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

P042939046

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 , Environmental Specialist		**ACTIVITY DATE:** 03/23/2017
STAFF: Michelle Luplow	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MAJOR
SUBJECT: Scheduled, announced compliance inspection (PCE), conducted as part of an FCE.		
RESOLVED COMPLAINTS:		

Inspected by: Michelle Luplow

Personnel Present: John Krocker (john.krocker@magna.com), Environmental Specialist
Sean Guyett (sean.guyett@magna.com), Mold & Paint Superintendent
Kaylyn Cox (kaylyn.cox@magna.com), Environmental Specialist

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

Purpose: Conduct an unannounced, scheduled, partial compliance evaluation (PCE) inspection of Magna DexSys (Delta Exterior Systems). Compliance was determined based on Magna DexSys Permit to Install (PTI) No. 38-13E. This activity was done as part of a full compliance evaluation (FCE). DexSys was last inspected in August 2016.

Additionally the inspection served as an outlet for discussing the Working Draft of DexSys initial ROP and DexSys' list of exemptions that were provided after the August 2016 inspection.

Facility Background/Regulatory Overview: 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.

DexSys is currently in the process of obtaining an initial ROP. The proposed issuance date is August 14, 2017.

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-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 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 and 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 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 6/21/16 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 then and again during the current 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.

The current 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 the Working Draft ROP.

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_2O 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.

Inspection: At approximately 8:00 a.m. on March 23, 2017 I met with John Krocker and Kaylyn Cox, Environmental Specialists. I provided them with the January 2017 version of the PTI Exemption Handbook in addition to a Boiler MACT outreach brochure. We met up later with Sean Guyett, the Superintendent for molding and painting. J. Krocker and K. Cox are direct reports under S. Guyett.

We (Kaylyn, John and I) went through the working draft ROP, page by page, and I pointed out things in the ROP that differ from the Permits to Install that DexSys has had, including the addition of flexible groups for the Boiler MACT Subpart DDDDD, cold cleaners, and 287(2)(c) painting operations, and the additional CAM recordkeeping requirements in EUPLASTICCOATING. Additionally, I explained that ROP's require annual and semi-annual reporting, including semi-annual reporting for their CAM-subject emissions under EUPLASTICCOATING. I showed them where in the ROP they can find the due dates for these reports.

Deviation reporting was also discussed, and provided them an example: if continuous monitoring of the RTO temperature was disrupted during production hours, it would have to be reported as a deviation. S. Guyett said that presently DexSys plans to forgo deviation reporting and shut the system down during periods of production where continuous temperature data is not being recorded.

We also discussed the Appendix 2 Schedule of Compliance and the associated due dates.

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.

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 via closed-lines. All waste containers within the waste recovery room were closed during the inspection.

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

In the paint kitchen, paint is transferred from drums into paint distribution containers, which are connect 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.

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. I mentioned to J. Krocker and K. Cox during the inspection 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.

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. J. Krocker said the sludge in the water trap 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 in zones 1 and 2 (basecoat 1 and 2). 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 and the robotic gun applicators were used in zone 3.

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. 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 H_2O. The MACT Subpart PPPP (FGMACTPPPP) also requires this of PTE's. Compliance with the PTE operating parameters is discussed in the subsection "FGMACTPPPP." The ROP removes the NFE requirement and replaces it with PTE requirements.

The RTO is required to operate at 95% destruction efficiency at a minimum temperature of 1500°F and 0.5 second retention time. During the inspection, the instantaneous temperature 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. I reviewed DexSys' RTO continuous records for February 2016 – January 2017 (see attached for example). J. Krocker makes notes on the charts to indicate where periods of preventative maintenance, bake-outs, and non-production is occurring. Additionally he keeps records for the RTO bypass to demonstrate that the bypass mode has not been activated. Temperature was continuously monitored throughout all production hours through the past 12 months of data that I reviewed. The most recent bakeouts were conducted November 25, 2016 and December 30-31, 2016.

During a post-inspection phone call I informed DexSys 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 and operated in a satisfactory manner. Operator Shane Coan provided me with DexSys' manufacturer RTO maintenance instructions (attached is a copy). 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.

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.

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, 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 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.

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. This requirement was removed in the working draft ROP.

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

Monitoring/Recordkeeping
I asked for the top 6 most-used coatings for April 2016, the month with the highest total coating usage between February 2016 and January 2017. The following are the top 6 coatings used in April: a high-bake clearcoat (RKAX9277), Urethane Clear activator (RK-7018), Summit White, Black adhesion promoter (764-X9848), Switchblade Silver, and Abalone White Groundcoat (2562-140X). 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 November 2016 – January 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. This is what was done to determine formaldehyde lb/gal in Table 1.

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	15	0.062
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
Abalone White Groundcoat	1.3	NA	NA	NA	NA	5	0.023

(2562-51701)							
Switchblade Silver (2561-51708)	0.9	NA	NA	NA	NA	5	0.021
Summit White (2562-51724)	1.2	NA	NA	NA	NA	5	0.025

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. For the months November – January 2017, usage, VOC contents and VOC monthly emission calculations were verified.

Magna DexSys is also required to keep 12-month rolling VOC emission rates. K. Cox provided me with electronic records (hard copies attached) for monthly and 12-month rolling VOC emissions. Initially DexSys had reported all emissions, not only those regulated under the FGMACTPPPP, without control credit. After further discussion DexSys understood that all emissions under EUPLASTICCOATING can use the RTO control credit, and revised 12-month rolling emissions under EUPLASTICCOATING was submitted. 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 (February 2016 – January 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

Pollutant	Actual Emissions (Feb 2016 – Jan 2017)	Permitted Limit, 12-month rolling	Compliance Status
VOC	20.7 tons	59.1 tons	Compliance
Cumene	315.8 lb	744.6 lb	Compliance
Ethyl benzene	3,516.0 lb	10,792.3 lb	Compliance
Naphthalene	54.9 lb	1,033.7 lb	Compliance
Formaldehyde	217.4 lb	876.0 lb	Compliance

Xylene has a daily permit limit. J. Krocker provided me with November 2016, December 2016, and January 2017 daily xylene emissions 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 for November, December and January were 30 lbs, 27.4 lbs, and 32.7 lbs, respectively. Magna DexSys is in compliance with their xylenes limit at this time.
Magna DexSys is in compliance with all Monitoring/Recordkeeping requirements for EUPLASTICCOATING at this 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. All containers of IPA solution were closed during the inspection, as required by the permit.

Each time an employee fills a 2.5 gallon container with the IPA solution they are required to note 2.5 gallons used on a logsheet near the finesse stations. During the inspection it was noted that the employees were recording "3 G" (indicating 3 gallons) which was conflicting with the directions on the logsheet. J. Krocker 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 refill (a copy of this alert is attached).

K. Cox updated the emissions spreadsheet to include corrections to the emissions that were reported from 2 gallons of the solution, when actual emissions should have been based on 5 gallons of solution for those months where two 2.5 gallon containers were filled. Attached are examples of their monthly, uncorrected log sheets.

Magna DexSys is limited to 2 tons of VOC per 12-month rolling time period from EUFINESSE. K. Cox sent me an electronic record of the 12-month rolling summary (February 2016 – January 2017) of VOC emissions from this unit. The 12-month rolling total of VOC was 0.09 tons.

The IPA-laden rags are placed into a "laundry basket" to be air-dried prior to being laundered with household laundry detergent. The 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.

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. 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.

S. Guyett explained that the molds are cleaned with a degreaser as needed. The degreaser in addition to mold-release VOC's are tracked in DexSys' excel spreadsheet.

DexSys uses hand-held aerosol spray cans to apply mold release to the front and rear bumper molds. K. Cox provided me with the November 2016 – January 2017 monthly usages of various mold releases and the VOC emissions in lbs from each and the 12-month rolling VOC emissions in tpy (February 2016 – January 2017). The 12-month rolling VOC emissions was 0.09 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 February 2016 – January 2017 was 108 MMcf. I verified the natural gas usages recorded in their spreadsheet for April 2016, September 2016 and January 2017 were correct using DexSys' Consumer's Energy statements, provided electronically.

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 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.

The total hours run is tracked on non-resettable hours meters, were documented onsite, and are recorded in Table 3, in addition to August 2016 total operating hours. I recorded the nameplate kW for each engine while onsite, and documented them in Table 3 as well (during the 8/2016 inspection).

Table 3. Engine data

Engine	Total hours	Total Hours 8/2016	Serial #	Nameplate HP/kW
EUFIREPUMPENG (DEUTZ, 190kw, 241 HP)	64.9	47.5	10823135	241/180
EUDIESELENG#1 (Generac, 130 kw, 198 HP)	63.2	49.1	8624627	NA/130
EUDIESELENG#2 (Cummins, 563 kw, 744 HP)	38.4	23.9	I150868772	NA/500

Material Limits
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.

Process/Operational Restrictions & Monitoring/Recordkeeping
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.

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, 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.

K. Cox 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. Per my request, DexSys included a separate column in their spreadsheet for non-emergency hours, tracking of which is required in SC VI.4. Table 4 provides a breakdown of operating hours associated with each activity per engine between January 2016 and December 2016. DexSys is in compliance with the 100-hour and 50-hour limits for each engine for the 2016 calendar year at this time.
Table 4. January 2016 – December 2016 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 Calendar Year (Jan 2016 – Dec 2016)	Total Operating hours 12-Month Rolling (Feb 2016 – Jan 2017)
EUDIESELENG#1	25.3	0	0	25.3	27.2
EUDIESELENG#2	8.3	0	13.1	21.4	22.8
EUFIREPUMP	28.4	0	0	28.4	28.3

Additionally, the engines may operate up to 500 hours per 12-month rolling time period, per engine. The total hours operated from February 2016 – January 2017 are indicated in Table 4. DexSys is in compliance with the 12-month rolling operating hours for each engine at this time.

Each of the engines is certified by the manufacturer. J. Krocker provided me with certifications for each of the engines during the previous inspection. DexSys is also required to maintain and operate the engines and their associated control devices (as applicable) according to the manufacturer's emission-related written instructions. They are also required to 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. Attached are hard copies of excerpts from each manual. EUDIESELENG#1 and EUDIESELENG#2 undergo preventative maintenance on a monthly basis, and EUFIREPUMP on a weekly basis. 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.

DexSys is in compliance with all Process/Operational Restrictions and 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 non-certified 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
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.

FG-MACT-PPPP
During the initial compliance period, 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 H2O. 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) 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. The pressure drop at the Cooling Tunnel was reading at approximately -0.05 inches H_2O, which is in compliance with the -0.007 inches H_2O 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.

Exemptions

Table 5 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. Krocker's exemption table he had created after the August 2016 inspection. Table 5 contains correction to the original table, which I have already made J. Krocker and K. Cox aware of via email.

Table 5. 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.	Demonstration shows that approximately 706 lbs of VOC (isopropanol) is being emitted per month, meeting the 1000 lb/month limit. 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
		10/20/14		NA	

Oven for quality control testing	Painted fascia from quality control testing paint booth are cured in this natural gas-fired oven.		Rule 282(2) (b)(i)		Unit is rated at less than 50 MMBtu/hr
Rofin DC X50 CO2 Laser	Stationary CO2 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 input. Used for heating	Unknown	Rule 282(2) (b)(i)	NA	NA
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^2. 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. Krocker 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

Compliance Statement: At this time Magna DexSys is in compliance with PTI 38-13E.

NAME [signature] DATE 4/24/17 SUPERVISOR B.M.