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April 19, 2018

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APR 2 3 2018

Mr. Brian Carley, Environmental Quality Specialist Air Quality Division Michigan Department of Environmental Quality 301 E. Louis B. Glick Highway Jackson, MI 49201-1556

AIR QUALITY DIVISION

Re: DTE Electric Response to the MDEQ-AQD Violation Notice of March 29, 2018 Monroe Power Plant, PM 2.5 testing for Units 1-4

Dear Mr. Carley:

This letter is in response to the Michigan Department of Environmental Quality (MDEQ) Air Quality Division's (AQD) Violation Notice. The MDEQ's Notice cited the following:

| Process Description | Rule/Permit Condition Violated | Comments | | |
|------------------------------|-----------------------------------|--|--|--|
| EU-UNITs 1-4 in Section 1 | Special Condition V.3 | <i>DTE failed to do required annual PM _{2.5} stack test on each unit.</i> | | |

DTE Electric's response provides its review of the situation, provides $PM_{2.5}$ data demonstrating the post project's actual annual $PM_{2.5}$ emissions are well below pre-project levels (ie. project reduced overall $PM_{2.5}$ emissions); and proposes that MDEQ-AQD and DTE Electric further meet to clarify the permit requirement, identify practical methods to meet obligations under this special condition and/or modify the permit language.

Analysis of Existing PM2.5 data

As part of the PSD analysis of the original permit to install, DTE Electric-Monroe Power Plant has been compiling end of year $PM_{2.5}$ emissions data and providing the MDEQ-AQD annual reports demonstrating that the actual $PM_{2.5}$ annual emissions have not exceeded the emission projections documented in the PTI application. The PTI application predicted that $PM_{2.5}$ emission projections would be reduced relative to the site's baseline established in the PTI application. Copies of the 2016 and 2017 annual report for $PM_{2.5}$ shown as Attachments A & B and previously sent to MDEQ show that the actual annual emissions were 507 and 592 tons, respectively, compared to the 2,730 tons projected, giving net $PM_{2.5}$ due to the project of at least 2100 tons per year.

MDEQ-AQD requested a more detailed breakdown of the 2016 and 2017 $PM_{2.5}$ annual emissions calculations, demonstrating how the annual totals were determined. Attachment C provides the detailed monthly data used to calculate a month $PM_{2.5}$ emission value for each unit. The annual total is simply the summation of the calendar month's $PM_{2.5}$ values. The monthly $PM_{2.5}$ value is the product of the unit's monthly heat input (mmBtus as determined for Part 75 continuous emissions monitoring) and the unit's $PM_{2.5}$ emission factor (lbs/mmBtu).

As previously discussed, for $PM_{2.5}$ there is no direct reading monitor or USEPA approved emission test available for wet stacks. In 2014, the MDEQ-AQD approved a test protocol that allowed DTE Electric to conduct PM testing that would provide an approximation of PM_{10} and $PM_{2.5}$ emission rates. The test method established that PM_{10} & $PM_{2.5}$ Emission Rate would be **represented** by conducting EPA Method 5B for filterable PM and EPA Method 202 for condensable particulate matter (CPM). This conservatively assumes the following: $PM10=PM2.5=(PM_{-filterable})+(CPM)$ The calculated $PM_{2.5}$ value using this method would be over the actual $PM_{2.5}$ emission rate. This method's result is biased in a manner that "over estimates" the PM_{10} and $PM_{2.5}$ emission rates. The test method results were approved because this method provides data that would provide a conservative assurance that the unit's emission rate does not exceed the permit limit. Likewise, the PM_{10} and $PM_{2.5}$ mass emissions when calculated using this conservative emission rate, would provide assurance that the unit's emission field using this PM_{10} permit limit or the $PM_{2.5}$ post project's "projected actual emissions" in the PTI application.

Therefore, the attached results reassure that the "conservatively high," actual annual $PM_{2.5}$ emissions are below the projected actual emissions from the PTI application. There is no fundamental issue with permit emission compliance or with the post project's projected actual emissions.

DTE Electric's Position

DTE Electric does not agree it violated an enforceable condition to conduct annual testing for PM_{2.5}. During the PTI drafting and review process with AQD, DTE Electric expressed its concerns with PM_{2.5} testing requirements for the main units. DTE Electric and AQD were aware that there was no USEPA approved PM_{2.5} testing method at the time of permit issuance for wet stacks to demonstrate compliance with the PM_{2.5} testing condition on Units 1-4. Nevertheless, the MDEQ-AQD issued the permits with the PM_{2.5} testing requirements. There remains no USEPA approved method for direct measurement of PM_{2.5}.

DTE Electric proposes that appropriate personnel from MDEQ-AQD and DTE Electric meet in May with the objective to resolve how the annual monitoring is conducted for the balance of the 10 year monitoring period (roughly 2022 for units 1 and 2). In the meantime, DTE Electric is tentatively planning to conduct PM_{2.5} testing per the test protocol previously approved by MDEQ-AQD (e.g. USEPA Method 5B and Method 202). The final schedule or need for further testing, can also be discussed at the May meeting.

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<u>Summary</u>

DTE Electric – Monroe Power Plant demonstrated in the attachments that the actual annual $PM_{2.5}$ emissions are well below the projected $PM_{2.5}$ emissions in the PTI application. This illustrates the project produces significant decreases in emissions, including $PM_{2.5}$, as projected in the PTI application. Further, considering the facts presented herein, DTE Electric does not agree it violated an enforceable condition to conduct annual $PM_{2.5}$ testing given that both DTE Electric and MDEQ-AQD were aware that there was no approved USEPA $PM_{2.5}$ testing method for wet stacks at the time of permit issuance. DTE Electric looks forward to meeting with the MDEQ-AQD to define future PM2.5 monitoring expectations and layout any potential permit requirement changes to avoid further confusion.

If you have any questions on the information contained herein or would like further information, contact Andrew Fadanelli (at 313-235-6384 / fadanellii@dteenergy.com), or Lisa Lockwood (at 734-284-2561 / Lisa.hagerty@dteenergy.com).

Sincerely,

Mm h

Mike Twomley Plant Manager – Monroe Power Plant

Cc:

S. Miller – MDEQ Jackson B. Rice – Monroe Power Plant S. Boyd – DTE Energy B. Marietta – DTE Energy A. Hayden – DTE Energy

Appendix A:Monroe Power Plant - All Units2016Comparison of Actual Emissions to Projected Actual (A2A) and Baselines
Per PTI 27-13B

| | | | Emissions (tpy) | | |
|---------------------------------------|-----------------|------------------------------|--|------------------------------------|------------------------------|
| Emission Unit/Flexible Group ID | Pollutant | Baseline Actual Emissions | Projected Actual Emissions ⁽¹⁾ | Actual Emissions ⁽²⁾ | Reason for Difference |
| FG-ProjectPC1-4 | PM 2.5 | 5,315 | 2,730 | 507 | |
| FG-ProjectPC1-4 | SO ₂ | 117,940 | 11,753 | 2,343 | |

Notes:

1) Projected actual emissions from the defined project, from App C, PTI 27-13B

2a) Actual SO2 values derived from CEMS for the reporting year

2b) For Units 1 - 4, actual annual PM2.5 values are based on recent stack testing. Consistent with the MDEQ approved Particulate Matter (PM) test plan, PM2.5 emissions = total filterable PM emissions + the condensable PM portion.

2c) For all other emissions sources in the project, actual PM2.5 uses the same emission calculation as found in permit application, accept, substituting the actual annual material thruput, instead of using the Maximum capacity factors (used in calculating PTE)

Appendix B:

x B:Monroe Power Plant - All Units2017Comparison of Actual Emissions to Projected Actual (A2A) and Baselines

Per PTI 27-13B

| Emission Unit/Flexible Group ID | Pollutant | Baseline Actual Emissions | Projected Actual Emissions ⁽¹⁾ | Actual Emissions ⁽²⁾ | Reason for Difference |
|---------------------------------------|-----------------|------------------------------|--|------------------------------------|-----------------------|
| FG-ProjectPC1-4 | PM 2.5 | 5,315 | 2,730 | 592 | |
| FG-ProjectPC1-4 | SO ₂ | 117,940 | 11,753 | 3,077 | |

Notes:

1) Projected actual emissions from the defined project, from App C, PTI 27-13B

2a) Actual SO2 values derived from CEMS for the reporting year

- 2b) For Units 1 4, actual annual PM2.5 values are based on recent stack testing. Consistent with the MDEQ approved Particulate Matter (PM) test plane PM2.5 emissions = total filterable PM emissions + the condensable PM portion.
- 2c) For all other emissions sources in the project, actual PM2.5 uses the same emission calculation as found in permit application, accept, substituting the actual annual material thruput, instead of using the Maximum capacity factors (used in calculating PTE)

| STACK | DATE | | Heat Input from CEMS, (mm Btu) | Monthly PM CEMS, PM _{filterable} Emission Rate, (lbs/mmBtu) | Condensable PM Rate from Method 202 test(s) (lbs/mmBtu) | Calculated PM _{2.5} Emission Rate, PM _{2.5} =(PM _{filterable})+(CPM) (lbs/mmBtu) | Condensable PM, Method 202 test date(s) | Monthly PM _{filterable} Tons | Monthly PM _{2.5} tons |
|--------|--------|------|--------------------------------------|---|---|---|---|---|-----------------------------------|
| MONPP1 | Jan-16 | 2016 | 4,427,044 | 0.00442 | 0.004 | 0.0084 | 3-Apr-14 | 9.8 | 18.6 |
| MONPP1 | Feb-16 | 2016 | 3,550,953 | 0.00445 | 0.004 | 0.0085 | 3-Apr-14 | 7.9 | 15.0 |
| MONPP1 | Mar-16 | 2016 | 0 | | 0.004 | | 3-Apr-14 | | |
| MONPP1 | Apr-16 | 2016 | 0 | | 0.004 | | 3-Apr-14 | | |
| MONPP1 | May-16 | 2016 | 1,114,883 | 0.00464 | 0.004 | 0.0086 | 3-Apr-14 | 2.6 | 4.8 |
| MONPP1 | Jun-16 | 2016 | 4,627,897 | 0.00404 | 0.004 | 0.0080 | 3-Apr-14 | 9.3 | 18.6 |
| MONPP1 | Jul-16 | 2016 | 2,083,114 | 0.00393 | 0.004 | 0.0079 | 3-Apr-14 | 4.1 | 8.3 |
| MONPP1 | Aug-16 | 2016 | 4,213,193 | 0.00409 | 0.004 | 0.0081 | 3-Apr-14 | 8.6 | 17.0 |
| MONPP1 | Sep-16 | 2016 | 2,391,434 | 0.00369 | 0.004 | 0.0077 | 3-Apr-14 | 4.4 | 9.2 |
| MONPP1 | Oct-16 | 2016 | 0 | | 0.004 | | 3-Apr-14 | | |
| MONPP1 | Nov-16 | 2016 | 2,282,827 | 0.00347 | 0.004 | 0.0075 | 3-Apr-14 | 4.0 | 8.5 |
| MONPP1 | Dec-16 | 2016 | 4,736,150 | 0.00395 | 0.004 | 0.0080 | 3-Apr-14 | 9.4 | 18.8 |
| MONPP1 | Jan-17 | 2017 | 3,332,635 | 0.00429 | 0.004 | 0.0083 | 3-Apr-14 | 7.1 | 13.8 |
| MONPP1 | Feb-17 | 2017 | 3,906,078 | 0.00438 | 0.004 | 0.0084 | 3-Apr-14 | 8.6 | 16.4 |
| MONPP1 | Mar-17 | 2017 | 4,185,825 | 0.00403 | 0.004 | 0.0080 | 3-Apr-14 | 8.4 | 16.8 |
| MONPP1 | Apr-17 | 2017 | 4,257,172 | 0.00383 | 0.004 | 0.0078 | 3-Apr-14 | 8.1 | 16.7 |
| MONPP1 | May-17 | 2017 | 4,435,875 | 0.00405 | 0.004 | 0.0080 | 3-Apr-14 | 9.0 | 17.8 |
| MONPP1 | Jun-17 | 2017 | 4,263,759 | 0.00403 | 0.004 | 0.0080 | 3-Apr-14 | 8.6 | 17.1 |
| MONPP1 | Jul-17 | 2017 | 4,453,956 | 0.00444 | 0.004 | 0.0084 | 3-Apr-14 | 9.9 | 18.8 |
| MONPP1 | Aug-17 | 2017 | 2,529,891 | 0.00436 | 0.004 | 0.0084 | 3-Apr-14 | 5.5 | 10.6 |
| MONPP1 | Sep-17 | 2017 | 3,268,919 | 0.00404 | 0.004 | 0.0080 | 3-Apr-14 | 6.6 | 13.1 |
| MONPP1 | Oct-17 | 2017 | 2,240,194 | 0.00396 | 0.004 | 0.0080 | 3-Apr-14 | 4.4 | 8.9 |
| MONPP1 | Nov-17 | 2017 | 2,252,984 | 0.00440 | 0.004 | 0.0084 | 3-Apr-14 | 5.0 | 9.5 |
| MONPP1 | Dec-17 | 2017 | 3,468,122 | 0.00410 | 0.004 | 0.0081 | 3-Apr-14 | 7.1 | 14.0 |

| STACK | DATE | | Heat Input from CEMS, (mm Btu) | Monthly PM CEMS, PM _{filterable} Emission Rate, (lbs/mmBtu) | Condensable PM Rate from Method 202 test(s) (lbs/mmBtu) | Calculated PM _{2.5} Emission Rate, PM _{2.5} =(PM _{filterable})+(CPM) (lbs/mmBtu) | Condensable PM, Method 202 test date(s) | Monthly PM _{filterable} Tons | Monthly PM _{2.5} tons |
|--------|--------|------|--------------------------------------|---|---|---|---|---|-----------------------------------|
| MONPP2 | Jan-16 | 2016 | 1,867,199 | 0.00349 | 0.002 | 0.0055 | 2-Mar-15 | 3.3 | 5.1 |
| MONPP2 | Feb-16 | 2016 | 1,304,752 | 0.00305 | 0.002 | 0.0051 | 2-Mar-15 | 2.0 | 3.3 |
| MONPP2 | Mar-16 | 2016 | 2,821,413 | 0.00477 | 0.002 | 0.0068 | 2-Mar-15 | 6.7 | 9.6 |
| MONPP2 | Apr-16 | 2016 | 4,339,213 | 0.00403 | 0.002 | 0.0060 | 2-Mar-15 | 8.7 | 13.1 |
| MONPP2 | May-16 | 2016 | 3,306,193 | 0.00439 | 0.002 | 0.0064 | 2-Mar-15 | 7.3 | 10.6 |
| MONPP2 | Jun-16 | 2016 | 3,156,091 | 0.00349 | 0.002 | 0.0055 | 2-Mar-15 | 5.5 | 8.7 |
| MONPP2 | Jul-16 | 2016 | 3,454,706 | 0.00415 | 0.002 | 0.0062 | 2-Mar-15 | 7.2 | 10.6 |
| MONPP2 | Aug-16 | 2016 | 3,108,624 | 0.00447 | 0.002 | 0.0065 | 2-Mar-15 | 6.9 | 10.1 |
| MONPP2 | Sep-16 | 2016 | 3,221,452 | 0.00452 | 0.002 | 0.0065 | 2-Mar-15 | 7.3 | 10.5 |
| MONPP2 | Oct-16 | 2016 | 3,497,956 | 0.00577 | 0.002 | 0.0078 | 2-Mar-15 | 10.1 | 13.6 |
| MONPP2 | Nov-16 | 2016 | 3,392,402 | 0.00502 | 0.002 | 0.0070 | 2-Mar-15 | 8.5 | 11.9 |
| MONPP2 | Dec-16 | 2016 | 1,834,951 | 0.00456 | 0.002 | 0.0066 | 2-Mar-15 | 4.2 | 6.0 |
| MONPP2 | Jan-17 | 2017 | 4,041,806 | 0.00521 | 0.002 | 0.0072 | 2-Mar-15 | 10.5 | 14.6 |
| MONPP2 | Feb-17 | 2017 | 930,684 | 0.00769 | 0.002 | 0.0097 | 2-Mar-15 | 3.6 | 4.5 |
| MONPP2 | Mar-17 | 2017 | 3,597,374 | 0.00515 | 0.002 | 0.0072 | 2-Mar-15 | 9.3 | 12.9 |
| MONPP2 | Apr-17 | 2017 | 4,420,494 | 0.00466 | 0.002 | 0.0067 | 2-Mar-15 | 10.3 | 14.7 |
| MONPP2 | May-17 | 2017 | 4,404,724 | 0.00462 | 0.002 | 0.0066 | 2-Mar-15 | 10.2 | 14.6 |
| MONPP2 | Jun-17 | 2017 | 3,963,105 | 0.00501 | 0.002 | 0.0070 | 2-Mar-15 | 9.9 | 13.9 |
| MONPP2 | Jul-17 | 2017 | 3,931,607 | 0.00594 | 0.002 | 0.0079 | 2-Mar-15 | 11.7 | 15.6 |
| MONPP2 | Aug-17 | 2017 | 2,034,821 | 0.00805 | 0.002 | 0.0101 | 2-Mar-15 | 8.2 | 10.2 |
| MONPP2 | Sep-17 | 2017 | 239,825 | 0.00604 | 0.002 | 0.0080 | 2-Mar-15 | 0.7 | 1.0 |
| MONPP2 | Oct-17 | 2017 | 0 | | 0.002 | | 2-Mar-15 | | |
| MONPP2 | Nov-17 | 2017 | 0 | | 0.002 | | 2-Mar-15 | | |
| MONPP2 | Dec-17 | 2017 | 3,774,904 | 0.00596 | 0.002 | 0.0080 | 2-Mar-15 | 11.2 | 15.0 |

| STACK | DATE | | Heat Input from CEMS, (mm Btu) | Monthly PM CEMS, PM _{filterable} Emission Rate, (lbs/mmBtu) | Condensable PM Rate from Method 202 test(s) (lbs/mmBtu) | Calculated PM _{2.5} Emission Rate, PM _{2.5} =(PM _{filterable})+(CPM) (Ibs/mmBtu) | Condensable PM, Method 202 test date(s) | Monthly PM _{filterable} Tons | Monthly PM _{2.5} tons |
|--------|--------|------|--------------------------------------|---|---|---|---|---|-----------------------------------|
| MONPP3 | Jan-16 | 2016 | 4,511,034 | 0.00299 | 0.0023 | 0.0053 | 15-Apr-15 | 6.7 | 11.9 |
| MONPP3 | Feb-16 | 2016 | 1,773,657 | 0.00308 | 0.0023 | 0.0054 | 15-Apr-15 | 2.7 | 4.8 |
| MONPP3 | Mar-16 | 2016 | 4,300,041 | 0.00330 | 0.0023 | 0.0056 | 15-Apr-15 | 7.1 | 12.0 |
| MONPP3 | Apr-16 | 2016 | 4,249,652 | 0.00324 | 0.0023 | 0.0055 | 15-Apr-15 | 6.9 | 11.8 |
| MONPP3 | May-16 | 2016 | 4,465,580 | 0.00330 | 0.0023 | 0.0056 | 15-Apr-15 | 7.4 | 12.5 |
| MONPP3 | Jun-16 | 2016 | 4,687,443 | 0.00294 | 0.0023 | 0.0052 | 15-Apr-15 | 6.9 | 12.3 |
| MONPP3 | Jul-16 | 2016 | 4,270,174 | 0.00303 | 0.0023 | 0.0053 | 15-Apr-15 | 6.5 | 11.4 |
| MONPP3 | Aug-16 | 2016 | 4,400,619 | 0.00305 | 0.0023 | 0.0053 | 15-Apr-15 | 6.7 | 11.8 |
| MONPP3 | Sep-16 | 2016 | 2,609,741 | 0.00391 | 0.0023 | 0.0062 | 15-Apr-15 | 5.1 | 8.1 |
| MONPP3 | Oct-16 | 2016 | 4,398,054 | 0.00387 | 0.0023 | 0.0062 | 15-Apr-15 | 8.5 | 13.6 |
| MONPP3 | Nov-16 | 2016 | 4,486,720 | 0.00374 | 0.0023 | 0.0060 | 15-Apr-15 | 8.4 | 13.5 |
| MONPP3 | Dec-16 | 2016 | 4,540,526 | 0.00318 | 0.0023 | 0.0055 | 15-Apr-15 | 7.2 | 12.4 |
| MONPP3 | Jan-17 | 2017 | 4,438,200 | 0.00307 | 0.0023 | 0.0054 | 15-Apr-15 | 6.8 | 11.9 |
| MONPP3 | Feb-17 | 2017 | 3,982,769 | 0.00377 | 0.0023 | 0.0061 | 15-Apr-15 | 7.5 | 12.1 |
| MONPP3 | Mar-17 | 2017 | 2,013,280 | 0.00369 | 0.0023 | 0.0060 | 15-Apr-15 | 3.7 | 6.0 |
| MONPP3 | Apr-17 | 2017 | 3,365,045 | 0.00354 | 0.0023 | 0.0058 | 15-Apr-15 | 6.0 | 9.8 |
| MONPP3 | May-17 | 2017 | 4,416,501 | 0.00336 | 0.0023 | 0.0057 | 15-Apr-15 | 7.4 | 12.5 |
| MONPP3 | Jun-17 | 2017 | 3,902,841 | 0.00329 | 0.0023 | 0.0056 | 15-Apr-15 | 6.4 | 10.9 |
| MONPP3 | Jul-17 | 2017 | 4,511,453 | 0.00314 | 0.0023 | 0.0054 | 15-Apr-15 | 7.1 | 12.3 |
| MONPP3 | Aug-17 | 2017 | 4,257,539 | 0.00308 | 0.0023 | 0.0054 | 15-Apr-15 | 6.6 | 11.5 |
| MONPP3 | Sep-17 | 2017 | 4,122,111 | 0.00329 | 0.0023 | 0.0056 | 15-Apr-15 | 6.8 | 11.5 |
| MONPP3 | Oct-17 | 2017 | 4,030,990 | 0.00323 | 0.0023 | 0.0055 | 15-Apr-15 | 6.5 | 11.1 |
| MONPP3 | Nov-17 | 2017 | 3,139,632 | 0.00472 | 0.0023 | 0.0070 | 15-Apr-15 | 7.4 | 11.0 |
| MONPP3 | Dec-17 | 2017 | 976,771 | 0.00400 | 0.0023 | 0.0063 | 15-Apr-15 | 2.0 | 3.1 |

| STACK | DATE | | Heat Input from CEMS, (mm Btu) | Monthly PM CEMS, PM _{filterable} Emission Rate, (lbs/mmBtu) | Condensable PM Rate from Method 202 test(s) (lbs/mmBtu) | Calculated PM _{2.5} Emission Rate, PM _{2.5} =(PM _{filterable})+(CPM) (Ibs/mmBtu) | Condensable PM, Method 202 test date(s) | Monthly PM _{filterable} Tons | Monthly PM _{2.5} tons |
|--------|--------|-----------|--------------------------------------|---|---|---|---|---|-----------------------------------|
| MONPP4 | Jan-16 | 2016 | 2,675,886 | 0.00213 | 0.0043 | 0.0064 | Jan'11 & Mar'15 | 2.9 | 8.6 |
| MONPP4 | Feb-16 | 2016 | 4,017,620 | 0.00202 | 0.0043 | 0.0063 | Jan'11 & Mar'15 | 4.1 | 12.7 |
| MONPP4 | Mar-16 | 2016 | 3,186,265 | 0.00201 | 0.0043 | 0.0063 | Jan'11 & Mar'15 | 3.2 | 10.1 |
| MONPP4 | Apr-16 | 2016 | 3,602,574 | 0.00237 | 0.0043 | 0.0067 | Jan'11 & Mar'15 | 4.3 | 12.0 |
| MONPP4 | May-16 | 2016 | 4,392,629 | 0.00276 | 0.0043 | 0.0071 | Jan'11 & Mar'15 | 6.1 | 15.5 |
| MONPP4 | Jun-16 | 2016 | 4,416,301 | 0.00308 | 0.0043 | 0.0074 | Jan'11 & Mar'15 | 6.8 | 16.3 |
| MONPP4 | Jul-16 | 2016 | 3,387,361 | 0.00297 | 0.0043 | 0.0073 | Jan'11 & Mar'15 | 5.0 | 12.3 |
| MONPP4 | Aug-16 | 2016 | 4,010,200 | 0.00299 | 0.0043 | 0.0073 | Jan'11 & Mar'15 | 6.0 | 14.6 |
| MONPP4 | Sep-16 | 2016 | 3,208,685 | 0.00235 | 0.0043 | 0.0066 | Jan'11 & Mar'15 | 3.8 | 10.7 |
| MONPP4 | Oct-16 | 2016 | 0 | | 0.0043 | | Jan'11 & Mar'15 | | |
| MONPP4 | Nov-16 | 2016 | 0 | | 0.0043 | | Jan'11 & Mar'15 | | |
| MONPP4 | Dec-16 | 2016 | 33,136 | 0.00477 | 0.0043 | 0.0091 | Jan'11 & Mar'15 | 0.1 | 0.2 |
| MONPP4 | Jan-17 | 2017 | 2,534,332 | 0.00326 | 0.0043 | 0.0076 | Jan'11 & Mar'15 | 4.1 | 9.6 |
| MONPP4 | Feb-17 | 2017 | 2,112,877 | 0.00454 | 0.0043 | 0.0088 | Jan'11 & Mar'15 | 4.8 | 9.3 |
| MONPP4 | Mar-17 | 2017 | 3,137,443 | 0.00287 | 0.0043 | 0.0072 | Jan'11 & Mar'15 | 4.5 | 11.3 |
| MONPP4 | Apr-17 | 2017 | 4,169,628 | 0.00337 | 0.0043 | 0.0077 | Jan'11 & Mar'15 | 7.0 | 16.0 |
| MONPP4 | May-17 | 2017 | 4,600,932 | 0.00292 | 0.0043 | 0.0072 | Jan'11 & Mar'15 | 6.7 | 16.6 |
| MONPP4 | Jun-17 | 2017 | 4,411,696 | 0.00298 | 0.0043 | 0.0073 | Jan'11 & Mar'15 | 6.6 | 16.1 |
| MONPP4 | Jul-17 | 2017 | 4,643,588 | 0.00297 | 0.0043 | 0.0073 | Jan'11 & Mar'15 | 6.9 | 16.9 |
| MONPP4 | Aug-17 | 2017 | 4,467,379 | 0.00360 | 0.0043 | 0.0079 | Jan'11 & Mar'15 | 8.0 | 17.6 |
| MONPP4 | Sep-17 | 2017 | 2,775,799 | 0.00415 | 0.0043 | 0.0085 | Jan'11 & Mar'15 | 5.8 | 11.7 |
| MONPP4 | Oct-17 | 2017 | 4,574,909 | 0.00543 | 0.0043 | 0.0097 | Jan'11 & Mar'15 | 12.4 | 22.3 |
| MONPP4 | Nov-17 | 2017 | 4,549,271 | 0.00452 | 0.0043 | 0.0088 | Jan'11 & Mar'15 | 10.3 | 20.1 |
| MONPP4 | Dec-17 | 2017 | 2,613,219 | 0.00322 | 0.0043 | 0.0075 | Jan'11 & Mar'15 | 4.2 | 9.8 |
| | | - | | * Started using PM | CEMS to calculate Monthl | y PM filterable when the PM | A CEMS was certifie | d, ~ June 2018 | 5 |
| MONPP1 | 2016 | ** | | | | | | 60.1 | 118.9 |
| MONPP2 | 2016 | ** | | | | | | 77.7 | 113.0 |
| MONPP3 | 2016 | | | | | | | 80.1 | 136.1 |
| MONPP4 | 2016 | | | | | | | 42.1 | 112.9 |
| Total | 2016 | | | | | | | 260.0 | 481.0 |
| | | ** In RY2 | 016's year-end / | Annual NSR report, | Unit 1's PM2.5 was report | ed as 149 tons and Unit 2 [·] | was reported as 108 | tons. | |
| MONPP1 | 2017 | | - | • | | | · | 88.4 | 173.6 |
| MONPP2 | 2017 | | | | | | | 85.6 | 117.0 |
| MONPP3 | 2017 | | | | | | | 74.1 | 123.7 |
| MONPP4 | 2017 | | | | | | | 81.3 | 177.2 |
| Total | 2017 | | | | | | | 329.4 | 591.5 |

File: Attachment C Monthly PM2-5 data (002)\Unit 1-4, PM2-5