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

B281649326

FACILITY: DTE Electric Company - Monroe Power Plant		**SRN / ID:** B2816
LOCATION: 3500 EAST FRONT STREET, MONROE		**DISTRICT:** Jackson
CITY: MONROE		**COUNTY:** MONROE
CONTACT: Lisa Lockwood , Senior Environmental Engineer		**ACTIVITY DATE:** 05/13/2019
STAFF: Brian Carley	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MAJOR
SUBJECT: An announced, scheduled inspection		
RESOLVED COMPLAINTS:		

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Purpose
This was an announced scheduled inspection of the DTE Electric Company – Monroe Power Plant (DTE Monroe). I arrived at the facility and met with Lisa Lockwood and Kailyn Gerzich. This facility is currently operating under ROP #MI-ROP-B2816-2009, PTI #27-13B, and PTI #178-08.

Background
DTE Monroe is a coal-fired power plant that began operation in 1971 and generates and transmits electricity for sale. The facility, in the ROP, is divided into three sections.

Section 1: This facility operates four cell burner boilers, which have a total nominal capacity of 3,140 megawatts. A low NOx burner system was installed in the boilers in 1994 and a new generation of Lo-NOx burners were installed on Units 1, 2, 3, and 4 on March 2006, March 2005, August 2006, and November 2005, respectively. Low-NOx burners, overfire air, Reduced Emissions Fuel (REF) sorbent system, selective catalytic reduction (SCR), dry wire electrostatic precipitators (ESP), and wet flue gas desulfurization (FGD) systems control the emissions from each boiler. They previously had an SO_3 and ammonia flue gas conditioning system installed but became obsolete due to the installation of the FGD and SCR and were removed. In addition, each stack is equipped with a continuous emission monitoring (CEMS) system for the measurement of sulfur dioxide, nitrogen oxide, particulate matter and carbon dioxide emissions. Other emission sources in Section 1 include a coal and petroleum coke handling system, an ash handling system, auxiliary boilers, parts cleaning stations, limestone handling systems, hydrated lime storage, gypsum material handling systems and a fly ash storage facility. The fly ash storage facility consists of two 75-ton surge silos (Nos. 1 and 2), a 3000-ton storage silo, a 200-ton load-out silo, and associated blowers, pressure pumps, compressors, pipe conveyor lines, and spouts.

Section 2: DTE Electric Company – Monroe Peakers consists of five diesel fuel-fired generator peaking units that are limited use stationary reciprocating internal combustion engines.

Section 3: Monroe Fuels Company consists of coal and sorbent handling activity in the Reduced Emissions Fuel (REF) Transfer House and Refined Coal Plant Building including an 8,500-gallon Mersorb storage tank, a 750-ton S-Sorb solid storage silo, associated conveyors, and any trucking and unloading activities.

Compliance Evaluation
The following compliance determinations of the emission units permitted under PTI #27-13B unless otherwise noted.

EU-UNIT1-S1
Unit 1 was operating at the time of the inspection. They are currently combusting bituminous and sub-bituminous coal with the REF sorbents in this unit to generate electricity (S.C. II.2). The only other fuel that is used in this unit is #2 ultralow sulfur diesel fuel for startup (S.C. II.1). They have submitted a malfunction abatement plan (MAP) that also includes a plan that describes how emissions will be minimized during startup/shutdown for Unit 1 that was approved on December 4, 2013 (S.C. III.1 & 3). Per the EPA Clean Air Market Division (CAMD) database, Unit 1 operated at 36,806,235.692 mmBtu for 6,527 hours, which equals 5,639 mmBtu/hr for 2018 and is less than their limit of 7,624 mmBtu/hr (S.C. IV.1). All air pollution control devices were operating at the time of the inspection (S.C. IV.2). Per consent decree settling, "U.S. v DTE Energy Company, Civil Action No. EPA-5-2018-113(a)-MI-07" they also have installed a non-certified Hg CEMS as a process monitor and is used

in addition with their current certified Hg monitoring system (S.C. IV.4). This allows the operators to initiate corrective actions in the event of elevated mercury emissions. They're also required in this consent decree to install and maintain a halogenated compound application system to promote mercury oxidation and maintain compliance with the unit's mercury emission limits. This system is handled in the REF transfer house and is accomplished by adding more Mersorb to minimize the mercury emissions (S.C. IV.5). They completed all the required initial compliance stack tests during the week of January 3, 2011 (Section V, see files for stack test results). They conducted the follow-up stack tests that is required every 5 years for PM, PM_{10}, $PM_{2.5}$, VE, H_2SO_4, HCl, HF, Hg, As, Pb and VOC on May 6-9, 2019 and the results were received by AQD on June 26, 2019. They reported that they were complying with the limits specified in Section I (see file for test results). I requested and received the fuel and pet coke usage for the months of January, February, and March of 2019 (see attachment 1). They are currently well under their limit of 23,652 tons of pet coke per month for each of those months. They have a COM installed in the duct work before the FGD, which they use as a process monitor by the control room (S.C. VI.2). I also reviewed records of the monitoring that is required per S.C. VI.1, 7, 8, 9, 10, 11, and 12 from submitted quarterly excess emission reports, data reported to the CAMD database, and from information provided to me during my inspection (see attachment 2). They have installed a PM monitor and had it certified by AQD. On March 27, 2019, they have sent in the results of the Relative Correlation Audit (RCA) that was conducted January 28 and 29 and February 4, 2019, which is the annual test to recertify the PM CEMS and the results showed that the monitor passed the RCA. They have certified SO2, NOx, CO, CO2 CEMS installed on this stack (S.C. VI.4). They are also monitoring flow with a certified meter and are monitoring mercury with sorbent tubes, which also has been certified (S.C. VI.5 & 6). They have been submitting quarterly excess emission reports as required by S.C. VII.1 (see MACES report received). They are currently in compliance with Acid Rain and CSAPR requirements (S.C. IX.1 & 2). Due to the compliance deadline for MATS was April 16, 2016, all requirements for MATS have been consolidated into a proposed table in their draft ROP renewal (S.C. IX.3, see below for FGMATS). I have determined that they're in compliance with the conditions set forth in this table.

EU-UNIT2-S1

Unit 2 was not operating at the time of the inspection. They are currently permitted to combust bituminous and sub-bituminous coal with the REF sorbents in this unit to generate electricity (S.C. II.2). The only other fuel that is used in this unit is #2 ultralow sulfur diesel fuel for startup (S.C. II.1). They have submitted a malfunction abatement plan (MAP) that also includes a plan that describes how emissions will be minimized during startup/shutdown for Unit 2 that was approved on December 4, 2013 (S.C. III.1 & 3). Per the EPA-CAMD database, Unit 2 operated at 45,561,052 mmBtu for 7,734 hours, which equals 5,890 mmBtu/hr for 2018 and is less than their limit of 7,624 mmBtu/hr (S.C. IV.1). All air pollution control devices were installed at the time of the inspection (S.C. IV.2). Per consent decree settling, "U.S. v DTE Energy Company, Civil Action No. EPA-5-2018-113(a)-MI-07" they also have installed a non-certified Hg CEMS as a process monitor and is used in addition with their current certified Hg monitoring system (S.C. IV.4). This allows the operators to initiate corrective actions in the event of elevated mercury emissions. They're also required in this consent decree to install and maintain a halogenated compound application system to promote mercury oxidation and maintain compliance with the unit's mercury emission limits. This system is handled in the REF transfer house and is accomplished by adding more Mersorb to minimize the mercury emissions (S.C. IV.5). They completed all the required initial compliance stack tests during the week of January 3, 2011 (Section V, see files for stack test results). They conducted the follow-up stack tests that is required every 5 years for PM, PM_{10}, $PM_{2.5}$, VE, H_2SO_4, HCl, HF, Hg, As, Pb and VOC on June 24-26, 2019 and the I am awaiting the results of these stack tests. I requested and received the fuel and pet coke usage for the months of January, February, and March of 2019 (see attachment 1). They are currently well under their limit of 23,652 tons of pet coke per month for each of those months. They have a COM installed in the duct work before the FGD, which they use as a process monitor by the control room (S.C. VI.2). I also reviewed records of the monitoring that is required per S.C. VI.1, 7, 8, 9, 10, 11, and 12 from submitted quarterly excess emission reports, data reported to the CAMD database, and from information provided to me during my inspection (see attachment 2). They have installed a PM CEMS and had it certified by AQD. They conducted their annual certification on the PM CMS with an RCA on December 4-5, 2019 on the PM CEMS. The results of the RCA, received on January 14, 2019, showed that the monitor passed the RCA. They have certified SO2, NOx, CO, CO2 CEMS installed on this stack (S.C. VI.4). They are also monitoring flow with a certified meter and are monitoring mercury with sorbent tubes, which also has been certified (S.C. VI.5 & 6). They have been submitting quarterly excess emission reports as required by S.C. VII.1 (see MACES report received). They are currently in compliance with Acid Rain and CSAPR requirements (S.C. IX.1 & 2). Due to the compliance deadline for MATS was April 16, 2016, all requirements for MATS have been consolidated into a proposed table in their draft ROP renewal (S.C. IX.3, see below for FGMATS). I have determined that they're in compliance with the conditions set forth in this table.

EU-UNIT3-S1

Unit 3 was operating at the time of the inspection. They are combusting bituminous and sub-bituminous coal with the REF sorbents and pet coke in this unit to generate electricity (S.C. II.2). The only other fuel that is used in this unit is #2 ultralow sulfur diesel fuel for startup (S.C. II.1). They have submitted a malfunction abatement plan (MAP) that also includes a plan that describes how emissions will be minimized during startup/shutdown for Unit 3 that was approved on December 4, 2013 (S.C. III.1 & 3). Per the EPA-CAMD database, Unit 3 operated at 44,335,238.71 mmBtu for 7,952 hours which equals 5,575 mmBtu/hr for 2018, which is less than their limit of 7,624 mmBtu/hr (S.C. IV.1). All air pollution control devices were operating at the time of the inspection (S.C. IV.2). Per consent decree settling, "U.S. v DTE Energy Company, Civil Action No. EPA-5-2018-113(a)-MI-07" they also have installed a non-certified Hg CEMS as a process monitor and is used in addition with their current certified Hg monitoring system (S.C. IV.4). This allows the operators to initiate corrective actions in the event of elevated mercury emissions. They're also required in this consent decree to install and maintain a halogenated compound application system to promote mercury oxidation and maintain compliance with the unit's mercury emission limits. This system is handled in the REF transfer house and is accomplished by adding more Mersorb to minimize the mercury emissions (S.C. IV.5). They completed all the required initial compliance stack tests during the week of January 3, 2011 (Section V, see files for stack test results). They have tentatively scheduled the follow-up stack tests that is required every 5 years for PM, PM_{10}, VE, H_2SO_4, HCl, HF, Hg, As, Pb and VOC for December 2019. They did the annual PM2.5 stack test on May 14-16, 2019 and AQD received the results on June 26, 2019 per S.C. V.3 (see file for stack test results). I requested and received the fuel and pet coke usage for the months of January, February, and March of 2019 (see attachment 1). They are currently under their limit of 23,652 tons of pet coke per month for each of those months. They have a COM installed in the duct work before the FGD, which they use as a process monitor by the control room (S.C. VI.2). I also reviewed records of the monitoring that is required per S.C. VI.1, 7, 8, 9, 10, 11, and 12 from submitted quarterly excess emission reports, data reported to the CAMD database, and from information provided to me during my inspection (see attachment 2). They have installed a PM CEMS and had it certified by AQD. On February 26, 2019, they have sent in the results of the RCA that was conducted January 8 through 10, 2019, which is a test to recertify the PM CEMS and the results showed that the monitor passed the RCA. They have certified SO2, NOx, CO, CO2 CEMS installed on this stack (S.C. VI.4). They are also monitoring flow with a certified meter and are monitoring mercury with sorbent tubes, which also has been certified (S.C. VI.5 & 6). They have been submitting quarterly excess emission reports as required by S.C. VII.1 (see MACES report received). They are currently in compliance with Acid Rain and CSAPR requirements (S.C. IX.1 & 2). Due to the compliance deadline for MATS was April 16, 2016, all requirements for MATS have been consolidated into a proposed table in their draft ROP renewal (S.C. IX.3, see below for FGMATS). I have determined that they're in compliance with the conditions set forth in this table.

EU-UNIT4-S1

Unit 4 was operating at the time of the inspection. They are currently combusting bituminous and sub-bituminous coal with the REF sorbents and pet coke in this unit to generate electricity (S.C. II.2). The only other fuel that is used in this unit is #2 ultralow sulfur diesel fuel for startup (S.C. II.1). They have submitted a malfunction abatement plan (MAP) that also includes a plan that describes how emissions will be minimized during startup/shutdown for Unit 4 that was approved on December 4, 2013 (S.C. III.1 & 3). Per the EPA-CAMD database, Unit 4 operated at 44,239,249.973 mmBtu for 7,253 hours which equals 6,099 mmBtu/hr for 2018, which is less than their limit of 7,624 mmBtu/hr (S.C. IV.1). All air pollution control devices were operating at the time of the inspection (S.C. IV.2). Per consent decree settling, "U.S. v DTE Energy Company, Civil Action No. EPA-5-2018-113(a)-MI-07" they also have installed a non-certified Hg CEMS as a process monitor and is used in addition with their current certified Hg monitoring system (S.C. IV.4). This allows the operators to initiate corrective actions in the event of elevated mercury emissions. They're also required in this consent decree to install and maintain a halogenated compound application system to promote mercury oxidation and maintain compliance with the unit's mercury emission limits. This system is handled in the REF transfer house and is accomplished by adding more Mersorb to minimize the mercury emissions (S.C. IV.5). They completed all the required initial compliance stack tests during the week of January 3, 2011 (Section V, see files for stack test results). They have tentatively scheduled the follow-up stack tests that is required every 5 years for PM, PM_{10}, VE, H_2SO_4, HCl, HF, Hg, As, Pb and VOC for December 2019. They did the annual PM2.5 stack test on May 14-16, 2019 and AQD received the results on June 26, 2019 per S.C. V.3 (see file for stack test results). I requested and received the fuel and pet coke usage for the months of January, February, and March of 2019 (see attachment 1). They are currently under their limit of 23,652 tons of pet coke per month for each of those months. They have a COM installed in the duct work before the FGD, which they use as a process monitor by the control room (S.C. VI.2). I also reviewed records of the monitoring that is required per S.C. VI.1, 7, 8, 9, 10, 11, and 12 from submitted quarterly excess emission reports, data reported to the CAMD database, and from information provided to me during my inspection (see attachment 2). They have installed a PM CEMS and had it

certified by AQD. They have conducted the RCA on the PM CEMS on January 22 through 24, 2019. The results of the RCA, received on February 26, 2019, showed that the monitor passed the RCA. They have certified SO2, NOx, CO, CO2 CEMS installed on this stack (S.C. VI.4). They are also monitoring flow with a certified meter and are monitoring mercury with sorbent tubes, which also has been certified (S.C. VI.5 & 6). They have been submitting quarterly excess emission reports as required by S.C. VII.1 (see MACES report received). They are currently in compliance with Acid Rain and CSAPR requirements (S.C. IX.1 & 2). Due to the compliance deadline for MATS was April 16, 2016, all requirements for MATS have been consolidated into a proposed table in their draft ROP renewal (S.C. IX.3, see below for FGMATS). I have determined that they're in compliance with the conditions set forth in this table.

EU-WFGD-QP1, EU-WFGD-QP2, EU-WFGD-QP3, and EU-WFGD-QP4
These units are used as emergency FGD quench pumps. All four quench pumps were not operating at the time of the inspection. These pumps only burn diesel fuel with a sulfur content of 15 ppm per S.C. II.1, which I verified after reviewing the fuel analysis that they provided me during this inspection (see attachment 7). They are operating the pumps according to the manufacturer's instructions (S.C. III.1 & 3). Each pump has a non-resettable hour meter that they use to track the amount of time in minutes and hours each one runs (S.C. IV.1). Unit 1 quench pump ran for a total of 41.1 hours since it has been installed. Unit 2 quench pump ran for a total of 32.2 hours since it has been installed. Unit 3 quench pump ran for a total of 113 hours since it has been installed. Unit 4 quench pump ran for a total of 126 hours since it has been installed. They record the amount of time it ran, the time that it ran, and the reason for operating in their facility database per S.C. VI.2 (see attachment 3). They are considered emergency stationary ICE and they are being operated for less than 100 hours for the last year. I consider them in compliance with 40 CFR Part 60, Subpart IIII, which means they are also in compliance with 40 CFR Part 63, Subpart ZZZZ (S.C. IX.1 & 3). They have submitted notification of construction and operation for the units that are servicing Units 1, 2, 3, and 4, which are EU-WFGD-QP3, EU-WFGD-QP4, EU-WFGD-QP1, and EU-WFGD-QP2 respectively (S.C. IX.2). I have determined that they're in compliance with the requirements of this table.

EU-CASCADES-S1
We did not go onto the roof to see the exhaust vents for the Cascades room, which is a coal handling system that is covered under EU-CASCADES-S1 to see if there was any opacity coming from the vents. They currently have an approved fugitive dust plan and a malfunction abatement plan (MAP) for this unit per SC III.1 and 2, respectively. All the associated enclosures, water sprays, and dust collectors are being operated in a satisfactory manner (SC IV.1 and 2). Instead of installing a bag leak detection system, they conduct and document daily non-certified visible emissions observations per SC VI.3, which I reviewed on their plant database. They have upgraded the dust collectors for Cascades #1, 2, 3, and 6 and they are planning on upgrading Cascades #4 and 5 by the end of July 2019. They have tested Cascades #6 and are planning on testing #2 and #3 sometime in June or July 2019 (SC V.1). Based on the information and my inspection, I determined that they're in compliance with this table.

EU-TRANSFERHS-S1
This table covers coal handling in the transfer houses (nos. 1, 2, 3, 9, and 11) and this emission unit was partially operating at the time of the inspection. Transfer Houses 1 and 2 were not operating at the time of the inspection. The dust collectors in Transfer Houses 1, 2, 3 are no longer in use and they are using a fog spray from a portable hose for these areas to control the dust. In Transfer House 9, they are currently using a surfactant and water spray to control the dust. This unit has an approved MAP and an approved fugitive dust plan on file (S.C. II1 & 2). The Fuel Systems personnel use non-certified VE readings with the requirement that if any VE is detected that corrective actions must be taken with the incident documented (S.C. IV.1 and VI.2 & 3). They enter their observations into the fuel systems shift report on a daily basis, which I was able to review on their plant database. They are required to do a stack test to verify the PM2.5 emissions after they modify the emission unit. They did conduct a PM 2.5 stack test on 12/9/12 on the Transfer House 11 dust collector and had a result of 0.03 lb/hr, which is lower than the PM2.5 limit of 2.74 lb/hr for this unit. However, in 2017 they dismantled the dust collector and now use a fog spray from a portable hose to control the dust I have determined that they're in compliance with the requirements of this table.

EU-DUMPERHS-S1
This emission unit only operates when they are unloading coal trains and it was not in operation at the time of the inspection. This unit has an approved MAP and an approved fugitive dust plan on file (S.C. II1 & 2). They are maintaining and operating the dust collector as described in their MAP. The Fuel Systems personnel use non-certified VE readings with the requirement that if any VE is detected, corrective actions must be taken with the incident documented to show that they are operating and maintaining the dust collector satisfactorily (S.C. IV.1 and VI.2 & 3). They enter their observations into the fuel systems shift report daily, which I reviewed on their

plant database. They did a PM 2.5 stack test on the Dumper House on December 4-7, 2017 with the results of 0.087 lb/hour, which is below their limit of 6.44 lb/hr (S.C. V.1). I have determined that they're in compliance with the requirements of this table.

EU-COALUNLOAD-S1
This unit only operates when there is a coal shipment that comes in on Great Lakes ship and there was not one on site on the day of the inspection. This unit has an approved MAP and an approved fugitive dust plan on file (S.C. II1 & 2). The Fuel Systems personnel use non-certified VE readings with the requirement that if any VE is detected that corrective actions must be taken with the incident documented (S.C. IV.1 and VI.2 & 3). They enter their observations into the fuel systems shift report on a daily basis, which I reviewed on their plant database. All the external conveyors are hooded they are being maintained (S.C. IV.2). I have determined that they're in compliance with the requirements of this table.

EU-CRUSHERHS-S1
This unit covers the coal handling operations in the crusher house. This unit has an approved MAP and an approved fugitive dust plan on file (S.C. II1 & 2). The Fuel Systems personnel use non-certified VE readings with the requirement that if any VE is detected that corrective actions must be taken with the incident documented (S.C. IV.1 and VI.2 & 3). All external conveyors are hooded and are being maintained (S.C. IV.2). They enter their observations into the fuel systems shift report on a daily basis, which I reviewed on their plant database. They are required to do a stack test to verify the PM2.5 emissions after they modify the emission unit. They have not modified this emission as of the time of this this inspection. I have determined that they're in compliance with the requirements of this table.

EU-REFHS&BL-S1
This emission unit represents coal and sorbent handling activity in the REF Transfer House and Refined Coal Plant Building, which is operated by the Monroe Fuel Company, and it was operating at the time of the inspection. This unit has an approved MAP and an approved fugitive dust plan on file (S.C. II1 & 2). I met with Vincent Verschueren, Plant Manager for the Monroe Fuels Company and he provided me with their records of their daily observations (see attachment #6). The Fuel Systems personnel use non-certified VE readings with the requirement that if any VE is detected that corrective actions must be taken with the incident documented (S.C. IV.1 and VI.2 & 3). They enter their observations into the fuel systems shift report daily. All the external conveyors are hooded and are being maintained (S.C. IV.2). This emission unit is subject to 40 CFR Part 60, Subpart Y and they did their initial Method 9 compliance test on 5/13/13 on the REF dust collectors and bin vent filter system resulted in 6-minute averages below the 5% opacity standard. All monitoring and recordkeeping required in 40 CFR 60.255 (f)(1)(i) and (ii) are being completed and I reviewed the documentation stored on site. Per 60.255 (f)(1)(iii), the most recent Method 9 test occurred on April 19, 2018 for the REF control equipment. I have determined that they're in compliance with the requirements of this table.

EU-PETCOKE-S1
This unit covers the pet coke handling activity, including roadway traffic and pile maintenance, and it was operating on the day of the inspection. At the time of the inspection, Units 3 and 4 were getting most of the pet coke that is used as part of the fuel blend for those boilers. Units 1 and 2 do not burn as much pet coke due to the specifications required for the fly ash from EU-FlyAshStorage, who they sell the ash to from these units (See attachment 1). This unit has an approved MAP and an approved fugitive dust plan on file (S.C. II1 & 2). They keep logs of the trucks that are delivering the pet coke to the Monroe Power Plant and they are being operated for less than 16 hours per day as required by S.C. III.3 and VI.3. I asked for and received the logs for May 6 through 10, 2019 (see attachment 4). The Fuel Systems personnel use non-certified VE readings with the requirement that if any VE is detected that corrective actions must be taken with the incident documented (S.C. IV.1 and VI.2 & 3). They enter their observations into the fuel systems shift report daily (see attached #7 and 8). I did not see any fugitive emissions from the pile or any part of the process. They have installed the permanent equipment (S.C. IV.2 and VII.1). I have determined that they're in compliance with the requirements of this table.

EU-LIMESTONE-S1
This emission unit covers the limestone handling activities, which includes the ship unloading process, storage and pile maintenance, and reclaims activities – including any trucking activities, and the Prep building. There was not a ship delivering limestone at the time of the inspection so that portion of the emission unit was not in operation at the time of the inspection. This unit has an approved MAP and an approved fugitive dust plan on file (S.C. II1 & 2). They are maintaining and operating the dust collector as described in their MAP. The FGD Operations personnel use non-certified VE readings with the requirement that if any VE is detected that corrective actions must be taken with the incident documented to show that they are operating and maintaining the dust collector satisfactorily. All observations are recorded in the Plant View database and are in a format like

the fuel systems report (S.C. IV.1 and VI.2 & 3). All external conveyors are hooded and are being maintained (S.C. IV.2). They enter their observations into the fuel systems shift report daily, which I reviewed on their plant database. They did a Method 9 stack test as required by 40 CFR Part 60, Subpart OOO on the exhaust ports on the Reagent Building where they crush the limestone on 9/9/13 with the results of no visible emissions were observed, which is below their limit of 5% opacity (S.C. IX.1). They have three limestone silos, each with its own dust collector and exhaust bin vents that exhaust out of the side of the Reagent Building and down at least 115 feet above the ground. I have determined that they're in compliance with the requirements of this table.

EU-GYPSUMHAND-S1
This emission unit covers the gypsum handling activity in the gypsum dewatering building and the gypsum storage and loading building. This emission unit was in operation at the time of the inspection. This unit has an approved MAP and an approved fugitive dust plan on file (S.C. II1 & 2). They are maintaining and operating the dust collector as described in their MAP. The FGD Operations personnel use non-certified VE readings with the requirement that if any VE is detected that corrective actions must be taken, and the incident documented to show that they are operating and maintaining the dust collector satisfactorily. All observations are recorded in the Plant View database and are in a format like the fuel systems report (S.C. IV.1 and VI.2 & 3). They keep logs, like the ones they are using for the pet coke delivery, of the trucks that are hauling the gypsum from the Monroe Power Plant. I asked for and received the daily logs for May 5 through 10, 2019. They are being operated for well under than 16 hours per day as required by S.C. III.3 and VI.3 (see attachment5). All external conveyors are hooded and are being maintained (S.C. IV.2). I have determined that they're in compliance with the requirements of this table.

EU-HYDRATEDLIME-S1
This emission unit covers the storage and handling of hydrated lime. This unit has an approved MAP and an approved fugitive dust plan on file (S.C. II1 & 2). They are maintaining and operating the dust collector as described in their MAP. The FGD Operations personnel use non-certified VE readings with the requirement that if any VE is detected corrective actions must be taken with the incident documented to show that they are operating and maintaining the dust collector satisfactorily. All observations are recorded in the Plant View database and are in a format like the fuel systems report (S.C. IV.1 and VI.2 & 3). The associated enclosures have been installed and are being maintained (S.C. IV.2). They have two hydrated lime silos with its own dust collector and exhaust bin vents that exhaust out of the side of the dust collector and are at least 89 feet above the ground. The bins were being filled at the time of the inspection and I did not see any visible emissions coming from the dust collectors. I have determined that they're in compliance with the requirements of this table.

FG-ProjectPC1-4
This flexible group is to verify that the increase of the use of sub-bituminous coal and adding pet coke to provide additional fuels for Units 1, 2, 3, and 4; the installation of four (4) wet FGD quench pumps; modifications to the fuel handling systems; the installation of new material handling systems for limestone and gypsum; and the installation of a new fuel handling system for petroleum coke is a minor nonattainment source modification by use of the actual-to-projected-actual applicability test. They submitted the 2018 Annual Emission Analysis Report on February 28, 2019 to AQD which showed that the actual emissions were lower than the projected annual emissions as well as the baseline annual emissions. I have determined that they're in compliance with this table.

FGAUXBOILERS
This flexible group contains two auxiliary boilers that are subject to 40 CFR 63 Subpart DDDDD (Boiler MACT) as existing limited use boilers. At the time of the inspection, auxiliary boilers #1 and #2 were not operating. These two boilers are used when necessary and can be sent to any header that it is needed at. These two boilers only burn diesel fuel with a sulfur content of 15 ppm per S.C. II.1, which I reviewed on their plant database as required by S.C. VI.3 (see attachment 7). They are also keeping track of the monthly fuel usage and hours of operation per S.C. VI.2 and 4 (see attachment 6). They have submitted their Notification of Compliance Status Report on March 10, 2016 and they have certified that they have complied with the tune up requirements of the Boiler MACT. I have determined that they're in compliance with this table.

FG-MESBLDG (proposed table in draft renewal MI-ROP-B2816-20XX)
This flexible group contains two 6.3 mmBtu/hr boilers, which are subject to the Boiler MACT. These two boilers are in the units designed to burn light oil sub-category and have a heat input rating less than 10 mmBtu/hr. As a result, they do not have any emission limits or compliance demonstrations. The initial compliance requirements for these boilers are limited to the work practice standards of tune ups and a one-time energy assessment, which they have done. On March 10, 2016, DTE Monroe submitted a certification of compliance stating that they have completed the required initial tune ups and have performed an energy assessment on these boilers by the required date of January 31, 2016 (see files for notification). I have determined that they would be in compliance

with this proposed table.

FG-EMERGENS (proposed table in draft renewal MI-ROP-B2816-20XX)
This is an emergency fire pump in the Unit 1-2 Screenhouse that is exempt from Rule 201 but is subject to 40 CFR 63 Subpart ZZZZ. This unit only burns diesel fuel with a sulfur content of 15 ppm per S.C. II.1. They are limited to 100 hours of operation per year for maintenance checks and testing with up to 50 hours of those 100 hours able to operate in non-emergency situations (SC III.1). They have non-resettable hour meters on these boilers (SC IV.1). I have determined that they would be in compliance with this proposed table.

FGMATS (proposed table in draft renewal MI-ROP-B2816-20XX)
This table covers all the requirements of the National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units (also known as the Mercury and Air Toxics Standards (MATS)). EU-UNIT1, EU-UNIT2, EU-UNIT3, and EU-UNIT4 are subject to this standard. On September 29, 2016 and December 22, 2016, DTE Monroe was sent a LOV for exceeding the mercury emission limit specified by MATS. In September 2018, consent decree settling, "U.S. v DTE Energy Company, Civil Action No. EPA-5-2018-113(a)-MI-07" was issued and has resolved these violations. They are submitting the required reports as required by MATS and is currently meeting the MATS requirements. I have determined that they are in compliance with this proposed table.

FG-NSPS4I (proposed table in draft renewal MI-ROP-B2816-20XX)
This table covers MI R336.1285(2) exempted diesel engines, model year 2008 or later, less than 25 Hp. Engines subject to 40 CFR Part 60, Subpart IIII as non-emergency stationary combustion ignition (CI) internal combustion engines (ICE) and meet 40 CFR Part 63 Subpart ZZZZ requirements by meeting the requirements of 40 CFR Part 60 Subpart IIII. They currently have two exempt ICE onsite and they are located at the Slurry House. These two ICEs are exempt from needing to obtain a permit to install per Rule 285(2)(g) (see exemption determination in files). However, these two ICEs are subject to 40 CFR 63 Subpart ZZZZ for Major Sources of HAPs and 40 CFR 60 Subpart IIII. If they meet the all requirements of Subpart IIII, then they are considered to meet all the requirements of Subpart ZZZZ. They have not deviated from the manufacturer's written instructions for operation and maintenance. Because of this, I have determined that they're in compliance with Subpart IIII and therefore in compliance with Subpart ZZZZ.

FGPEAKERS-S2
This flexible group covers five diesel fuel-fired generator peaking units that are limited use stationary reciprocating internal combustion engines, which were not operating at the time of the inspection. These five peaking units only burn diesel fuel with a sulfur content of 15 ppm per S.C. II.1. Each peaking unit has a non-resettable hour meter that they use to track the amount of time in minutes and hours each one runs (S.C. IV.1). They are also keeping track of the monthly fuel usage and hours of operation per S.C. VI.2 and 4 (see attachments #8 and 9). These peaking units are also subject to 40 CFR Part 63, Subpart ZZZZ. Since these peaking units are classified as limited use, they do not have to meet the requirements of Subpart ZZZZ and of subpart A of this part except for the initial notification requirements of § 63.6645(f). AQD received the initial notification for these peaking units on August 30, 2010. I have determined that they're in compliance with this table.

EU-FlyAshStorage (PTI #178-08)
This emission unit covers a fly ash storage facility that previously was owned by Headwaters, Inc. On December 20, 2018 DTE Electric purchased this facility and is now responsible the operations and the compliance of this facility. This facility receives fly ash from Units 1 and 2 and will sell it as a raw material for the heavy construction market. I did not see any visible emissions from any of the exhaust stacks at the time of the inspection (S.C. 1.2). This facility, which located at 3333 E. Front St. is due west of the plant and is contiguous to the Monroe Plant. As such, the Monroe Plant includes this facility in their fugitive dust plan. When treatment is needed to control the dust, this facility contacts DTE to have them do the treatment and they are recording the date of each treatment (S.C. 1.3). They do not keep any outside fly ash storage piles nor is there any sign of any storage piles, which meets the requirement of S.C. 1.4. The four silos, two at the Monroe Plant and two at the ash handling facility, are controlled with bin vent filters. The two silos at the Monroe Plant are also equipped with two filter receivers each (S.C. 1.5, 1.6, 1.7, 1.8, 1.9, & 1.10). I have determined that they're in compliance with this permit.

FGCOLDCLNRS-S1 (MI-ROP-B2816-2009)
This flexible group covers all the cold cleaners that are at the Monroe Plant. There are currently four cold cleaners on site: One at the CHCC Machine Shop; One at the Motor Pool Building; and the remaining two are in the building where they work on the heavy machinery. These parts cleaners are the same ones that I have

inspected in previous scheduled inspections. At the time of the inspection, none of the cold cleaners were in use and all of them had written operating instructions posted in an accessible, conspicuous location on or near each cold cleaner (S.C. VI.3). They are keeping all the required records with the information required by S.C. VI.2. I have determined that they're in compliance with this table.

They are planning to eventually install a new fire pump in the Unit 3-4 Screenhouse. They said that this fire pump would be are exempt from needing to obtain a permit to install per Rule 285(2)(g). However, like the landfill gensets, this fire pump would be subject to 40 CFR 63 Subpart ZZZZ for Major Sources of HAPs and 40 CFR 60 Subpart IIII. The proposed fire pump would be 350 hp diesel engine with a displacement of 9 liters and would be EPA certified. Once it has been installed, DTE should follow procedures to incorporate it into the ROP.

They have submitted all the reports required by MI-ROP-B2816-2009, PTIs #27-13B and #178-08, and MAERS within the timeframes mentioned in those permits and programs. All the reports have been determined as acceptable as submitted (see MACES report received). Based on the information received during the inspection and the reports that have been submitted, I have determined that they are in compliance.

NAME Brian Conley DATE 7/1/19 SUPERVISOR