

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

P078854433

FACILITY: ZFS Ithaca, LLC		SRN / ID: P0788
LOCATION: 1266 E. Washington Road, ITHACA		DISTRICT: Lansing
CITY: ITHACA		COUNTY: GRATIOT
CONTACT: Bridgette Rillema , Environmental Manager		ACTIVITY DATE: 07/29/2020
STAFF: Michelle Luplow	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Scheduled, announced compliance inspections conducted in June and July 2020, to determine compliance with PTI 20-17B.		
RESOLVED COMPLAINTS:		

Inspected by: Michelle Luplow (author), Lindsey Wells (AQD Technical Programs Unit tester)

Personnel Present: Brandon LaRosa, Environmental Engineer (brandonl@zfsinc.com)
Bridgette Rillema, Environmental Manager (bridgetter@zfsinc.com)

Other ZFS Staff: Scott Duncan, EHS Manager (scottd@zfsithaca.com)

Purpose

Conduct announced, scheduled, partial compliance evaluation (PCE) inspections by determining compliance with ZFS Ithaca's Permit No. 20-17B. These inspections were conducted as part of a full compliance evaluation (FCE).

Facility Background/Regulatory Overview

ZFS Ithaca is a new Title V major source for NO_x, VOC, and PM and they are also a major source of HAPS (hexane). This is the first time that ZFS Ithaca is being inspected by AQD.

The majority of ZFS Ithaca operations fall into 2 categories: grain receiving and handling and soybean oil extraction processes. The grain receiving/handling operations permitted under FGHANDLING are subject to the NSPS Subpart DD, Standards of Performance for Grain Elevators, and the soybean oil extraction process permitted under FGEXTRACTION is subject to the NESHAP Subpart GGGG, Solvent Extraction for Vegetable Oil Production. ZFS Ithaca also owns two boilers that are subject to the Boiler MACT Subpart DDDDD.

The 2 natural gas-fired boilers are subject to the NSPS Subpart Dc and the NESHAP Boiler MACT Subpart DDDDD.

An administratively complete ROP application is required to be submitted within 12 months of commencing trial operations. Trial operations commenced February 20, 2020, and therefore an administratively complete initial ROP application is due before Monday, February 22, 2021 (February 20, 2021 is a Saturday).

Inspections

Inspection of the facility was conducted in two phases. The first phase was conducted on June 9, 2020, during the stack testing of the grain elevator equipment, and consisted of compliance checks on FGHANDLING, EUDRYING1, EUROADS, and EUBINS; the second phase was conducted on July 29, 2020, during stack testing of the soybean extraction equipment, and consisted of compliance checks on FGBOILERS, EUPREP, EUHULLGRINDING, EUPELLETIZING, EUMEALGRINDING, FGEXTRACTION, and FGLOADSTORE. EUINGREDIENTS (an EU in FGLOADSTORE) is the only permitted emission unit that has not yet been installed at this time.

Table 1. Equipment List

Equipment	Description	Installation dates	Date of Startup
EUSHIPRECEIVE (FGHANDLING)	Grain unloading (receiving) via truck and rail, housed in same building. Baghouse control	April 3, 2017	July 22, 2019
EUHANDLING (FGHANDLING)	Grain handling (bucket elevators, enclosed conveyors, enclosed distributor). Oil suppression control.	April 3, 2017	July 22, 2019
EUBINS (FGHANDLING)	Grain storage bins and silos.	April 3, 2017	July 22, 2019
EUDRYING1	Rack dryer with two 33-MMBtu/hr max	October 10, 2019	October 10, 2019

	heat input burners		
EUROADS	Onsite vehicle traffic	NA	NA
EUBOILERS1 & 2 (FGBOILERS)	Natural gas-fired boilers, each rated at 95 MMBtu/hr maximum heat input	November 11, 2019	November 11, 2019
EUPREP	Soybean preparation processes for extraction	February 10, 2020	February 10, 2020
EUHULLGRINDING	2 hammermills for soybean hull grinding	February 10, 2020	February 10, 2020
EUPELLETIZING	Hull pelletizing systems	February 19, 2020	February 19, 2020
EUMEALGRINDING	Meal grinding operations	February 10, 2020	February 10, 2020
EUEXTRACTION (FGEXTRACTION)	Soybean oil extraction, including mineral oil adsorption system as control	February 10, 2020	February 10, 2020
EUDC (FGEXTRACTION)	3 meal dryers, 1 meal cooler	February 10, 2020	February 10, 2020
EUTANKS1, 2, 3 (FGEXTRACTION)	Three hexane storage tanks, each with 27,000-gallon capacity, vented to extraction system for control	December 20, 2019	February 5, 2020
EUMEALSTORAGE (FGEXTRACTION)	Indoor storage of crude soybean meal	February 10, 2020	February 10, 2020
EUHULLSTORAGE (FGLOADSTORE)	4 steel bins for hull storage	February 10, 2020	February 10, 2020
EUHULLLOADOUT (FGLOADSTORE)	Soybean hull truck and rail loadout controlled by baghouse	February 17, 2020	February 17, 2020
EULOADOUT (FGLOADSTORE)	6 overhead bins and truck/rail loadout operations for soybean meal. Controlled by baghouse.	February 17, 2020	February 17, 2020
EUINGREDIENTS (FGLOADSTORE)	Receiving ingredients by truck and rail	TBD	TBD
EUCOOLINGTWR	Draft cooling tower, equipped with mist eliminators	TBD	TBD

EUDRYING1

Rack grain dryer used to dry soybeans down to a preferred moisture content. Dryer has 5 exhaust stacks.

There are currently no Process/Operational Restrictions on EUDRYING1.

Emission Limits & Testing/Sampling

EUDRYING1 has PM, PM10, PM2.5, NOx and CO limits. The lb/hr limits outlined in the permit are for all stacks combined. Testing is required to be conducted upon request of the AQD. During the June 2020 testing event EUDRYING1 ZFS Ithaca tested for these pollutants of their own volition. The test report was received August 26, 2020. Note that the permit allows ZFS Ithaca to test emission rates from a single representative exhaust stack of EUDRYING1, but take the results of that single stack and multiply by 5 for lb/hr results (multiplying by 5 does not apply to lb/1000 lb exhaust gasses), to represent emissions from all 5 dryer stacks. Table 2 contains a list of the pollutants, their limits, and test results from the June 2020 testing event. ZFS Ithaca is currently in non-compliance with EUDRYING1 CO emission limit and will provide AQD with a compliance plan in response to the violation notice AQD will be sending.

Table 2. June 2020 Stack Test Data

Pollutant	Emission Limit	June 2020 Test Results	Compliance Status
PM	0.10 lb/1000 lb exhaust gas	0.015 lb/1000 lb	Compliance
PM10	12.5 lb/hr	2.80	Compliance
PM2.5	9.38 lb/hr	<2.35	Compliance

NOx	6.60 lb/hr	2.05	Compliance
CO	5.54 lb/hr	5.85 (as reported in test report) 5.92 (as reported by TPU)	Non-Compliance

ZFS Ithaca is required to conduct visible emissions testing, as required by the NSPS Subpart DD, within 60 days after achieving the maximum production rate, but not later than 180 days after commencement of initial startup. Testing of this unit took place June 11, 2020. Initial startup commenced on October 10, 2019. At that time, through the winter, ZFS Ithaca was not receiving enough grain to be dried. The spring and early summer 2020 also did not allow for testing because of safety considerations associated with the COVID-19 pandemic and therefore, ZFS Ithaca was under AQD COVID-19 enforcement discretion to complete the NSPS Subpart DD visible emission testing until a time at which it could be safely done during the COVID-19 pandemic. The timing of their test on this unit is acceptable to AQD. The visible emissions test report was received August 27, 2020. The report states that there were no visible emissions seen during the testing of EUDRYING1, and all reviewed VE data demonstrated such. I was not able to verify this as I was not onsite for the EUDRYING1 test, but during the July 29, 2020 visit I did not see any signs of opacity from the dryer exhaust stacks.

Material Limits & Monitoring/Recordkeeping

EUDRYING1 is limited to 16,000,000 bushels of throughput per 12-month rolling time period as determined at the end of each calendar month, and ZFS Ithaca is required to track the throughput of grain dried. ZFS Ithaca provided monthly and 12-month rolling records from October 2019 (startup) through June 2020, attached. ZFS Ithaca EUDRYING1 records showed incorrect calculations for the 12-month rolling totals from December 2019 – June 2020. Table 3 provides the corrected 12-month rolling records. ZFS Ithaca is in compliance with grain throughput at a 12-month rolling total of ~3.28 million bushels.

Table 3. Grain throughput in EUDRYING1

Month	Monthly throughput (bushels)	12-month Rolling Totals (bushels)
October 2019	435,423.00	435,423.00
November 2019	478,613.16	914,036.16
December 2019	977,461.41	1,891,497.57
January 2020	109,248.14	2,000,745.71
February 2020	39,715.00	2,040,460.71
March 2020	0.00	2,040,460.71
April 2020	309,792.50	2,350,253.21
May 2020	478,128.00	2,828,381.21
June 2020	448,582.00	3,276,963.21

Design/Equipment Parameters

A device to monitor the amount of grain processed through EUDRYING1 on a monthly basis is required to be installed, calibrated, maintained and operated in a satisfactory manner. ZFS Ithaca provided the following explanation for determining quantity of grain processed through the grain dryer:

“Grain drying quantity is based on the extraction rate of the dryer. The operator selects the extraction rate from the control room. The extraction rate is the amount of time grain remains in one section of the dryer before moving to the next section of the dryer. The dryer manufacturer has provided a chart which correlates extraction rate to grain throughput rate. The chart below shows some of the common extraction rates used, and the corresponding grain throughput rate. The operators monitor how long the dryer runs at the extraction rate to calculate total grain throughput. Therefore, there is no calibration or specific device used to monitor grain throughput of the dryer, and it is instead calculated based on the overall operation of the dryer.”

Extraction Rate (seconds)	56	63	65	90	116
Grain Rate (bushels/hr)	10,140	9,230	9,000	6,857	5,496

At this time, it is my professional judgment that this method for determining grain throughput for EUDRYING1 is acceptable, and meets the intent of the permit condition; however, during future inspections further due diligence should involve an inspection of the control board used to adjust extraction rate, verify via in-person observation that there is a chart that

correlates extraction rate with grain rate, and verify with the operator how they calculate grain throughput rates for the hour and day.

Stack/Vent Restrictions

There are 5 rectangular stacks from which emissions from EUDRYING1 are vented. Each of the stacks has a flap that closes while the grain is being extracted from the dryer. Three seconds before the extraction of grain, shutters stop the air flow, extraction takes place, and then 3 seconds later the shutters open again and drying resumes. There is no movement of air when the grain is in movement. This information was obtained from B. Rillema as well as a video explaining the drying process, which can be found at <https://vimeo.com/427570898/b69f253734>. B. Rillema also said that natural gas is not combusted when the flaps are closed. There should be no emissions generated in the drying (PM or natural gas combustion products) from the stacks during flap closure.

Exhaust gases from the stacks are required to be discharged unobstructed vertically upwards to the ambient air. The flaps on the dryer do not open up to ambient air completely; there is ~10-20% angle of closure when the flaps are open to exhaust air. Michelle Rogers and I discussed with AQD modeler, Stephanie Hengesbach, and supplied the dryer vimeo video to her to evaluate whether there was a possible obstruction of air flow due to the flaps. Per her note below, the exhaust gases appear buoyant enough that the exhaust air flow does not appear to be obstructed by the flaps:

"With the plume being so buoyant, I do feel vertically unobstructed is appropriate. The vents seem to open fully and don't seem to hamper the plumes vertical motion. Often for vents we use area sources; however, in this case it wouldn't be appropriate since area sources do not take into consideration vertical motion of a plume. Jim [Haywood] and I did discuss the video and the plume, and we are in agreement."

EUROADS

EUROADS addresses fugitive dust from on-site vehicle traffic. Opacity is limited to 5% and ZFS Ithaca was required to submit a nuisance minimization plan for fugitive dust within 60 days of PTI 20-17 issuance (September 2017). The nuisance minimization plan was received June 2018 (late) and was reviewed, with a final version of the plan approved by AQD in July 2018.

While onsite in June and July all paved roads were well-maintained. I saw no fugitive dust while onsite from the roadways caused by neither wind nor truck traffic. Weekly, non-certified visible emissions are required to be kept by the company. ZFS Ithaca supplied me with weekly non-certified VE readings for the month of June 2020 (see attached).

EUPREP

All soybeans that are processed through EUPREP are also run through EUEXTRACTION. EUPREP represents a conglomerate of over 20 pieces of equipment with associated dust control systems. Attached is a schematic provided by ZFS Ithaca showing how all equipment in EUPREP, as well as EUHULLGRINDING, EUPELLETIZING, and EUMEALGRINDING, are arranged for soybean processing, and their associated particulate control devices and exhaust systems. SVPREP is EUPREP's stack with an associated "main exhaust filter." Whole bean cleaning and aspiration; hull cleaning and aspiration; and soybean cascade coolers and dryers all have cyclones that exhaust to the main exhaust filter, prior to exhausting through SVPREP.

Emission Limits, Testing/Sampling & Monitoring/Recordkeeping

EUPREP has PM, PM10, PM2.5, and visible emissions limits. Testing is required to be conducted within 180 days after commencement of initial startup. Testing on EUPREP was conducted July 28 – 29, 2020 as part of a testing series that lasted through July 30th. The test report is due no later than 60 days following the last date of the test, September 28, 2020. As such, test results for PM, PM10, and PM2.5 are pending.

During the July 29, 2020 inspection and stack testing I conducted uncertified visible observations, the results of which indicated that ZFS Ithaca would meet the opacity limit of 10% from the SVPREP stack, as all readings were 0-<5%. See July 29, 2020 Stack Test Observation report for visible emission readings. Additionally, ZFS Ithaca is required to conduct and record weekly non-certified visible emission observations from SVPREP. ZFS Ithaca has provided me with these readings on a weekly basis for the month of June 2020. See attached.

Process/Operational Restrictions

A Malfunction Abatement Plan (MAP) used to identify normal operating ranges of air cleaning devices, required maintenance, etc, is required to be submitted prior to startup of EUPREP. Startup was 2/10/20 and the initial MAP was received via email January 14, 2020. The MAP contains all emission units that require a MAP including EUPREP. The MAP was reviewed and approved. Operating ranges for various control devices are included in the MAP and were used to determine compliance with this requirement to ensure equipment is operating properly. See [Design/Equipment Parameters discussion](#).

Design/Equipment Parameters

All control devices associated with the equipment in the following table is required to be installed, maintained, and operated in a satisfactory manner. This includes operating the baghouses (with fabric filters) within the ranges specified in the MAP.

Table 4 lists the equipment and their control devices, and the control device operating ranges specified in the MAP. Note that all equipment in this table exhausts through SVPREP; however, some of the equipment exhausts to a cyclone before exhausting through the SVPREP stack, while other pieces of equipment exhaust to a cyclone or baghouse and then to the main exhaust filter/baghouse prior to exhausting from SVPREP. The MAP does not specify proper operating ranges for the cyclones as there are no pressure gauges associated with these, but notes that if opacity above the 10% limit is seen from SVPREP, the entire exhaust system is investigated to determine where the source of the opacity is.

During the inspection/stack test I recorded pressure drops on the main exhaust filter and Jet Dryer A & B baghouses. All pressure drop readings were between 3-4" H₂O, and therefore in compliance with the operating ranges established in the MAP. See July 29, 2020 stack test observation report for all data points.

Table 4. EUPREP processes

Process	Control Device	Operating Ranges
Whole bean cleaning and aspiration	Cyclone + main exhaust filter	0.5 – 10" H ₂ O (main exhaust filter)
Hull cleaning and aspiration	Cyclone + main exhaust filter	0.5 – 10" H ₂ O (main exhaust filter)
Vertical seed conditioners (VSCA & VSCB)	Cyclones	NA
Jet Dryers A & B	Fabric filters for each	0.5 – 10" H ₂ O (main exhaust filter)
Crown Cascade Dryers (CCDA & CCDB)	Cyclone + main exhaust filter	0.5 – 10" H ₂ O (main exhaust filter)
Crown Cascade Coolers (CCCA & CCCB)	Cyclone + main exhaust filter	0.5 – 10" H ₂ O (main exhaust filter)
Hull screener and secondary aspirator	Cyclone + main exhaust filter	0.5 – 10" H ₂ O (main exhaust filter)
Flaker vacuum exhaust fan	Cyclone	NA

Monitoring/Recordkeeping

ZFS Ithaca is required to monitor the pressure drop continuously and to record the pressure drop on a daily basis for each fabric filter in EUPREP (main exhaust filter and Jet Dryer A & B exhaust filters). Computer output monitors are used to continuously monitor the pressure drops on these 3 baghouses. ZFS Ithaca provided me daily records for the month of June 2020, as requested, and demonstrated that they take readings twice daily, although not required, once during the night shift and once during the day shift. I reviewed these records and it appears that all pressure drops fall within the MAP-established operating range of 0.5 – 10" H₂O (reported values are ~2" – 6" H₂O). See attached for a snapshot of these records.

Non-certified VE's are required to be conducted and results recorded on a weekly basis. ZFS Ithaca provided me weekly uncertified VE readings for the month of June 2020. See attached for a snapshot of these records. Records indicate compliance with the 10% limit. Highest opacity reading over a 6-minute period was 1%.

Reporting

Ten (10) days after completion of the installation of EUPREP, ZFS Ithaca was required to notify AQD of the installation. Installation report has been submitted and can be found in the FCE Summary Report.

EUHULLGRINDING

This emission unit consists of 2 hammermills used to grind soybean hulls and is controlled by a baghouse. Exhaust gases emit through SVHULLGRINDING. This unit was operating during the July inspection

There are currently no Material Limits for EUHULLGRINDING.

Emission Limits & Testing/Sampling

EUHULLGRINDING has PM, PM₁₀, PM_{2.5}, and visible emissions limits. Testing is required to be conducted upon request of the AQD. At this time it is my professional judgement that EUHULLGRINDING does not need to be tested for PM emissions; a spot-check of the exhaust stack during the July stack test/inspection indicated that there was no opacity being emitted from SVHULLGRINDING.

Process/Operational Restrictions

A Malfunction Abatement Plan (MAP) used to identify normal operating ranges of air cleaning devices, required maintenance, etc, is required to be submitted prior to startup of EUHULLGRINDING. Startup was 2/10/20 and the initial MAP was received via email January 14, 2020. The MAP contains all emission units that require a MAP including EUHULLGRINDING. The MAP was reviewed and approved. Operating ranges for various control devices are included in the MAP and were used to determine compliance with this requirement to ensure equipment is operating properly.

Design/Equipment Parameters

The baghouse controlling both hammermills is required to be installed, maintained, and operated in a satisfactory manner. This includes operating the baghouses (with fabric filters) within the ranges specified in the MAP (0.5 – 10" H₂O).

During the July inspection/stack test I recorded a pressure drop of 5.33 " H₂O at 9:24 a.m., within the operating range specified in the MAP.

Monitoring/Recordkeeping

ZFS Ithaca is required to monitor the pressure drop continuously and to record the pressure drop on a daily basis for the EUHULLGRINDING fabric filter. Computer output monitors are used to continuously monitor the pressure drop on this baghouse. ZFS Ithaca provided me daily records for the month of June 2020, as requested, and demonstrated that they take readings twice daily, although not required, once during the night shift and once during the day shift. I reviewed these records and it appears that all pressure drops fall within the MAP-established operating range of 0.5 – 10" H₂O (reported values are ~2" – 6" H₂O). See attached for a snapshot of these records.

Non-certified VE's are required to be conducted and results recorded on a weekly basis. ZFS Ithaca provided me weekly uncertified VE readings for the month of June 2020. See attached for a snapshot of these records. Records indicate compliance with the 5% limit. Records indicate 0% opacity for all readings.

Reporting

Ten (10) days after completion of the installation of EUHULLGRINDING, ZFS Ithaca was required to notify AQD of the installation. Installation report has been submitted and can be found in the FCE Summary Report.

EUPELLETIZING

EUPELLETIZING is associated with a hull pelletizing system and its pellet cooler. This unit was operating during the July inspection.

There are currently no Material Limits for EUPELLETIZING.

Emission Limits & Testing/Sampling

EUPELLETIZING has PM, PM₁₀, PM_{2.5}, and visible emissions (VE) limits. Testing is required to be conducted within 180 days after commencement of initial startup. Testing on EUPELLETIZING for PM, PM₁₀, PM_{2.5} and VE's was conducted during the testing that occurred July 28 – 30, 2020 as part of a testing series. The test report is due no later than 60 days following the last date of the test, September 28, 2020. As such, test results for PM, PM₁₀, and PM_{2.5} are pending.

VE's are limited to 15% opacity over a 6-minute average. During the July inspection/stack test I did a spot-check of the VE's from SVPELLETIZING and did not observe any opacity emitting from the stack at that time.

Process/Operational Restrictions

A Malfunction Abatement Plan (MAP) used to identify normal operating ranges of air cleaning devices, required maintenance, etc, is required to be submitted prior to startup of EUPELLETIZING. Startup was 2/19/20 and the initial MAP was received via email January 14, 2020. The MAP contains all emission units that require a MAP including EUPELLETIZING. The MAP was reviewed and approved. Operating ranges for various control devices are included in the MAP and were used to determine compliance with this requirement to ensure equipment is operating properly.

Design/Equipment Parameters

The cyclone controlling emissions from the pelletizing system is required to be installed, maintained, and operated in a satisfactory manner. ZFS Ithaca's MAP specifies that any opacity over the limit of 15% would be an indicator that the cyclone is not operating properly.

Monitoring/Recordkeeping

Non-certified VE observations are required to be conducted and results recorded on a weekly basis. ZFS Ithaca provided me weekly uncertified VE readings for the month of June 2020. See attached for a snapshot of these records. Records indicate compliance with the 15% limit. Records show 0-<1% opacity for all 6-minute readings.

Reporting

Ten (10) days after completion of the installation of EUPELLETIZING, ZFS Ithaca was required to notify AQD of the installation. Installation report has been submitted and can be found in the FCE Summary Report.

EUMEALGRINDING

EUMEALGRINDING is associated with 3 hammermills used to grind meal. This unit was operating during the July inspection.

There are currently no Material Limits for EUMEALGRINDING.

Emission Limits & Testing/Sampling

EUMEALGRINDING has PM, PM10, PM2.5, and visible emissions (VE) limits. Testing is required to be conducted within 180 days after commencement of initial startup. Testing on EUMEALGRINDING for PM, PM10, PM2.5 and VE's was conducted during the testing that occurred July 28 – 30, 2020 as part of a testing series. The test report is due no later than 60 days following the last date of the test, September 28, 2020. As such, test results for PM, PM10, and PM2.5 are pending.

VE's are limited to 5% opacity over a 6-minute average. During the July inspection/stack test I did a spot-check of the VE's from SVMEALGRINDING and did not observe any opacity emitting from the stack at that time.

Process/Operational Restrictions

A Malfunction Abatement Plan (MAP) used to identify normal operating ranges of air cleaning devices, required maintenance, etc, is required to be submitted prior to startup of EUMEALGRINDING. Startup was 2/10/20 and the initial MAP was received via email January 14, 2020. The MAP contains all emission units that require a MAP including EUMEALGRINDING. The MAP was reviewed and approved. Operating ranges for various control devices are included in the MAP and were used to determine compliance with this requirement to ensure equipment is operating properly.

Design/Equipment Parameters

The baghouse controlling the 3 hammermills is required to be installed, maintained, and operated in a satisfactory manner. This includes operating the baghouses (with fabric filters) within the ranges specified in the MAP (0.5 – 10" H2O).

During the July inspection/stack test I recorded a pressure drop of 6.26 " H2O at 9:24 a.m., within the operating range specified in the MAP.

Monitoring/Recordkeeping

ZFS Ithaca is required to monitor the pressure drop continuously and to record the pressure drop on a daily basis for the EUMEALGRINDING fabric filter. Computer output monitors are used to continuously monitor the pressure drop on this baghouse. ZFS Ithaca provided me daily records for the month of June 2020, as requested, and demonstrated that they take readings twice daily, although not required, once during the night shift and once during the day shift. I reviewed these records and it appears that all pressure drops fall within the MAP-established operating range of 0.5 – 10" H2O (reported values are ~4" – 6" H2O). See attached for a snapshot of these records.

Non-certified VE's are required to be conducted and results recorded on a weekly basis. ZFS Ithaca provided me weekly uncertified VE readings for the month of June 2020. See attached for a snapshot of these records. Records indicate compliance with the 5% limit. Records indicate 0% opacity for all readings.

Reporting

Ten (10) days after completion of the installation of EUMEALGRINDING, ZFS Ithaca was required to notify AQD of the installation. Installation report has been submitted and can be found in the FCE Summary Report.

EUCOOLINGTWR

This emission unit is a 3-cell mechanical draft cooling tower for utilities purposes.

There are currently no Emission Limits, Material Limits, Process/Operational Restrictions, or Reporting requirements for EUCOOLINGTWR.

Design/Equipment Parameters, Testing/Sampling, & Monitoring/Recordkeeping

EUCOOLINGTWR is required to be equipped and maintained with mist/drift eliminators with a vendor-certified maximum drift rate of 0.005% or less and ZFS Ithaca is required to maintain a record of the vendor's certification for the life of EUCOOLINGTWR. This record is still pending. If ZFS Ithaca is not able to provide this vendor-certified maximum drift rate, AQD may ask ZFS Ithaca to verify the drift loss by testing.

ZFS Ithaca is also required to maintain a record of any maintenance conducted on EUCOOLINGTWR. I requested records from startup of the equipment through June 2020. Scott Duncan, EHS Manager, stated in the attached document, "No maintenance has been needed or performed on the cooling tower during the timeframe specified."

FGHANDLING

This flexible group includes EUSHIPRECEIVE (grain shipping and receiving operations), EUHANDLING (grain handling), and EUBINS (grain storage). Grain loading, unloading, and handling under this flexible group are subject to the NSPS Subpart DD, as ZFS Ithaca is classified as a terminal grain elevator.

Grain receiving (unloading grain via trucks and railcar) is controlled by a baghouse that exhausts through SVSHIPRECEIVE. I was told by B. Rillema during the June inspection/stack test that ZFS Ithaca currently does not operate truck and rail grain shipping (loading); however, if and when they do, the grain shipping operations would be controlled by the same baghouse as the grain receiving operations and emitted through SVSHIPRECEIVE as well. Records, however, indicate, that there was grain shipping occurring in January 2020. I am waiting for clarification from ZFS staff on the grain shipping; the installation and operation of the equipment would have begun a timeline by which ZFS Ithaca was required to test VE's from truck or rail

loading (or both, if both had been used).

Oil spray is used on the grain to control grain dust as it is being moved through the grain handling equipment. The loading and unloading bays are housed within a 4-bay building.

B. LaRosa said that truck unloading generally takes 5-10 minutes to unload a truck. During the June stack test it was also witnessed that trucks that unload with hoppers produce less opacity than those that have to dump the grain to unload. Unloading Pit 4 (westernmost pit) is capable of receiving both wet and dry grain, as well as grain via truck and railcar. Unloading Pit 1, the easternmost pit, only receives dry grain from trucks.

Emission Limits & Testing/Sampling

FGHANDLING has PM and visible emission limits for SVSHIPRECEIVE, truck and railcar unloading, railcar loading, truck loading and grain handling. ZFS Ithaca is required to conduct PM emissions testing per state rule and Method 9 visible emissions testing, as required by the NSPS Subpart DD, within 60 days after achieving the maximum production rate, but not later than 180 days after commencement of initial startup. Testing of SVSHIPRECEIVE, truck unloading, and grain handling took place June 9, 2020. Initial startup of these units commenced on July 22, 2019. At the time of operation commencement, through the winter 2019/2020, ZFS Ithaca was not receiving enough grain to conduct the testing. The spring and early summer 2020 also did not allow for testing because of safety considerations associated with the COVID-19 pandemic and therefore, ZFS Ithaca was under AQD COVID-19 enforcement discretion to complete the NSPS Subpart DD visible emission testing until a time at which it could be safely done during the COVID-19 pandemic. The timing of their test on this unit is acceptable to AQD.

See the June 9, 2020 Stack Test Observation report for data collected during the test. The test report for PM on EUSHIPRECEIVE was received August 26, 2020 via email, and the test report for visible emissions observations was received August 27, 2020 via email. Hard copies to follow in the mail.

Table 5 contains the FGHANDLING test results, as reported in the test report. The test report states that there were no visible emissions seen during the testing of EUSHIPRECEIVE's truck unloading, grain handling, and SVSHIPRECEIVE stack emissions. As reported in the Stack Test Observation report, I noted that there were times when I could see opacity from the SVSHIPRECEIVE stack as well as fugitive emissions from truck unloading (albeit less than 5%). I brought the SVSHIPRECEIVE visible emissions to the attention of Montrose certified reader, Benjamin Durham, who stated that he did not see any visible emissions from the stack. Despite this discrepancy in our observations and based on the data I recorded, I believe ZFS Ithaca would still meet their opacity limit of 0% for SVSHIPRECEIVE and 5% for truck unloading. Regardless of these test results, if at any time the AQD conducts an inspection at ZFS Ithaca and conducts a 6-minute opacity reading on the stack, truck unloading, or any other equipment with an opacity limit, and find that the average is over the permitted limit, a violation may exist.

AQD is currently working with ZFS Ithaca staff to determine a test day for railcar unloading visible emissions testing, as well as determining whether the remaining grain handling equipment not tested in June should also be tested.

Table 5. June 2020 FGHANDLING Stack Test Data

Pollutant	Emission Limit	June 2020 Test Results	Compliance Status
SVSHIPRECEIVE PM (lb/1000 lb exhaust gas)	0.10	0.0008	Compliance
SVSHIPRECEIVE PM (gr/dscf)	0.01	0.0004	Compliance
SVSHIPRECEIVE Visible emissions (6-minute average)	0%	0%	Compliance
Truck unloading visible emissions (6-minute average)	5%	0%	Compliance
Grain handling visible emissions (6-minute average)	0%	0%	Compliance

Material Limits & Monitoring/Recordkeeping

ZFS Ithaca is limited to 48,000,000 bushels/year grain received through EUSHIPRECEIVE (truck and rail unloading) and 48,000,000 bushels/year grain shipped through EUSHIPRECEIVE (truck and rail loading). ZFS is required to keep records (on a monthly and 12-month rolling basis) for all grain received through EUSHIPRECEIVE.

Records from July 2019 – June 2020 were provided, see attached, which include monthly totals and a 12-month rolling total. Total 12-month rolling grain received for July 2019 – June 2020 was 17,049,042 bushels. Total grain shipped during this time was 4,896 bushels.

Process/Operational Restrictions

A Malfunction Abatement Plan (MAP) used to identify normal operating ranges of air cleaning devices, required maintenance, etc, is required to be submitted prior to startup of FGHANDLING. Startup was 7/22/19 and the initial MAP was received via email January 14, 2020. The MAP contains all emission units that require a MAP including FGHANDLING. The MAP was reviewed and approved. Operating ranges for various control devices are included in the MAP and were used to determine compliance with this requirement to ensure equipment is operating properly.

Design/Equipment Parameters

The baghouse controlling the fugitive emissions from grain receiving is required to be installed, maintained, and operated in a satisfactory manner. This includes operating the baghouses (with fabric filters) within the ranges specified in the MAP (0.5 – 10" H₂O).

I recorded pressure drops for the EUSHIPRECEIVE baghouse pressure differential monitor (housed outside at ground level, but can also be viewed in the control tower in the receiving bays) during the June 2020 stack test which ranged from 2 – 3" H₂O, within the operating range specified in the MAP.

The grain handling operations (EUHANDLING) are required to have an oil application system that is installed and operated in a satisfactory manner to minimize airborne particulate from the grain. B. Rillema said during the July inspection/stack test that the oil use rate is not measured/monitored. They know the oil application system is working based on the indicator light - whether the oil tank pump is on when grain is being handled - and being able to monitor the level of oil in the tank. The indicator light is green when the oil pump is on and red when the system is shut off. It is designed to coat grain with oil at a 0.5 – 2.0 gallons per 1,000 bushels grain processed. The application rate is determined at the end of the day by the total oil used and the total bushels received. According to B. Rillema, on June 30th, the rate was 0.5 gallons oil per bushel. She explained that the oil application turns on when the grain conveyors turn on.

Monitoring/Recordkeeping

ZFS Ithaca is required to monitor the pressure drop continuously and to record the pressure drop on a daily basis for the SVSHIPRECEIVE fabric filter. ZFS Ithaca provided me with daily records for the month of June 2020, as requested, and demonstrated that they take at least once, sometimes twice, daily, once during the night shift and once during the day shift. I reviewed these records and it appears that all pressure drops fall within the MAP-established operating range of 0.5 – 10" H₂O (reported values are ~2" – 3" H₂O). See attached for a snapshot of these records. However, I did note that ZFS Ithaca specifies a different operating range on their pressure drop recordkeeping for this unit (0.5 – 8" H₂O) and there will be ongoing discussions to determine which operating range is correct and to modify the MAP if the MAP no longer contains an accurate operating range.

Reporting

Ten (10) days after completion of the installation of FGHANDLING equipment, ZFS Ithaca was required to notify AQD of the installation. Installation report has been submitted and can be found in the FCE Summary Report.

FGLOADSTORE

FGLOADSTORE consists of emission units used to store (EUHULLSTORAGE) and loadout (EUHULLLOADOUT) hull, loadout of meal (EULOADOUT) and ingredient receiving and storage (EUIINGREDIENTS). Baghouses are used to control each of these emission units. As of July 29, 2020, B. Rillema said they are not receiving or storing ingredients yet. EULOADOUT was operating during the July inspection/stack test. EULOADOUT is conducted in a 1-bay building that has the capability to have both doors closed while loading out trucks. B. Rillema said that most of the time both doors are closed during the loading. During times when convenience is necessary due to a line-up of trucks, the front door will be shut and the rear door will remain open through loading to allow trucks to enter the loading bay faster.

Emission Limits & Testing/Sampling

The EULOADOUT and EUIINGREDIENTS have emission limits for PM, PM₁₀, PM_{2.5}, and visible emissions (VE). Testing is required to be conducted within 180 days after commencement of initial startup. Initial startup for EULOADOUT was February 17, 2020. As of July 29, 2020, EUIINGREDIENTS has not yet commenced initial startup. EULOADOUT testing for PM, PM₁₀, PM_{2.5} and VE's was conducted during the testing that occurred July 28 – 30, 2020 as part of a testing series. The test report is due no later than 60 days following the last date of the test, September 28, 2020. As such, test results for PM, PM₁₀, and PM_{2.5} and visible emissions are pending.

Fugitive emission VE's from the emission units in FGLOADSTORE are limited to 10% opacity over a 6-minute average. During the July inspection/stack test, I saw no signs of fugitive dust while the trucks were being loaded (front bay door shut, rear bay door open) from EULOADOUT.

Process/Operational Restrictions

A Malfunction Abatement Plan (MAP) used to identify normal operating ranges of air cleaning devices, required maintenance, etc, is required to be submitted prior to startup of FGLOADSTORE emission units. Startup was ranged between 2/10 and 2/17/20 and the initial MAP was received via email January 14, 2020. The MAP contains all emission units that require a MAP including EUMEALGRINDING. The MAP was reviewed and approved. Operating ranges for various control devices are included in the MAP and were used to determine compliance with this requirement to ensure equipment is operating properly.

Design/Equipment Parameters & Monitoring/Recordkeeping

Each emission unit has its own control device. EUHULLSTORAGE has 4 baghouses, one baghouse for each storage bin. EUHULLLOADOUT has 2 baghouses, 1 baghouse for each overhead loadout bin. EULOADOUT has one baghouse used to loadout meal. All baghouses are required to be installed, maintained, and operated in a satisfactory manner. This includes operating the baghouses (with fabric filters) within the ranges specified in the MAP (0.5 – 10" H2O).

Table 6 provides pressure drop data recorded during the July inspection stack test.

Table 6. FGLOADSTORE baghouse pressure drop data.

Emission Unit	Baghouse 1	Baghouse 2	Baghouse 3	Baghouse 4	Operating Range (per records)	Comments
EUHULLSTORAGE	0.54	0.94	Not operating	Not operating	0.2 – 5" H2O	Baghouse 1 operating, but not loading out during the inspection Baghouse 2 loading out during inspection
EUHULLLOADOUT	Not Operating	Not Operating	NA	NA	0.2 – 5" H2O	NA
EULOADOUT	0.91	NA	NA	NA	0.2 – 5" H2O	Baghouse operating, meal loaded out

ZFS Ithaca is required to monitor the pressure drop continuously and to record the pressure drop on a daily basis for each baghouse in FGLOADSTORE. Computer output monitors and pressure drop gauges are used to continuously monitor the pressure drop on these baghouses. ZFS Ithaca provided me with daily records for the month of June 2020, as requested, and demonstrated that they take readings at least daily. The records also specify a range within which the baghouses should be operated, which differ from the 0.5 – 10" H2O defined in the MAP (and noted in Table 6). AQD is working with ZFS staff to determine which ranges are the correct ones and to get the MAP updated if the ranges specified in the records are the correct ranges. I reviewed the pressure drop data records. EUHULLLOADOUT actual readings range from 0.3 – 1 "H2O; EULOADOUT actual readings ranged from 0.8 – 1.5" H2O, with an outlier of 6.25 the morning of June 5th. A reading was taken again in the afternoon shift and pressure drop was 1.11 (within the normal operating range 0.2 – 5" H2O specified in their records). EUHULLSTORAGE actual readings ranged from 0.2 – 1 " H2O. See attached for a snapshot of these records.

Non-certified VE's of fugitive dust emissions are required to be conducted and recorded on a weekly basis. ZFS Ithaca provided me weekly uncertified VE readings for the month of June 2020. See attached for a snapshot of these records. Records indicate compliance with the fugitive emissions 10% limit, at 0% opacity for all readings.

Reporting

Ten (10) days after completion of the installation of the emission units in FGLOADSTORE, ZFS Ithaca was required to notify AQD of the installations. Installation completion reports were submitted for all, except EUINGREDIENTS, which I learned during the inspection, had already been installed. The installation notification report is late for EUINGREDIENTS, and AQD will follow up with ZFS Ithaca to ensure the installation and startup reports. Installation report has been submitted and can be found in the FCE Summary Report.

FGEXTRACTION

FGEXTRACTION processes are subject to the NESHAP Subpart GGGG for Solvent Extraction for Vegetable Oil Production. This flexible group consists of emission units used to store the extraction solvent, hexane, (EUTANKS1-3) the soybean oil extraction process, the mineral oil adsorption system (MOS) used to control the hexane emissions from the extraction

process and tanks (EUEXTRACTION), 3 meal dryers and 1 meal cooler (EUDC) and storage of crude soybean meal (EUMEALSTORAGE). The MOS recovers hexane gas from the soybean oil/solvent distillation unit, as well as the waste water reboiler stream. Solvent in the distiller can come from the extractor and desolventizer toaster. Any hexane not removed from the desolventizer toaster is sent to EUDC where hexane can further be removed, prior to residual hexane being discharged to ambient air.

Emission Limits, Testing/Sampling & Monitoring/Recordkeeping

EUEXTRACTION has VOC emission limits, and EUDC has VOC emission limits, as well as PM, PM10, PM2.5 and visible emissions limits. ZFS Ithaca is required to conduct VOC and PM emissions testing per state rule, while visible emissions testing is required to be conducted according to Method 9. Testing is required to be conducted within 180 days after commencement of initial startup to determine compliance with the emission limits. Initial startup of these units commenced on February 10, 2020 and testing occurred on July 29, 2020; therefore, testing was conducted within the 180-day window.

On a 12-month rolling basis (as determined at the end of each calendar month), VOC's are limited to 62.63 tpy for EUEXTRACTION and 132.5 tpy for EUDC. ZFS Ithaca is required to keep monthly and 12-month rolling VOC emission calculation records for these two emission units. The VOC emissions calculations are to be based on the most recent stack test data. Stack test data will be provided in the test report, which is due no later than 60 days following the last date of the test, September 28, 2020. As such, test results for VOC, PM, PM10, PM2.5, and visible emissions are pending.

During the July 29, 2020 stack test, I observed the EUDC stack several times (see July 29, 2020 Stack Test Observation Report for data), and conducted uncertified Method 9 readings that indicated the opacity to be less than 5% on a 6-minute average, in compliance with the 15% opacity limit.

Material Limits & Monitoring Recordkeeping

The Material Limits include limits that only apply during the initial startup period, as defined in 40 CFR Part 63.2872:

"A period of time from the initial startup date of a new, reconstructed or modified source, for which you choose to operate the source under an initial startup period, until the date your source operated for 15 consecutive days at or above 90% of the nominal design rate of the extractor or at or above 90% of the permitted production rate of your source. The initial startup period following initial startup of a new or reconstructed source may not exceed 6 calendar months."

During the July inspection/stack test, B. Rillema defined ZFS Ithaca's initial startup period from the date of startup of EUDC and EUEXTRACTION (February 10, 2020) through June 4, 2020. There are several Material Limits within FGEXTRACTION for Total Extraction Solvent Loss; however, only one limit applies to the initial startup period: 1.0 gallon per ton of soybeans processed, on a 3-month rolling time period, as determined at the end of each calendar month. Monthly records were provided for February through June 2020 (3-month rolling calculations were not correctly calculated by ZFS Ithaca). Table 7 provides the monthly and 3-month rolling totals (3-month rolling were calculated by AQD, based on ZFS Ithaca's reported monthly totals), which are in compliance with the limit. Attached is the ZFS Ithaca data.

Table 7. Initial Startup Period Solvent Loss, 3-month rolling

Month	Monthly Gallons Solvent Loss Per Ton of Soybeans	3-month Rolling Gallons Solvent Loss per Ton of Soybeans
February 2020	0.19	0.19
March 2020	0.166	0.356
April 2020	0.113	0.469
May 2020	0.099	0.378
June 2020	0.086	0.298

The remaining Material Limits for Total Extraction Solvent Loss are as follows: 0.250 gal/ton of soybeans processed on a 3-month rolling period; 0.150 gal/ton soybeans processed per 12-month rolling period; and 0.2 gal/ton soybeans processed per 12-operating month rolling time period. These limits do not apply to the initial startup period; therefore, at this time there is no data to determine compliance with these limits because all data at this time was from the initial startup period. Future compliance checks with these limits will need to be determined at a future inspection.

ZFS Ithaca is limited to 3,800 tons of soybeans processed per calendar day in FGEXTRACTION. Daily records were provided from startup, February 10, 2020, through June 30, 2020 and reviewed. Highest daily soybean throughput was **3,746.15** tons on June 4, 2020, with other daily throughputs within the 3,600 range from late-May to early-June 2020. While the June 4th value was close to the limit, the limit was not exceeded.

Process/Operational Restrictions & Monitoring/Recordkeeping

A Malfunction Abatement Plan (MAP) used to identify proper operation of the Mineral Oil Adsorption system (MOS) and the EUDC cyclones is required maintenance, etc, is required to be submitted prior to startup of FGEXTRACTION emission units.

Initial startup for this equipment was February 10, 2020 and the initial MAP was received via email January 14, 2020. The MAP contains all emission units that require a MAP including those emission units contained in FGEXTRACTION. The MAP was reviewed and approved. Operating ranges for various control devices are included in the MAP and were used to determine compliance with this requirement to ensure equipment is operating properly.

ZFS Ithaca is also required to develop a written Startup, Shutdown, and Malfunction (SSM) Plan to minimize HAP emissions during an SSM event, and must provide corrective action for malfunctioning processes and air pollution control equipment and best practice to minimize emissions. A copy of the SSM Plan is attached to this report. S. Duncan provided me with a statement that there were no SSM events that occurred during the initial startup period.

Design/Equipment Parameters & Monitoring/Recordkeeping

The MOS and EUDC cyclones are required to be installed and operating properly in accordance with the approved MAP. B. Rillema explained that % LEL and the sparge deck temperature operating values are used as an indicator for proper operation of the Mineral Oil Adsorption System. The spark deck temperature is also used to ensure proper operation of the EUDC. Proper operation includes operating the sparge deck temperature at or above 195F and the %LEL less than 50%. During the stack test/inspection, these two parameters were recorded throughout the stack test and were maintained in the appropriate ranges. See July 29, 2020 Stack Test Observation report for this data: sparge deck temperatures stayed within the 225F – 226F range and %LEL was maintained at 2 – 2.5%. ZFS Ithaca is required to record the desolventizer toaster sparge deck temperature hourly during operation, and the %LEL a minimum of 4 times per day. Sparge deck temperature and % LEL records were provided for the first week of initial startup. Records indicate compliance with the sparge deck temperatures; however the %LEL was exceeded once during readings conducted on 2/14/20, 2/15/20 and 2/16/20 (see attached). According to the permit, ZFS Ithaca is required to promptly examine the cause of the variance, respond as needed to minimize the possibility of exceeding any emission limits in the permit, implement any measures necessary to return the affected parameters to the normal range, record the date and time that the variance occurred, and record the measures taken to return the affected parameters to the normal range.

The forms ZFS Ithaca staff fill out include a section for “Comments/Corrective Action;” however, this field was not filled out for 2/14, 2/15, or 2/16 and ZFS Ithaca had no other documentation that included correction measures taken. B. Rillema said that because it was the first week of operations, ZFS was still working out how to fine-tune the system to ensure proper operation and maintaining an appropriate LEL level. To the benefit of ZFS Ithaca, the records did demonstrate that after the reading indicating a %LEL exceedance was taken, the next reading taken for the day showed compliance with the %LEL limit. B. Rillema said that the procedures summarized in the MAP for an LEL exceedance were followed. I have requested additional %LEL records to review whether these exceedances were largely due to startup, or more systemic in nature, and whether corrective action documentation was kept for any further exceedances.

Monitoring/Recordkeeping

ZFS is required to record the following:

- The volume fraction of HAP present at greater than 1% by volume and gallons of extraction solvent in each shipment;
- The monthly weighted average volume fraction of HAP in the extraction solvent received;
- And the monthly records of the actual extraction solvent loss in gallons.

There are no emission limits directly associated with these values, but rather these values are used to calculate emissions to determine compliance with the emission limits. ZFS has provided me with all records, attached for reference.

Reporting

Ten (10) days after completion of the installation of the emission units in FGFACILITY, ZFS Ithaca was required to notify AQD of the installation. Installation report has been submitted and can be found in the FCE Summary Report.

Because FGEXTRACTION was operated under the initial startup period, ZFS Ithaca was required to submit an SSM report by the end of the calendar month following each month in which the initial startup period occurred. ZFS Ithaca is currently working on submitting the monthly SSM reports.

FGBOILERS

FGBOILERS includes 2 natural gas-fired boilers, each with a minimum heat input of 95 MMBtu/hr. I recorded each boiler's information from the boiler identification plate:

EUBOILER1:

**Johnston Boiler Co
Catalog No PFTS2500-3G200S
Unit #: 11378-01
Date: 2018
Max Gas Firing Rate: 95,000 BTU**

EUBOILER2:

**Johnston Boiler Co
Catalog No PFTS2500-3G200S
Unit #: 11378-02
Date: 2018**

Max Gas Firing Rate: 95,000 BTUEmission Limits & Testing/Sampling

FGBOILERS has NOx and CO emissions limits. Testing is required to be conducted upon request of the AQD. At this time it is my professional judgement that FGBOILERS does not need to be tested, as the boilers are fairly new.

Material Limits

I verified with ZFS Ithaca staff while onsite during the July stack test/inspection, that these units only burn pipeline quality natural gas.

Design/Equipment Parameters

A device to monitor and record the natural gas usage is required to be calibrated, maintained, and operated in a satisfactory manner. S. Duncan said that the fuel meters are calibrated every 3 years. It may be helpful to determine who does the calibrations and whether a 3-year frequency is sufficient for calibrations, during a future inspection.

Process/Operational Restrictions

A Malfunction Abatement Plan (MAP) used to identify normal operating ranges of air cleaning devices, required maintenance, etc, is required to be submitted prior to startup of FGBOILERS. Startup was 11/11/2019 and the initial MAP was received via email January 14, 2020. The MAP contains all emission units that require a MAP including FGBOILERS. The MAP was reviewed and approved. Operating ranges for various control devices are included in the MAP and were used to determine compliance with this requirement to ensure equipment is operating properly.

Monitoring/Recordkeeping

Although there are no limits on quantity of natural gas burned, ZFS Ithaca is required to track natural gas usage for each boiler on a monthly basis. Monthly records from November 2019 – June 2020 were provided. See attached.

Reporting

ZFS Ithaca submitted all reports required under the NSPS for notification of date of construction and actual startup. See FCE Summary report for details.

FGBOILERMACT

This flexible group covers all Gas 1 Fuel subcategory requirements for new boilers/process heaters at major sources of HAP, subject to the MACT Subpart DDDDD. Compliance is required upon startup of the units, and applies to EUBOILER1 and EUBOILER2.

There are currently no Emission Limits, Design/Equipment Parameters, or Testing/Sampling requirements for FGBOILERMACT.

Material Limits

ZFS Ithaca shall only burn fuels as allowed in the "Unit signed to burn gas 1" subcategory. This includes natural gas-burning units. As stated under FGBOILERS, EUBOILER1 and EUBOILER2 burn natural gas only.

Process/Operational Restrictions, Monitoring/Recordkeeping & Reporting

EUBOILER1 and EUBOILER2 are new boilers without continuous oxygen trim and each with a heat input capacity of 10 MMBTU/hr or greater. There are no emission limits or work practice standards that ZFS needs to comply with according to the NESHAP Subpart DDDDD. ZFS Ithaca is, however, required to conduct a tune-up of each boiler annually, as specified in 63.7540 (Table 3). The annual tune-up reports are due by December 31st each year. The first annual tune-up report is due December 31, 2020. The annual period began November 11, 2019 (startup of boilers).

The Initial Notification for startup was due 15 days after actual start-up date. The notification was late, and received on February 20, 2020.

Compliance Statement: ZFS Ithaca appears to be in compliance with PTI 20-17B, pending the aforementioned deficiencies.



Image 1(SVDC - SVPREP) : Gray stack is SVPREP, silver stack is SVDC. No opacity, taken during stack test of these units.

NAME Michelle Luplow

DATE 9/24/20

SUPERVISOR B.M.