obtained from the main control room. The differential pressure reading was 0.85" H2O.

Visible emissions readings are taken once a month and recorded. Records show visible emissions are typically zero from this emission unit.

A screen printout was submitted by the facility shows the fan amperage and bag pressure drop readings which are monitored continuously. Typical operation shows that the pressure drop ranges between 0"-1" of water with small spikes at the end of March and in the middle of May.

FG-LOADOUT (MI-ROP-B8570-2015B)

This consists of two denatured ethanol truck load-outs and one denatured ethanol rail load-out. Emission units are EU-LOADOUTRL, EU-LOADOUTTRK,2. These are controlled by an ethanol load-out flare P-50 and P-50_A.

Loadout was occurring during the time of the inspection. The flare was also operational during the time of the inspection. The heat signature from the flare was visible out of the top of the stack. They are used, as needed, during loadout in happening. There is an interlock "scully" system that prevents any loading out to occur without the flare running. If the flare shuts down to any reason, the system stops the operation to prevent continued loading.

EU-LOADOUT (MI-ROP-B8570-2015B)

The DDGS truck and rail loadout including the conveyors and elevators used for transfer and loading operations. This controlled by baghouse P-90 and P-91.

This emission unit was not in use during the inspection. Monthly visible emissions checks are done on the emission unit. Differential pressure readings:

P-90: 1" H2O

P-91: 1" H2O

The baghouses differential pressure gauges were last calibrated on 6/10/20. All baghouse gauges are calibrated on the same date throughout the facility. Mr. Dankert and I investigated the DDGS storehouse. The dried and spent grains are brought to a large warehouse, via conveyor, and stored until they are loaded out to consumers to process the grains further into animal feed.

The facility is tracking the monthly pressure drop readings on the magnehelic gauges at the baghouses around the facility. Records were submitted showing these readings are taken as part of the monthly preventative maintenance checks around the facility. On May 4, 2020 the loadout magnehelic gauge read 1', according to records. Records show this magnehelic typically ranges between 0"-1".

EU-COOLINGTWR and EU-COOLINGTWR2 (MI-ROP-B8570-2015B)

These emission units contain four cell cooling towers equipped with drift eliminators. Water is used in a loop at the facility. The water that runs through the system never touches any product and can be recirculated. Mr. Dankert stated they do water testing on site including for chlorine content in compliance with their NPDES permitting.

There are no specific recordkeeping requirements for EU-COOLINGTWR.

EU-DIESELPUMP and EU-DIESELPUMP2 (MI-ROP-B8570-2015B)

EU-DIESELPUMP is a 300 HP diesel fired emergency fire water pump. EU-DIESELPUMP2 is a 322 HP diesel fired emergency fire water pump. These pumps are used as emergency only. The last inspection was in August 2020. The hour readings on the diesel pumps during the inspection were:

Hours DP1: 1724.7

Hours DP2: 258.7

Facility provided the annual maintenance logs which are conducted by a third party, BL Harroun. The pumps are inspected, maintained, and tested. Manufacturer certifications were sent for the Clark fire pump (PUMP2) showing the specifications of emissions, indicating compliance with 40 CFR Part 60 Subpart IIII. During the inspection in 2016, AQD was provided documentation that engine manufacturer had tested and certified the engine model to comply with applicable emission limits.

The facility is tracking the monthly and 12-month rolling hours of operation for both

DIESELPUMP/DIESELPUMP2. Typical operations appear to be around 1-3 hours per month. In October 2019, pump 2 ran for 76.3 hours. Documentation was provided following the 2018 inspection that the engine manufacturer had tested and certified the engine model to comply with applicable emission limits for engine manufacture date.

The diesel fuel SDS was also provided identifying the fuel as ultra-low sulfur fuel at less than 0.0015% sulfur.

EU-WDGS (MI-ROP-B8570-2015b)

The emission unit is the wet distiller's grains and solubles handling operations. Mr. Dankert stated they are in the process of removing this emission unit and only processing DDGS in the future. The WDGS is processed through the dryer and stored outside in a contained and covered area. A front-end loader was operating at the time of the inspection loading a truck with grain. This is also sold as a secondary product to be used as animal feed.

The facility is tracking daily volume of the WDGS. Records were provided showing the daily tracking of the weight of WDGS at the facility.

FGFACILITY (MI-ROP-B8570-2015b)

Emission unit consists of all process equipment, source-wide, including equipment covered by other permits, grandfathered equipment, and exempt equipment. Emission records were submitted as part of the records request. Facility is tracking the following emissions across the source: NOx, VOC, CO, PM, PM10, PM2.5, SO2, acetaldehyde, acrolein, and total HAPs. All emissions appear to be well below the permitted amounts. NOx appears to be the closest pollutant to the emissions limit at about 59% of the permitted amount.

EXEMPT EQUIPMENT

PARTS WASHER

The facility has one parts washer on site in the maintenance area. Safety Kleen maintains the cleaner, as needed. The solution in the cleaner is identified as Armakleen combo cleaner cleaning solution. The facility uses ArmaKleen 4 in 1 cleaner concentrate (i.e. aqueous alkaline solution) which is 21.1% VOC, by weight. If solution is diluted to < 5% VOC by weight, emission unit would not meet the definition of a cold cleaner under Rule 336.1103(aa) and would not be subject to Rule 707. If cleaning solution, as used, has a VOC content of 5% or more, by weight, the emission unit would be subject to Rule 707 and need to be included in the ROP renewal application process.

TANKS

Facility has a sulfuric acid storage tank with concrete secondary containment area. The sulfuric acid storage tank is exempt from air use permitting requirements under Rule 336.1284(2)(h)(i). Facility also has a 35,000-gallon corn oil storage tank. The corn oil storage tank is exempt from air use permitting requirements under Rule 336.1284(2)(i).

The facility appears to be in compliance with MI-ROP-B8570-2015b, permits to install (PTIs) 114-15D, 144-15E, and 199-19, and all other applicable state and federal regulations.

NAME Amber Clepe

DATE 9/30/20

SUPERVISOR RIL 10/2/20