

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION

FCE Summary Report

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| <b>Facility :</b> DETROIT WASTEWATER TREATMENT PLANT   | <b>SRN :</b> B2103                     |
| <b>Location :</b> 9300 W. JEFFERSON AVE  | <b>District :</b> Detroit              |
|  | <b>County :</b> WAYNE                  |
| <b>City :</b> DETROIT <b>State:</b> MI <b>Zip Code :</b> 48209   | <b>Compliance Status :</b> Compliance  |
| <b>Source Class :</b> MAJOR  | <b>Staff :</b> Stephen Weis            |
| <b>FCE Begin Date :</b> 8/13/2014  | <b>FCE Completion Date :</b> 8/13/2015 |
| <b>Comments :</b> The City of Detroit Water and Sewerage Dept. WWTP appears to be in compliance with applicable regulations and the terms and conditions of ROP No. MI-ROP-B2103-2014a and PTI No. 61-13A, which both contain the applicable regulations for the facility. |  |

List of Partial Compliance Evaluations :

| Activity Date | Activity Type        | Compliance Status | Comments  |
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| 08/13/2015    | Scheduled Inspection | Compliance        | Compliance inspection of the Detroit Water and Sewerage Department's Wastewater Treatment Plant (WWTP). The WWTP facility is scheduled for inspection in FY 2015. |

| Activity Date | Activity Type           | Compliance Status | Comments   |
|---------------|-------------------------|-------------------|--|
| 06/22/2015    | Rule 912                | Compliance        | <p>DWSD submitted an Incinerator Main Stack Excursion Report to document an incident regarding Incinerator Number 7. DWSD reported that Incinerator 7 was venting to the main stack, thereby bypassing the scrubber, for 31.5 hours from June 19 through June 20.</p> <p>The AQD-Detroit Office receives similar reports from DWSD relating to the operation of the incinerators at the WWTP, but I had some questions regarding this report due to the length of time that the incinerator in question was venting to the main stack. I sent an e-mail to Melvin Dacres of DWSD posing some questions regarding the excursion, to which he replied (a copy of the e-mail exchange is attached to this report). Based on the response from DWSD:</p> <p>* Whenever an incinerator is venting directly to the main stack and bypassing the scrubber, interlock devices automatically stop the feed of sludge to that incinerator.</p> <p>* During a main stack excursion incident, incinerators are designed to operate no more than 1-2 minutes at a time. According to the response to my e-mail, Incinerator No. 7 has been out of service since 8:41am on June 19, 2015, which is 10 minutes after the excursion was reported to have begun.</p> <p>Based on this information, it appears that ample measures were taken to remove Incinerator No. 7 from service after the excursion, and to thus minimize emissions to the ambient air.</p> |
| 05/26/2015    | MAERS                   | Compliance        |  |
| 05/26/2015    | Other                   | Compliance        | Review of RY 2014 MAERS submittal.   |
| 05/02/2015    | Complaint Investigation | Compliance        | Odor Complaint - PEAS No. 20150502-173817  |

| Activity Date | Activity Type   | Compliance Status | Comments  |
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| 04/09/2015    | ROP Annual Cert | Compliance        | This report includes the total deviations for both semi-annual periods of 2014. |

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| 04/09/2015 | ROP SEMI 2 CERT | Compliance | <p>Many of the deviations reported were repeats of past deviations.</p> <p>Some of the deviations seem to represent minor issues. For example, the first deviation involved a record indicating that a sludge hauling truck's wheels were not washed, which occurred 13 times between August and November of 2014. However, DWSD has weigh scale tickets showing that the wheels were actually washed on these occasions. Thus, the required physical action of washing wheels on departing haul trucks did occur; the flaw was in the recordkeeping of some of these events.</p> <p>Also, there were 6 deviations involving opacity exceedances. All of the exceedances lasted for a single 6 minute block, and they were previously reported to DEQ-AQD.</p> <p>There was one reported deviation involving a deviation in the 8-hour average differential pressure across the scrubber system involving Complex 2. This involved 191 instances of pressure readings deviating from the permitted limit in the second half of 2014. DWSD states that these deviations did not result in any excess opacity. This issue will be discussed with DWSD staff during stack testing the week of April 13.</p> <p>Two deviations relate to short duration (1 to 2 minutes) bypasses of the scrubber. These deviations were also previously reported to AQD-Detroit via faxed notifications, and according to DWSD, interlocks stopped the sludge feed and the problem was corrected or the incinerator unit was taken out of service.</p> <p>The remaining deviations reported for this semi-annual period involve the MAP PM (malfunction abatement plan/preventative maintenance), specifically some of the tasks required by the MAP PM not being done. Several of the deviations were reported as being</p> |
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| 04/09/2015 | ROP SEMI 2 CERT                  | Compliance     | due to the task and equipment being the responsibility of the contractor that was replacing equipment/monitors. Some of the other deviations of this type were reported as being due to data migration. For the Complex 2 incinerators, these matters could be due to the upgrades being made to the incinerators and the pollution control equipment. Some of the MAP-related deviations were reported as being due to lack of manpower. These deviations will also be discussed with DWSD. |
| 02/18/2015 | NSPS (Part 60)                   | Compliance     | 40 CFR Part 60, Subpart M site-specific monitoring plan.   |
| 02/18/2015 | Other                            | Compliance     | Review of 40 CFR Part 60, Subpart M required site-specific monitoring plan for the sewage sludge incinerators and the ash handling system.   |
| 12/23/2014 | Complaint Investigation          | Compliance     | Investigation of odor complaint.   |
| 11/26/2014 | Reg. Applicability Determination | Compliance     | Permit to Install status for the proposed installation/operation of an oxygen vaporizer.   |
| 10/23/2014 | Complaint Investigation          | Non Compliance | Investigation of PEAS odor complaints  |



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| 10/16/2014 | ROP Semi 1 Cert | Compliance | <p>With this many deviations reported, there were a variety of different issues presented among them.</p> <p>The first deviation involved a record indicating that a sludge hauling truck's wheels were not washed, which occurred 5 times in February and March. However, DWSD has weigh scale tickets showing that the wheels were actually washed on these occasions.</p> <p>There were two deviations of the type involving a deviation in the 8-hour average differential pressure across the scrubber system, one for Complex 1 and the other for Complex 2. The Complex 1 deviation was reportedly due to freezing weather conditions causing freezing moisture in the lines. The Complex 2 deviation involved 578 instances of pressure readings deviating from the permitted limit in the first half of 2014, which is excessive. DWSD states that there were only 5 short term opacity deviations during this time period (4 of which lasted for only one six-minute block), and they further state that none of the opacity deviations were due to these scrubber deviations. The Complex 2 scrubbers are being replaced as part of the Complex 2 improvements, so this issue will be watched.</p> <p>There were 6 reported opacity deviations - 5 were reported as lasting for a single 6 minute block, and the sixth lasted for 2 blocks (12 minutes), so these were all short term issues which were previously reported to DEQ-AQD, along with the corrective actions taken.</p> <p>Two deviations relate to short duration (1 to 2 minutes) bypasses of the scrubber. These deviations were also previously reported to AQD-Detroit via faxed notifications, and according to DWSD, interlocks stopped the sludge feed and the problem was corrected or the incinerator unit</p> |
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| 10/16/2014 | ROP Semi 1 Cert | Compliance | <p>was taken out of service.</p> <p>The remaining deviations reported for this semi-annual period involve the MAP PM (malfunction abatement plan/preventative maintenance), specifically some of the tasks required by the MAP PM not being done. Several of the deviations were reported as being due to the task and equipment being the responsibility of the contractor that was replacing equipment/monitors. Some of the other deviations of this type were reported as being due to data migration. For the Complex 2 incinerators, these matters could be due to the upgrades being made to the incinerators and the pollution control equipment. Some of the MAP-related deviations were reported as being due to lack of manpower. These deviations will be discussed as part of DWSD's compliance with the newly issued permits.</p> |
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Name: Steve Was Date: 9/29/15 Supervisor: JR