

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection

P109859002

FACILITY: COMPASSIONATE ADVISORS-PINCANNA, LLC		SRN / ID: P1098
LOCATION: 419 E PINCONNING ROAD, PINCONNING		DISTRICT: Bay City
CITY: PINCONNING		COUNTY: BAY
CONTACT: Joe Hauri , Maintenance Manager		ACTIVITY DATE: 06/04/2021
STAFF: Adam Shaffer	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS:
SUBJECT: Scheduled announced inspection.		
RESOLVED COMPLAINTS:		

An inspection was conducted by Air Quality Division (AQD) staff Adam Shaffer (AS) of the Compassionate Advisors – Pincanna, LLC (CAP) facility located in Pinconning, MI on June 4, 2021, to verify compliance with permit to install (PTI) No. 195-19A and other applicable air quality rules. All necessary safety precautions were completed due to the Covid-19 pandemic.

Facility Description

CAP is a cannabis production facility. The facility is a minor source for criteria pollutants and is in operation with PTI No. 195-19A.

Stack Testing June 1-2, 2021

On June 1-2, 2021, CAP attempted to conduct testing of emission rates for nitric oxides (NO_x), carbon monoxide (CO), and volatile organic compounds (VOCs) from flexible group (FG)ENGINES per PTI No. 195-19A FGENGINES, Special Condition (SC) V.1-2. AQD staff AS and several AQD Technical Programs Unit (TPU) staff were onsite to observe testing. Prior to test runs that would have been completed for each day, issues were encountered with engine operation that resulted in several power outages each day. Preliminary data observed by AQD staff appeared to indicate high concentrations of VOC and/or NO_x emission rates for FGENGINES

Compliance Evaluation

AQD staff AS arrived in the area of the facility at 7:41am. Weather conditions at the time were mostly cloudy skies, temperatures in the middle 60's degrees Fahrenheit and winds from the west/southwest at 0-5mph. While offsite, no visible emissions were observed, and odors noted were determined to have been from surrounding hay fields recently having been worked on. Upon entering the facility, AQD staff AS initially met with Mr. Joe Hauri, Maintenance Manager, Mr. Steve Schafer, Partner, and Mr. Dave Esser, Partner. During the initial meeting, several topics of note were discussed at length and are described below.

- The June 1-2, 2021, stack testing for FGENGINES was discussed. Preliminary data results were available and later provided by CAP staff. Additionally, a more formal presentation of the information collected will be submitted to the AQD. CAP plans to retest FGENGINES in July 2021 and plans to have the engine manufacturer complete the necessary maintenance prior too. AQD staff AS informed CAP staff of the role of AQD during a stack test and what would be expected of the company / stack testing crew during the next test for the FGENGINES.
- As previously identified during the stack test, the EUGEN1 and EUGEN3 are incorrectly labeled in PTI No. 195-19A and should be switched. In the remainder of

this inspection report, they will be referenced in the correct manner. CAP staff stated that EUGEN1 was intended to have an AeriNO_x SCR catalyst and that the AeriNO_x SCR catalyst referenced for EUGEN2 and EUGEN3 is incorrect. There appeared to be confusion regarding whether the engines would be operating in a certified or non-certified manner based on information provided by the company consultant and speaking with staff. It was later verified by company staff that the engines are non-certified.

- The three solvent based cannabis extraction units for FGPROCESSES (EUEXTRACT1, EUEXTRACT2, and EUEXTRACT3) were discussed. CAP staff stated that EUEXTRACT3 will not be constructed and that EUEXTRACT1 was formally installed, however, the unit has since then been removed and will be replaced with a unit with what appeared to be different technology.

Following the initial meeting, Mr. Hauri and Mr. Esser accompanied a walk-through of the facility and answered site specific questions along with several other CAP staff. Records following the inspection were provided by CAP's consultant BLDI and Mr. Hauri.

CAP is a cannabis growing and processing facility. During the inspection, the various stages of cannabis plant growing were observed. Products made / cultivated onsite include the flowers from the plants, edibles, concentrates, pre-rolls and oils.

FGENGINES

This flexible group is for the three natural gas fired engines used for electricity generation for the cannabis cultivation, extraction, processing, and distribution operations. Each engine is permitted to be equipped with a AeriNO_x SCR and Oxicat oxidation catalyst for control of NO_x, CO, VOC, and formaldehyde. The AeriNox SCR system includes a 1,100-gallon diesel exhaust fluid (DEF) tank.

This flexible group is subject to several NO_x, VOC and/or CO hourly emission limits per New Source Performance Standards (NSPS) Subpart JJJJ and Michigan air quality rules. As mentioned above CAP attempted to complete testing of NO_x, CO, and VOC emission rates on June 1-2, 2021. Preliminary data appeared to show high concentrations of NO_x and/or VOC emissions for FGENGINES, however, a full test was not completed. The company plans to retest the FGENGINES to verify applicable emission rates are in compliance.

Per SC II.1, CAP shall only burn pipeline quality natural gas for FGENGINES, which was verified to be being completed by CAP staff.

Per SC III.1, no later than 30 days after startup of any engines associated with FGENGINES, a Preventative Maintenance / Malfunction Abatement Plan (MAP) shall be submitted. After speaking with CAP staff, the engines were fired up in September 2020, however, did not appear to start powering the facility until December 19, 2020. A MAP was received on May 25, 2021. The MAP is considered late, and this is a violation per PTI No. 195-19A, FGENGINES, SC III.1. Prior to the June 1-2, 2021, stack testing parameters were discussed at length with a CAP consultant and after the initial stack test, the MAP would be updated with the applicable parameters.

Per SC IV.2 – 4, the nameplate capacity for EUGEN3 shall not exceed 700 kW and EUGEN1-2 shall not exceed 1,067 kW as certified by the equipment manufacturer. As

previously mentioned, these conditions shall need to be updated accordingly to reflect the correct engines. Additionally, during the inspection, the capacities for each engine were noted to be less than the ones mentioned in the PTI No. 195-19A. The two larger engines have a nameplate capacity of 1,030 kW and the smaller engine has a nameplate capacity of 650 kW.

Per SC IV.5, each engine in FGENGINEs shall not operate unless the associated SCR system and oxidation catalyst are installed, maintained and operated in a satisfactory manner. As previously mentioned, the two larger engines have always operated without an SCR system and as CAP staff have stated that was always the intention. After further discussion with CAP staff, a PTI application shall be submitted to correct this condition in PTI No. 195-19A. This is a violation per PTI No. 195-19A, FGENGINEs, SC IV.5.

Per SC V.1-2, within 180 days after startup of each engine in FGENGINEs, CAP shall verify emission rates for NO_x, CO, and VOCs. CAP staff stated that the engines were first turned on sometime in September 2020. The engines started powering the facility on December 19, 2020. The definition of startup is defined as “means the setting in operation of a process or process equipment for any purpose”. It was concluded the 180-day timeline would have commenced with the initial fire up of the engines to verify they would operate. The June 1-2, 2021, stack testing would have been over the 180-day timeline. This is a violation per PTI No. 195-19A, FGENGINEs, SC V.1-2.

Additionally, per SC V.2, the three engines associated with FGENGINEs are non-certified engines and will be required per NSPS Subpart JJJJ rules to complete subsequent performance tests to verify applicable emission standards. The company is aware of this and based on conversations with staff, the smaller engine would appear to require yearly testing and the two larger engines would require testing over a longer timespan due to anticipated hours of operation.

Per SC VI.3b, maintenance records are to be kept for each of FGENGINEs. Logbooks and additional maintenance work orders completed for each engine were provided. After further review, the maintenance records appear acceptable.

Per SC VI.4, CAP shall keep records of notifications submitted for the completion of construction and start-up of each engine. Notifications were not provided within the required timeframes and will be discussed further below. The notifications were later provided by the company on June 7, 2021. Errors were noted in the notifications, however after further review the notifications were considered acceptable.

Per SC VI.5, CAP shall monitor and record the hours of operation for FGENGINEs on a monthly / 12-month rolling time period basis. Records were requested since startup of each engine. After speaking with CAP staff, estimates of the hours of operation per month were provided. At this time, the records are acceptable, however, moving forward it was explained to CAP staff on keeping more accurate hours of operation for each engine. Additionally, minor corrections were noted with records provided. This was discussed with CAP staff and will be implemented moving forward.

Per SC VI.6, applicable records per the MAP shall be kept. As mentioned above the MAP shall be updated with accurate parameters that were used during the most recent stack test to verify compliance with emission rates for FGENGINEs. Records were provided of various inspections being completed for the unit. After further review, the records appear acceptable.

Per SC VII.1-3, CAP was to notify the AQD within 30 days after completion of the installation of FGENGINES, an initial notification within 30 days after construction commenced, and a notification within 30 days after initial startup of the engines on if they would be operated in a certified or non-certified manner. All three notifications were not received by the AQD within the given required timeframes. These are violations of PTI No. 195-19A, FGENGINES, SC VII.1-3.

Three stacks are listed in association with FGENGINES. The three stacks were observed during the course of the site inspection. Though the exact dimensions were not measured they appeared to be consistent with the dimensions listed in PTI No. 195-19A.

Per SC IX.1, CAP shall comply with the provisions of NSPS Subpart JJJJ rules. Based on the observations made, CAP does not appear to be in compliance with NSPS Subpart JJJJ rules. This is a violation of PTI No. 195-19A, FGENGINES, SC IX.1.

The three engines were observed in operation at the time of the inspection. At the time of the inspection, all three engines were in operation at approximately 80-82% loading.

FGBOILERS

This flexible group is for three 2 MMBtu/hr natural gas fired boilers (EUBOILER1, EUBOILER2, and EUBOILER3).

Per SC II.1, the three boilers shall only use pipeline quality natural gas. This was verified by CAP staff as being done.

Per SC III.1, the heat input capacity of each boiler shall not exceed a maximum of 2.0 MM BTU per hour. Speaking with CAP staff this appears to be being done.

There are three stacks listed in association with FGBOILERS. The three stacks were observed during the course of the site inspection. Though the dimensions were not measured they appeared to be consistent with what is identified in PTI No. 195-19A. The three stacks observed were noted to have rain caps. Per PTI No. 195-19A, all three stacks shall be discharged unobstructed vertically upwards to the ambient air. Based on CAP staff the caps appeared to be a design requirement. Moving forward this will be discussed further with CAP staff and the rain caps shall be removed from the stacks.

The three boilers were observed during the inspection and were not in operation. Per records attached to each boiler, all three boilers were most recently inspected in 2021. CAP staff stated that the boilers are rarely used (are used only for a few weeks in the winter months).

FGPROCESSES

This flexible group is for three solvent based cannabis extraction units.

Based on the initial conversation with CAP staff described above, the only unit in operation onsite at the time of the inspection is EUEXTRACT2.

This flexible group is subject to a VOC emission limit of 24.75 tons per year (tpy) per a 12-month rolling time period. Since FGPROCESSES has not been in operation a full 12-

months (started in July 2020) this emission limit is not applicable at this time. The VOC emissions from July 2020 through part of June 2021 are 1.14 tons of VOCs.

Per SC II.1-2, only ethanol will be used for EUEXTRACT1 and only butane and/or propane shall be used for EUEXTRACT2-3. Since only EUEXTRACT2 is constructed onsite only butane and/or propane would be used. Based on records provided this is correct.

Per SC III.1, a MAP for FGPROCESSES shall be submitted within 60 days of issuance. A MAP was received on May 25, 2021. The MAP is considered late, and this is a violation per PTI No. 195-19A, FGPROCESSES, SC III.1. The MAP at this time only applies to EUEXTRACT2. After further review, the MAP appears acceptable at this time. After speaking with CAP staff, it appears that the maintenance inspections listed in the MAP are being completed for the unit. Moving forward it was discussed with CAP staff on keeping records to verify that the applicable inspections for FGPROCESSES are being completed.

Per SC VI.2, CAP shall keep records on a monthly basis for each extraction process of volume or weight of each solvent used, VOC contents of each solvent used as supplied per Safety Data Sheets (SDS), hours of operation and VOC monthly / 12-month rolling time period emission calculations. Records were requested for select time periods and provided. Based on the records provided, CAP appears to be keeping track of volumes / weights of each solvent used, hours of operation, and monthly / 12-month rolling time period VOC emissions. According to CAP staff, solvents used are 100 percent VOCs.

The one solvent extraction unit constructed for FGPROCESSES was observed during the course of the inspection. The various steps in the extraction process were discussed with CAP staff. Based on the observations at the time of the inspection, the unit appeared to be operating in a satisfactory manner according to manufacturer's specifications per SC IV.1.

Conclusion

Based on the facility walkthrough, observations made, and records received, CAP appears to not be in compliance with the PTI No. 195-19A and NSPS Subpart JJJJ rules. A violation notice will be sent for the following violations identified.

A MAP was not received within 30 days of startup of FGENGINES. This is a violation of PTI No. 195-19A, FGENGINES, SC III.1

The two larger engines (correctly identified as EUGEN3 & EUGEN2) were determined to not be in operation with AeriNO_x SCR pollution control equipment per PTI No. 195-19A. This is a violation per PTI No. 195-19A, FGENGINES, SC IV.5.

A stack test was not completed within 180 days of startup of FGENGINES. This is a violation of PTI No. 195-19A, FGENGINES, SC V.1-2. Additionally, this is a violation of NSPS Subpart JJJJ regulations.

The following three notifications were received late for each engine.

- A notification of completion within 30 days of installation.
- An initial notification.
- A notification on whether the engines shall be certified or non-certified.

These are violations of PTI No. 195-19A, FGENGINES, SC VII 1-3. Additionally, this is a violation of NSPS Subpart JJJJ regulations.

A MAP was not received within 60 days of permit issuance. This is a violation of PTI No. 195-19A, FGPROCESSES, SC III.1.

CAP shall comply with the provisions of NSPS Subpart JJJJ rules. Based on the observations made, CAP does not appear to be in compliance with NSPS Subpart JJJJ rules and this is a violation of PTI No. 195-19A, FGENGINES, SC IX.1.

NAME Adam Shaffer

DATE 07/22/2021

SUPERVISOR Chris Hare