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

P042936168	•			
FACILITY: Magna DexSys (Delta Exterior Systems)		SRN / ID: P0429		
LOCATION: 5589 W. MOUNT	HOPE HIGHWAY, LANSING	DISTRICT: Lansing		
CITY: LANSING		COUNTY: EATON		
CONTACT: John Krocker, Env	ironmental Specialist	ACTIVITY DATE: 08/30/2016		
STAFF: Michelle Luplow	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MAJOR		
SUBJECT: Scheduled complian Subpart PPPP	nce inspection PCE, conducted as part of an FCE to dete	rmine compliance with PTI 38-13D and MACT		
RESOLVED COMPLAINTS:				

Inspected by: Michelle Luplow

Personnel Present: John Krocker (john.krocker@magna.com), Environmental Specialist

Other Personnel: Gerry Mazzola (gerry.mazzola@magna.com), General Manager Sean Guyett (sean.guyett@magna.com), Paint Technical Department Manager

<u>Purpose:</u> Conduct an announced, scheduled, partial compliance evaluation (PCE) inspection of Magna DexSys (Delta Exterior Systems). Compliance was determined based on Magna DexSys Permit to Install (PTI) No. 38-13D. This activity was done as part of a full compliance evaluation (FCE). DexSys was last inspection in June 2015.

<u>Facility Background/Regulatory Overview</u>: Magna DexSys is an automotive parts supplier. They make automotive front and rear bumpers using mold injection presses and a paint coating line equipped robotic applicators contained within water wash booths.

PTI No. 38-13 was issued on May 3, 2013 to Magna DexSys (under the name Lansing Division of Norplas Industries) for a plastic parts coating line controlled by an RTO, preheater, and 5 natural gas-fired ovens. The permit contained EUMOLD#1-#4 (mold injection presses), EUPREWASH (a 5-stage parts washer), EUPLASTICCOATING (surface coating operations of plastic automotive front and rear bumpers), EUCLEANUP (cleanup operations throughout the facility), EUSOLVENTTANKS1 -2 (solvent storage tanks), EUHWMU (hazardous waste storage), EUDIESELENG (350 kW emergency engine), and EUHEATERS (natural gas-fired hot water heaters, etc). This permit was issued prior to Magna DexSys constructing the building that would house these emission units. A site review of the land prior to issuance of the permit was conducted 3/2013 by Brad Myott. Through the issuance of this permit Magna DexSys also acknowledged that they were a major source of HAPs and consequently subject to the MACT NESHAP PPPP for Surface Coating of Plastic Parts and Products.

On December 19, 2014, PTI No. 38-13A was issued. After constructing the Magna DexSys facility, Magna DexSys applied for this permit modification because upon reaching the final stages of the construction and installing various emission units, the predicted "as-build" design which DexSys had originally applied for did not predict the changes that needed to be made during the actual construction and installation of emission units. PTI No. 38-13A added another EUMOLD, removed EUPREWASH and EUHWMU and included it in EUPLASTICCOATING, removed FGCLEANUP, and added EUFINESSE.

A modification to PTI No. 38-13A was issued June 15, 2015 under PTI No. 38-13B. This permit modification included the addition of a fire pump engine (EUFIREPUMPENG), altering some of the emission limits and updating some of the equipment descriptions. This included changing a few conditions in the Design/Equipment Parameters section IV for EUPLASTICCOATING. In PTI 38-13A Magna DexSys was only allowed to use robotic bell disk, electrostatic applicators, or comparable technology with equivalent transfer efficiency for all coating operations in EUPLASTICCOATING. During the April 2015 stack test, S. Guyett showed me that Magna DexSys was using robotic bell disk applicators/electrostatic technology in Zones 1 and 2 (Basecoat 1 and Basecoat 2). The third zone, Basecoat 3, used only a spray gun applicator: the same gun they use for the AdPro, but not electrostatically charged. Magna DexSys was used to spray paint within cracks, crevices, and hard-to-reach angles that couldn't be achieved by the robotic bell disks or electrostatically charged spray. I made K. Zielinski aware that this was considered non-compliant operations and told her that if she can get the PTI modification into AQD within 2 weeks of 4/28/15 to get a condition within the permit to allow for a robotic applicator in zone 3 only, I would not send a violation notice. Magna DexSys did so, and the condition is now included in the current permit, PTI No. 38-13B.

DexSys submitted a PTI modification under 38-13C 9/22/15 to opt-out of the MACT PPPP by taking a HAPs opt-out limit. However, after further discussion between Brad Myott, Vrajesh Patel (permit engineer for 38-13C), Bob Byrnes and I, the conclusion was made that DexSys would have to appeal to the EPA Region V to make the determination whether or not DexSys was truly a minor source of HAPs, rather than the major source of HAPs that they were permitted to be under PTI 38 -13 (under the "once in, always in" EPA policy). The opt-out application for 38-13C was voided 12/1/15 while DexSys waited for EPA's determination. DexSys' position was that their permit was issued based on information from one of their other facilities that uses solvent-borne coatings; however, DexSys constructed their current facility in a way that could only accommodate water-borne coatings, and therefore HAP emissions would be relatively minimal compared to what was proposed in the permit to install application. On 8/30/16 EPA Region V made the determination that DexSys is a major source of HAP for the purposes of MACT Subpart PPPP, and is therefore also subject to the Title V ROP program. The EPA posited that because waste from the process contains xylene, and there is no federally enforceable requirement that requires the waste solvent tanks be vented to the RTO (which is the process DexSys currently has in place for handling waste solvent [see 6/21/16 activity report]), the xylene emissions have the potential to exceed HAP major source thresholds. DexSys ROP application is in-house under technical review.

During the 7/23/2015 inspection, B. Byrnes explained to K. Zielinski and S. Guyett that if DexSys wanted to take control credit, they must install a continuous monitor to their entry and exit points for their Permanent Total Enclosure (PTE) to have a continuous record of the pressure drop at these points. DexSys submitted their initial compliance report per the MACT PPPP for the initial compliance period of 11/3/2014-11/30/2015, stating that they used the add-on control compliance option during the initial compliance period. In April 2016 I asked for records of pressure differential across the PTE, to demonstrate that the pressure differential and the entrance and exit points were continuously monitored and at or below the 0.007 in. H2O during the initial compliance period; however, DexSys did not have records to demonstrate that they met the requirement to continuously monitor and record the pressure differential across the PTE to meet the 0.007 in. H2O minimum pressure drop. Without the continuous monitoring and recording of the pressure drop, DexSys was not allowed to claim control credit for their HAPs emissions and as a result, exceeded their HAP emission limit of 0.16 lb HAP/lb coating solids for the initial compliance period through April 2016. DexSys started to continuously monitor and record the pressure differential data as of May 3, 2016. Because of the exceedance of a MACT standard emission limit, a violation notice was issued and on 7/26/16 for this exceedance and a referral package was submitted to Jason Wolf of the Enforcement Unit on 9/13/16 as the AQD Lansing District believed the exceedance to be a High Priority Violation. On 9/21/16 Jason Wolf sent DexSys the escalated enforcement letter requesting a meeting with DexSys for MACT PPPP violations.

On December 19, 2015 PTI 38-13D was issued to incorporate an additional diesel emergency generator (EUDIESELENG#2). This unit was installed prior to permit issuance (October 2015), but the AQD was not aware of this until after the PTI was issued. I informed John Krocker that emission units are not allowed to be installed prior to permit issuance. A violation was not cited, as the PTI had already been issued and the resolution to the potential violation would likely have been to obtain a PTI for the unpermitted, yet installed, equipment.

J. Krocker said a new assembly line was installed in April 2016 (there are no air emissions associated with this line) and they have plans to install a laser to cut plastic in the future as well, which will be exempt from requiring a permit to install, and which John has included in DexSys' list of all PTI-exempt equipment (attached). A thorough review of the accuracy of these listed exemptions as they apply to the equipment will be done at a later date.

Inspection: At approximately 8:40 a.m. on August 30, 2016 I met with John Krocker and provided him with an "Environmental Inspections: Rights and Responsibilities" brochure.

EUPLASTICCOATING

The EUPLASTICCOATING line is used to coat various automobile fascia. The plastic parts are washed, dried off in an oven, cooled down in the cooling tunnel before being coated with an adhesion promoter (AdPro), and Base coats 1, 2 and 3.

The parts washer is a large enclosed section of the line where S. Guyett explained that they use an acidic soap solution (1.5% soap, the remainder of the solution is water) to wash the parts and that it is heated to keep the level of bacteria down. The heat also helps the soap etch into the surface of the part, which helps with adhesion of the coating. The parts move from the injection mold presses to the parts cleaner, then to the Adpro, clearcoat and basecoat stages of the coating line.

Additionally, DexSys has 2 parts washers located in their chemical room that are used to clean pump parts. Both are less than 10 ft2 in air:vapor interface and are therefore exempt from obtaining a PTI through Rule 281(h). One contains Aquapurge, a non-HAP containing solvent, the other contains a Gage 31950 Purge solvent, which contains multiple HAPs. These would be considered new cold cleaners under Rule 336.1707. Lids are required to be closed unless the parts washer is in use, both lids were closed. There were no operating procedures posted for these units and I informed J. Krocker that is a requirement. I will send him DEQ OEA "Cold Cleaner Operating Procedure" stickers to ensure compliance with the operating procedure requirement. Both are kept at room temperature and the solvent is not agitated. J. Krocker said that the waste Gage Purge solvent is sent to their hazardous waste tank to be shipped out as hazardous waste, and the waste from Aquapurge is removed and placed in the sludge pit from the coating booths and shipped out as non-hazardous waste. A determination will still have to be made as to the Reid Vapor Pressures of each of these solvents in order to determine compliance with the remainder for Rule 707. A flexible group representative of these two cleaners will be added to DexSys' draft ROP.

Process/Operational Restrictions

All waste coatings and solvents are required to be stored in closed containers and disposed of in a manner in compliance with all state rules and federal regulations and any VOC and/or HAP-containing materials should be handled in a way to minimize the generation of fugitive emissions.

Waste accumulation ultimately ends up in the waste recovery room adjacent to the paint kitchen. All waste coatings and waste solvent are transported via a closed line to one of 3 waste containers ("boothside waste tanks") that DexSys has vented to the RTO. The waste in these 3 containers is then pumped to the 500 gallon main waste collector. When this container is full it is pumped into 55 gallon drums to be shipped out as hazardous waste. All waste containers within the waste recovery room were closed.

There are satellite containers located throughout the facility for spray cans only. In the paint kitchen, paint is distributed to the paint booths by dumping the drums into the appropriate paint containers which are connected to the paint tunnels where the automobile fascia are coated. Transfer of the paint from the drum into the distribution container is done in a manner to minimize fugitive emissions because the connection between the drum and the distribution container seals into place during transfer.

Magna DexSys is also required to have a Malfunction Abatement Plan (MAP) that has been submitted within 180 days of permit issuance, which equates to June 19, 2015, and is implemented and maintained. K. Zielinski emailed the MAP to me June 18, 2015.

Currently the MAP contains all required information, including an exhaustive list of items to be inspected for the RTO on daily, weekly, monthly and annual bases. It also includes identification of all the major replacement parts that are maintained in inventory for quick replacement.

DexSys is in compliance with all Process/Operational restrictions at this time.

Design/Equipment Parameters

EUPLASTICCOATING is required to have a water wash particulate control system that is properly installed and maintained. At the June 2015 inspection S. Guyett said that the water wash system creates a negative pressure in the paint booth to pull the air contaminants down through the floor of the booth into the water trap. He said underneath the water trap is a filter/scrubber system to catch particulate. The scrubber pressure drop is monitored to ensure that it's operating correctly. This pressure reading is also used to make sure the air stream is being pulled toward the RTO. S. Guyett explained that if the water wash system wasn't operating properly, the paint booth would become cloudy with paint particulate would fill the booth and paint the booth window. I did not see any excess particulate clouding the booths during the inspection. J. Krocker said the sludge from this process is shipped out as non-hazardous waste.

Robotic bell disk applicators, electrostatic applicators, or applicators with comparable technology with equivalent transfer efficiency are required on zones 1 and 2 (Basecoat 1 and 2). During the stack test and again during the inspection I verified that the electrostatic bell applicators were being used in zones 1 and 2. Zone 3 is required only to have a robotic applicator, which it does.

The NFE (as specified in the permit) was determined to be a PTE based on the data provided by Air Compliance Testing Inc. during the 2015 stack test (conducted to determine capture and destruction efficiency). Method 204 requires that a PTE have an average facial velocity through the NDO of at least 200 fpm, which is equivalent to a pressure drop of -0.007 in H₂O. During the stack test the pressure drop at the inlet and outlet of the enclosure was verified at less than -0.007 in. H2O, establishing a PTE. Prior to May 2016 the pressure differential was measured once per shift, a total of 3 times per day. Since that time, a continuous monitor and recorder has been installed to track continuous records. More discussion to follow under FG-MACT-PPPP of this activity report.

The RTO is required to operate at 95% destruction efficiency at a minimum temperature of 1500°F. During the inspection, the instantaneous temperature was 1511°F. The 2015 stack test established that the destruction efficiency of the RTO was 95%.

DexSys is in compliance with the Design/Equipment Parameters requirements at this time.

Testing/Sampling

The VOC content, water content and density of any coating applied and received is required to be determined via Reference Test Method 24 unless prior approval from the AQD District Supervisor is received. DexSys submitted a request for approval to use manufacturer's formulation data on July 24, 2016. On May 12, 2016, the AQD sent an approval letter to DexSys for the allowance to use manufacturer's formulation data when calculating emissions from coatings used and to determine VOC and water contents as well as coating density.

The permit requires that both destruction efficiency of the RTO for EUPLASTICCOATING and the capture efficiency of the non-fugitive enclosure (NFE) be tested. On April 28, 2015, Magna DexSys conducted stack testing of the RTO for destruction efficiency as well as verifying the enclosure for EUPLASTICCOATING meets the definition of a Permanent Total Enclosure (PTE). The results in the report show a 95.2% average destruction efficiency at 1500 °F. See the stack test observations report for details on process specs during the test. The RTO chamber temperature was 1511°F during the inspection. The RTO chamber temperature is continuously monitored and recorded electronically.

Although the permit requires that a capture efficiency test on the NFE be conducted quarterly, it is no longer applicable because the pressure drop readings are sufficient for determining that there is 100% capture. The quarterly test requirement was based only on the assumption that Magna DexSys would use a smoke tube test to determine 100% capture.

DexSys is in compliance with all Testing/Sampling requirements at this time.

Monitoring/Recordkeeping

J. Krocker and I went through the records of coatings used and the quantities of each that were used for July 2016 and chose the top 6 coatings with the highest usage rates for the month: a high-bake clearcoat (RKAX9277), Black Meet Kettle, Summit White, Black adhesion promoter (764-X9848), Switchblade Silver, and Iridium. J. Krocker then provided me with the Environmental Data Sheets (EDS) for each of these coatings to verify VOC and HAP content and thus VOC and HAP emissions for the month of July 2016. Table 1 contains Magna DexSys' most-used coatings and their VOC, cumene, ethyl benzene, naphthalene, xylenes, and formaldehyde contents, as specified in the EDS.

Melamine resin contributes to formaldehyde emissions as formaldehyde is a byproduct of the melamine resin when it is heated. In the event a coating does contain melamine resin, formaldehyde emissions are calculated by multiplying the melamine content by 5% and then multiplying by the density of the coating. This is what was done to determine formaldehyde lb/gal in Table 1.

Coating	VOC with water (lb/gal)	Cumene (Ib/gal)	Ethyl benzene (lb/gal)	Naphthalene (lb/gal)	Xylenes (ib/gal)	Formaldehyde from Melamine Resin (Ib/gal)
Clear Coat RKAX9277	3.5	0.04	NA	NA	0.05	0.062
Black Meet Kettle (2562-51725)	1.1	NA	NA	NA	NA	0.021
Iridium Met (2561-51711)	1.1	NA	NA	NA	NA	0.021
Switchblade Silver (2561-51708)	1.3	NA	NA	NA	NA	0.021
Summit White (2562-51724)	1.4	NA	NA	NA	NA	0.025
Black Adhesion Promoter 764-X9848	6.0	0.07	0.24	NA	1.0	NA

Table 1. Various coating contents

DexSys is required to keep the following records on a monthly basis: Gallons or pounds of each coating, reducer and thinner material used, VOC content in lb/gal or lb/lb of each material as applied, and VOC mass emission calculations to determine the monthly emission rate. Magna DexSys is also required to keep 12-month rolling VOC emission rates. J. Krocker provided me with electronic records (hard copies attached) for July 2016 which contain the gallons of each coating used, VOC content in lb/gal, and VOC mass emissions on a monthly and 12-month rolling basis. The spreadsheets include the 6 coatings in Table 1. Based on my review of these records it appears that the monthly and 12-month rolling emissions data for VOCs were calculated correctly and the emissions are accurate. July VOC emissions totaled to 3,165.2 lbs, ~1.58 tons. DexSys has a column in their spreadsheet tab "12 Mo Rolling" for VOC lb/month and lb/yr (12-month rolling) emissions. August 2015 – July 2016 12-month rolling VOC emissions were 34,730.33 lbs, or 17.37 tons with the 95% control credit from the RTO. DexSys limit is 59.1 tpy per 12-month rolling period.

Cumene, ethyl benzene, naphthalene, and formaldehyde emissions must be recorded on a monthly and 12-month rolling basis. I verified the reported emissions rates for these compounds and they appear to be accurate. Table 2 contains the 12-month rolling (August 2015-July 2016) emissions for these 4 HAPs and their compliance status with the permitted emission limits with the 95% control credit from the RTO.

Table 2.

Pollutant	Actual Emissions (Aug 2015 – July 2016)	Permitted Limit, 12-month rolling	Compliance Status
VOC	17.4 tons	59.1 tons	Compliance
Cumene	244,2 lb	744.6 lb	Compliance
Ethyl benzene	2,051.4 lb	10,792.3 lb	Compliance
Naphthalene	31.9 lb	1,033.7 lb	Compliance
Formaldehyde	217.6 lb	876.0 lb	Compliance

Xylenes have permit limits on a daily basis. J. Krocker provided me with July 2016 daily xylene emissions from each coating, thinner, reducer, and cleaning solvent used. The daily limit is 108.0 lbs. The highest xylene daily emissions was 28.3 lbs on July 25, 2016. Magna DexSys is in compliance with their xylenes limit at this time.

Magna DexSys is also required to keep record of the temperature in the RTO combustion chamber in equally-spaced intervals not to exceed 15 min/interval. J. Krocker showed me their RTO records through July 2016 and provided with me the January 2016 continuous monitoring of the RTO temperature as an example. The graph indicates that DexSys has been maintaining the RTO chamber temperatures on a weekly basis. All weeks show graphically that the RTO was maintained at a minimum of 1500F, except during periods where the RTO was shut down. J. Krocker explained that the shutdowns at DexSys are largely the result of GM shutting down. DexSys' operating schedule is contingent on GM's operating schedule.

Magna DexSys is in compliance with all Monitoring/Recordkeeping requirements for EUPLASTICCOATING at this time.

EUFINESSE

Magna DexSys uses hand-held sanders, buffing pads, and a solution of isopropyl alcohol (IPA) (20%) and water (80%) to repair defects in painted plastic parts. The IPA solution is specifically used for removing the residue from the sanding cream. All containers of IPA were closed during the inspection, as required by the permit. Each time an employee fills a container with the IPA solution they note it on a sheet of paper near the finesse stations. Magna DexSys is limited to 2 tons of VOC per 12-month rolling time period. J. Krocker provided me with the 12-month rolling summary (August 2015 – June 2016) and a July 2016 record showing that Magna DexSys used 3 gallons of solution containing 20% IPA, equivalent to 4.0 lbs of VOC for July. The 12-month rolling total of VOC was 0.14 tons.

Magna DexSys is in compliance with all requirements for EUFINESSE at this time.

FGMOLDING

The injection mold presses (EUMOLD#1 - #5) in this flexible group are used to mold the automotive front and rear bumpers.

Magna DexSys uses hand-held aerosol spray cans to apply mold release to the front and rear bumper molds. J. Krocker provided me with the July 2016 usage of various mold releases and the VOC emissions in lbs from each and the 12-month rolling VOC emissions in tpy (August 2015-July 2016). The 12-month rolling VOC emissions was 0.6 tpy. The limit is 0.6 tpy.

Magna DexSys is in compliance with all requirements in FGMOLDING at this time.

FGNATURALGAS

This unit contains the emission units EUPLASTICCOATING and EUHEATERS.

Magna DexSys is required to have a device to monitor and record the natural gas usage for FGNATURALGAS on a continuous basis. Before the permit was issued Magna DexSys had a conversation with me about what would be an approved monitoring device. The agreement was made that Magna DexSys could provide AQD with Consumer's Energy billing statements to show how much natural gas they've used because Consumer's Energy is the entity responsible for recording this usage.

There is a 12-month rolling limit of 573 MMcf natural gas. DexSys records indicate that the natural gas usage from August 2015 – July 2016 was 99.3 MMcf.

Magna DexSys is in compliance with all requirements in FGNATURALGAS at this time.

FGDIESELENGS

This flexible group contains EUFIREPUMPENG, EUDIESELENG#1, and EUDIESELENG#2, all subject to NSPS Subpart IIII. EUDIESELENG#2, a 563 kW (744 hp) Racoma Cummins diesel-fired engine, was the most recent engine installation as of October 2015, and is used to provide backup power to the new assembly line. EUDIESELENG#1 is a Generac 130 kW (198 hp) emergency diesel-fired engine that was installed 5/12/2014 and commenced up in June 2014. EUFIREPUMPENG is a 190 kW (241 hp) DEUTZ AG diesel-fired emergency engine manufactured in 2009 and installed 4/18/2014.

Table 3. Engine data

Engine	Total hours	Serial #	Nameplate HP/kW
EUFIREPUMPENG (190kw, 241 HP)	47.5	10823135	241/180
EUDIESELENG#1 (130 kw, 198 HP)	49.1	8624627	NA/130
EUDIESELENG#2 (563 kw, 744 HP)	23.9	1150868772	NA/500

Material Limits

http://intranet.deq.state.mi.us/maces/webpages/ViewActivityReport.aspx?ActivityID=2459... 9/29/2016

Magna DexSys is permitted only to use diesel fuel with a maximum sulfur content of 15 ppm (0.0015%) and a minimum Cetane index of 40. J. Krocker showed me their Marathon documentation that their fuel is ultra-low sulfur (15 ppm) and that the fuel's Cetane index is a minimum of 40 (see attached).

Process/Operational Restrictions

Each engine in FGDIESELENGS is allowed up to 500 hours of operation per year on a 12-month rolling time period basis, as determined at the end of each calendar month. The 500 hours of operation includes maintenance checks and readiness testing. J. Krocker provided me with an excel spreadsheet of the total hours each engine operated on a monthly and 12-month rolling basis, which includes all hours operated for maintenance/readiness testing and emergency hours. DexSys is also allowed up to 100 hours total per engine for maintenance checks and readiness testing, and up to 50 hours of non-emergency operation per engine. Table 3 provides a breakdown of operating hours associated with each activity per engine and the 12-month rolling-totals. DexSys is in compliance with the 500-hour, 100-hour and 50-hour limits for each engine at this time.

Table 4. 12-Month Rolling Total Operating Hours for each engine in FGDIESELENGINES.

Engine	Maintenance Checks/ Readiness Testing hours (100 hr limit)	Emergency hours	Non-emergency hours (50 hr limit)	Total Operating hours 12-month rolling 500 hr limit (Aug 2015 – July 2016)
EUDIESELENG#1	24.6	0	2.1*	26.7
EUDIESELENG#2	11.0	0	11.4**	22.4
EUFIREPUMP	16.3	0	0	16.3

*DexSys documented that EUDIESELENG#1 emergency-operated for 2.1 hours in September 2015 for scheduled hours of electrical downtime; AQD does not agree with this categorization per discussion below (thus hours moved to non-emergency hours).

**DexSys also documented that EUDIESELENG#2 operated 11.4 hours in December 2015 under maintenance checks or readiness testing; however, AQD does not agree with this categorization per discussion below (thus hours moved to non-emergency hours).

40 CFR 60.4219 defines an "emergency stationary internal combustion engine" as

"any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All Emergency stationary ICE must comply with the requirements specified in 60.4211(f) in order to be considered emergency stationary ICE. If the engine does not comply with the requirements specified in 60.4211 (f), then it is not considered to be an emergency stationary ICE under [NSPS Subpart III].

The stationary ICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc..."

Scheduled electrical downtime for EUDIESELENG#1 would not be considered emergency usage based on the NSPS Subpart IIII definition of emergency operation. Therefore, the 2.1 hours listed under "emergency hours" in DexSys' recordkeeping should be accounted for under "non-emergency hours." I will inform J. Krocker of this definition to ensure DexSys' future compliance with hours of operation. DexSys is in compliance with the 50-hour limit for non-emergency operation of EUDIESELENGINE#1.

Additionally, DexSys claimed 11.4 hours of operation under maintenance checks/readiness testing for EUDIESELENG#2. They noted that this was done in response to a request from their customer, GM, to ensure operations continued in the event of a power outage. This would not be considered maintenance checks or readiness testing that is recommended to be conducted by Federal, State, or local government, the manufacturer, the vendor, or the regional transmission organization or equivalent balancing authority, or the insurance company associated with the engine. The 11.4 hours would therefore be recategorized under non-emergency hours. I will inform J. Krocker of this inaccuracy to ensure DexSys future compliance with hours of operation. DexSys is in compliance with the 50-hour limit for non-emergency operation of EUDIESELENG#2.

DexSys is in compliance with all Process/Operational Restrictions at this time.

Design/Equipment Parameters

Magna DexSys is required to equip each engine with a non-resettable hours meter. J. Krocker and I went to each engine and he adjusted the screen settings to allow me to record the total hours of operation on each engine. Table 3 contains this data. Table 3 also contains the kW which I recorded from each engine nameplate. DexSys is required not to exceed the manufacturer's maximum rated output for each engine. All recorded nameplate kW outputs are at or below the permitted kW.

DexSys is in compliance with all Design/Equipment Parameter requirements at this time.

Monitoring/Recordkeeping

DexSys is required to keep records of each engine's manufacturer certification. DexSys has provided documentation (attached) to demonstrate that all 3 engines if FGDIESELENGS are certified engines.

DexSys also provided me with fuel supplier certification records for the most recent deliveries of diesel fuel oil used in the engines, which also contain the sulfur content and cetane index number.

DexSys is in compliance with all Monitoring/Recordkeeping requirements at this time.

Reporting

DexSys is required to notify the district office specifying whether EUDIESELENG#2 will be operated in a certified or a noncertified manner and to notify of the completion of installation of the engine. On January 22, 2016 the district office received a letter for DexSys stating that they plan to operate the engine in a certified manner, on December 29, 2015 they completed installation of EUDIESELENG#2 and on December 29, 2015 also initialized first operation of the engine for 11.4 hours.

DexSys is in compliance with all reporting requirements at this time.

Stack/Vent Restrictions

All engines in FGDIESELENGS are required to have stacks oriented vertically upward. I have had previous conversations with J. Krocker concerning this requirement (in addition to the minimum stack height requirements for each engine). None of the engines have vertically upward orientation and also have raincaps. The heights of the stacks also do not meet the minimum requirements for EUFIREPUMPENG and EUDIESELENG#2 (10 feet from ground level). J. Krocker and I have already agreed that to come into compliance with this requirement, DexSys will submit a permit modification to allow for lower stack heights and horizontal orientations rather than the vertical orientations currently required. I will not cite a violation at this time, but rather work with DexSys to ensure the permit modification gets submitted within a reasonable timeframe.

FG-MACT-PPPP

During the initial compliance period, as stated in the initial compliance report, DexSys has chosen to use the add-on control option in order to achieve compliance with the 0.16 lb HAP/lb coating solids emission limit for general use coatings on a 12-month rolling basis.

To use the add-on controls option, DexSys must ensure that the direction of air flow is at all times into the enclosure and the pressure drop across the enclosure is at least 0.007 in H2O, with compliance determined from the 3-hour averaged data (continuous data reduced to 3-hour averages), required under 40 CFR 63.4568(a).

As previously mentioned, DexSys was out of compliance with this requirement during the initial compliance period through April 2016. J. Krocker has provided me continuous data from May 2016 – August 2016 demonstrating that the pressure drop at both ends of the permanent total enclosure are being continuously monitored and recorded. This data was originally in a graphical format and in Pascals rather than inches of water. I informed J. Krocker that the units must be in inches of water to demonstrate compliance with the limit. Attached is an example of small sets of data for May, June, July, and August 2016 that was converted from Pa to in. H2O.

I reviewed all data to confirm compliance with the 0.007 in H2O requirement. The pressure drop ranged from 0 to ~-0.09 in. H2O for the CC2 Oven/Plant end of the permanent total enclosure, demonstrating compliance. However, the Tack-Off Clean Room end of the PTE pressure differential ranged from positive pressures to -0.0237. (see attached for examples of both data sets). Although this data was not averaged in 3-hour rolling intervals, there are enough positive pressure data within multiple 3-hour blocks throughout May-August that indicate the 0.007 in. H2O pressure drop was not maintained. Therefore, while continuous monitoring and recordkeeping have been conducted, control credit for May – August 2016 will not be allowed for those rolling 3-hour portions of time where the average pressure differential was not maintained at 0.007 in. H2O or less. The 12-month rolling, August 2015 – July 2016, HAP lb/lb coating solids emissions without control credit is 0.52, which exceeds the 0.16 lb HAP/lb coating solids limit for General Use coatings. Even if DexSys were in compliance with the 0.007 in. H2O from May – July 2016, the 12-month rolling of non-control credit months with the control credit months would result in 0.38 lb HAP/lb coating solids.

Although DexSys is currently in escalated enforcement with the Air Quality Division for MACT PPPP violations during the initial compliance period, I will address this violation (not meeting the 0.007 in. H2O) by issuing a violation notice.

DexSys is required to have a startup, shutdown and malfunction plan (SSMP) and work practice plan per the MACT PPPP. Both were submitted with the initial ROP application.

Compliance Statement: At this time Magna DexSys is in non-compliance with PTI 38-13D for FG-MACT-PPPP violations. A violation notice will be issued for the FG-MACT-PPPP violation. Magna DexSys is in compliance with all other requirements in PTI 38-13D at this time.

NAME Mull Joins

DATE <u>9/23/16</u>

B.M. SUPERVISOR_

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