

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

N662644777

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| FACILITY: Consumers Energy Co. - Jackson Generating Station | | SRN / ID: N6626 |
| LOCATION: 2219 CHAPIN ST, JACKSON | | DISTRICT: Jackson |
| CITY: JACKSON | | COUNTY: JACKSON |
| CONTACT: Douglas Mallory , Environmental, Health & Safety | | ACTIVITY DATE: 06/19/2018 |
| STAFF: Brian Carley | COMPLIANCE STATUS: Compliance | SOURCE CLASS: MAJOR |
| SUBJECT: Scheduled inspection | | |
| RESOLVED COMPLAINTS: | | |

Facility Contact: Doug Mallory, Compliance Coordinator

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I arrived at the facility and met with Doug Mallory and Jason Ricketts, Plant Manager. We then discussed the current status of the plant and all seven turbines were operating at the time of the inspection. They also updated me on a proposed permit to install application that they will be submitting in the near future. I then went with Doug to review their records and to do an inspection tour of the plant.

For Table EUEDG, this table covers their 1,337-horse power (HP) emergency/stand-by diesel fired generator that is subject to 40 CFR Part 52 (PSD) and Part 63, Subpart ZZZZ (a.k.a. RICE MACT). They are required to monitor and record the hours of operation for this unit, for the current 12 month rolling time period, they operated 115.6 hours, which is well below their limit of 800 hours and is their only PSD requirement for this piece of equipment (S.C. III.1 and VI.1). We quickly went over their RICE MACT requirements, which they are classified as an area source, and they are maintaining all the records that are required by this subpart. They had done the required testing for this subpart in April 2018. I determined that they are in compliance with this table.

For Table FGLMDB1-6, this table covers Units 1 through 6 natural gas-fired turbines, steam injection, and duct burners. I first reviewed their records to determine compliance with their emission limits for this table. They are well under their limits specified in S.C. I.1 through 7 (see attachment 1 - CEMS Report – Jackson , MI). They are still following the manufacturer's recommendations for operating the turbines and using steam injection except during periods of startup or shutdown (S.C. III.1 and 2). They have only been in startup or shutdown in the last 12 months for 538.9 hours, which is well below their limit of 4,380 hours (S.C. III.3). They conducted their last stack test for PM and VOC during the week of June 15, 2015 (S.C. V.1 and 2). The results showed that they were in compliance with their emission limits and they are using the results to keep track of those emissions (see file for 6/15/2015 emissions test report). They demonstrate compliance with the NOx ppm limits and mass emission limits and CO mass emission limits in this table using CEMS. A relative accuracy test audit (RATA) was recently conducted on these CEMS during the week of May 21, 2018 to continue their certification in accordance with 40 CFR Part 75 (S.C. VI.1 and 2). I determined that they are in compliance with this table.

For Table FGEADB7, which covers Unit 7EA natural gas-fired turbine, dry low-NOx burner, and duct burner. I first reviewed their records to determine compliance with their emission limits for this table. They are well under their limits specified in S.C. I.1 through 6 (see attachment 1 - CEMS Report – Jackson , MI). They have only been in startup or shutdown in the last 12 months for 141.7 hours, which is well below their limit of 1,040 hours (S.C. IV.1). They are using the dry low-NOx combustion technology when they are operating except during times of startup or shutdown (S.C. IV.2). They conducted their last stack test for PM and VOC during the week of June 15, 2015 (S.C. V.1 and 2). The results showed that they were in compliance with their emission limits and they are using the results to keep track of those emissions (see file for 6/15/2015 emissions test report). They demonstrate compliance with the NOx ppm limits and mass emission limits and CO mass emission limits in this table using CEMS. A RATA was recently conducted on these CEMS on June 18, 2018 to continue their certification in accordance with 40 CFR Part 75 (S.C. VI.1 and 2). I determined that they are in compliance with this table.

For Table FGCTDB1-7, this table covers all seven units. I first reviewed their records to determine compliance with their emission limits for this table. They are well under their limits specified in S.C. I.1 through 4 (see attachment 1 - CEMS Report – Jackson , MI). They were operating today and I did not observe any visible emission coming from their stacks (S.C. I.5). They are firing only natural gas when running and they are monitoring and recording the sulfur content of the fuel. The sulfur content of the

natural gas in 2015 was 0.114 gr/100 scf and for 2016 is 0.251 gr/100 scf, which is well below their limit of 20 grains per 100 scf per S.C. III.1 and VI.4 (see attachment 2 – SPL Certificate of Analysis). They are still following the manufacturer's recommendations for operating the turbines and using steam injection except during periods of startup or shutdown (S.C. III.2 and 3). The last time that they conducted a stack test to determine compliance with the formaldehyde annual mass emission limit, VOC mass emission limit, and the PM-10 mass emission limit was during the week of June 15, 2015 (S.C. V.1 through 3). The results showed that they were in compliance with their emission limits and they are using the results to keep track of those emissions (see file for 6/15/2015 emissions test report). They demonstrate compliance with the NOx ppm limits and mass emission limits and CO mass emission limits in this table using CEMS. As previously stated, these CEMS had a RATA recently conducted on them (S.C. VI.1 and 6). They are monitoring and recording the heat input in mmBtu on a continuous basis in accordance with 40 CFR Part 75 (S.C. VI.2). They are monitoring, recording, and reporting emissions and operating information per 40 CFR Part 60, Subpart GG. They are not claiming an allowance for fuel bound nitrogen that is allowed per Subpart GG (S.C. VI.3 and 5). They are in compliance with their Acid Rain permit and CSAPR that are attached to their ROP as appendices (S.C. IX.1 through 8). Based on the information from this inspection they are meeting the requirements of the PSD regulations, 40 CFR 52.21 (S.C. IX.9). I have determined that they are in compliance with this table.

For Table FGCOLDCLEANERS, this table covers all parts cleaners on site. They are currently using a parts cleaner with Stoddard solvents from Safety-Kleen. They showed me the records that they are required to keep per S.C. VI.2. The size of their parts cleaner was 4.9 square foot air-to-vapor interface area and is exempt per Rule 285 (r). The Stoddard solvent that they use has a Reid vapor pressure of .0116 psia (S.C. VI.2). I was able to see the written operating instructions on the wall above the parts cleaner, which had its lid closed at that time (S.C. VI.3). I determined that they are in compliance with this table.

In their recently submitted ROP renewal application, they added a new table for an emergency diesel-fired 208 HP fire pump that is also subject to the RICE MACT. They are using a non-resettable hour meter to monitor the hours of operation on this unit. This unit is not required to have a permit to install since it is exempt per Rule 285(2)(g).

When then went back to Doug's office to discuss what I had determined their compliance status was from this inspection. Based on the findings of this inspection, their MAERS submittal, and the annual and semi-annual reports, I have determined that they are in compliance with their permit.

NAME

Brian Carley

DATE

6/20/18

SUPERVISOR

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