

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

M420447913

FACILITY: Zeeland Farm Services, Inc.		SRN / ID: M4204
LOCATION: 2468 84th Ave, ZEELAND		DISTRICT: Grand Rapids
CITY: ZEELAND		COUNTY: OTTAWA
CONTACT: Bridgette Rillema, Environmental Manager		ACTIVITY DATE: 02/13/2019
STAFF: Tyler Salamasick	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: FY 2019 Inspection		
RESOLVED COMPLAINTS:		

*Clean Air Act Inspection report for Zeeland Farm Services (ZFS), Zeeland, Michigan*

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### ***Facility Background***

Zeeland Farm Services is a soybean processing facility. The facility receives soybeans and processes them for storage and eventual sale. The grain can be dried, cracked and processes for soybean oil extraction. The facility performs solvent based soybean oil extraction and refining on site.

Zeeland Farm Services is subject to the Title V program, which is discussed below, in the regulatory analysis section of this report.

### ***Compliance History***

The facility recently received a violation notice from the AQD on 5/9/2018 for failing to test FGEXTRACTION. FGEXTRACTION was last tested in December of 2011. Special Condition V.1 requires that the equipment be tested every 5 years. The facility failed to test all equipment associated with FGEXTRACTION within the 5-year requirement. Since the issuance of the violation notice the facility has conducted testing and resolved the violation. ZFS is also subject to administrative consent order AQD No. 19-2015.

### ***Location***

Zeeland Farm Services located at 2468 84th Ave, Zeeland, Michigan. This area is primarily industrial and rural with a recent residential development south of the facility. The nearest residential structure is approximately 700 feet to the south of the facility.

### ***Recent Changes***

The facility recently removed the meal loadout portion of the permitted EUPREPEQUIPMENT process. The facility notified the MDEQ of the change via a Rule 215 notification. The MDEQ informed ZFS that this would require a permit change in order to properly reflect the removal of an emission unit. The facility modified the permit to reflect the change and the modified permit (PTI 4-19) was issued on 2/13/2019. During this time ZFS also installed closed grain storage with a reportedly Rule 291 exempt associated baghouse.

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### ***Introduction and purpose of inspection***

On 2/13/2019 Tyler Salamasick, Environmental Quality Analyst of the Michigan Department of Environmental Quality, Air Quality Division conducted an unannounced, scheduled inspection of Zeeland Farm Services. The MDEQ inspected the facility located at 2468 84th Ave, Zeeland, Michigan.

The purpose of the inspection was to determine the facility's compliance with the requirements of the

federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules; and MI-ROP-M4204-2018.

#### *Observations and facility processes*

AQD staff met with Brandon LaRosa, Environmental Engineer, and Bridgette Rillema, Environmental Manager. AQD staff informed the representatives of the intent of the inspection. The facility representatives agreed to show the AQD the facility and its processes. Zeeland Farm Services produces soybean products including soybean oil through three main processes. The main processes include, the grain elevator, grain processing, and the refinery. The grain elevator receives and sells grain independent from the other facility processes. The grain processing area has a designated soybean receiving area. Grain processing includes, drying for storage, cracking, dehulling, flaking and extraction. The extraction process utilizes solvents to extract the oil from the soymeal. The extraction process includes oil recovery and meal drying, both of which have a solvent recovery step. Once the meal is dried it is further processed and toasted. The final process is oil refining.

During the inspection AQD staff observed the facility's processes roughly from start to finish. I followed the production stream and observed the various control devices associated with the main emission units. While observing the equipment, production staff showed me which instruments they took readings from and how they conducted their daily readings.

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#### ***Regulatory analysis and compliance evaluation***

##### *Facility emission category*

Zeeland Farm Services (ZFS) is a major source of nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), volatile organic compounds (VOCs), particulate matter (PM) and hazardous air pollutants (HAPs). The facility is currently subject to the Title V program and holds MI-ROP-M4204-2018. Zeeland Farm Services has boilers that are also subject to 40 CFR Part 60, Subpart Dc and 40 CFR Part 63, Subpart DDDDD. ZFS has engines that are subject to Subpart JJJJ and Subpart ZZZZ. Some of the grain handling and extraction is subject to New Source Performance Standard (NSPS) DD and National Emission Standard for Hazardous Air Pollutants (NESHAP) Subpart GGGG.

#### MI-ROP-M4202-2018 Requirements

##### *Source-wide Conditions*

The source wide conditions apply to all process equipment at the stationary source including equipment covered by other permits, grandfathered equipment and exempt equipment.

ZFS has one source-wide condition that applies to fugitive dust generated by all/any vehicle traffic on-site as well as all material handling. The permit limits visible emissions from all on site traffic to not exceed 5% opacity. While conducting the inspection the ground was snow covered and frozen. I did not observe conditions that would cause fugitive dust emissions, nor did I detect any opacity. The facility is also not permitted to maintain outside storage piles of soybean or soybean meal. I did not observe any outside storage piles during the inspection.

##### *Emission Unit*

EUBOILER- This unit covers an existing 35 MMTBU firetube boiler fueled with natural gas, distillate

oil (potential), landfill gas, and/or soybean oil (potential).

Emission unit conditions

Zeeland Farm Services has a material limit which limits the sulfur content contained in the distillate oil. Bridgette and Brandon indicated that they do not use distillate oil, but instead retained the option to use it. The facility does not currently have distillate oil on-site for use in the boiler therefore would only need to meet the limit if they utilize oil in the future. The facility instead uses both natural gas and landfill gas to fuel the boiler. Per the requirements of 40 CFR Part 60, Subpart Dc the permit requires that the facility track the amount of each fuel combusted in the boiler. While on site I observed the records, which indicated an average use of 845 scf/m.

*Emission Unit*

EUDRYING- This emission unit covers the Cimbria Super Cyclofan grain drier. This process has five exhaust points. The process is run depending on the moisture content of the soybeans as received from the suppliers.

Emission unit conditions

The equipment has the following emission limits:

Pollutant	Limit	Time Period/ Operating Scenario	Equipment
1. PM	0.03 pounds per 1000 lbs of exhaust gases calculated on a dry gas basis <sup>2</sup>	Hourly	Each exhaust stack in EUDRYING
2. PM10	12.65 pounds per hour <sup>2</sup>	Hourly	The total of the five exhaust stacks combined in EUDRYING
3. PM2.5	10.12 pounds per hour <sup>2</sup>	Hourly	The total of the five exhaust stacks combined in EUDRYING
4. Opacity	10% <sup>2</sup>	6-minute average	Each exhaust stack in EUDRYING

The facility demonstrated compliance with the above limits with a recently conducted stack test (see stack test report). The facility also has associated material limits as set by the permit. The facility is limited to 2520 tons of soybeans produced per day. The facility maintains records of daily soybean drying in bushels which indicate that the facility's highest daily production of soybean was 86664 bushels on 3/17/2016. 33.33 bushels equals 1 short ton (US), which equates to the highest daily drying at 2600.18 tons per day. If correct this would be above the permitted limit of 2520 tons per day by 80 tons or approximately 3% of the limit. I contacted Brandon LaRosa and discussed the records and the exceedance. He reviewed the handwritten logs and provided me with a copy. He indicated that there was a data entry error and that the days actual rate was 8664 bushels and not 86664 bushels. The handwritten notes also indicated that the process was only operated for six hours, which would be more consistent with the normal production rate producing 8664 bushels. The facility should implement a data input monitoring regiment to prevent an accidental reporting of an exceedance. The highest daily drying since the last inspection was 77760 bushels in one calendar day. This equates to 2333.03 tons

which is approximately 92.6% of the facility's daily limit.

The cyclofans are each limited to 10% opacity each. Brandon showed me the form they use to track opacity, which is part of their normal monitoring routine. I did not observe opacity while inspecting the area, and Brandon indicated that the equipment does not normally have any visible emissions.

The facility is also limited to a yearly drying rate of 225,000 tons (per 12 month rolling). The facility's highest drying rate was reported at 5,757,648 bushels, which equates to 172,746.7 tons per year (per 12 month rolling). This is approximately 77% of the facility's yearly limit.

The process is required to be equipped with properly installed and operated cyclofans. The facility has the installed cyclofans and they demonstrated that they are working through the utilization of an interlock.

#### *Emission Unit*

EUPREPEQUIPMENT- This emission unit includes the equipment which mechanically prepares the soybeans prior to oil extraction, including conditioning, dehulling, crushing, flaking and grinding. As discussed above in the recent changes section, ZFS has removed the meal load out process and modified their permit.

#### Emission unit conditions

The equipment has the following emission limits:

1. PM	0.044 pounds per 1,000 pounds of exhaust gases Calculated on a dry gas basis <sup>2</sup>	Hourly	EUPREPEQUIPMENT (Baghouse)
2. PM10	5.55 pounds per hour <sup>2</sup>	Hourly	EUPREPEQUIPMENT (Baghouse)
3. PM2.5	4.44 pounds per hour <sup>2</sup>	Hourly	EUPREPEQUIPMENT (Baghouse)
4. Opacity	10% <sup>2</sup>	6-minute average	Meal loading operations
5. PM	0.05 pounds per 1,000 pounds of exhaust gases Calculated on a dry gas basis <sup>2</sup>	Hourly	EUPREPEQUIPMENT (VSC Cyclone)
6. PM10	2.0 pounds per hour <sup>2</sup>	Hourly	EUPREPEQUIPMENT (VSC Cyclone)
7. PM2.5	1.4 pounds per hour <sup>2</sup>	Hourly	EUPREPEQUIPMENT (VSC Cyclone)

The facility demonstrated compliance with the above limits with a recent stack test conducted on 10/16/2018 - 10/19/2018. The opacity requirement that pertains to meal loadout was not assessed since this component of the process has been removed.

#### *Emission Unit*

EUPREPEQUIPMENT has one associated baghouse which is subject to 40 CFR Part 64 (CAM). This process is equipped with a gauge to continuously detect the baghouse pressure drop. I took a reading while in the control room and the pressure drop was 3.95" H<sub>2</sub>O. While in the production area, at the

baghouse I took a reading from the gauge and it indicated that the pressure drop was at 3.97" H2O. Both readings were consistent with the normal operating range of 1-6" H2O.

*Flexible Groups*- ZFS has the following flexible groups which contain conditions applicable to multiple emission units: *FGHANDLING, FGEXTRACTION, FGLF/NGENGINES, FGBOILERS*

*Flexible Group*

**FGHANDLING**- Equipment used for offloading soybeans including: receiving pits, storage bins, bean cleaners, south receiving leg, north reclaim leg, wet leg, pit leg, cleaner leg, receiving belts, bin fill conveyors, bin reclaim conveyors, cyclones, baghouses, and oil spray applicators. This equipment, except for storage bins, is subject to NSPS DD.

Emission Units: EUBIN, EUHANDLING, EUHANDLING2

The equipment has the following emission limits:

Pollutant	Limit	Time Period/ Operating Scenario	Equipment
1. PM	0.023 grams per dscm <sup>2</sup>	Hourly	Each stack in FGHANDLING
2. PM	0.019 pound per 1,000 pounds of exhaust gases, calculated on a dry gas basis <sup>2</sup>	Hourly	Each stack in FGHANDLING
3. PM10	0.86 pounds per hour <sup>2</sup>	Hourly	FGHANDLING EUHANDLING (SVRECSTACK)
4. PM10	0.51 pounds per hour <sup>2</sup>	Hourly	FGHANDLING EUHANDLING2 (SVRECSTACK2)
5. PM2.5	0.69 pounds per hour <sup>2</sup>	Hourly	FGHANDLING EUHANDLING (SVRECSTACK)
6. PM2.5	0.41 pounds per hour <sup>2</sup>	Hourly	FGHANDLING EUHANDLING2 (SVRECSTACK2)
7. Opacity	0% <sup>2</sup>	6-minute average	Grain handling operations (EUHANDLING, EUHANDLING2)
8. Opacity	10% <sup>2</sup>	6-minute average	Grain loading operations
9. Opacity	5% <sup>2</sup>	6-minute average	Grain unloading operations (EUHANDLING, EUHANDLING2)

The facility demonstrates compliance with the above limits through a combination of stack testing, material limits and monitoring. The flexible group is limited to processing 10,500 tons of soybean per day (349,965 bushels) and 450,000 tons of soybeans per year (14,998,500 bushels) (12 month rolling). The facilities highest daily receiving rate was 9,850 tons (328,290 bushels) which is below the 10,500 ton daily limit. The facility's highest 12 month rolling total was 368,880 tons received (12,294,778 bushels) which is below the 450,000 ton per year (12 month rolling) limit.

*Flexible Group*

**FGEXTRACTION**- Equipment used to remove oil from soybeans including: extractor, DTDC, spent flake conveyor, evaporators, oil stripper solvent system, plug screw aspiration, solvent dump tank, solvent storage tank, MO stripper, MO absorber, MO heater, MO cooler, MO heat exchanger, MO storage tanks, main gas vent, vacuum gauge and fan motion alarm, and DTDC cyclones. This is also the equipment and processes subject to the Solvent Extraction for Vegetable Oil Production NESHAP

(Subpart GGGG). (PTI No. 165-14)

Emission Units: EUEXTRACTION, EUDTDC, EUSTORAGETANK, EUDUMPTANK

The equipment has the following emission limits:

Pollutant	Limit	Time Period/ Operating Scenario	Equipment
1. VOC	7.12 pounds per hour <sup>2</sup>	Hourly <sup>1</sup>	FGEXTRACTION/ EUEXTRACTION (SVMMAINVENT)
2. VOC	30.3 tons per year <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	FGEXTRACTION/ EUEXTRACTION (SVMMAINVENT)
3. VOC	14.6 pounds per hour <sup>2</sup>	Hourly	FGEXTRACTION/ EUDTDC (SVDTDC)
4. VOC	62.2 tons per year <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	FGEXTRACTION/ EUDTDC (SVDTDC)
5. PM	0.034 lbs per 1,000 lbs of exhaust gases, calculated on a dry gas basis <sup>2</sup>	Hourly	FGEXTRACTION/ EUDTDC (SVDTDC)
6. PM10	3.03 pph <sup>2</sup>	Hourly	FGEXTRACTION/ EUDTDC (SVDTDC)
7. PM2.5	2.42 pph <sup>2</sup>	Hourly	FGEXTRACTION/ EUDTDC (SVDTDC)
8. Visible Emissions	10% Opacity <sup>2</sup>	6-minute average	FGEXTRACTION/ EUDTDC (SVDTDC)

The facility complies with the above limits through stack testing, operational requirements and material limits. The facility was recently issued a violation notice for failing to stack test one portion of FGEXTRACTION. The facility has since, submitted a testing plan and conducted the required stack test. The testing conducted indicated that the facility was in compliance with the required permit limit (see stack test report). In conjunction with the testing the facility is limited to the following:

Material	Limit	Time Period/ Operating Scenario	Equipment
1. Soybeans	1,050 tons per day <sup>2</sup>	Calendar day	Extraction plant
2. Soybeans	383,250 tons per year <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	Extraction plant
3. Extraction solvent	0.150 gallon per ton of soybeans processed <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	Extraction plant

4. Extraction solvent	0.250 gallon per ton of soybeans processed <sup>2</sup>	Three-month rolling time period as determined at the end of each calendar month	Extraction plant
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The facility’s records indicate that the highest soybean production rate per day was 1066 tons on 11/5/2016. This would exceed the 1050 ton per day limit by 16 tons or 1.52% except for the this occurred on a 25 hour day. The facility recorded the data on during a daylight saving time day using hourly production and included an extra hour into the 24 hour period. If the data were input for a 24 hour time period (1 day) the daily production would be 1024 tons per day, which is below the permit limit. The data discrepancy was noted in the past AQD inspection conducted on 6/8/2017. The next highest production rate was 1049 tons on 4/26/2017. This is within 1 ton of the permit limit or 99.9% of the limit. The facility also has multiple additional daily production rates within 99% of the permitted limit.

The facilities highest 12 month rolling soybean production was 345,292 tons during 11/30/2018. This is below the yearly (12 month rolling) 383,250 ton limit.

The facility’s solvent use per ton of soybean processed is split into a 12 month rolling average and a three month rolling average. The facility is limited to a 0.150 gallon per ton limit per 12 month rolling. The facility’s highest use of gallons solvent per ton of soybean was on 6/30/2015 at 0.138 gallons per ton per 12 month rolling total. This is below the 0.150 gallon per ton limit per 12 month rolling total. The facility’s highest 3 month average use per ton was on various dates in 2013 and 2015 at approximately 0.150 and 0.152 gallons per ton of soybean. The facility normally operates between approximately 0.085 and 0.120 gallon per ton of soybean.

ZFS tracks the VOC emissions from the units and provided me with the records. They indicate that of the 30.3 tons per year SVMMAINVENT limit (12 month rolling) the facility at its highest emitted 17.73 tons per 12 month rolling in June 2018. They also indicated that of the 62.2 ton per year SVDTDC limit (12 month rolling) the facility at its highest emitted 17.73 tons per 12 month rolling in July 2018.

The permit requires that the facility shall not operate the DTDC unit unless the associated condenser, the spent flakes conveyor, either of the two evaporators and their associated condenser, and the oil stripper, unless the absorber system is installed and operating properly and in accordance with the approved MAP and PMP. The process operator indicated that the process will not draw a vacuum and that the equipment has a gauge that indicates the negative pressure. While inspecting the equipment the gauge indicated that the vacuum was at -1.6” H2O.

*Flexible Group*

FGLF/NGENGINES- This flexible group includes two (2) 2,300 BHP Caterpillar 3520C reciprocating internal combustion engines fueled with treated landfill gas or natural gas.

Emission Units: EULF/NGENGINE1 and EULF/NGENGINE2

The equipment has the following emission limits:

Pollutant	Limit	Time Period / Operating Scenario	Equipment
1. NOx	4.56 lb/hr <sup>2</sup>	Hourly	EULF/NGENGINE1

			EULF/NGENGINE2 (The limit is applicable to each individual engine)
2. CO	22.44 lb/hr <sup>2</sup>	Hourly	EULF/NGENGINE1 EULF/NGENGINE2 (The limit is applicable to each individual engine)
3. VOC	4.02 lb/hr <sup>2</sup>	Hourly	EULF/NGENGINE1 EULF/NGENGINE2 (The limit is applicable to each individual engine)
4. Formaldehyde	2.8 lb/hr <sup>1</sup>	Hourly	EULF/NGENGINE1 EULF/NGENGINE2 (The limit is applicable to each individual engine)
5. SO <sub>2</sub>	2.77 lb/hr <sup>2</sup>	Hourly	EULF/NGENGINE1 EULF/NGENGINE2 (The limit is applicable to each individual engine)

ZFS demonstrates compliance with the above permit limits through engine testing as well as material limits. The facility is limited to only use either landfill gas or natural gas. The two engines primarily run on landfill gas when it is available (approximately 100% landfill gas and 96.45% landfill gas). The facility recently conducted a test of the engines, which demonstrated that the engines met the emission limits set by the permit.

#### *Flexible Group*

FGBOILERS- This flexible group covers gas 1; Fuel Subcategory requirements for existing Boilers/Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD.

Emission Units: EUBOILER, EULF/NGBLR5, EUNUKBOILER, EUREFBOILER

The facility demonstrates compliance with the flexible group requirements through material restrictions, operational restrictions and fuel tracking. The facility has provided an initial notification for these units.

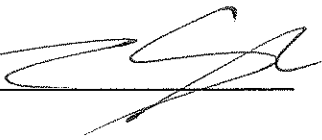
FGBOILERS does not establish emission limits, these are instead limited specific to each emission unit under the emission unit conditions. The flexible group instead establishes material limits and operational restrictions. The permit requires that ZFS shall only burn fuels as allowed in the EULF/NGBLR5, EUNUKBOILER, EUREFBOILER designed to burn gas 1 subcategory definition in 40 CFR 63.7575. The permit also requires that ZFS shall only burn natural gas, distillate oil, landfill gas and soy oil as fuel for EUBOILER. It appeared that ZFS was complying with the condition of the permit. ZFS does not burn soy oil, but as mentioned previously they do retain the ability to do so.

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#### *Discussion*

**Compliance statement:** It appears that ZFS is in compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules; and MI-ROP-M4204.



NAME 

DATE 2/29/19

SUPERVISOR  (Acting)



**DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: Other**

M420448581

<b>FACILITY:</b> Zeeland Farm Services, Inc.		<b>SRN / ID:</b> M4204
<b>LOCATION:</b> 2468 84th Ave, ZEELAND		<b>DISTRICT:</b> Grand Rapids
<b>CITY:</b> ZEELAND		<b>COUNTY:</b> OTTAWA
<b>CONTACT:</b> Bridgette Rillema, Environmental Manager		<b>ACTIVITY DATE:</b> 04/22/2019
<b>STAFF:</b> Kaitlyn DeVries	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b> MAJOR
<b>SUBJECT:</b> Supplemental Records Review for the February 13, 2019 Inspection		
<b>RESOLVED COMPLAINTS:</b>		

This report is serving as a supplemental records review for the records obtained during the February 13, 2019 Inspection for Zeeland Farm Services (ZFS).

Compliance with several of the emission limits for various emission units is demonstrated via stack testing. Stack tests for EUDRYING, EUPREPEQUIPMENT, EUHANDLING, and EUHANDLING2 was conducted in October 2019 and results from these tests all indicated compliance with the emission limits for PM, PM2.5 and PM10, as specified in each of the emission units in MI-ROP-M4204-2018. In addition to the particulate limits for many of the emission units, opacity limits also exist. The facility conducts daily observations of the emission points for EUDRYING, the meal loading operations for EUPREPEQUIPMENT, the grain unloading operations for FGHANDLING, and FGEXTRACTION.

EUPREPEQUIPMENT also requires the pressure drop for the baghouse be read twice daily; records indicate that the pressure drop multiple times throughout the day, and the pressure drop is consistently between 3 and 5 inches of water column.

EULF/NGBLR5 is a 6.27 MMBtu/hr boiler that can burn either natural gas or landfill gas and EUNUKBOILER is a 4.0 MMBTU natural gas firetube boiler that is used to provide high pressure steam for the plants deodorizing systems. ZFS has until December 31, 2020 to conduct testing to verify compliance with the emission limits for NOx and CO from EULF/NGBLR5. Per a review of the 2018 MAERS data, the facility is properly tracking the natural gas usage for EULF/NGBLR5 and EUNUKBOILER.

Testing to demonstrate compliance with the emission limits for FGLF/NGENGINES was done in August 2018, and the results indicated compliance with the limits for CO, VOC, Formaldehyde, NOx, and SO2.

EUREFBOILER is a 16.8 MMBTU/hr firetube boiler used to provide steam to plant processes. The boiler can burn either natural gas or landfill gas. The boiler was most recently tested in 2015, and demonstrated compliance with the NOx and CO limits, but the boiler must be tested again before December 31, 2020. Per the 2018 MAERS data, ZFS is tracking the monthly amount of natural gas and landfill gas that is burned in the boiler.

EUAMMONIA is for a single anhydrous ammonia storage tank, which was not evaluated during the inspection. This unit will be evaluated during the next regular compliance inspection. This emission unit was initially omitted from the 2018 MAERS; ZFS has re-submitted the 2018 MAERS to include this emission unit.

EUGENERATOR is for a 70 Kw emergency engine that was installed in April 2016. This unit is subject to the provisions of 40 CFR Part 60 Subpart JJJJ for stationary spark ignition internal combustion engines and to 40 CFR Part 63 Subpart ZZZZ for stationary reciprocating internal combustion engines.

Compliance with the provisions of Subpart ZZZZ are demonstrated via compliance with Subpart JJJJ. Data for this emission unit was not obtained in the Inspection. This emission unit was initially omitted from the 2018 MAERS; ZFS has re-submitted the 2018 MAERS to include this emission unit.

In addition to the requirements evaluated as part of the inspection, ZFS has to track the temperature of the desolventizer toaster sparge deck, as part of FGEXTRACTION. Records indicate that when the unit is on, the temperature is above the required 195°F, typically around 225°F. ZFS must also maintain an LEL within a range of 0-50% and record the reading at least four (4) times per day. ZFS is typically recording the LEL six (6) times per day, and the records show it below the 50% maximum allowed. The HAP fraction (hexane) being calculated is less than the 1% by volume, as required by 40 CFR Part 63 Subpart GGGG, and ZFS is calculating the solvent loss as required.

ZFS uses Rule 290 to demonstrate compliance for EUREFINERY. This emission unit was installed prior to the December 2016 Rule change, thus demonstrates compliance with the rule as written at the time. Records indicate less than 200 pounds of emissions per month.

Initially the MAERS report was submitted without all of the Emission Units included, but this has since been resolved.

NAME Kaitlyn DeW DATE 5/17/2019 SUPERVISOR Bob Spurgeon (Acting)