

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

P042942703

FACILITY: Magna DexSys (Delta Exterior Systems)		SRN / ID: P0429
LOCATION: 5589 W. MOUNT HOPE HIGHWAY, LANSING		DISTRICT: Lansing
CITY: LANSING		COUNTY: EATON
CONTACT: Sean Guyett , Mold & Paint Superintendent		ACTIVITY DATE: 12/18/2017
STAFF: Michelle Luplow	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Scheduled, semi-unannounced inspection PCE conducted as part of an FCE. Compliance determined with MI-ROP-P0429-2017		
RESOLVED COMPLAINTS:		

Inspected by: Michelle Luplow

Personnel Present: Sean Guyett (sean.guyett@magna.com), Mold & Paint Superintendent  
Dawn Mobarak, Paint Systems Technician

Other Personnel: Gerry Mazzola (gerry.mazzola@magna.com), General Manager

### **Purpose**

Conduct an semi-unannounced, scheduled, partial compliance evaluation (PCE) inspection of Magna DexSys (Delta Exterior Systems), as part of a full compliance evaluation (FCE). The inspection was largely conducted to determine compliance with DexSys' newly issued (August 14, 2017) ROP, MI-ROP-P0429-2017. An inspection using this ROP had not yet been conducted. DexSys was last inspected in March 2017.

Additionally, the inspection served as an outlet for discussing any questions DexSys had concerning annual and semi-annual reporting, CEDRI submittals for the Boiler MACT, and the opportunity to request that reports for the Administrative Consent Order (ACO) AQD No 3-17 no longer be required after the submittal of DexSys 12-month rolling HAP lb/lb coating solids emissions.

### **Facility Background/Regulatory Overview**

Magna DexSys is an automotive parts manufacturer: front- and rear-end bumper fascia are created using mold injection presses and a paint coating line equipped with robotic spray applicators.

DexSys was issued their initial ROP, MI-ROP-P0429-2017, August 14, 2017.

### **Permitting History**

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 Subpart 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-built" 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 them 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 EUPLASTICCOATING Design/Equipment Parameters section. 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 therefore operating out of compliance with PTI 38-13A during the stack test. They explained that the third zone 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 at the time, and I told her that if she can get the PTI modification into AQD within 2 weeks of 4/28/15 to allow for a robotic applicator in zone 3 only, a violation notice would not be issued. Magna DexSys did so, and the condition was included in PTI No. 38-13B.

In September 2015 DexSys submitted a PTI modification under 38-13C 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 (LDO Auto Specialist) 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 under, or if they were fixed into the MACT "once in, always in" 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 8/21/16 Regulatory Determination activity report]), the xylene emissions have the potential to exceed HAP major source thresholds.

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 reminded John Krocker, who currently no longer works for DexSys, then and again during the last inspection, 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.

PTI, 38-13E was issued January 10, 2017 to include modifications of the FGDIESELENGS individual stack heights and orientations. This PTI was also rolled into MI-ROP-P0429-2017.

#### *Consent Order History*

During the 7/23/2015 inspection, B. Byrnes explained to K. Zielinski and S. Guyett that, per the MACT PPPP, if DexSys wanted to take control credit for their HAPs emissions, they must install a continuous monitor at the entry and exit points of their Permanent Total Enclosure (PTE) in order 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, demonstrating that the pressure differential at the entrance and exit points were continuously monitored and at or below the -0.007 in. H<sub>2</sub>O during the initial compliance period; however, DexSys did not have these records. 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 on 7/26/16 and a referral package was submitted to Jason Wolf of the Enforcement Unit on 9/13/16. A Consent Order (AQD No 3-2017) was issued January 2017 to resolve the MACT Subpart PPPP violations.

As of January 31, 2017, DexSys has the option to request that the monitoring data required by the Consent Order no longer be required to be submitted.

#### **Inspection**

At approximately 8:00 a.m. on December 18, 2017 I met with Sean Guyett, Mold and Paint Supervisor. I provided him with the January 2017 PTI Exemption Handbook. During the March 2017 inspection I provided K. Cox and J. Krocker with a Boiler MACT outreach brochure. Dawn Mobarak, Paint Systems Technician, was also present for this inspection.

S. Guyett, D. Mobarak, and I discussed the great job DexSys is doing with timely submittals of the Permanent Total Enclosure (PTE) data for the Consent Order. I reminded them that a request can be made after January 31, 2017 to no longer be required to submit the PTE data for demonstrating the air flow at both ends of the PTE are greater than 0.007 inches H<sub>2</sub>O. Additionally, I reminded them that the 12-month rolling HAP emission calculations for January – December 2017 are due by January 30, 2018.

We also discussed Semi-Annual and Annual reporting requirements, to which S. Guyett said that DexSys has an environmental calendar to keep track of report due dates.

S. Guyett said there have been no new installations of equipment since the December 2015 installation of the additional emergency engine.

### Exemptions

Table 1 contains a list of exempt equipment located at DexSys, including installation dates, the appropriate exemption, and demonstrations that the exemption applies, as applicable. This was derived from J. Krockner's exemption table he had created after the August 2016 inspection.

**Table 1.** DexSys Exempt Equipment

Emission Unit	Process Description	Installation/ Mod Dates	PTI Exemption	Required Documentation	Exemption Demonstration
Rocker Panel Assembly	Using 99% IPA solution to apply peel & stick adhesive	4/21/14	Rule 290(2) (a)(i)	Monthly records required to demonstrate noncarcinogenic VOC emissions are less than 1000 pounds per month.	January -- December 2017 demonstration shows that the highest VOC emissions were in March at approximately 241 lbs of VOC (isopropanol). Exemption is being met. Demonstration attached.
Plastic Grinder	CONAIR grinder and blower system grinds substandard plastic fascia into pellet-sized pieces to be reused into product or shipped off-site for recycle. This is a closed-loop system	8/11/14	Rule 285(2) (l)(vi)(B)	NA	Onsite inspection revealed a closed-loop system not vented to atmosphere nor the in-plant environment. Ground plastic is kept in bins
Paint booth for quality control testing	Paint is used to identify deficiencies in the fascia. The fascia are painted with aerosol spray cans	9/22/14	Rule 287(2) (b)	NA	Onsite inspection revealed a booth with fabric filters used only for aerosol can spray painting
Oven for quality control testing	Painted fascia from quality control testing paint booth are cured in this natural gas-fired oven.	10/20/14	Rule 282(2) (b)(i)	NA	Unit is rated at less than 50 MMBtu/hr
Rofin DC X50 CO2 Laser	Stationary CO <sub>2</sub> laser with 500 W output that is used to cut plastic parts off the fascia. Laser also does plastic welding. A Katasorb exhaust system filters the air before it is released to the ambient air	5/2016	Rule 285(2) (l)(vi)(C) and Rule 285(2) (i)	NA	Equipment externally vents emissions. Mechanical precleaner and filters are within the unit to filter particulate prior to exhausting to ambient air.
Jenopik Diode Laser	Welding lasers inside an enclosure	5/2016	Rule 285(2) (i)	NA	NA
Cooling Towers -- Molding	Used to cool the mold presses	5/2016	Rule 280(2) (d)	NA	NA
BAC Cooling Tower	Three BAC cooling towers. Cools the processes on the paint line	9/15/14	Rule 280(2) (d)	NA	NA
HVAC	HVAC Units, each less than 9.9 MMBtu/hr heat	Unknown	Rule 282(2) (b)(i)	NA	NA

	input. Used for heating				
Photo copiers	Office printers/photo copiers	2014	Rule 285(2) (l) (vii)(B)	NA	NA
Maintenance welding, soldering, brazing	NA	Unknown	Rule 285(2) (i)	NA	NA
Storage containers	Forklift propane, diesel	Unknown	Rule 284(2) (b), (c), (l)	NA	NA
Parts Washers	Maintenance Parts washer using Gage Purge Solvent in one, and Aquapurge, aqueous solution. Located in the chemical room. Cleans pump parts.	Post-2014	Rule 281(2) (h)	NA	Air:vapor interface is less than 10 ft <sup>2</sup> . Considered new cold cleaners under Rule 336.1707. Lids are required to be closed unless the parts washer is in use. Lids were closed. DEQ OEA "Cold Cleaner Operating Procedure" stickers used to ensure compliance with the operating procedure requirement. Kept at room temperature, solvent is not agitated. J. Krockner said that the waste Gage Purge solvent is transferred to nearby haz waste drum, Aquapurge is removed and placed in the sludge pit from the coating booths and shipped out as non-hazardous waste

**SOURCE-WIDE CONDITIONS**

*There are no Emission Limits, Material Limits, Process/Operational Restrictions, Design/Equipment Parameters, Testing/Sampling, Monitoring/Recordkeeping, Reporting, or Stack/Vent Restrictions under the Source-Wide Conditions.*

**Other Requirements**

DexSys is required to be in compliance with Consent Order AQD No. 3-2017 at all times, and meet the compliance deadlines established in Appendix 2 (Schedule of Compliance). As discussed, S. Guyett and I talked about the deadlines for both submitting the 12-month rolling HAP emissions by January 30, 2018. DexSys has been submitting all required monthly monitoring records since the consent order was issued. DexSys is in compliance with these requires at this time.fc

**EUPLASTICCOATING**

The EUPLASTICCOATING line is used to coat various automobile fascia. The permit covers the following equipment under this emission unit: an uncontrolled paint kitchen; a 5-stage parts washer with a natural gas-fired hot water heater (subject to the Boiler MACT Subpart DDDDD); 3 water wash spray booths (AdPro, basecoats, clearcoats); and 3 natural gas-fired drying ovens. All VOC's from this process are controlled by a regenerative thermal oxidizer (RTO).

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 etch the surface of the part, which aids in the coating adhesion. The parts move from the injection mold presses to the parts cleaner, which are then oven-dried, and cooled down in the cooling tunnel before being coated with an adhesion promoter (AdPro), and base coats 1, 2 and 3. The coated parts are then oven-cured.

Emission Limits & Monitoring/Recordkeeping

DexSys is required to keep record of the chemical composition of each coating and solvent, including the weight percent of each component. They are also required to keep record of the VOC, cumene, ethyl benzene, naphthalene, and xylenes, formaldehyde, and melamine resins content for each coating.

DexSys is required to keep the following records on a monthly basis: Gallons or pounds of each coating (including permitted HAP-containing coatings), 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. For the months March, August, and December 2017, usage, VOC contents and VOC monthly emission calculations were verified.

Magna DexSys is also required to keep 12-month rolling VOC emission rates. S. Guyett provided me with electronic records (hard copies attached) for monthly and 12-month rolling VOC emissions. DexSys' VOC limit is 59.1 tpy per 12-month rolling period. DexSys' VOC emissions, December 2016 – November 2017 was 10.3 tons (using RTO control), and is therefore in compliance with their VOC emission limits.

To grab a snapshot of the coating composition and verify calculations with the respective coating compositions, I requested the Environmental Data Sheets (EDSs) for the top 6 most-used coatings for the month with the highest total coating usage between December 2016 and November 2017 (March 2017). The following are the top 6 coatings used in March: a high-bake clearcoat (RKAX9277), Urethane Clear activator AHS (RK-7018), Summit White, Black adhesion promoter (764-X9848), Switchblade Silver MET, and Iridium MET. All coatings except for the Iridium MET were considered the top most-used coatings during the previous inspection; thus, indicating that the clearcoat, clear activator, Summit White, Black adhesion promoter, and Switchblade Silver are the most common coatings used. I was provided 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 months of December 2016 – November 2017. Table 1 contains the aforementioned 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 contains melamine resin, formaldehyde emissions are calculated by multiplying the melamine content by 5% and then multiplying by the density of the coating. Based on the EDSs, none of these coatings contain melamine resin.

**Table 1.** Various coating contents

Coating	VOC with water (lb/gal)	Cumene (lb/gal)	Ethyl benzene (lb/gal)	Naphthalene (lb/gal)	Xylenes (lb/gal)	Melamine content (wt%)	Formaldehyde from Melamine Resin (lb/gal)
Clear Coat RKAX9277	3.5	0.04	NA	NA	0.05	NA	NA
Urethane Clear Activator (RK-7018)	2.5	NA	0.18	NA	0.71	NA	NA
Black Adhesion Promoter 764-X9848	6.0	0.07	0.24	NA	1.0	NA	NA
Iridium MET (2561-51711)	1.12	NA	NA	NA	NA	NA	NA
Switchblade Silver (2561-51708)	1.32	NA	NA	NA	NA	NA	NA
Summit White (2562-51724)	1.35	NA	NA	NA	NA	NA	NA

Cumene, ethyl benzene, naphthalene, and formaldehyde emissions must be recorded on a monthly and 12-month rolling basis. I reviewed the reported emissions rates for these compounds in DexSys' excel spreadsheet and they appear to be accurate. Table 2 contains the 12-month rolling (December 2016 – November 2017) emissions for these 4 HAPs and their compliance status with the permitted emission limits using the 95% control credit from the RTO.

**Table 2.** 12-month Rolling VOC and TAC emissions, December 2016 – November 2017

Pollutant	Actual Emissions	Permitted Limit, 12-month rolling	Compliance Status
VOC	10.3 tons	59.1 tons	Compliance
Cumene	247.2 lb	744.6 lb	Compliance
Ethyl benzene	2,592.1 lb	10,792.3 lb	Compliance
Naphthalene	71.7 lb	1,033.7 lb	Compliance
Formaldehyde	138.0 lb	876.0 lb	Compliance

Xylene has a daily permit limit of 108.0 lbs. S. Guyett provided me with March, August, September and October 2017 daily xylene emissions (attached) from each coating, thinner, reducer, and cleaning solvent used, controlled by the RTO. The daily limit is 108.0 lbs. The highest xylene daily emissions from these months was 31.3 lbs, on September 11, 2017. Magna DexSys is in compliance with their xylenes limit at this time.

### Material Limits

*There are currently no Material Limits for EUPLASTICCOATING at this time.*

### Process/Operational Restrictions & Monitoring/Recordkeeping

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 container. When this container is full it is pumped via closed lines into 55-gallon drums to be shipped out as hazardous waste. All waste containers within the waste recovery room were closed during the inspection. The AQD and WMRPD will conduct a joint inspection in FY 2018 to ensure that all waste regulations are being met.

There are satellite containers located throughout the facility for waste aerosol spray cans.

In the paint kitchen, paint is transferred from drums into paint distribution containers, which are connected via closed lines 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 is sealed into place during transfer; therefore, procedures are in place to ensure that the generation of fugitive emissions is minimized.

Magna DexSys is also required to have a Malfunction Abatement Plan (MAP) that is implemented and maintained. S. Guyett verified that the most recent version of the MAP is dated June 18, 2015, which the AQD currently has on file. He said DexSys hasn't had any RTO issues that would result in the need to revise or update their MAP; however, they do plan to review it and update the MAP per corporate's request.

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. I mentioned to S. Guyett that the MAP could also include the updates for their automatic electronic notification system for any system disturbances of pressure drop or temperature in the paint booths and RTO, and that the MAP should reflect current processes and procedures in place in preparation for potential malfunctions.

When operating the Permanent Total Enclosure (PTE) of the coating booths, DexSys is required to maintain a minimum of 0.007 inches of water pressure differential between the PTE and the adjacent area on a 3-hour block average basis. Additionally, records of the direction of air flow into the enclosure and the pressure drop are required to be kept on file. From January 2017 through November 2017, I have reviewed the pressure drop data at each end of the PTE on a monthly basis. DexSys, per Consent Order AQD No 3-2017, was required to submit pressure drop records on a monthly basis to ensure that the 0.007 inches H<sub>2</sub>O minimum requirement was being met. Throughout this entire period DexSys has met this limit on a 3-hour block average basis.

### Design/Equipment Parameters & Monitoring/Recordkeeping

EUPLASTICCOATING is required to have a water wash particulate control system that is properly installed and maintained. During the 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. J. Krockner, during the last inspection, said the sludge in the water trap from this process is shipped out as non-hazardous waste. The water wash particulate control system appeared to be operating properly as the booths were not cloudy with paint particulate.

Robotic bell disk applicators, electrostatic applicators, or applicators with comparable technology with equivalent transfer efficiency are required in zones 1 and 2 (basecoat 1 and 2), and in the Adpro and clearcoat booths. Zone 3 (basecoat 3) requires robotic gun applicators or comparable technology. I verified with S. Guyett that the electrostatic bell applicators were being used in zones 1 and 2, electrostatic applicators are used in the Adpro booth, and electrostatic bell disk applicators are used in the clearcoat booth. During the last inspection, zone 3 used robotic gun applicators, but S. Guyett said they now have electrostatic bell disk applicators in zone 3, which has better transfer efficiency than the robotic applicators. He also said that there is the possibility DexSys will switch back to a robotic applicator, but that will depend on the parts they have to coat.

The devices to continuously monitor and record the pressure differential between the PTE and the outside area are required to be installed, calibrated, maintained and operated in a satisfactory manner. Duplicate pressure drop monitors are installed at each end of the PTE, and S. Guyett conducts monthly leak check tests and pressure gauge calibrations on these units. These monthly tests qualify as satisfactory calibration, maintenance and operation of the monitoring devices. Further discussion on this topic is under the "FGMACTPPPP" section of this report.

To ensure that the PTE is installed, maintained and operated in a satisfactory manner, the minimum, continuous 3-hour block average of 0.007 inches of water pressure differential must be maintained at each end of the PTE. During the inspection, I took an instantaneous readings at each end of the PTE, at the Tack-off and Cooling Tunnel monitoring points. At 9:30 a.m. the Cooling Tunnel monitoring point had a reading of -0.0511 inches H<sub>2</sub>O, and at 9:45 a.m. the Tack-off monitoring point had a reading of -0.0107 inches H<sub>2</sub>O. The Tack-Off end of the PTE has the general tendency of having a higher (less negative) pressure drop than the Cooling Tunnel end of the PTE; however, all records for the past 11 months indicate that the Tack-off end 3-hour averages are meeting the 0.007 inches H<sub>2</sub>O requirement.

The RTO is required to operate at 95% destruction efficiency at a minimum temperature of 1500°F and 0.5 second retention time. Temperature records are required to be recorded at least once every 15 minutes, at equally-spaced intervals. The instantaneous temperature I recorded during the inspection was 1516°F (within the maximum routine operating conditions established during the 2015 stack test). S. Guyett said that the RTO is always running, except during RTO preventative maintenance or bakeouts (conducted once per month), or when there is no production. S. Guyett said the last bakeout was conducted the week of November 20, 2017 and they generally conduct their bakeouts during the day. I reviewed DexSys' RTO continuous records for May, June, September and October 2017 (see attached for June 2017 example). The May 2017 records (also attached for comparison) are in the old format (analogue continuous records), while the remaining 3 are in the new format: a digital record of temperature data points taken every 15 minutes. S. Guyett also provided production hours to ensure AQD that the periods where data points were not taken were during periods of downtime. Temperature was continuously monitored throughout all production hours and kept above 1500F for the months I reviewed (May, June, September October 2017).

I informed DexSys, after the last inspection, to be aware of any opacity exiting the RTO stack during bakeouts, and that, according to Rule 301, DexSys is limited to 20% opacity from the stack at all times, including bakeouts.

The temperature monitoring device for the RTO is also required to be installed, calibrated, maintained and operated in a satisfactory manner. During the March 2017 inspection, Operator Shane Coan provided me with DexSys' manufacturer RTO maintenance instructions. The maintenance for the thermocouples is required every 6 months and involves measuring the thermoelectric voltage at a known temperature and compare it to the values specified in the operating instructions. S. Coan said that every 5-6 weeks this is conducted (during RTO Preventative Maintenance downtime). Additionally, he said that they install a new, calibrated temperature sensor on an annual basis. S. Guyett said the temperature sensor was last replaced in February 2017.

DexSys staff explained that whenever there are system abnormalities detected (in pressure drop, RTO temperature, etc) an email notification is sent out to multiple DexSys staff immediately so that the issue is corrected in a timely manner.

#### 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, 2015. 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 destruction efficiency of the RTO is required to be tested at least once every 5 years. On April 28, 2015, Magna DexSys conducted initial 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 stack test 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. S. Guyett said they have the new test date scheduled in their environmental calendar for April 27, 2020.

#### Monitoring/Recordkeeping

As required by CAM, a record of maintenance inspections, which include the dates, results of the inspections, and the dates and reasons for repairs if made, must be kept for the following items:

- Validation of thermocouple accuracy or recalibration of each temperature thermocouple a minimum of once every 12 months – OR – replace the thermocouple in lieu of validation
- Perform a heat exchange/heat transfer media inspection a minimum of once every 18 months
- Inspect the condition of the RTO seals and verify that the continuous valve timing/synchronization monitoring system, and its associated alarm, are operating properly, a minimum of once every 18 months.

To address item number 1, the thermocouple was last replaced in February 2017, as previously discussed; DexSys has chosen to replace it annually to meet this requirement. To address item number 2, S. Guyett provided me with the semi-annual inspection report on the RTO, conducted June 26, 2017. Within the semi-annual report, line item 9 under Task 2 demonstrates that the ceramic block, insulation and steel baskets are inspected semi-annually, which is more frequent than what is required. Generally, S. Guyett said preventative maintenance on the RTO as a whole is conducted on a monthly basis, or more frequently if there are problems that arise they need to address and that the maintenance is generally conducted on the weekends when no production is taking place/the RTO is already down. To address item number 3, S.

Guyett said that this condition does not accurately reflect the design of the RTO they have installed. Because the RTO is rotary, timing and synchronization are not applicable. He explained that preventative maintenance conducted will also involve checking the rotary bearings on the drive shaft and the seals to the rotor, in addition to ensuring the amperage on the rotor is correct. It is my professional judgment that the preventative maintenance conducted on the rotor is sufficient for meeting the intent of item number 3.

DexSys is required to conduct bypass monitoring on the RTO for each bypass line such that the valve or closure method cannot be opened without creating an alarm condition for which a record should be made. Records of the bypass line that was open and the length of time the bypass was open shall be kept on file. S. Guyett said that the bypass line has not been used since operations began, and explained that if the bypass line were opened, the pressure in the system would drop, and result in an alarm condition where the paint line is shut down and the email notification system sends emails to the responsible staff to address the situation. S. Guyett, per my request, sent me bypass flow records for the first week of November 2017 to demonstrate that records of bypass flow are kept on a continuous basis (see attached).

#### Reporting

DexSys' first semi-annual and annual reporting periods will cover June – December 2017, and January – December 2017, respectively. Reports are expected to be on time.

#### **EUFINESSE**

EUFINESSE is a defect repair station using hand-held sanders, buffing pads, and a solution of isopropyl alcohol (IPA) (20%) and water (80%) on painted plastic parts. The IPA solution is specifically used for removing the residue from the sanding cream.

#### Emission Limits & Monitoring/Recordkeeping

DexSys is limited to 2.0 tons of VOC per 12-month rolling time period from EUFINESSE. S. Guyett provided an electronic version of the 12-month rolling total of VOC for December 2016 – November 2017, in addition to March, August, and November monthly tracking sheets, attached. The 12-month rolling VOC emissions during this 12-month rolling period was 0.08 tons.

In the past, each time an operator would fill a 2.5-gallon container with the IPA solution they were required to note 2.5 gallons used on a logsheet near the finesse stations. The operators, however, were recording "3 G" (indicating 3 gallons) which was conflicting with the directions on their logsheet. J. Krockner and K. Cox looked into this and sent an "Environmental Alert" on March 28, 2017, specifying that 2.5 gallons should be recorded for each container. To ease the tracking process, S. Guyett said they now have an environmental technician tracking usage by monitoring how much is remaining at the end of the month from purchased 55-gallon drums of the 20/80 IPA solution.

IPA-laden rags are placed into a "laundry basket" to be air-dried prior to being laundered with household laundry detergent. The minimal fugitive emissions from these rags are calculated into the monthly VOC emissions from EUFINESSE, as all solvent solution that is used is reported as being emitted.

None of the spent IPA solution is reclaimed.

#### Material Limits

*There are currently no Material Limits for EUFINESSE at this time.*

#### Process/Operational Restrictions

All waste solvents are required to be captured and stored in closed containers, and all VOC/HAP-containing materials are to be handled to minimize generation of fugitive emissions, which containers required to be covered at all times, except during operator access. During the inspection, I noted that all containers of IPA solution were closed during the inspection, including the 2.5-gallon satellite containers that the operators use. I also noted that the drum which the IPA solution is pulled from is equipped with a pump in conjunction with a seal so that all pumping operations ensure the drum is closed to ambient air.

#### Design/Equipment Parameters & Testing/Sampling

*There are currently no Design/Equipment Parameter Requirements or Testing/Sampling requirements for EUFINESSE at this time.*

#### Stack/Vent Restrictions

*There are currently no Stack/Vent Restrictions for EUFINESSE at this time.*

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. Once molded, the robots remove the excess plastic which is then ground up and reused. A flame is used to burn off "residual" plastic that is too fine to remove via cutting.

Emission Limits & Monitoring/Recordkeeping

DexSys uses hand-held aerosol spray cans to apply mold release to the front and rear bumper molds, as well as a degreaser to clean the molds, as needed.

DexSys is limited to 0.6 tons of VOC per 12-month rolling time period from all mold releases, cleaners, and degreaser agents used. The degreaser and mold-release VOC's are tracked in DexSys' excel spreadsheet. S. Guyett provided me with the SDS sheets for both agents. I verified that VOC contents were recorded correctly for each, in addition to tracking of gallons used and VOC emission calculations. March, August and November 2017 monthly records are attached, as well as 12-month rolling VOC emissions for December 2016 – November 2017.

The reported 12-month rolling VOC emissions was 0.18 tpy, in compliance with the emission limits.

It appears, based on the monthly March, August and November 2017 records that DexSys consistently uses 38 cans of mold release and 48 cans of degreaser per month. I will verify with S. Guyett that these quantities are accurate and the reasons why the quantity used is consistent each month.

Material Limits

*There are currently no Material Limits for FGMOLDING at this time.*

Process/Operational Restrictions

All waste mold release, cleaner, and degreaser agents are required to be captured and stored in closed containers. All mold release and degreasing agents are applied via aerosol spray can. S. Guyett said that there are aerosol can collection points near the molding units that are used to store the aerosol cans before they are sent out to Safety Kleen for disposal. J. Coulter and I will return to DexSys in FY18 to ensure that all appropriate waste regulations are being complied with.

Design/Equipment Parameters

FGMOLDING spray operations are required to be conducted with HVLP applicators (or comparable technology), or by using hand-held aerosol cans. DexSys currently uses aerosol spray cans for FGMOLDING operations.

Testing/Sampling

*There are currently no Testing/Sampling requirements for FGMOLDING at this time.*

Stack/Vent Restrictions

*There are currently no Stack/Vent Restrictions for FGMOLDING at this time.*

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

**FGNATURALGAS**

This unit contains the emission units EUPLASTICCOATING and EUHEATERS and was established to encompass natural gas usage facility-wide.

Emission Limits

*There are currently no Emission Limits for FGNATURALGAS at this time.*

Material Limits & Monitoring/Recordkeeping

DexSys is required to have a device to monitor and record the natural gas usage for FGNATURALGAS on a continuous basis, and the device is required to be installed, calibrated, maintained and operated in a satisfactory manner. Before the permit was issued, DexSys had a conversation with me about what would be an approved monitoring device. The agreement was made that DexSys could provide AQD with Consumer's Energy billing statements to show how much natural gas they've used. Consumer's Energy provides a gas monitoring device which tracks all natural gas usage throughout the facility.

Consumer's also calibrates the gas meter. S. Guyett said they calibrate the meter every 2 years and provided me with the most recent calibration conducted on the meter, March 27, 2017, attached.

DexSys is limited to 573 MMcf per 12-month rolling time period. DexSys records indicate that the natural gas usage from December 2016 -- November 2017 was 104 MMcf. I verified the natural gas usages recorded in their spreadsheet for August - November 2017 were correct using DexSys' Consumer's Energy statements.

*There are currently no Process/Operational Restrictions; Design/Equipment Parameters; Testing/Sampling; or Stack/Vent Restriction requirements for FGNATURALGAS at this time.*

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

**FG-MACT-PPPP**

This flexible group encompasses EUPLASTICCOATING and EUFINESSE and is for each new, reconstructed, and existing affected source engaged in the surface coating of plastic parts and products, identified within each of the 4 subcategories

listed in 40 CFR Part 63, Subpart PPPP. Surface coating also includes associated activities, such as surface preparation, cleaning, mixing and storage if they are directly related to the application of the coating.

#### Emission Limits & Monitoring/Recordkeeping

During the initial compliance period under the MACT Subpart PPPP, as stated in the initial compliance report, DexSys had 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 directed into the enclosure continuously, as indicative through pressure drop monitoring across the enclosure with at least 0.007 in H<sub>2</sub>O. In order to take control credit they were also required to maintain records of 3-hour averaged pressure drop data (continuous data reduced to 3-hour averages) to demonstrate compliance (required under 40 CFR 63.4568(a)).

DexSys was not able to furnish continuous (recorded at least every 15 minutes) pressure drop data for the entirety of the initial compliance period through April 2016. Prior to May 2016 the pressure differential was manually measured once per shift, for a total of 3 times per day. DexSys was therefore out of compliance with this requirement during the initial compliance period through April 2016, which resulted in an exceedance in HAP lb/lb coating solids emissions throughout multiple 12-month rolling periods in 2015 and 2016.

The Administrative Consent Order (ACO) AQD No. 3-2017 specifies how DexSys is to come into compliance with the MACT PPPP throughout the 12-month period of January 2017 through December 2017. DexSys is required through the ACO to submit pressure drop records on a monthly basis to demonstrate compliance with the pressure drop requirement, which verifies that control credit can be taken. At the end of the 12-month period, DexSys will be required to submit the 12-month rolling lb/lb coating solids HAP emissions to demonstrate that they have come back into compliance with the limit.

DexSys has been monitoring and recording the pressure drop at the Tack-off and Cooling Tunnel portions of the permanent total enclosure every 15 minutes, the data of which is reduced to 3-hour rolling averages. DexSys employs redundant pressure drop sensors at both ends of the permanent total enclosure. As discussed earlier in the report, the pressure drop recorded during the inspection at the Cooling Tunnel and Tack-off areas were in compliance with the 0.007 inches H<sub>2</sub>O requirement.

The monthly ACO reports have been consistently submitted by DexSys since the ACO was issued.

Additionally, the ACO requires DexSys demonstrate compliance with 40 CFR 63.4568(g)(2)(i) through (vii) of the MACT PPPP. DexSys has already submitted this documentation and has fulfilled the ACO requirement.

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. The work practice plan was updated to meet the requirements in the MACT PPPP.

HAP emissions are limited to 0.16 lb per pound of coating solids per 12-month rolling period with the add-on control option (RTO). Per the electronic records provided by S. Guyett, DexSys has emitted 0.03 lb/lb coating solids between December 2016 and November 2017.

#### Material Limits

Material Limits do not apply at this time as they are only required if DexSys chooses to use the Compliant Material Option.

#### Process/Operational Restrictions & Monitoring/Recordkeeping

Because DexSys has chosen to use the add-on control option, they are required to maintain the 1500F combustion temperature in the RTO on a 3-hour block average, in addition to maintaining the pressure drop across the PTE at 0.007 in H<sub>2</sub>O. S. Guyett provided me with 3-hour block average temperature data for June, September and October 2017 (June 2017 attached). All records indicate that the minimum 1500F temperature 3-hr block average have been maintained at or above 1500F. As previously discussed in this report, the pressure drop across the PTE has also been maintained at or above 0.007 in H<sub>2</sub>O.

#### Design/Equipment Parameters

The RTO is required to be installed, maintained and operated properly for the purposes of CAM. Demonstration that this requirement has been met is discussed under EUPLASTICCOATING.

#### Testing/Sampling

DexSys is required to determine the mass fraction of organic HAP for each material used, the mass fraction of coating solids for each coating and the density of each material used per 40 CFR 63.4541. DexSys uses the EDS values for HAP and solids content, in addition to density, to calculate the mass fraction HAP lb/lb coating solids content, and thus each coatings emissions to total HAP lb/lb coating solids emissions.

A performance test to determine the capture and destruction efficiencies for the RTO is required to be performed. On April 28, 2015, DexSys conducted initial 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) (capture efficiency). The results in the stack test 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. S. Guyett said they have the new test date scheduled in their environmental calendar for April 27, 2020.

#### Reporting

All required reporting will be submitted for the semi-annual reporting period (July – December 2017) and the annual reporting period (January – December 2017). This will be DexSys' first time submitting these reports. Compliance will be determined at that time.

#### Stack/Vent Restrictions

*There are currently no Stack/Vent Restrictions for FG-MACT-PPPP at this time.*

#### **FG-MACT-DDDDD**

FG-MACT-DDDDD currently covers one Rite Water natural gas-fired heating boiler (Model 1250WG) used for heating washer water and temperature and humidity control for the paint system. The boiler originally permitted under EUHEATERS (also part of FGNATURALGAS), but because of its rated heat input capacity and water capacity (12.5 MMBtu/hr and 1319 gallons) it was found to also be subject to the Boiler MACT, 40 CFR 63 Subpart DDDDD; thus, conditions were added to the ROP to address this applicability.

#### Emission Limits

*There are currently no Emission Limits for FG-MACT-DDDDD at this time.*

#### Material Limits

This boiler is limited to combust only natural gas, refinery gas, or other gas 1 fuels (gaseous fuels, not including natural and refinery gases, which have a max concentration of 40 ug/m<sup>3</sup> Hg). This unit only burns natural gas.

#### Process/Operational Restrictions & Other Requirements

DexSys is required to meet the work practices standards in Table 3 of 40 CFR 63 Subpart DDDDD; the work practice standard requires that boilers designated under fuel subcategory 1 have initial and annual scheduled tune-ups.

During issuance of the ROP, we learned that the Rite Water boiler was subject to the Boiler MACT. Boiler MACT discussions did not take place during the time of permitting; at that time (2014), the Boiler MACT had been vacated. There were no boiler MACT requirements to discuss at that time. The amended Boiler MACT DDDDD was finalized in November of 2015. That said, we informed DexSys that being unaware of an applicable standard does not preclude facilities from the responsibility of being in compliance with that standard. The initial tune-up had not been completed within 13 months of initial startup (December 2015). Rather than send a VN, I requested that a plan for achieving compliance with the boiler tune-up schedule be submitted. DexSys responded via email on 6/9/17. They provided an initial notification form, and stated that they will perform the initial annual tune-up no later than June 30, 2017 and will perform subsequent annual tune-ups no more than 13 months after the previous tune-up (required under 40 CFR 63.7515(d)).

The initial boiler tune-up was conducted 6/16/17. The subsequent annual tune-ups are required to be no more than 13 months after the previous tune-up, thus July 16, 2018. This frequency would not apply to boilers with continuous oxygen trim systems that maintain an optimum air to fuel ratio. S. Guyett said DexSys is looking into installing an oxygen trim system on their unit.

During tune-ups DexSys is required to conduct the following inspections (with measures taken during the 6/16/17 tune up to meet these requirements):

- Inspect the burner and clean or replace any components of the burner as necessary  
*The burner was inspected and cleaned, not necessary to replace any components*
- Inspect the flame pattern and adjust the burner as necessary to optimize the flame pattern consistent with manufacturer's specifications, if available  
*The flame was inspected; it was noted that the flame is optimal per manufacturer's specifications*
- Inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly  
*The report indicates that the air-fuel system was inspected, is optimal and was calibrated*
- Optimize total CO emissions to be consistent with manufacturer's specifications  
*The report indicates that optimization was conducted at low-, mid- and high-fire*

- Measure the concentrations in the effluent stream of CO in ppm by volume and oxygen in vol%, before and after adjustments are made, and maintain an on-site report containing the information: CO concentrations in effluent stream in ppm by volume and oxygen in vol% measured at high fire or typical operating load, before and after the tune-up of the boiler; a description of corrective actions taken as part of the tune-up  
*CO (ppm) and O<sub>2</sub> (vol%) concentrations were measured before and after tune-up adjustments were made. See report for actual numbers*

The report for the initial tune-up is attached.

#### Reporting

All required reporting will be submitted for the semi-annual reporting period (July – December 2017) and the annual reporting period (January – December 2017). This will be DexSys' first time submitting these reports. Compliance will be determined at that 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) Tacoma 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 operating in June 2014. EUFIREPUMPENG is a 190 kW (241 hp) DEUTZ AG diesel-fired emergency engine manufactured in 2009 and installed 4/18/2014.

#### Emission Limits, Testing/Sampling, Monitoring/Recordkeeping

Each engine is limited in its NHMC + NOx, CO, and PM emissions if the certified engines are not operated in a certified manner (operated and maintained according to the manufacturer's emission-related written instructions).

Each of the engines is certified by the manufacturer. S. Guyett provided me with certifications for each of the engines, attached for reference. DexSys is required to maintain and operate the engines according to the manufacturer's emission-related written instructions and keep records of the maintenance activity for each engine demonstrating that the engine has been maintained according to these emission-related instructions.

K. Cox emailed me copies of the maintenance manuals and recent maintenance activities for each engine for the previous inspection. EUDIESELENG#1 and EUDIESELENG#2 undergo preventative maintenance on a monthly and annual basis, and EUFIREPUMP on a weekly basis. S. Guyett provided me with 2017 maintenance records for each engine. Per review of these records, it appears that the details within each maintenance record align with the frequency and requirements recommended by each manufacturer. Follow-up inspections will be conducted to ensure that the certifications are still valid and that DexSys is maintaining the engines according to manufacturer recommendations. Attached is an annual, monthly and weekly (as applicable) log for each engine, for reference.

#### Material Limits

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, during the previous inspection, their Marathon documentation that their fuel is ultra-low sulfur (15 ppm) and that the fuel's Cetane index is a minimum of 40.

#### Process/Operational Restrictions & Monitoring/Recordkeeping

Each engine in FGDIESELENGS is allowed up to 500 total hours of operation 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, which in itself is limited to 100 hours per calendar year. Of the 100 maintenance/readiness testing hours, 50 of those hours can be allotted to non-emergency situations.

During review of records from the August 2016 inspection, DexSys documented that EUDIESELENG#2 operated 11.4 hours in December 2015 under maintenance checks/readiness testing. DexSys 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; therefore, AQD did not agree with this designation of hours and the 11.4 hours was re-categorized under non-emergency hours. At that time I informed J. Krocker of the necessity to record non-emergency hours, as appropriate. I also re-explained the need to have records for non-emergency hours during the current inspection. Review of current records for demonstration of compliance for this inspection appear to have been correctly recorded with respect to the designation of operating hours to their respective categories.

S. Guyett provided me with an excel spreadsheet of the total hours each engine operated on a monthly basis, which includes all hours operated for maintenance/readiness testing, non-emergency hours and emergency hours. Each month's hours were recorded and then calculated on a 12-month rolling basis. I used DexSys data to calculate calendar year (January – November 2017) operating hours. Table 3 provides a breakdown of operating hours associated with each activity per engine. As seen in the table, DexSys is in compliance with each category's operating limit per calendar year, in addition to the 500

total hours of operation per 12-month rolling period. Although the data doesn't include December 2017, the operating-hour trend for January through November suggests that operating hours would be within the same range for December and thus it is likely DexSys will meet the calendar year limits for 2017.

Table 3. Operating Hours Log per Category

Engine	Maintenance Checks/ Readiness Testing hours Jan – Nov 2017 (100 hr limit)	Emergency hours	Non-emergency hours Jan – Nov 2017 (50 hr limit)	Total Operating hours 12-Month Rolling (Dec 2016 – Nov 2017)
EUDIESELENG#1	23.2	0	0	26.16
EUDIESELENG#2	23.7	0	23.7	25.1
EUFIREPUMP	24.8	0	0	28.9

**Design/Equipment Parameters**

Each engine is required to be equipped with a non-resettable hours meter to track operating hours. The total hours run is tracked on non-resettable hours meters for each engine; the hours meters were verified in place during the previous inspection.

Each engine is also limited to a maximum rated output which cannot be exceeded, as certified by the equipment manufacturer. Table 4 contains engine specifications, including the nameplate hp/kW which I verified onsite. DexSys is meeting the maximum allowed output for each engine.

Table 4. Engine data

Engine	Model #	Manufacture Date	Serial #	Nameplate HP/kW	Permitted Maximum Output (hp/kW)
EUFIREPUMPENG (DEUTZ, 190 kW, 241 HP)	DFP6 2013 C35	2009	10823135	241/180	241/190
EUDIESELENG#1 (Generac, 130 kW, 198 HP)	SD0130KG176.7D18HPSY	12/27/2013	8624627	NA/130	198/130
EUDIESELENG#2 (Cummins, 563 kW, 744 HP)	DFEK-1519843	9/9/2015	I150868772	NA/500	744/563

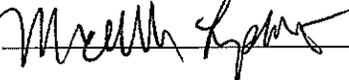
Reporting

DexSys is required to notify the district office specifying whether any engine in FGDIESELENGS will be operated in a certified or a non-certified manner within 30 days of switching to the non-certified manner. DexSys has no plans of operating any engine in a non-certified manner at this time.

Stack/Vent Restrictions

PTI 38-13E was issued to correct the permitted stack heights and orientations to what was physically built rather than requiring that all stack heights be oriented vertically upward and stack heights included in previous PTI applications be met. All engines are in compliance with stack height and orientation requirements at this time.

**Compliance Statement:** At this time DexSys is in compliance with MI-ROP-P0429-2017.

NAME  DATE 1/18/18 SUPERVISOR 

