



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

6/18/2015

Certified Mail

Randall Newberry
DP&L, J.M. Stuart Generating Station
P.O. Box 468
Aberdeen, OH 45101

Facility ID: 0701000007
Permit Number: P0091208
County: Adams

RE: DRAFT AIR POLLUTION TITLE V PERMIT
Permit Type: Renewal

Dear Permit Holder:

A draft of the OAC Chapter 3745-77 Title V permit for the referenced facility has been issued. The purpose of this draft is to solicit public comments. A public notice will appear in the Ohio Environmental Protection Agency (EPA) Weekly Review and the local newspaper, The Peoples Defender. A copy of the public notice, the Statement of Basis, and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43216-1049

and Portsmouth City Health Dept., Air Pollution Unit
605 Washington Street
3rd Floor
Portsmouth, OH 45662

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified if a public hearing is scheduled. A decision on processing the Title V permit will be made after consideration of comments received and oral testimony if a public hearing is conducted. You will then be provided with a Preliminary Proposed Title V permit and another opportunity to comment prior to the 45-day Proposed Title V permit submittal to U.S. EPA Region 5. The permit will be issued final after U.S. EPA review is completed and no objections to the final issuance have been received. If you have any questions, please contact Portsmouth City Health Dept., Air Pollution Unit at (740)353-5156.

Sincerely,

A handwritten signature in cursive script that reads "Michael E. Hopkins".

Michael E. Hopkins, P.E.
Assistant Chief, Permitting Section, DAPC

Cc: U.S. EPA Region 5 - Via E-Mail Notification
Portsmouth; Kentucky; West Virginia

PUBLIC NOTICE

The following matters are the subject of this public notice by the Ohio Environmental Protection Agency. The complete public notice, including any additional instructions for submitting comments, requesting information, a public hearing, or filing an appeal may be obtained at: <http://epa.ohio.gov/actions.aspx> or Hearing Clerk, Ohio EPA, 50 W. Town St., Columbus, Ohio 43215. Ph: 614-644-2129 email: HClerk@epa.ohio.gov

Draft Title V Permit Renewal

DP&L, J.M. Stuart Generating Station

745 U.S. Route 52, ,Aberdeen, OH 45101

ID#: P0091208

Date of Action: 6/18/2015

Permit Desc: Title V Renewal permit for coal-fired electric generation station..

The permit and complete instructions for requesting information or submitting comments may be obtained at: <http://epa.ohio.gov/dapc/permitonline.aspx> by entering the ID # or: Matt Freeman, Portsmouth City Health Dept., Air Pollution Unit, 605 Washington Street 3rd Floor, Portsmouth, OH 45662. Ph: (740)353-5156



Statement of Basis
 DP&L, J.M. Stuart Generating Station
Permit Number: P0091208
Facility ID: 0701000007

Statement of Basis For Air Pollution Title V Permit

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| Facility ID: | 0701000007 |
| Facility Name: | DP&L, J.M. Stuart Generating Station |
| Facility Description: | Electric Generating Station |
| Facility Address: | 745 U.S. Route 52, Aberdeen, OH 45101 |
| Permit #: | P0091208, Renewal |
| <p>This facility is subject to Title V because it is major for:</p> <p> <input type="checkbox"/> Lead <input checked="" type="checkbox"/> Sulfur Dioxide <input checked="" type="checkbox"/> Carbon Monoxide <input checked="" type="checkbox"/> Volatile Organic Compounds <input checked="" type="checkbox"/> Nitrogen Oxides <input checked="" type="checkbox"/> Particulate Matter ≤ 10 microns <input type="checkbox"/> Single Hazardous Air Pollutant <input checked="" type="checkbox"/> Combined Hazardous Air Pollutants <input checked="" type="checkbox"/> Maximum Available Control Technology Standard(s) <input checked="" type="checkbox"/> GHG <input checked="" type="checkbox"/> Title IV </p> | |

A. Standard Terms and Conditions

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| Has each insignificant emissions unit been reviewed to confirm it meets the definition in OAC rule 3745-77-01(U)? | Y |
| Were there any "common control" issues associated with this facility? If yes, provide a summary of those issues and explain how the DAPC decided to resolve them. | N |
| Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a minor permit modification per OAC rule 3745-77-08(C)(1) | N/A |
| Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a significant permit modification per OAC rule 3745-77-08(C)(3) | N/A |



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| Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a reopening per OAC rule 3745-77-08(D) | N/A |
| Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document resulting from a renewal per OAC rule 3745-77-08(E) | N/A |
| Please identify the affected unit(s) and pollutant(s) for which a Compliance Assurance Monitoring (CAM) Plan is required per 40 CFR 64. Provide more emissions unit specific detail in Section C. | CAM is applicable to emission units B001, B002, B003, & B004 for particulate matter. CAM only applies to the bypass stacks of B001-B004 identified as MS1B-MS4B which are used in actual operation less than 2% of the time. |

B. Facility-Wide Terms and Conditions

| Term and Condition (paragraph) | Basis | | Comments |
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| | SIP (3745-) | Other | |
| B.1 | | N | State only requirements |
| B.2 | OAC Chapter 3745-77-07(A)(13) | | Insignificant Emissions Unit with applicable requirements |
| B.3 | | 40 CFR Part 63, Subpart UUUUU | MATS Rule |
| B.4 | | 40 CFR Part 63, Subpart DDDDD | Boiler MACT |
| B.5 | OAC chapter 3745-109 | | State CAIR Rule |
| B.6 | | 40 CFR Part 63, Subpart ZZZZ | RICE MACT |



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| B.7 | | 40 CFR Part 64 | Compliance Assurance Monitoring (CAM) is applicable to bypass stacks of B001-B004 identified as MS1B-MS4B which are used in actual operation less than 2% of the time. |
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C. Emissions Unit Terms and Conditions

| Key: EU = emissions unit ID ND = negative declaration (i.e., term that indicates that a particular rule(s) is (are) not applicable to a specific emissions unit) OR = operational restriction M = monitoring requirements ENF = did noncompliance issues drive the monitoring requirements? R = record keeping requirements Rp = reporting requirements ET = emission testing requirements (not including compliance method terms) St = streamlining term used to replace a PTI monitoring, record keeping, or reporting requirement with an equivalent or more stringent requirement Misc = miscellaneous requirements | | | | | | | | | | | | | |
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| EU(s) | Limitation | Basis | | ND | OR | M | ENF | R | Rp | ET | St | Misc | Comments |
| | | SIP (3745-) | Other | | | | | | | | | | |
| F001 | Compliance with ORC 3704.03(T) shall be demonstrated by the emission limitations and compliance with applicable fuel restrictions, BACT requirements, record keeping, reporting, and emissions testing required by this permit that are associated with the above ORC 3704.03(T) limitations and requirements. The above-specified limitations under ORC 3704.03(T) represent best available technology (BAT) requirements that were triggered as a result of the New Source Review (NSR) major modification in this permit action for the Carter Hollow Landfill | N | ORC 3704.03(T) Best Available Technology (BAT) (PTI P0107967 issued 8/16/2011) | N | N | Y | N | Y | Y | Y | N | N | Basis-BAT using reduced speed limits, watering (flushing), sweeping, at sufficient treatment frequencies to ensure compliance M&R-daily inspections Rp- quarterly deviation reports ET- if required |



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| | <p>project which increased potential emissions of PE and PM10.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-10 through 20.</p> | | | | | | | | | | | | |
| F001 | <p>Fugitive particulate emissions (PE) shall not exceed 208.36 tons per year.</p> <p>Fugitive particulate matter with a diameter equal to or less than 10 microns in diameter (PM10) shall not exceed 54.29 tons per year.</p> <p>There shall be no visible PE from any paved roadway or parking area except for a period of time not to exceed 1 minute during any 60-minute observation period.</p> <p>There shall be no visible PE from any unpaved roadway or parking area except for a period of time not to exceed 3 minutes during any 60-minute observation period.</p> | OAC rules 3745-31-10 through 20 (PTI P0107967 issued 8/16/2011) | N | N | N | Y | N | Y | Y | Y | N | N | <p>Basis-PSD- using reduced speed limits, watering (flushing), sweeping, at sufficient treatment frequencies to ensure compliance</p> <p>M&R- daily inspections</p> <p>Rp- quarterly deviation reports</p> <p>ET- if required</p> |
| F001 | Fugitive particulate matter with a diameter | N | OAC paragraph 3745-31-05(A)(3), as | N | N | Y | N | Y | Y | Y | N | N | <p>Basis-BAT</p> <p>M&R- daily inspections</p> |



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| | equal to or less than 2.5 microns in diameter (PM2.5) shall not exceed 8.30 tons per year. | | effective 11/30/01 (PTI P0107967 issued 8/16/2011) | | | | | | | | | | | Rp- quarterly deviation reports ET- if required |
| F001 | This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM2.5 emissions from the roadways because they are less than 10 tons per year. | N | OAC paragraph 3745-31-05(A)(3), as effective 12/01/06 (PTI P0107967 issued 8/16/2011) | N | N | N | N | N | N | N | N | N | N | Basis-BAT |
| F002 | None | N | N | N | N | N | N | N | N | N | N | M | N | This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rules 3745-17-07 and 3745-17-08 do not apply to this fugitive emissions unit. |
| F003 | None | N | N | N | N | N | N | N | N | N | N | N | N | This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rules 3745-17-07 and 3745-17-08 do not apply to this fugitive emissions unit. |
| F004 | Fugitive Particulate Emissions (PE) from the FGD material handling system, transfer, conveying, underground reclaim hopper, wet ball mills and screens shall not exceed 3.95 pounds per hour. | OAC rule 3745-31-05(A)(3) (PTI 07-00567 issued 4/04/2006) | N | N | N | Y | N | Y | Y | N | N | N | N | Basis-BAT for limestone handling operations a combination of precautionary measures, partial enclosure of conveyor, telescoping chute, and dust collector BAT for gypsum handling operations a combination of precautionary measures, partial enclosure of conveyor, maintaining appropriate moisture content, and telescoping chute |



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| | <p>Fugitive Particulate matter with a diameter equal to or less than 10 microns (PM10) from the FGD material handling system, transfer, conveying, underground reclaim hopper, wet ball mills and screens shall not exceed 1.65 pounds per hour.</p> <p>Fugitive PE from the FGD material handling system, transfer, conveying, underground reclaim hopper, wet ball mills and screens shall not exceed 14.44 tons per year.</p> <p>Fugitive PM10 from the FGD material handling system, transfer, conveying, underground reclaim hopper, wet ball mills and screens shall not exceed 6.65 tons per year.</p> <p>The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see b)(2)b. through d.)</p> | | | | | | | | | | | | <p>M&R- weekly inspections Rp- quarterly deviation reports</p> |
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| | The requirements of this rule also include compliance with the requirements of 40 CFR 60.672. | | | | | | | | | | | | |
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| F004 | <p>No owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emission which contains particulate matter in excess of 0.022 gr/dscf.</p> <p>No owner or operator shall cause to be discharged into the atmosphere from any baghouse that controls emissions from only an individual, enclosed storage bin, stack emissions which exhibit greater than 7 percent opacity.</p> <p>No owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any fugitive emissions which exhibit greater than 10 percent opacity.</p> | N | 40 CFR 60.672 (NSPS Subpart 000) | N | N | Y | N | Y | Y | Y | N | N | <p>Basis- NSPS subpart 000 M&R- weekly inspections Rp- deviation reports ET- if required</p> |
| F005 | There shall be no | N | OAC rule 3745-31- | N | N | Y | N | Y | Y | Y | N | N | Basis-BAT use of a telescoping chute, |



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| | <p>visible particulate emissions except for one minute during any 60-minute period.</p> <p>The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.</p> <p>Fugitive Particulate emissions (PE) from the limestone and gypsum storage piles- load-in and load-out of storage piles and wind erosion from storage piles shall not exceed 5.25 tons per year.</p> <p>Fugitive Particulate matter with a diameter equal to or less than 10 microns (PM10) from the limestone and gypsum storage piles- load-in and load-out of storage piles and wind erosion from storage piles shall not exceed 3.12 tons per year.</p> | | <p>05(A)(3) (PTI 07-00567 issued 4/04/2006)</p> | | | | | | | | | | <p>maintaining material moisture content, and precautionary measures (reduce drop heights) to ensure compliance M&R- weekly inspections Rp- quarterly deviation reports ET- if required</p> |
| F006 | <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-10</p> | N | <p>ORC 3704.03(T) Best Available Technology (BAT) (PTI P0106503 issued 8/16/2011)</p> | N | N | Y | N | Y | Y | Y | N | N | <p>Basis-BAT shall be demonstrated by the emission limitations and compliance with applicable fuel restrictions, BACT requirements, record keeping, reporting, and emissions testing required by this</p> |



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| | <p>through 20.</p> <p>Compliance with ORC 3704.03(T) shall be demonstrated by the emission limitations and compliance with applicable fuel restrictions, BACT requirements, record keeping, reporting, and emissions testing required by this permit that are associated with the above ORC 3704.03(T) limitations and requirements.</p> <p>The above-specified limitations under ORC 3704.03(T) represent best available technology (BAT) requirements that were triggered as a result of the New Source Review (NSR) major modification in this permit action for the Carter Hollow Landfill project which increased potential emissions of PE and PM10.</p> | | | | | | | | | | | | | | <p>permit that are associated with the above ORC 3704.03(T) limitations and requirements</p> <p>M&R- daily inspections during periods of active use</p> <p>Rp- quarterly deviation reports</p> <p>ET- if required</p> |
| F006 | <p>Fugitive particulate emissions (PE) shall not exceed 90.63 tons per year.</p> <p>Fugitive particulate matter emissions less than or equal to 10 microns in diameter (PM10) shall not</p> | 31-10 through 31-20 | N | N | N | Y | N | Y | Y | Y | N | N | <p>Basis-BACT limits -use of reduced speed limits, sweeping, (flushing) watering, good housekeeping, and the emission limitations listed under OAC rules 3745-31-10 through 20 above constitutes BACT for this emissions unit</p> <p>M&R- daily inspections during periods of active use</p> <p>Rp- quarterly deviation reports</p> | | |



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| | <p>265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1,2006 version of 3745-31-05, then these emission limits/control measures no longer apply.</p> | | | | | | | | | | | | |
| F006 | <p>This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.</p> <p>The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply</p> | N | OAC paragraph 3745-31-05(A)(3), as effective 12/01/06 (PTI P0106503 issued 8/16/2011) | N | N | Y | N | Y | Y | Y | N | N | <p>Basis-BAT limits not applicable SB 265 M&R- daily inspections during periods of active use Rp- quarterly deviation reports ET- if required</p> |



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| | to the PM2.5 emissions from the roadways because they are less than 10 tons per year. | | | | | | | | | | | | |
| F007 | <p>Compliance with ORC 3704.03(T) shall be demonstrated by the emission limitations and compliance with the applicable annual throughput restriction, BACT requirements, record keeping, reporting, and emissions testing required by this permit that are associated with the above ORC 3704.03(T) limitations and requirements.</p> <p>The above-specified limitations under ORC 3704.03(T) represent best available technology (BAT) requirements that were triggered as a result of the New Source Review (NSR) major modification in this permit action for the Carter Hollow Landfill project which increased potential emissions of PE and PM10.</p> | N | <p>ORC 3704.03(T) Best Available Technology (BAT) (PTI P0106503 issued 8/16/2011)</p> | N | Y | Y | N | Y | Y | Y | N | N | <p>Basis-BAT limits compliance with ORC 3704.03(T) shall be demonstrated by the emission limitations and compliance with the applicable annual throughput restriction, BACT requirements, record keeping, reporting, and emissions testing required by this permit that are associated with the above ORC 3704.03(T) limitations and requirements</p> <p>OR- The maximum throughput for this emissions unit shall not exceed 2,000,000 tons of gypsum and/or bottom ash and fly ash, based upon a rolling, 12-month summation of the throughput rates. After the first 12 calendar months of operation following the issuance of this permit, compliance with the throughput limitation shall be based upon a rolling, 12-month summation of the gypsum and/or bottom ash, fly ash throughput.</p> <p>M&R- daily inspections when in use Rp- quarterly deviation reports ET- if required</p> |
| F007 | <p>Fugitive particulate emissions (PE) shall not exceed 10.62 tons per rolling, 12-month period.</p> | <p>OAC rules 3745-31-10 thru 20 (PTI P0106503 issued 8/16/2011)</p> | N | N | Y | Y | N | Y | Y | Y | N | N | <p>Basis-BACT limits-use of speed reductions, watering, natural wind breaks, inherent high moisture content and the emission limitations listed under OAC rules 3745-31-10 through 20 above constitutes BACT for this emissions unit</p> |



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| | Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM2.5 emissions from the gypsum and ash handling operations because they are less than 10 tons per year. | | | | | | | | | | | | | summation of the throughput rates. After the first 12 calendar months of operation following the issuance of this permit, compliance with the throughput limitation shall be based upon a rolling, 12-month summation of the gypsum and/or bottom ash, fly ash throughput. M&R- daily inspections when in use Rp- quarterly deviation reports ET- if required |
| P002 | <p>Nitrogen oxides (NOx) emissions shall not exceed 2.48 pounds per hour and 10.87 tons per year (combined stack emissions - crusher and screener diesel engines).</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-10 through 20.</p> <p>Compliance with ORC 3704.03(T) shall be demonstrated by the emission limitations and compliance with applicable BACT requirements, record keeping, reporting, and emissions testing required by this permit that are associated with the above ORC 3704.03(T) limitations and requirements. The above-specified limitations under ORC</p> | N | ORC 3704.03(T) Best Available Technology (BAT) (PTI P0106503 issued 8/16/2011) | N | Y | Y | N | Y | Y | Y | N | N | <p>Basis-BAT limits - Compliance with ORC 3704.03(T) shall be demonstrated by the emission limitations and compliance with applicable BACT requirements, record keeping, reporting, and emissions testing required by this permit that are associated with the above ORC 3704.03(T) limitations and requirements</p> <p>OR- The permittee shall only use diesel fuel (or number 2 fuel oil) with a maximum sulfur content of 0.5%, by weight, for combustion in this emissions unit. The crusher water spray shall be in operation at all times when this emissions unit is operating to minimize or eliminate visible emissions of fugitive dust.</p> <p>M&R- daily inspections when in use Rp- quarterly deviation reports ET- if required</p> | |



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| | 3704.03(T) represent best available technology (BAT) requirements that were triggered as a result of the New Source Review (NSR) major modification in this permit action for the Carter Hollow Landfill project which increased potential emissions of PE and PM10. | | | | | | | | | | | | | |
| P002 | <p>Particulate emissions (PE) shall not exceed 0.11 pound per hour and 0.50 ton per year (combined stack emissions - crusher and screener diesel engines).</p> <p>PE emissions shall not exceed 0.17 pound per hour and 0.74 ton per year (fugitive crushing/screening).</p> <p>Particulate matter emissions less than or equal to 10 microns in diameter (PM10) shall not exceed 0.11 pound per hour and 0.50 ton per year (combined stack emissions - crusher and screener diesel engines).</p> <p>PM10 emissions shall not exceed 0.06 pound per hour and 0.24 ton</p> | OAC rules 3745-31-10 through 20 (PTI P0106503 issued 8/16/2011) | N | N | Y | Y | N | Y | Y | Y | N | N | <p>Basis-BACT limits, the use of water spray nozzles/dust suppression system, minimizing the drop height into the feeder, and the emission limitations listed under OAC rules 3745-31-10 through 20 above constitutes BACT for this emissions unit; and the diesel crusher engines shall be Tier III CARB certified engines.</p> <p>OR- The permittee shall only use diesel fuel (or number 2 fuel oil) with a maximum sulfur content of 0.5%, by weight, for combustion in this emissions unit. The crusher water spray shall be in operation at all times when this emissions unit is operating to minimize or eliminate visible emissions of fugitive dust.</p> <p>M&R- daily inspections when in use Rp- quarterly deviation reports ET- if required</p> | |



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| | <p>per year (fugitive crushing/screening). Visible PE shall not exceed 20% opacity, as a 6-minute average (stack emissions from crusher exhaust and screener exhaust).</p> <p>Visible PE of fugitive dust shall not exceed 10% opacity, as a 6-minute average (fugitive transfer/screening).</p> <p>Visible PE of fugitive dust shall not exceed 15% opacity, as a 6-minute average (crusher).</p> | | | | | | | | | | | | | |
| P002 | The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-10 through 20. | OAC rule 3745-17-11(B)(5)(a) (generator stack emissions-diesels) | N | N | Y | Y | N | Y | Y | Y | N | N | | |
| P002 | Exempt per 40 CFR 60.670(c)(2) (capacity is 150 tons per hour or less). | N | 40 CFR 60 Subpart 000 | N | Y | Y | N | Y | Y | Y | N | N | | |
| P002 | This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(B). | OAC rule 3745-18-06(G) | N | N | Y | Y | N | Y | Y | Y | N | N | | |
| P002 | The emission limitation required by this applicable rule is less | OAC rule 3745-17-07(A) | N | N | Y | Y | N | Y | Y | Y | N | N | | |



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| | stringent than the emission limitation established pursuant to OAC rules 3745-10 through 20. | | | | | | | | | | | | | |
| P002 | <p>Carbon Monoxide (CO) emissions shall not exceed 0.80 pound per hour and 3.50 tons per year (combined stack emissions - crusher and screener diesel engines).</p> <p>Volatile Organic Compounds (VOC) emissions shall not exceed 1.82 pounds per hour and 7.98 tons per year (combined stack emissions - crusher and screener diesel engines).</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 0.84 pound per hour and 3.68 tons per year (combined stack emissions - crusher and screener diesel engines).</p> <p>Particulate matter emissions less than or equal to 2.5 microns in diameter (PM_{2.5}) shall not exceed 0.11 pound per hour and 0.50 ton per year (combined stack emissions - crusher and screener diesel engines).</p> | N | OAC paragraph 3745-31-05(A)(3), as effective 11/30/01 (PTI P0106503 issued 8/16/2011) | N | Y | Y | N | Y | Y | Y | N | N | | |



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| <p>PM2.5 emissions shall not exceed 0.01 pound per hour and 0.04 ton per year (fugitive crushing/screening)</p> <p>The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30,2001, in this permit. On December 1, 2006, paragraph (A)(3) or OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been aproved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio.</p> | | | | | | | | | | | | |
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| | Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply. | | | | | | | | | | | | |
| P002 | <p>This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.</p> <p>The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the CO, VOC, SO2 and PM2.5 emissions from the diesel generators and the PM2.5 emissions from crushing and screening operations because the CO, VOC, SO2 and PM2.5 emissions are each less than 10 tons per year.</p> | N | OAC paragraph 3745-31-05(A)(3), as effective 12/01/06 (PTI P0106503 issued 8/16/2011) | N | Y | Y | N | Y | Y | Y | N | N | Basis-BAT less than 10 tpy |
| P002 | The new stationary compression ignition (CI) reciprocating internal combustion engines (RICE), located at a major source for hazardous air pollutants (HAPs), shall meet the | | <p>40 CFR Part 63 Subpart ZZZZ</p> <p>In accordance with 40 CFR 63.6590(c)(7) both engines associated with this emissions unit are affected sources</p> | N | Y | Y | N | Y | Y | Y | N | N | OR – Operate in accordance with manufacturer’s recommendations. M&R - daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., crusher, screens, and conveyor’s transfer points) serving this emissions unit. The presence or absence |



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| | requirements of 40 CFR Part 63, Subpart ZZZZ no later than May 3, 2013. | | with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions. | | | | | | | | | | | of any visible fugitive emissions shall be noted in an operations log. R- quarterly deviation reports ET- if required |
| P002 | The exhaust emissions from these engines shall not exceed: 0.30 gram PM/kW-hr 4.0 grams NOx + NMHC/kW-hr 5.0 grams CO/kW-hr See b)(2)j through b)(2)l. | | 40 CFR Part 60, Subpart IIII 40 CFR 60.4204(b) 40 CFR 60.4201(a) Table 1 to 40 CFR 89.112, Tier 3 | N | Y | Y | N | Y | Y | Y | N | N | <p>OR- (3) The stationary CI ICE and any control device shall be installed, operated, and maintained according to the manufacturer's emission-related written instructions and the permittee shall only change those emission-related settings that are allowed by the manufacturer. The CI ICE must also be installed and operated to meet the applicable requirements from 40 CFR Part 89, Control of Emissions from New and In-use Non-road CI ICE; and Part 1068, the General Compliance Provisions for Engine Programs. The permittee shall operate and maintain the stationary CI ICE to achieve the emissions standards established in 40 CFR 60.4204 over the entire life of the engine(s).</p> <p>(4) Diesel fuel burned in the CI, ICE shall not exceed the limit for sulfur as specified by 40 CFR 80.510(b), i.e., the maximum sulfur content of diesel fuel shall not exceed 15 ppm or 0.0015% sulfur by weight.</p> <p>(5) If the stationary CI internal combustion engine is equipped with a diesel particulate filter to comply with the emission standards in 40 CFR 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the permittee when the high backpressure limit of the engine is approached. M&R- fuel records, filter backpressure records, manufacturer's certification on site or log book. R- quarterly deviation reports ET- if required</p> | |
| P002 | The sulfur content of | N | 40 CFR 60.4207(b) | N | N | Y | N | Y | Y | Y | N | N | OR-(4) Diesel fuel burned in the CI, ICE | |



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| | <p>the diesel fuel burned in this emissions unit shall not exceed 15 ppm or 0.0015% sulfur by weight. See terms b)(2)l, c)(4), d)(7), e)(4) and g)(3).</p> | | 40 CFR 80.510(b) | | | | | | | | | | <p>shall not exceed the limit for sulfur as specified by 40 CFR 80.510(b), i.e., the maximum sulfur content of diesel fuel shall not exceed 15 ppm or 0.0015% sulfur by weight. M&R- (7) The permittee shall maintain a record of the diesel fuel burned in this ICE during each calendar year. The fuel oil usage can be calculated at the end of each year using the best method available to estimate the annual throughput which might include, but shall not be limited to: any flow meter installed on the engine, records of the volume of diesel fuel oil received with each delivery, the fuel oil levels recorded from the diesel storage tank, and/or the recorded or estimated hours of operation along with the manufacture's documentation of the fuel flow rate. R- quarterly deviation reports ET- if required Misc- portable source & useful life</p> |
| P002 | <p>Exhaust opacity from compression-ignition nonroad engines shall not exceed: 20% opacity during the acceleration mode 15% opacity during the lugging mode 50% opacity during the peaks in either the acceleration or lugging modes</p> | N | 40 CFR 89.113 (certified by manufacturer) | N | N | N | N | N | N | Y | N | N | ET- if required |
| B001 B002 B003 B004 | <p>Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.</p> | OAC rule 3745-17-07(A) | N | N | N | Y | N | Y | Y | Y | N | N | <p>ET- visible emission readings bi-monthly and continuous opacity monitoring while flow not going through the FGD. M&R - The continuous opacity monitors are located in the exhaust bypass stacks (MS1B-MS4B). The continuous opacity monitoring equipment monitors and records opacity during dry stack</p> |



Statement of Basis
DP&L, J.M. Stuart Generating Station
Permit Number: P0091208
Facility ID: 0701000007

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| | | | | | | | | | | | | | <p>conditions when the flue gases are not passing through the desulfurization control equipment and exhausting through the wet stacks identified by DP&L as (MS1W-MS4W).</p> <p>Because of the difficulties with monitoring opacity from a wet stack, Ohio EPA, DAPC, has drafted revised rules to address the scrubber/opacity issue. These rules have not yet gone out for public comment and are subject to change during the rule development and approval stages. However, the proposed approach for these rules is to replace the need for a continuous opacity monitor with a continuous particulate monitor (PM CEMS). Once the rules are promulgated and approved into Ohio's State Implementation Plan (SIP), DP&L can petition the Director to remove the COM's monitoring requirement.</p> <p>Rp- excess emission reports due quarterly along with deviation reports.</p> <p>Misc- A logbook documenting activities relating to the continuous opacity monitoring system must be kept on site and available for inspection during regular office hours.</p> |
| B001 B002 B003 B004 | Particulate emissions shall not exceed 0.10 lb/mmBtu actual heat input. | OAC rule 3745-17-10(C)(1) | N | N | N | Y | N | Y | Y | Y | N | N | <p>M&R- Until such time that an alternative monitoring option becomes available and is accepted by Ohio EPA and USEPA, the permittee shall operate and maintain equipment to continuously monitor and record the particulate mass emissions data in units of the standard(s) from this emission unit during operations in which the flue gas is passing through the desulfurization control equipment. Continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR 60.13, 40 CFR Part 60, Appendix B, Performance</p> |



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| | | | | | | | | | | | | | | | <p>Specifications 11 and modifications as approved by Ohio EPA and USEPA, and be operated in accordance with 40 CFR Part 60, Appendix B, Performance Specifications 11 and modifications as approved by USEPA, and 40 CFR Part 60, Appendix F, Procedure 2.</p> <p>Rp- quarterly deviation reports ET- twice before permit expiration permittee did not want to use PM Cems for direct compliance.</p> |
| B001 B002 B003 B004 | Sulfur dioxide emissions shall not exceed 3.16 lbs/mmBtu actual heat input. | OAC rule 3745-18-07(B)(2) | N | N | N | Y | N | Y | Y | Y | N | Y | | | <p>M&R- SO2 CEMs Rp-quarterly deviation reports ET- If required, but maintain 30-day rolling average. Misc-A logbook documenting activities relating to the continuous sulfur dioxide monitoring system must be kept on site and available for inspection during regular office hours. Also develop QA/QC plan for SO2 to comply with part 75 requirements.</p> |
| B001 B002 B003 B004 | d)(1), d)(5), d)(8), d)(9), e)(1), and e(4)-(5) sections of the permit terms. | N | 40 CFR, Part 64 – Compliance Assurance Monitoring (CAM) | N | N | N | N | Y | Y | N | N | N | | | <p>DP&L submitted a CAM plan for particulate emissions for particulate emissions. The CAM performance indicator for visible particulate emissions is the opacity from the bypass stacks (MS1B-MS4B) as measured by the certified continuous opacity monitoring system. The visible PE indicator range is each three-hour block average with an opacity value greater than 20%. The three hour block average opacity shall be based on the one-minute values recorded in d)(2)a. When the opacity value over the averaging period of the indicator range is greater than 20%, corrective action (including, but not limited to, an evaluation of the emissions unit and electrostatic precipitator) shall be assessed and implemented as appropriate</p> |
| B001 B002 | During flue gas desulfurization (FGD) | N | OAC rule 3745-31-02(A)(2) | N | N | Y | N | Y | Y | Y | N | Y | | | <p>M&R- SO2 CEMs Rp- quarterly deviation reports.</p> |



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| <p>B003 B004</p> | <p>operation only, Sulfur dioxide (SO2) emissions shall not exceed 1.77 lbs/MMBTU of actual heat input based upon a rolling, 30-day average verified by the operation of the certified SO2 continuous emissions monitor (CEM) system and the record keeping and reporting requirements for the SO2 CEM listed in the Title IV and Title V permit for this emissions unit.</p> | | <p>(PTI 07-00541 issued 12/9/2004)</p> | | | | | | | | | | <p>ET- If required, but maintain 30-day rolling average. Misc- A logbook documenting activities relating to the continuous sulfur dioxide monitoring system must be kept on site and available for inspection during regular office hours. Also develop QA/QC plan for SO2 to comply with part 75 requirements.</p> |
| <p>B001 B002 B003 B004</p> | <p>NA</p> | <p>N</p> | <p>OAC rule 3745-31-05(A)(3) does not apply to this modification based on OAC rule 3745-31-01(PPP)(1)(b) (PTI 07-00541 issued 12/9/2004)</p> | <p>N</p> | <p>Basis-BAT A flue gas desulfurization unit and FGD stack are allowed for installation on emissions units B001, B002, B003, & B004 (Units 1-4). Since the control equipment is being installed on a voluntary basis at this time, no specific SO2 emission reduction is cited, nor is there an additional requirement to conduct SO2 stack testing. For purposes of complying with air dispersion modeling requirements as depicted in Ohio EPA's Engineering Guide 69 dated 2003, the permittee has accepted the SO2 emission rate, during the operation of the FGD, listed in term b)(1)e. to show that this new allowable emission rate will not cause or contribute to a violation of a National Ambient Air Quality Standard (NAAQS) and/or Prevention of Significant Deterioration (PSD) increment violation based upon the permittee's air dispersion modeling information submitted on September 14th, 2004, to Ohio EPA, and</p> |



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| <p>B006 B007 B008 B009</p> | <p>The sulfur content of the diesel fuel burned in this emissions unit shall not exceed 15 ppm or 0.0015% sulfur, by weight.</p> | <p>N</p> | <p>40 CFR 63.6604 40 CFR 80.510(b)</p> | <p>N</p> | <p>Y</p> | <p>Y</p> | <p>N</p> | <p>Y</p> | <p>Y</p> | <p>Y</p> | <p>N</p> | <p>N</p> | <p>OR- (1) The quality of oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in b)(1)c above. (2) The permittee shall burn only number two fuel oil in this emissions unit. M&R - Option 1: oil as received or Option 2: grab sampling. R- (1) The permittee shall notify the Portsmouth Local Air Agency in writing of any record which shows a deviation of the allowable sulfur dioxide limitation specified in b)(1)c. above based upon the calculated sulfur dioxide emission rates from d)(1) above. The notification shall include a copy of such record and shall be sent to the Portsmouth Local Air Agency within 45 days after the deviation occurs. [Authority for term: 3745-77-07(C)(1)] (2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs. ET- if required</p> |
| <p>B006 B007 B008 B009</p> | <p>Table 8 – Applicability of General Provisions to Subpart ZZZZ of 40 CFR Part 63 show which parts of the General Provisions in 40 CFR 63.1 through 63.15 apply.</p> | <p>N</p> | <p>40 CFR 63.1 – 63.15</p> | <p>N</p> | <p>General Provisions</p> |
| <p>B010 B011 B012</p> | <p>Sulfur dioxide (SO₂) emissions shall not exceed 0.37 lb/mmBtu actual heat input.</p> | | <p>ORC 3704.03(T)</p> | <p>N</p> | <p>Y</p> | <p>Y</p> | <p>N</p> | <p>Y</p> | <p>Y</p> | <p>Y</p> | <p>N</p> | <p>N</p> | <p>The quality of No. 2 fuel oil burned in this emissions unit shall have a combination of sulfur content and heat content sufficient to comply with the allowable SO₂ emission limitation of 0.37 lb/mmBtu of actual heat input and a sulfur content limit of less than or equal to 0.35 percent sulfur, by weight.</p> |



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| <p>B010 B011 B012</p> | <p>The PM/PM10/PM2.5, NOx, CO and VOC emissions requirements of this rule are equivalent to the rolling, 12-month PM/PM10/PM2.5, NOx, CO and VOC emission limitations established pursuant to OAC rule 3745-31-05(D).</p> <p>The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart Dc.</p> | <p>OAC rule 3745-31-05(A)(3), as effective 11/30/01.</p> | | N | Y | Y | N | Y | Y | Y | N | N | <p>b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan. Permit to Install and operate P0116447 for these air contaminant sources takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purposes of avoiding BAT requirements under OAC rule 3745-31-05(A)(3) for PM/PM10/PM2.5, CO, NOx and VOC.</p> <p>i. The maximum annual heat input for this emissions unit shall not exceed 61,458 MMBtu, based upon a rolling, 12-month summation of the monthly heat input values.</p> <p>ii. PM/PM10/PM2.5 shall not exceed 0.45 ton per rolling, 12-month period.</p> <p>iii. CO emissions shall not exceed 1.12 tons per rolling, 12-month period.</p> <p>iv. NOx emissions shall not exceed 4.91 tons per rolling, 12-month period.</p> <p>v. VOC emissions shall not exceed 0.04 ton per rolling, 12-month period.</p> |
| <p>B010 B011 B012</p> | <p>This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan. Permit to Install and operate P0116447 for these air contaminant sources takes into account the following voluntary restrictions (including the use of any applicable air pollution control</p> | | <p>OAC rule 3745-31-05(A)(3), as effective 12/01/06</p> | N | Y | Y | N | Y | Y | Y | N | N | <p>OR-limited use M&R- (2) The permittee shall maintain monthly records of the following information for these emissions units: a. the monthly fuel usage of biodiesel and/or No. 2 fuel oil for B010, B011 and B012, in gallons; b. the monthly heat input rate for B010, B011 and B012, in MMBtu (calculated by multiplying d)(2)a by the oil heating value of biodiesel and/or No. 2 fuel oil); and c. the rolling, 12-month summation of the monthly heat input rates for B010, B011 and B012 (in MMBtu). R- quarterly deviation reports & the permittee shall notify the Portsmouth Local Air Agency of any record that shows a</p> |



Statement of Basis

DP&L, J.M. Stuart Generating Station

Permit Number: P0091208

Facility ID: 0701000007

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| | <p>equipment) as proposed by the permittee for the purposes of avoiding BAT requirements under OAC rule 3745-31-05(A)(3) for PM/PM10/PM2.5, CO, NOx and VOC.</p> <p>i. The maximum annual heat input for this emissions unit shall not exceed 61,458 MMBtu, based upon a rolling, 12-month summation of the monthly heat input values.</p> <p>ii. PM/PM10/PM2.5 shall not exceed 0.45 ton per rolling, 12-month period.</p> <p>iii. CO emissions shall not exceed 1.12 tons per rolling, 12-month period.</p> <p>iv. NOx emissions shall not exceed 4.91 tons per rolling, 12-month period.</p> <p>v. VOC emissions shall not exceed 0.04 ton per rolling, 12-month period.</p> | | | | | | | | | | | | <p>deviation of the allowable SO2 allowable emission limitation and/or sulfur content limitation based upon the calculated emission rates from d)(3) above. The notification shall include a copy of such record and shall be sent to the Portsmouth Local Air Agency within 45 days after the deviation occurs.</p> <p>[Authority for term: PTI P0116447 and 3745-77-07(C)(1)]</p> <p>(3) The permittee shall notify the Portsmouth Local Air Agency of any fuel burned in these emissions units other than biodiesel fuel or No. 2 fuel oil. The notification shall include a copy of such record and shall be sent to the Portsmouth Local Air Agency within 45 days after the deviation occurs.</p> <p>ET- demonstrated by record keeping</p> |
| <p>B010 B011 B012</p> | <p>PM/PM10/PM2.5 shall not exceed 0.45 ton per rolling, 12-month period.</p> <p>NOx emissions shall not exceed 4.91 tons per rolling, 12-month period.</p> | <p>OAC rule 3745-31-05(D) (Synthetic Minor restriction to qualify as a "limited use boiler" per 40 CFR Part 63, subpart DDDDD)</p> | | <p>N</p> | <p>Y</p> | <p>Y</p> | <p>N</p> | <p>Y</p> | <p>Y</p> | <p>Y</p> | <p>N</p> | <p>N</p> | <p>OR- (1) The maximum annual heat input for this emissions unit shall not exceed 61,458 MMBtu, based upon a rolling, 12-month summation of the monthly heat input values. The permittee has sufficient records to demonstrate compliance with the annual heat input limitation upon permit issuance in order to qualify as a "limited use boiler" per 40 CFR Part 63,</p> |



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| | <p>CO emissions shall not exceed 1.12 tons per rolling, 12-month period.</p> <p>Volatile organic compound (VOC) emissions shall not exceed 0.04 ton per rolling, 12-month period</p> <p>SO2 emissions shall not exceed 11.10 tons per rolling, 12-month period.</p> | | | | | | | | | | | | <p>Subpart DDDDD.</p> <p>(2) The permittee shall perform all maintenance activities as specified per the manufacturer's recommendations. To the extent practicable, the permittee shall maintain and operate the boiler, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.</p> <p>M&R- (1) The permittee shall maintain records of all maintenance activities performed in accordance with manufacturer's recommendations. Maintenance records for B010, B011 and B012 shall be made available to the Portsmouth Local Air Agency upon request.</p> <p>(2) The permittee shall maintain monthly records of the following information for these emissions units:</p> <ul style="list-style-type: none"> a. the monthly fuel usage of biodiesel and/or No. 2 fuel oil for B010, B011 and B012, in gallons; b. the monthly heat input rate for B010, B011 and B012, in MMBtu (calculated by multiplying d)(2)a by the oil heating value of biodiesel and/or No. 2 fuel oil); and c. the rolling, 12-month summation of the monthly heat input rates for B010, B011 and B012 (in MMBtu). <p>R- quarterly deviation (excursion) reports that identify the following:</p> <ul style="list-style-type: none"> a. all exceedances of the rolling, 12-month heat input limitation for emissions units B010, B011 and B012. <p>The permittee shall notify the Portsmouth Local Air Agency of any record that shows a deviation of the allowable SO2 allowable emission limitation and/or sulfur content limitation based upon the calculated emission rates from d)(3) above. The notification shall include a copy of such record and shall be sent to the Portsmouth</p> |
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| | | | | | | | | | | | | | | Local Air Agency within 45 days after the deviation occurs. The permittee shall notify the Portsmouth Local Air Agency of any fuel burned in these emissions units other than biodiesel fuel or No. 2 fuel oil. The notification shall include a copy of such record and shall be sent to the Portsmouth Local Air Agency within 45 days after the deviation occurs. ET- compliance shall be demonstrated by adding the current month's emissions to the preceding eleven calendar months for all pollutants. |
| B010 B011 B012 | The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to 40 CFR Part 60, Subpart Dc. | OAC rule 3745-17-07(A)(1) | N | N | N | N | N | N | N | N | N | N | N | |
| B010 B011 B012 | Particulate emissions shall not exceed 0.020 lb/mmBtu actual heat input. | OAC rule 3745-17-10(B)(1) | N | N | Y | Y | N | Y | Y | Y | N | N | N | ET- if required |
| B010 B011 B012 | The SO ₂ emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to ORC 3704.03(T). | OAC rule 3745-18-06 | N | N | N | N | N | N | N | N | N | N | N | |
| B010 B011 B012 | Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except for one 6-minute period per hour of not more than 27% | N | 40 CFR Part 60, Subpart Dc | N | N | N | N | N | N | Y | N | N | N | ET-If required, compliance shall be determined in accordance with Test Method 9, as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002. |



| | opacity. | | | | | | | | | | | | |
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| B010 B011 B012 | General Provisions | N | 40 CFR 60.1 – 60.19 | N | N | N | N | N | N | N | N | N | General Provisions |
| B010 B011 B012 | Tune-up requirements specified in Table 3. [40 CFR 63.7540] | N | 40 CFR Part 63, Subpart DDDDD (40 CFR 63.7480 – 63.7575) [In accordance 40 CFR 63.7500(c) this emissions unit is a limited-use boiler subject to the tune-up requirements specified in this section.] | N | N | N | N | N | N | N | N | N | Tune-up requirements specified in Table 3. [40 CFR 63.7540] The permittee shall comply with the requirements and limits of 40 CFR Part 63, Subpart DDDDD for the facility’s existing boilers and shall be in compliance with this NESHAP no later than January 31, 2016. This emissions unit is identified as limited-use boiler and is not subject to the emission limits in Table 2 of the subpart, the operating limits in Table 4 of the subpart, or the energy assessment requirements in Table 3 of the subpart. The limited-use boiler is subject to 5-year tune-up requirements, conducted in accordance with 40 CFR 63.7540(a)(10)(i) through (vi) and Table 3 to the subpart: Each limited-use boiler identified above shall have a federally enforceable average annual capacity factor of no more than 10%. |
| B010 B011 B012 | Table 10 to Subpart DDDDD of 40 CFR Part 63 – Applicability of General Provisions to Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63.1 – 63.16 apply. | N | 40 CFR Part 63.1 – 63.16 (40 CFR 63.7565) | N | N | N | N | N | N | N | N | N | Table 10 to Subpart DDDDD of 40 CFR Part 63 – Applicability of General Provisions to Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63.1 – 63.16 apply. |



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**Division of Air Pollution Control
Title V Permit
for
DP&L, J.M. Stuart Generating Station**

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| Facility ID: | 0701000007 |
| Permit Number: | P0091208 |
| Permit Type: | Renewal |
| Issued: | 6/18/2015 |
| Effective: | To be entered upon final issuance |
| Expiration: | To be entered upon final issuance |



Division of Air Pollution Control
Title V Permit
for
DP&L, J.M. Stuart Generating Station

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Draft Title V Permit
DP&L, J.M. Stuart Generating Station
Permit Number: P0091208
Facility ID: 0701000007
Effective Date: To be entered upon final issuance

Authorization

Facility ID: 0701000007
Facility Description: Electric Generating Station
Application Number(s): A0022569, A0022570, A0037566, A0039691, A0043335, A0053507
Permit Number: P0091208
Permit Description: Title V Renewal permit for coal-fired electric generation station.
Permit Type: Renewal
Issue Date: 6/18/2015
Effective Date: To be entered upon final issuance
Expiration Date: To be entered upon final issuance
Superseded Permit Number: P0091207

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

DP&L, J.M. Stuart Generating Station
745 U.S. Route 52
Aberdeen, OH 45101

Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Portsmouth City Health Dept., Air Pollution Unit
605 Washington Street
3rd Floor
Portsmouth, OH 45662
(740)353-5156

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Portsmouth City Health Dept., Air Pollution Unit. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months and no later than 6 months prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler
Director



Draft Title V Permit
DP&L, J.M. Stuart Generating Station
Permit Number: P0091208
Facility ID: 0701000007
Effective Date: To be entered upon final issuance

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
- (1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions
 - (2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions
 - (3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting For State-Only Requirements
 - (4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
 - (5) Standard Term and Condition A. 30.

(Authority for term: ORC 3704.036(A))

2. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
- (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) The operating conditions existing at the time of sampling or measurement.

(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))

- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))

- c) The permittee shall submit required reports in the following manner:
- (1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any submitted scheduled maintenancerequests, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

- (2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions of this Title V permit), all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be submitted promptly to the Portsmouth City Health Dept., Air Pollution Unit. Except as provided below, the written reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this Standard Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy (for the deviations so reported) the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this Standard Term and Condition.

See A.29 below if no deviations occurred during the quarter.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

- (3) All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with Standard Term and Condition A.2)c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted to the Portsmouth City Health Dept., Air Pollution Unit by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations

from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with Standard Term and Condition A.2.c)(2) above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))

- (4) Each written report shall be signed by a Responsible Official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete." Signature by the Responsible Official may be represented by entry of the personal identification number (PIN) by the Responsible Official as part of the electronic submission process or by the scanned attestation document signed by the Responsible Official that is attached to the electronically submitted written report.

(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

- (5) Consistent with A.2.c.1. above, reports of any required monitoring and/or record keeping information required to be submitted to Ohio EPA shall be submitted to Portsmouth City Health Dept., Air Pollution Unit unless otherwise specified.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

3. Reporting of Any Exceedence of a Federally Enforceable Emission Limitation or Control Requirement Resulting From Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

4. Risk Management Plans

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. ("Act"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

- a) a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or
- b) as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

(Authority for term: OAC rule 3745-77-07(A)(4))

5. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

(Authority for term: OAC rule 3745-77-07(A)(5))

6. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

(Authority for term: OAC rule 3745-77-07(A)(6))

7. General Requirements

- a) Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit except as provided pursuant to A.16 below.
- c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.11 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.
- f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:
 - (1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or
 - (2) the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or
 - (3) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))

8. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

(Authority for term: OAC rule 3745-77-07(A)(8))

9. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

(Authority for term: OAC rule 3745-77-07(A)(9))

10. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these standard terms and conditions shall apply to all operating scenarios authorized in this permit.

(Authority for term: OAC rule 3745-77-07(A)(10))

11. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a) Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b) This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c) The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d) The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

12. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

(Authority for term: OAC rule 3745-77-07(B))

13. Compliance Requirements

- a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a Responsible

Official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

- b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
- (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c) The permittee shall submit progress reports to the Portsmouth City Health Dept., Air Pollution Unit concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the Portsmouth City Health Dept., Air Pollution Unit) and the Administrator of the U.S. EPA in the following manner and with the following content:
- (1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
 - (2) Compliance certifications shall include the following:
 - a. Identification of each term or condition that is the basis of the certification. The identification may include a statement by the Responsible Official that every term and condition that is federally enforceable has been reviewed, and such terms and conditions with which there has been continuous compliance throughout the year are not separately identified.



- b. The permittee's current compliance status.
 - c. Whether compliance was continuous or intermittent consistent with A.13.d.2.a above.
 - d. The method(s) used for determining the compliance status of the source currently and over the required reporting period consistent with A.13.d.2.a above.
 - e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
- (3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))

14. Permit Shield

- a) Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b) This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

(Authority for term: OAC rule 3745-77-07(F))

15. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the Portsmouth City Health Dept., Air Pollution Unit with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the Portsmouth City Health Dept., Air Pollution Unit as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

16. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met.

This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

(Authority for term: OAC rule 3745-77-07(G))

17. Off-Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

- a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.
- c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit-to-install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(Authority for term: OAC rule 3745-77-07(I))

18. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Federal Register 8314, Feb. 24, 1997), in the context of any future proceeding.

(This term is provided for informational purposes only.)

19. Insignificant Activities or Emissions Levels

Each IEU that is subject to one or more applicable requirements shall comply with those applicable requirements.

(Authority for term: OAC rule 3745-77-07(A)(1))

20. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

(Authority for term: OAC rule 3745-77-07(A)(1))

21. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

(Authority for term: OAC rule 3745-77-07(A)(1))

22. Permanent Shutdown of an Emissions Unit

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the Responsible Official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the Responsible Official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

Unless otherwise exempted, no emissions unit identified in this permit that has been certified by the Responsible Official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

(Authority for term: OAC rule 3745-77-01)

23. Title VI Provisions

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:



- a) Persons operating appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.
- b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.
- c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

(Authority for term: OAC rule 3745-77-01(H)(11))

24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or record keeping information shall be submitted to the Portsmouth City Health Dept., Air Pollution Unit.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Portsmouth City Health Dept., Air Pollution Unit. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

25. Records Retention Requirements Under State Law Only

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

26. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine



whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

(Authority for term: OAC rule 3745-77-07(C))

27. Scheduled Maintenance/Malfunction Reporting For State-Only Requirements

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the Portsmouth City Health Dept., Air Pollution Unit in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

28. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Portsmouth City Health Dept., Air Pollution Unit must be notified in writing of any transfer of this permit.

(Authority for term: OAC rule 3745-77-01(C))

29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

- a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or
- b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potential to emit; or
- c) where the company's Responsible Official has certified that an emissions unit has been permanently shut down.



Draft Title V Permit
DP&L, J.M. Stuart Generating Station
Permit Number: P0091208
Facility ID: 0701000007

Effective Date: To be entered upon final issuance

30. Submitting Documents Required by this Permit

All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the Portsmouth City Health Dept., Air Pollution Unit, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the Responsible Official may be represented as provided through procedures established in Air Services.



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B. Facility-Wide Terms and Conditions



1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
 - a) None.
2. The following insignificant emission units at this facility must comply with all applicable State and federal regulations, as well as any emissions limitations and/or control requirements contained within the identified permit to install for the emissions unit. The insignificant emissions units listed below are subject to one or more applicable requirements contained in a permit to install or in the SIP approved versions of OAC Chapters 3745-17, 3745-18, and 3745-21, and/or 40 CFR Part 60 or 63:
 - a) P001-Fire protection pump – PBR 13641 issued 5/13/15
[Authority for term: 3745-77-07(A)(13)]
3. The following emissions units contained in this permit is subject to 40 CFR Part 63, Subpart UUUUU, National Emission Standards for Hazardous Air Pollutants from Coal and oil-fired Electric Utility Steam Generating Units: B001-B004. The complete MACT requirements, including the MACT General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://efcr.gpoaccess.gov> or by contacting the Portsmouth Local Air Agency.
4. The following emissions units contained in this permit is subject to 40 CFR Part 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants from Coal and oil-fired Electric Utility Steam Generating Units: B010, B011, and B012. The complete MACT requirements, including the MACT General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://efcr.gpoaccess.gov> or by contacting the Portsmouth Local Air Agency.
5. The permittee shall ensure that any CAIR NO_x, SO₂, or NO_x ozone season units complies with the requirements of OAC chapter 3745-109, which includes submitting timely permit applications. The permittee shall ensure that the affected emissions units comply with those requirements as outlined in the permit application submitted as required by OAC rules 3745-109-03, 3745-109-10 and 3745-109-16 for the affected emissions units.

The permittee shall also comply with any subsequent federally mandated programs that may replace the CAIR program affecting electric generating facilities.

Note: Ohio EPA DAPC has completed proposed rule amendments for OAC chapter 3745-14, specifically, OAC rule 3745-14-01 and OAC rule 3745-14-06, which facilitated the transition of the affected units from OAC chapter 3745-14 into the federal Clean Air Interstate Rule (CAIR) program which began with the 2009 control periods. This began the process of “sunsetting” the parts of OAC chapter 3745-14 which were no longer needed as a result of Ohio’s CAIR rules (OAC chapter 3745-109).

On April 29th, 2014, the United States Supreme Court upheld EPA’s Cross –State Air Pollution Rule (CSAPR) commonly known as the “Transport Rule” and reversed the 2012 decision by the U.S. Court of Appeals for the District of Columbia invalidating the rules. At this time, CAIR remains in place and no immediate action from States or affected sources is expected. The CAIR allowances for affected units and requirements of the CAIR rule will continue pending further guidance from USEPA on implementing CAIR.

- [Authority for term: OAC rules 3745-109 and 3745-77-07(A)(5)]
6. Cross-State Air Pollution Rule (CSAPR)-subject units at this Title V source are subject to CSAPR applicable requirements. These applicable requirements will be included in the Title V permit terms and conditions prior to issuance of the Final Title V permit based on the May 13, 2015 U.S. EPA guidance document titled "Title V Permit Guidance and Template for the Cross-State Air Pollution Rule" available at: http://www.epa.gov/crossstaterule/pdfs/CSAPR_Title_V_Permit_Guidance.pdf

(Authority for term: OAC rule 3745-77-07(A)(5))

7. The following emissions units contained in this permit are subject to 40 CFR Part 63, Subpart ZZZZ: B006, B007, B008, B009, P001 and P002.
- The existing emergency or limited use compression ignition (CI) reciprocating internal combustion engine(s) (RICE) fire protection pump (P001), less than or equal to 500 brake horse power and located at a major source for hazardous air pollutants (HAPs), is subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines, 40 CFR Part 63, Subpart ZZZZ.

[40 CFR 63.6585], [40 CFR 63.6590(a)], [40 CFR 63.6595], and [40 CFR 63.6602]

The compression ignition (CI) reciprocating internal combustion engine(s) (RICE), Diesel Generator No. 1 thru 4 (B006, B007, B008, B009), greater than 500 brake horse power and located at a major source for hazardous air pollutants (HAPs), are subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines, Part 63, Subpart ZZZZ. These existing stationary CI RICE diesel generators installed before 6/12/06, shall meet the requirements of Part 63, Subpart ZZZZ no later than 5/3/13.

[40 CFR 63.6585], [40 CFR 63.6590(a)], [40 CFR 63.6595], and [40 CFR 63.6602]

The compression ignition (CI) reciprocating internal combustion engine(s) (RICE), crusher and screener diesel engines (P002), less than or equal to 500 brake horse power and located at a major source for hazardous air pollutants (HAPs), is subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines, Part 63, Subpart ZZZZ. The new stationary CI RICE installed on or after 6/12/06, shall meet the requirements of Part 63, Subpart ZZZZ upon startup, through demonstration of compliance with the New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines, Part 60, Subpart IIII.

[40 CFR 63.6585], [40 CFR 63.6590(a)], [40 CFR 63.6595], and [40 CFR 63.6590(c)]

8. The Portsmouth Local Air Agency has approved the Compliance Assurance Monitoring (CAM) plan submitted by the permittee, pursuant to 40 CFR Part 64, for emissions units B001-B004. The permittee shall comply with the provisions of the plan (as specified in Part C – Terms and Conditions for Emissions Units (B001-B004) during any operation of the aforementioned emissions unit.

Pursuant to 40 CFR 64.2(b), CAM will not apply to the MACT emission limitations or standards in 40 CFR Part 63, Subpart UUUUU, upon the date that Emissions Units (B001-B004) become subject to the this rule.

[Authority for term: 40 CFR Part 64]



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C. Emissions Unit Terms and Conditions



1. Emissions Unit Group -Boilers: B001,B002,B003,B004

| EU ID | Operations, Property and/or Equipment Description |
|-------|---|
| B001 | Babcock and Wilcox boiler Babcock and Wilcox pulverized coal-fired, dry-bottom, wall-fired utility boiler, with cell burner technology, having a nominal capacity of 5649 mmBtu/hr and controlled with an electrostatic precipitator (ESP), selective catalytic reduction (SCR), and flue gas desulfurization (FGD) scrubber. |
| B002 | Babcock and Wilcox boiler Babcock and Wilcox pulverized coal-fired, dry-bottom, wall-fired utility boiler, with cell burner technology, having a nominal capacity of 5649 mmBtu/hr and controlled with an electrostatic precipitator (ESP), selective catalytic reduction (SCR), and flue gas desulfurization (FGD) scrubber. |
| B003 | Babcock and Wilcox boiler Babcock and Wilcox pulverized coal-fired, dry-bottom, wall-fired utility boiler, with cell burner technology, having a nominal capacity of 5649 mmBtu/hr and controlled with an electrostatic precipitator (ESP), selective catalytic reduction (SCR), and flue gas desulfurization (FGD) scrubber. |
| B004 | Babcock and Wilcox boiler Babcock and Wilcox pulverized coal-fired, dry-bottom, wall-fired utility boiler, with cell burner technology, having a nominal capacity of 5649 mmBtu/hr and controlled with an electrostatic precipitator (ESP), selective catalytic reduction (SCR), and flue gas desulfurization (FGD) scrubber. |

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
 - (1) b)(2)a., d)(8), and f)(1)b.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|-------------------------------|---|
| a. | OAC rule 3745-17-07(A) | Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule. |
| b. | OAC rule 3745-17-10(C)(1) | Particulate matter (PM) emissions shall not exceed 0.10 lb/mmBtu actual heat input. |



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| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|--|---|
| c. | OAC rule 3745-18-07(B)(2) | Sulfur dioxide (SO ₂) emissions shall not exceed 3.16 lbs/mmBtu actual heat input. |
| d. | 40 CFR, Part 64 – Compliance Assurance Monitoring (CAM) | See d)(1), d)(5), d)(8), d)(9), d)(10), d)(11), e)(1), e)(3), e)(6) and e)(7). Pursuant to 40 CFR 64.2(b) CAM will not apply to the MACT emission limitations or standards in 40 CFR Part 63, Subpart UUUUU after the compliance date in that rule. |
| e. | OAC rule 3745-31-02(A)(2) (PTI 07-00541 issued 12/9/2004) | During flue gas desulfurization (FGD) operation only, Sulfur dioxide (SO ₂) emissions shall not exceed 1.77 lbs/MMBTU of actual heat input based upon a rolling, 30-day average verified by the operation of the certified SO ₂ continuous emissions monitor (CEM) system and the record keeping and reporting requirements for the SO ₂ CEM listed in the Title IV and Title V permit for this emissions unit. |
| f. | OAC rule 3745-31-05(A)(3) does not apply to this modification based on OAC rule 3745-31-01(PPP)(1)(b). (PTI 07-00541 issued 12/9/2004) | See (2)a. |
| g. | 40 CFR Part 63, Subpart UUUUU (Table 2: 40 CFR Part 63.9991) effective date of April 16, 2015. [In accordance with 40 CFR 60.9982(d), this emissions unit is an existing EGU if it is not new or reconstructed. An existing electric steam generating unit that meets the applicability requirements after the effective date of this final rule due to a change in process (e.g., fuel or utilization) is considered to be an existing source under this subpart.] | Except as provided under the Emissions Averaging provisions specified in 63.10009 if applicable, the permittee shall comply with the following: Comply with either limit: 0.03 lb/MMBtu (PM) or 0.30 lb/MWh (PM); OR 5.0E-5 lb/MMBtu or 5.0E-1 lb/GWh of Total non-Hg HAP metals; OR Individual HAP metals: Antimony (Sb) 8.0E-1 lb/TBtu or 8.0E-3 lb/GWh. Arsenic (As) 1.1E0 lb/TBtu or 2.0 E-2 lb/GWh. Beryllium (Be) 2.0E-1 lb/TBtu or 2.0E-3 lb/GWh. |

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|--|-------------------------------|---|
| | | <p>Cadmium (Cd) 3.0E-1 lb/TBtu or 3.0E-3 lb/GWh.</p> <p>Chromium (Cr) 2.8E0 lb/TBtu or 3.0E-2 lb/GWh.</p> <p>Cobalt (Co) 8.0E-1 lb/TBtu or 8.0E-3 lb/GWh.</p> <p>Lead (Pb) 1.2E0 lb/TBtu or 2.0E-2 lb/GWh.</p> <p>Manganese (Mn) 4.0E0 lb/TBtu or 5.0E-2 lb/GWh.</p> <p>Nickel (Ni) 3.5E0 lb/TBtu or 4.0E-2 lb/GWh.</p> <p>Selenium (Se) 5.0E lb/TBtu or 6.0E-2 lb/GWh.</p> <p>Hydrogen chloride (HCl) 2.0E-3 lb/MMBtu or 2.0E-2 lb/MWh, OR</p> <p>Sulfur dioxide (SO₂) 2.0E-1 lb/MMBtu or 1.5E0 lb/MWh.</p> <p>Mercury (HG) 1.2E0 lb/TBtu or 1.3E-2 lb/GWh.</p> |

(2) Additional Terms and Conditions

- a. OAC rule 3745-31-05(A)(3) did not apply to this modification issued 12/09/2004, based on OAC rule 3745-31-01(QQQ)(1)(b).

This permit allowed the voluntary installation of flue gas desulfurization (FGD) scrubbers on emissions unit B001, B002, B003, & B004. A permit to install was required to determine whether the air quality impacts associated with the installation of the new FGD unit exceeded the levels outlined in OAC rule 3745-31-01(QQQ)(1)(b). Because an environmentally beneficial exemption does not allow installation of a project that exceeds modeling thresholds, the installation of the scrubber required a permit to install.

- b. The permittee shall maintain a written quality assurance/quality control plan for the continuous opacity monitoring system, designed to ensure continuous valid

and representative readings of opacity and compliance with 40 CFR Part 60, Appendix B, Performance Specification 1. The plan shall include, at a minimum, procedures for conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring accurate operation of the continuous opacity monitoring system on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous opacity monitoring system must be kept on site and available for inspection during regular office hours.

The continuous opacity monitors are located in the exhaust bypass stacks (MS1B-MS4B). The continuous opacity monitoring equipment monitors and records opacity during dry stack conditions when the flue gases are not passing through the desulfurization control equipment and exhausting through the wet stacks identified by DP&L as (MS1W-MS4W).

Because of the difficulties with monitoring opacity from a wet stack, Ohio EPA, DAPC, has drafted revised rules to address the scrubber/opacity issue. These rules have not yet gone out for public comment and are subject to change during the rule development and approval stages. However, the proposed approach for these rules is to replace the need for a continuous opacity monitor with a continuous particulate monitor (PM CEMS). Once the rules are promulgated and approved into Ohio's State Implementation Plan (SIP), DP&L can petition the Director to remove the COM's monitoring requirement.

- c. The continuous opacity monitoring system consists of all the equipment used to acquire data and record opacity.
- d. The permittee shall maintain a written quality assurance/quality control plan for the continuous SO₂ monitoring system, designed to ensure continuous valid and representative readings of SO₂ emissions in units of the applicable standard(s). Except as allowed below, the plan shall follow the requirements of 40 CFR Part 60, Appendix F and 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous SO₂ monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct relative accuracy test audits for the continuous SO₂ monitoring system in accordance with the frequencies required pursuant to 40 CFR Part 60 and 40 CFR Part 75; or may follow relative accuracy test audit frequency requirements for monitoring systems subject to 40 CFR 75, Appendix B, in lieu of frequencies required in 40 CFR Part 60. In either case, results shall be recorded and reported in units of the applicable standard(s) in accordance with 40 CFR Part 60.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits pursuant to 40 CFR Part 60, and linearity checks pursuant to 40 CFR Part 75; however, linearity checks completed pursuant to 40 CFR Part 75, Appendix B, may be substituted for the quarterly cylinder gas or relative accuracy audits required per 40 CFR Part 60.



- e. The continuous SO₂ monitoring system consists of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.
 - f. The permittee shall maintain a written quality assurance/quality control plan for the continuous particulate monitoring system, designed to ensure continuous valid and representative readings of particulate matter and compliance with 40 CFR Part 60, Appendix B, Performance Specification 11. The plan shall include, at a minimum, procedures for conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous particulate monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring accurate operation of the continuous particulate monitoring system on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous particulate monitoring system must be kept on site and available for inspection during regular office hours.
 - g. The continuous particulate monitoring system consists of all the equipment used to acquire data and record particulate emissions.
 - h. During normal source operation, the coal combustion gases are routed through the ESP and FGD and vented out the wet stack. However, the permittee is also capable of bypassing the FGD and venting emissions out the emission unit bypass stack. The permittee plans to discontinue the use of the bypass stacks and removing the continuous monitors associated with the bypass stacks i.e.: Flow, NO_x, SO₂, CO₂, and opacity (COMS). DP&L shall submit a request to Ohio EPA to remove the monitors and discontinue use of the bypass stacks with in 6 months of scheduled removal. If the request is approved, Ohio EPA will consider these bypass stacks as out of service for combustion emissions, except for rare emergency use associated with the prevention of boiler overpressure or melting of the FGD vessels. Such infrequent use of the bypass stacks must then follow the malfunction provisions of this Title V permit.
- c) Operational Restrictions
- (1) None.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA Central Office verifying that the continuous opacity monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter/document of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and

transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

[40 CFR 60.13] and [40 CFR Part 60, Appendix B]

- (2) The permittee shall operate and maintain the continuous opacity monitoring system to continuously monitor and record the opacity of the particulate emissions from this emissions unit. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The continuous opacity monitors are located in the exhaust bypass stacks (MS1B-MS4B). The continuous opacity monitoring equipment monitors and records opacity during dry stack conditions when the flue gases are not passing through the desulfurization control equipment and exhausting through the wet stacks identified by DP&L as (MS1W-MS4W).

Because of the difficulties with monitoring opacity from a wet stack, Ohio EPA, DAPC, has drafted revised rules to address the scrubber/opacity issue. These rules have not yet gone out for public comment and are subject to change during the rule development and approval stages. However, the proposed approach for these rules is to replace the need for a continuous opacity monitor with a continuous particulate monitor (PM CEMS). Once the rules are promulgated and approved into Ohio's State Implementation Plan (SIP), DP&L can petition the Director to remove the COM's monitoring requirement.

The permittee shall maintain records of data obtained by the continuous opacity monitoring system including, but not limited to:

- a. percent opacity on an instantaneous (one-minute) and 6-minute block average basis;
- b. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- c. hours of operation of the emissions unit, continuous opacity monitoring system, and control equipment;
- d. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous opacity monitoring system;
- e. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous opacity monitoring system; as well as,
- f. the reason (if known) and the corrective actions taken (if any) for each such event in (d) and (e).

[40 CFR 60.13] and [40 CFR Part 60, Appendix B]

- (3) The permittee shall maintain on-site, the document(s) of certification received from the U.S. EPA or the Ohio EPA Central Office documenting that the continuous SO₂ monitoring system has been certified to meet the requirements of 40 CFR Part 60,

Appendix B, Performance Specifications 2 and 6. The letter(s)/document(s) of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

[40 CFR 60.13] and [40 CFR Part 60, Appendix B]

- (4) The permittee shall operate and maintain equipment to continuously monitor and record SO₂ emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of all data obtained by the continuous SO₂ monitoring system including, but not limited to:

- a. emissions of SO₂ in parts per million for each cycle time of the analyzer, with no resolution less than one data point per minute required;
- b. emissions of SO₂ in pounds per hour and in units of the applicable standard(s) in the appropriate averaging period;
- c. results of quarterly cylinder gas audits;
- d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);
- f. hours of operation of the emissions unit, continuous SO₂ monitoring system, and control equipment;
- g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous SO₂ monitoring system;
- h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous SO₂ monitoring system; as well as,
- i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

All valid data points generated and recorded by the continuous emission monitoring and data acquisition and handling system shall be used in the calculation of the pollutant concentration and/or emission rate over the appropriate averaging period.

[40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

- (5) To obtain an exemption from the visible emissions limitations specified in OAC rule 3745-17-17(A)(3)(a)(i) or (A)(3)(b)(i), the permittee shall operate and maintain a temperature monitor(s) and recorder(s) that measure and record the temperature of the boiler exhaust gases entering the ESP:



- a. during all periods of start-up until the ESPs are operational or until the inlet temperature of the ESPs achieve a temperature of two hundred fifty (250) degrees Fahrenheit; and
- b. during all periods of shutdown until the inlet temperature of the ESPs drop below the temperature of two hundred fifty (250) degrees Fahrenheit. An electronic or hardcopy record of the temperature during periods of start-up and shutdown shall be maintained.

The temperature monitors and recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modification deemed necessary by the permittee, and shall be capable of accurately measuring the temperature of the boiler exhaust gases in units of degrees Fahrenheit.

[Authority for term: OAC rules 3745-17-07(A)(3)(a) and (b)]

- (6) Until such time that an alternative monitoring option becomes available and is accepted by Ohio EPA and USEPA, the permittee shall operate and maintain equipment to continuously monitor and record the particulate mass emissions data in units of the standard(s) from this emission unit during operations in which the flue gas is passing through the desulfurization control equipment. Continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR 60.13, 40 CFR Part 60, Appendix B, Performance Specifications 11 and modifications as approved by Ohio EPA and USEPA, and be operated in accordance with 40 CFR Part 60, Appendix B, Performance Specifications 11 and modifications as approved by USEPA, and 40 CFR Part 60, Appendix F, Procedure 2.

The continuous monitoring system consists of all the equipment used to acquire data and includes the data recording/processing hardware and software.

The permittee shall maintain a certification letter from the Ohio EPA documenting that the continuous particulate monitoring system has been certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 11, with any modifications as approved by Ohio EPA and USEPA. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous particulate monitoring system: particulate emissions in units of the standard(s) on a one-hour basis, results of daily zero/span calibration checks, magnitude of manual calibration adjustments, the duration of time that the continuous particulate monitoring system was not operating while flue gases were passing through the desulfurization control device, and the duration of time that the flue gases were passing through the desulfurization control device.

[Authority for term: 40 CFR Part 60.13, 40 CFR Part 64, and 3745-77-07(C)(1)]



- (7) The permittee shall perform periodic Method 9 readings from the wet stack. The Method 9 readings must be taken by a certified observer with the following conditions:
 - a. Monthly Method 9 readings must be taken for at least two hours each consecutive month but may be performed in no less than 30-minute intervals during regular source operation.
 - b. If excess opacity is identified during monthly Method 9 readings, the permittee must revert back to weekly Method 9 readings until six consecutive weeks of Method 9 data indicate compliance with the opacity limit.
 - c. If continuous compliance with the opacity limitation is demonstrated for 6 consecutive months, the permittee may petition the Director for a reduction in the frequency of Method 9 readings.

[Authority for term: 3745-77-07(C)(1)]

- (8) Each continuous particulate monitoring system installed shall meet the siting requirements in 40 CFR Part 60, Appendix B, Performance Specifications 11.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

[Authority for term: 40 CFR Part 60, 40 CFR Part 64, and 3745-77-07(C)(1)]

- (9) The permittee shall comply with the applicable monitoring and record keeping requirements required under 40 CFR Part 63, Subpart UUUUU, including the following sections (As effective with the compliance date of April 16, 2015):

| Applicable Rule | Requirement |
|-------------------|----------------------------|
| 63.10032-63.10033 | Recordkeeping requirements |

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (10) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicator for visible particulate emissions is the opacity from the bypass stacks (MS1B-MS4B) as measured by the certified continuous opacity monitoring system. The visible PE indicator range is each three-hour block average with an opacity value greater than 20%. The three hour block average opacity shall be based on the one-minute values recorded in d)(2)a. When the opacity value over the averaging period of the indicator range is greater than 20%, corrective action (including, but not limited to, an evaluation of the emissions unit and electrostatic precipitator) shall be assessed and implemented as appropriate.

Upon detecting an excursion of the visible particulate emission indicator range listed above, the owner or operator shall restore operation of the emissions unit (including the control device) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown, or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as thorough response by the computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.

If a determination is made by the Administrator or Ohio EPA that the permittee has not used acceptable procedures in response to an excursion or exceedance based on the results of a determination made under 40 CFR Part 64.7(d)(2), the permittee may be required to develop a Quality Improvement Plan (QIP) consistent with the requirements of 40 CFR Part 64.8

[40 CFR Part 64 and 3745-77-07(C)(1)]

- (11) After the compliance date specified in 40 CFR Part 63, Subpart UUUUU, the PM monitoring requirements specified in 40 CFR section 63.10010 may satisfy the monitoring requirements of 40 CFR Part 64 specified in d)10, if the permittee chooses to comply with the PM emission limitation specified in Table 2 to 40 CFR Part 63, Subpart UUUUU. Since the CAM requirements of 40 CFR Part 64 will continue to apply after the date specified in 40 CFR Part 63, Subpart UUUUU, the CAM plan shall be revised at such time to be consistent with the MACT monitoring requirements, if the permittee chooses to comply with PM emission limitation specified in Table 2 to 40 CFR Part 63, Subpart UUUUU.

[40 CFR Part 64 and 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous opacity monitoring system:
 - a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of opacity values in excess of any limitation specified in this permit, 40 CFR Part 60, OAC rule 3745-17-07, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude (percent opacity) of each 6-minute block average exceeding the applicable opacity limitation(s), as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance.



- b. These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall include the following:
 - i. the facility name and address;
 - ii. the manufacturer and model number of the continuous opacity monitor;
 - iii. a description of any change in the equipment that comprises the continuous opacity monitoring system (COMS), including any change to the hardware, changes to the software that may affect COMS readings, and/or changes in the location of the COMS sample probe;
 - iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified above;
 - v. the total operating time (hours) of the emissions unit;
 - vi. the total operating time of the continuous opacity monitoring system while the emissions unit was in operation;
 - vii. the date, time, and duration of any/each malfunction** of the continuous opacity monitoring system, emissions unit, and/or control equipment;
 - viii. the date, time, and duration of any downtime** of the continuous opacity monitoring system and/or control equipment while the emissions unit was in operation; and
 - ix. the reason (if known) and the corrective actions taken (if any) for each event in (b)(vii) and (viii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* where no exceedance of the opacity limit has occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the quarterly EER report

** each downtime and malfunction event shall be reported regardless if there is an exceedance of the opacity limit

[40 CFR 60.7]

- (2) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous SO₂ monitoring system:
 - a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of SO₂ emissions in excess of any applicable limit specified in this permit, 40 CFR Part

60, OAC Chapter 3745-18, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).

- b. These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall include the following:
- i. the facility name and address;
 - ii. the manufacturer and model number of the continuous SO₂ and other associated monitors;
 - iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;
 - iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified above;
 - v. the total SO₂ emissions for the calendar quarter (tons);
 - vi. the total operating time (hours) of the emissions unit;
 - vii. the total operating time of the continuous SO₂ monitoring system while the emissions unit was in operation;
 - viii. results and dates of quarterly cylinder gas audits;
 - ix. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
 - x. unless previously submitted, the results of any relative accuracy test audit showing the continuous SO₂ monitor out-of-control and the compliant results following any corrective actions;
 - xi. the date, time, and duration of any/each malfunction** of the continuous SO₂ monitoring system, emissions unit, and/or control equipment;
 - xii. the date, time, and duration of any downtime** of the continuous SO₂ monitoring system and/or control equipment while the emissions unit was in operation; and
 - xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* where no excess emissions have occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the EER quarterly report

** each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

[40 CFR 60.7]

(3) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous PM monitoring system:

a. The permittee shall submit reports within 30 days following the end of each calendar quarter via air services to the Portsmouth Local Air Agency documenting all instances of particulate values in excess of the limitations in b)(1)b of this permit when the emissions unit was operating and gases were passing through the desulfurization control device, detailing the date, commencement and completion times, duration, magnitude (pound per million BTU particulate), reason (if known), and corrective action(s) taken (if any) of each boiler operating day average above the applicable particulate limitation.

The reports shall also document any continuous particulate monitoring system downtime while the emissions unit was in operation and gases were passing through the desulfurization control device, (date, time, duration and reason), along with any corrective action(s) taken.

The report shall also include the date, time, reason, and corrective action(s) taken for each period of source or control equipment malfunction during periods when the emission unit was operating and the gases were passing through the desulfurization control device.

The total operating time that the emissions unit was operating and gases were passing through the desulfurization control device, and the total time of the analyzer shall also be included in this report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with date, time, reason and corrective action(s) taken for each time period of source or control equipment malfunction. The report shall also include the total operating time that the emissions unit was operating and gases were passing through the desulfurization control device, and the total operating time of the analyzer.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. The total of any continuous opacity monitoring system downtime while the emissions unit was on line and flue gases were not passing through the desulfurization control device, and any continuous particulate monitoring system downtime while the emission unit was operating and flue gases were passing through the desulfurization control device.



- ii. The total time (hrs) that the emissions unit was in operation: the total of the operating time that the emission unit was operating and flue gases were not passing through the desulfurization control device and the total operating time that the emissions unit was operating and flue gases were passing through the desulfurization control device.
- iii. The total excess emissions of particulate recorded for the quarter. Opacity excess emissions will be reported on a 6-minute block average basis while flue gases were not passing through the desulfurization control device. Particulate emissions will be reported when flue gases are passing through the desulfurization control device, and shall be reported on a boiler operating day average basis (arithmetic average of all operating one-hour periods). For limitations with other specified averaging periods, an average of the recorded hourly data in the specified units of the standard(s) shall be reported.

[Authority for term: 40 CFR Part 64, and 3745-77-07(C)(1)]

- (4) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[Authority for term: 3745-77-07(C)(1)]

- (5) The permittee shall submit semiannual reports and such other notifications and reports to the Portsmouth Local Air Agency as are required pursuant to 40 CFR Part 63, Subpart UUUUU, per the following sections:

| Applicable Rule | Requirement |
|-------------------|--------------------------------------|
| 63.10030-63.10031 | Submitting notifications and reports |

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- (6) If the results of CAM monitoring or record keeping data indicate that the particulate emission limitations may have been exceeded when burning coal, the permittee shall submit the results of that date, and document any corrective action taken to restore operation of the emissions unit, or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[Authority for term: 40 CFR Part 64, and 3745-77-07(C)(1)]



- (7) After the compliance date specified in 40 CFR Part 63, Subpart UUUUU, the reporting requirements specified in 40 CFR section 63.10031 may satisfy the reporting requirements of 40 CFR Part 64 specified in e)(6), if the permittee chooses to comply with the PM emission limitation specified in Table 2 to 40 CFR Part 63, Subpart UUUUU. Since the CAM requirements of 40 CFR Part 64 will continue to apply after the date specified in 40 CFR Part 63, Subpart UUUUU, the CAM plan shall be revised at such time to be consistent with the MACT reporting requirements, if the permittee chooses to comply with the PM emission limitation specified in Table 2 to 40 CFR Part 63, Subpart UUUUU.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
- a. Emission Limitation:
- Visible particulate emissions from the wet stack(s) shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- Applicable Compliance Method:
- In accordance with d)(7) above, compliance with the visible particulate emission limitation shall be demonstrated through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).
- b. Emission Limitation:
- Visible particulate emissions from the bypass stack(s) shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- Applicable Compliance Method:
- Ongoing compliance with the opacity limitation contained in this permit and any other applicable standard(s) may be demonstrated through data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.
- If required, compliance shall be demonstrated through visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).
- c. Emission Limitation:
- PM emissions shall not exceed 0.10 lb/mmBtu actual heat input.



Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation shall be demonstrated through emission tests performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 5 or 17 and the procedures in 40 CFR Part 60.46 and OAC rule 3745-17-03(B)(9).

Ongoing compliance with the PM limitation contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

d. Emission Limitation:

SO₂ emissions shall not exceed 3.16 lbs/mmBtu actual heat input.

Applicable Compliance Method:

Compliance with the SO₂ emission limitations contained in this permit shall be based upon a rolling, 30-day average verified by the operation of the certified SO₂ continuous emissions monitor (CEM) system and the record keeping and reporting requirements for the SO₂ CEM listed in the Title IV and Title V permit for these emissions units.

If required, the permittee shall demonstrate compliance with the allowable mass emission rate for SO₂ in accordance with the methods and procedures specified in 40 CFR Part 60.46.

e. Emission Limitation:

During flue gas desulfurization (FGD) operation only, SO₂ emissions shall not exceed 1.77 lbs/MMBTU of actual heat input based upon a rolling, 30-day average verified by the operation of the certified SO₂ continuous emissions monitor (CEM) system and the record keeping and reporting requirements for the SO₂ CEM listed in the Title IV and Title V permit for these emissions units.

Applicable Compliance Method:

Ongoing compliance with the SO₂ emission limitations contained in this permit, 40 CFR Parts 60 and 75, and any other applicable standard(s) may be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60 and 40 CFR Part 75.

If required, the permittee shall demonstrate compliance with the allowable mass emission rate for SO₂ in accordance with the methods and procedures specified in 40 CFR Part 60.46.



f. Emission Limitation:

Emissions from each boiler stack shall not exceed:

0.03 lb/MMBtu (PM) or 0.30 lb/MWh (PM); OR
5.0E-5 lb/MMBtu or 5.0E-1 lb/GWh of Total non-Hg HAP metals; OR

Individual HAP metals:

Antimony (Sb) 8.0E-1 lb/TBtu or 8.0E-3 lb/GWh.
Arsenic (As) 1.1E0 lb/TBtu or 2.0 E-2 lb/GWh.
Beryllium (Be) 2.0E-1 lb/TBtu or 2.0E-3 lb/GWh.
Cadmium (Cd) 3.0E-1 lb/TBtu or 3.0E-3 lb/GWh.
Chromium (Cr) 2.8E0 lb/TBtu or 3.0E-2 lb/GWh.
Cobalt (Co) 8.0E-1 lb/TBtu or 8.0E-3 lb/GWh.
Lead (Pb) 1.2E0 lb/TBtu or 2.0E-2 lb/GWh.
Manganese (Mn) 4.0E0 lb/TBtu or 5.0E-2 lb/GWh.
Nickel (Ni) 3.5E0 lb/TBtu or 4.0E-2 lb/GWh.
Selenium (Se) 5.0E lb/TBtu or 6.0E-2 lb/GWh.
Hydrogen chloride (HCl) 2.0E-3 lb/MMBtu or 2.0E-2 lb/MWh, OR

Sulfur dioxide (SO₂) 2.0E-1 lb/MMBtu or 1.5E0 lb/MWh.

Mercury (HG) 1.2E0 lb/TBtu or 1.3E-2 lb/GWh.

Applicable Compliance Method:

Compliance with the applicable limit(s) shall be demonstrated through f)(3) below.

[Authority for term: 40 CFR Part 63, and 3745-77-07(C)(1)]

(2) Emission Testing Requirements

The permittee shall conduct, or have conducted, emission testing for these emissions units in accordance with the following requirements:

- a. The emission testing while burning coal shall be conducted approximately 2.5 years after permit issuance and within 6 months prior to permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PM while burning coal.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s) and emission factors:
 - i. for PM: 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 5 or 17, and the procedures specified in OAC rule 3745-17-03(B)(9);

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.



- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity unless otherwise specified or approved by the Portsmouth Local Air Agency.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Portsmouth Local Air Agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).
- f. Personnel from the Portsmouth Local Air Agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- g. A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Portsmouth Local Air Agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Portsmouth Local Air Agency.

[Authority for term: P0106805 and 3745-77-07(C)(1)]

- (3) The permittee shall comply with the applicable compliance requirements and test requirements as required under 40 CFR, 63 Subpart UUUUU, including the following sections:

| Applicable Rule | Requirement |
|-------------------|--|
| 63.10000 | General requirements |
| 63.10005 | Initial compliance requirements |
| 63.10006 | Subsequent performance test or tune-ups |
| 63.10007 | Methods and procedures for performance tests |
| 63.10009 | Emissions averaging |
| 63.10011 | Compliance with the emissions limits and work practice standards |
| 63.10020-63.10023 | Continuous compliance requirements |

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

- g) Miscellaneous Requirements
 - (1) None.



2. F001, Plant Grounds, Roadways and Parking Areas

Operations, Property and/or Equipment Description:

Plant Grounds, Roadways and Parking Areas - Paved and unpaved roadways and parking areas.

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|--|---|
| a. | ORC 3704.03(T) Best Available Technology (BAT) (PTI P0107967 issued 8/16/2011) | The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-10 through 20. See b)(2)b. |
| b. | OAC rules 3745-31-10 through 20 (PTI P0107967 issued 8/16/2011) | Fugitive particulate emissions (PE) shall not exceed 208.36 tons per year. Fugitive particulate matter with a diameter equal to or less than 10 microns in diameter (PM ₁₀) shall not exceed 54.29 tons per year. There shall be no visible PE from any paved roadway or parking area except for a period of time not to exceed 1 minute during any 60-minute observation period. There shall be no visible PE from any unpaved roadway or parking area except for a period of time not to exceed 3 minutes during any 60-minute observation period. The permittee shall employ best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust. |



| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|---|--|
| | | See b)(2)a through b)(2)f. |
| c. | OAC paragraph 3745-31-05(A)(3), as effective 11/30/01 (PTI P0107967 issued 8/16/2011) | Fugitive particulate matter with a diameter equal to or less than 2.5 microns in diameter (PM _{2.5}) shall not exceed 8.30 tons per year. See b)(2)g. |
| d. | OAC paragraph 3745-31-05(A)(3), as effective 12/01/06 (PTI P0107967 issued 8/16/2011) | See b)(2)h. |

(2) Additional Terms and Conditions

- a. Based on the “Prevention of Significant Deterioration” (PSD) analysis conducted to ensure the application of “Best Available Control Technology” (BACT), it has been determined that the following control measures constitute BACT for PE and PM₁₀ emissions from this emissions unit.
 - i. Use of reduced speed limits, sweeping, (flushing) watering, good housekeeping, and the emission limitations listed under OAC rules 3745-31-10 through 20 above constitutes BACT for this emissions unit (paved roadways and parking areas)
 - ii. Use of chemical stabilization and the emission limitation listed under OAC rules 3745-31-10 through 20 above constitutes BACT for this emissions unit (unpaved roadways and parking areas).

The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-10 through 3745-31-20 in b)(1)b above. The controls and practices that constitute BACT also meet the BAT requirements of ORC 3704.03(T).

- b. Compliance with ORC 3704.03(T) shall be demonstrated by the emission limitations and compliance with applicable fuel restrictions, BACT requirements, record keeping, reporting, and emissions testing required by this permit that are associated with the above ORC 3704.03(T) limitations and requirements.

The above-specified limitations under ORC 3704.03(T) represent best available technology (BAT) requirements that were triggered as a result of the New Source Review (NSR) major modification in this permit action for the Carter Hollow Landfill project which increased potential emissions of PE and PM₁₀.

- c. The permittee shall employ best available control measures on all paved/unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance



with the permittee's application, the permittee has committed to treat the paved roadways and parking areas by using reduced speed limits, watering (flushing), sweeping, at sufficient treatment frequencies to ensure compliance. The permittee has committed to treat the unpaved roadways and parking areas using chemical stabilization at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- d. The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for paved/unpaved roadways and parking areas that are covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- e. The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- f. Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- g. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) or OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.
- h. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM_{2.5} emissions from the roadways because they are less than 10 tons per year.

c) Operational Restrictions

- (1) None.



d) Monitoring and/or Recordkeeping Requirements

(1) Except as otherwise provided in this section, the permittee shall perform inspections of each of the roadway segments and parking areas in accordance with the following frequencies:

Table with 2 columns: paved/unpaved roadways and parking areas, and minimum inspection frequency. Rows include 'all roads and parking areas' with a frequency of 'daily'.

[Authority for term: PTI P0107967 and 3745-77-07(C)(1)]

(2) The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.

[Authority for term: PTI P0107967 and 3745-77-07(C)(1)]

(3) The permittee shall maintain records of the following information:
a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
c. the dates the control measures were implemented; and
d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

[Authority for term: PTI P0107967 and 3745-77-07(C)(1)]

(4) The information required in d)(3)d shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

[Authority for term: PTI P0107967 and 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

[Authority for term: PTI P0107967 and 3745-77-07(C)(1)]

- (2) The quarterly deviation reports shall be submitted in accordance with the requirements specified in Standard Terms and Conditions, A.2.C)(2) of this permit.

[Authority for term: PTI P0107967 and 3745-77-07(C)(1)]

- (3) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[Authority for term: PTI P0107967 and 3745-77-07(C)(1)]

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Fugitive PE shall not exceed 208.36 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the sum of i and ii below.

i. paved roads and parking areas

Compliance for the paved roadway emissions shall be demonstrated by the sum of the vehicle types. The total sum is calculated by multiplying the annual vehicle miles traveled (VMT) per year for each vehicle type in the fleet, in tons, times the calculated uncontrolled PE lbs/VMT emission factor, times 0.10, assuming 90% control efficiency for use of reduced speed limits, sweeping, (flushing) watering, and good housekeeping, then dividing by 2,000 pounds/ton. The particulate emission factors were calculated using AP-42, Section 13.2.1, Equation (1), dated 11/06. The control efficiency was obtained from RACM, Table 2.1.1-3, dated 08/83.



ii. unpaved roads and parking areas

Compliance for the unpaved roadway emissions shall be demonstrated by the sum of the vehicle types. The total sum is calculated by multiplying the annual vehicle miles traveled (VMT) per year for each vehicle type in the fleet, in tons, times the calculated uncontrolled PE lbs/VMT emission factor, times 0.10, assuming 90% control efficiency for using chemical suppression as needed, then dividing by 2,000 pounds/ton. The particulate emission factors were calculated using AP-42, Section 13.2.2, Equation (1), dated 12/03.

b. Emission Limitation:

Fugitive PM₁₀ emissions shall not exceed 54.29 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the sum of i and ii below.

i. paved roads and parking areas

Compliance for the paved roadway emissions shall be demonstrated by the sum of the vehicle types. The total sum is calculated by multiplying the annual vehicle miles traveled (VMT) per year for each vehicle type in the fleet, in tons, times the calculated uncontrolled PM₁₀ lbs/VMT emission factor, times 0.10, assuming a 90% control efficiency for use of reduced speed limits, sweeping, (flushing) watering, and good house keeping, then dividing by 2,000 pounds/ton. The particulate emission factors were calculated using AP-42, Section 13.2.1, dated 11/06. The control efficiency was obtained from RACM, Table 2.1.1-3, dated 08/83.

ii. unpaved roads and parking areas

Compliance for the unpaved roadway emissions shall be demonstrated by the sum of the vehicle types. The total sum is calculated by multiplying the annual vehicle miles traveled (VMT) per year for each vehicle type in the fleet, in tons, times the uncontrolled PM₁₀ lbs/VMT emission factor, times 0.10, assuming 90% control for chemical suppression as needed, then dividing by 2,000 pounds/ton. The particulate emission factors were calculated using AP-42, Section 13.2.2, Equation (1), dated 12/03. The control efficiency was obtained from RACM, Table 2.1.1-3, dated 08/83.

c. Emission Limitation:

Fugitive PM_{2.5} emissions shall not exceed 8.30 tons per year.



Applicable Compliance Method:

Compliance shall be demonstrated by calculating the sum of i and ii below.

i. paved roads and parking areas

Compliance for the paved roadway emissions shall be demonstrated by the sum of the vehicle types. The total sum is calculated by multiplying the annual vehicle miles traveled (VMT) per year for each vehicle type in the fleet, in tons, times the calculated uncontrolled PM_{2.5} lbs/VMT emission factor, times 0.10, assuming a 90% control efficiency for use of reduced speed limits, sweeping, (flushing) watering, and good house keeping, then dividing by 2,000 pounds/ton. The particulate emission factors were calculated using AP-42, Section 13.2.1, dated 11/06. The control efficiency was obtained from RACM, Table 2.1.1-3, dated 08/83.

ii. unpaved roads and parking areas

Compliance for the unpaved roadway emissions shall be demonstrated by the sum of the vehicle types. The total sum is calculated by multiplying the annual vehicle miles traveled (VMT) per year for each vehicle type in the fleet, in tons, times the uncontrolled PM_{2.5} lbs/VMT emission factor, times 0.10, assuming 90% control for chemical suppression as needed, then dividing by 2,000 pounds/ton. The particulate emission factors were calculated using AP-42, Section 13.2.2, Equation (1), dated 12/03. The control efficiency was obtained from RACM, Table 2.1.1-3, dated 08/83.

d. Emission Limitation:

There shall be no visible PE from any paved roadway or parking area except for a period of time not to exceed 1 minute during any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible PE limitation listed above shall be demonstrated in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources").

e. Emission Limitation:

There shall be no visible PE from any unpaved roadway or parking area except for a period of time not to exceed 3 minutes during any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible PE limitation listed above shall be demonstrated in accordance with Test Method 22 as set forth in "Appendix on



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Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources").

[Authority for term: PTI P0107967 and 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.



3. F002, Coal Storage Piles

Operations, Property and/or Equipment Description:

Coal Storage Piles

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|-------------------------------|---|
| a. | None | None |

(2) Additional Terms and Conditions

a. This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rules 3745-17-07 and 3745-17-08 do not apply to this fugitive emissions unit.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. None.



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- g) Miscellaneous Requirements
 - (1) None.



4. F003, Coal and Ash Handling

Operations, Property and/or Equipment Description:

Coal unloading, transfer, and crushing and ash handling operations

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|-------------------------------|---|
| a. | None | None |

(2) Additional Terms and Conditions

a. This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rules 3745-17-07 and 3745-17-08 do not apply to this fugitive emissions unit.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. None.



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g) Miscellaneous Requirements

- (1) None.



5. F004, FGD Handling System

Operations, Property and/or Equipment Description:

Flue gas desulfurization (FGD) material handling, transfer, conveying, underground reclaim hopper, bins, wet ballmills, and screens - Limestone and gypsum handling system.

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|--|--|
| a. | OAC rule 3745-31-05(A)(3) (PTI 07-00567 issued 4/04/2006) | <p>Fugitive Particulate Emissions (PE) from the FGD material handling system, transfer, conveying, underground reclaim hopper, wet ballmills and screens shall not exceed 3.95 pounds per hour.</p> <p>Fugitive Particulate matter with a diameter equal to or less than 10 microns (PM₁₀) from the FGD material handling system, transfer, conveying, underground reclaim hopper, wet ball mills and screens shall not exceed 1.65 pounds per hour.</p> <p>Fugitive PE from the FGD material handling system, transfer, conveying, underground reclaim hopper, wet ballmills and screens shall not exceed 14.44 tons per year.</p> <p>Fugitive PM₁₀ from the FGD material handling system, transfer, conveying, underground reclaim hopper, wet ball mills and screens shall not exceed 6.65 tons per year.</p> <p>The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible</p> |



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| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|----------------------------------|--|
| | | <p>emissions of fugitive dust(see b)(2)b throughb)(2)d.)</p> <p>The requirements of this rule also include compliance with therequirements of 40 CFR 60.672.</p> <p>See b)(2)a through b)(2)e.</p> |
| b. | 40 CFR 60.672 (NSPS Subpart OOO) | <p>No owner or operator shall causeto be discharged into theatmosphere from any transferpoint on belt conveyors or from any other affected facility anystackemission which containsparticulate matter in excess of0.022 gr/dscf.</p> <p>No owner or operator shall causeto be discharged into theatmosphere from any baghousethat controls emissions from onlyan individual, enclosed storage bin, stack emissions whichexhibit greater than 7 percentopacity.</p> <p>No owner or operator shallcause to be discharged into theatmosphere from any transferpoint on belt conveyors or from any other affected facility anyfugitive emissions which exhibitgreater than 10 percent opacity.</p> <p>See b)(2)f and b)(2)g.</p> |

(2) Additional Terms and Conditions

- a. The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

Limestone handling system, from the barge unloading through the handling process, underground reclaim hopper, wet ball mills and screens, as described in the PTI 07-00567 application received on March 15th, 2006.

Gypsum handling system, from reclaim hopper, through the handling process, shuttle conveyor, and barge loading process, as described in the PTI 07-00567 application received on March 15th, 2006.



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- b. The permittee shall employ best available control measures for the above-identified material handling operation(s) for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to perform the following control measure(s) to ensure compliance:

| <u>material handling operation(s)</u> | <u>control measure(s)</u> |
|---------------------------------------|---|
| Limestone handling system | a combination of precautionary measures, partial enclosure of conveyor, telescoping chute, and dust collector |
| Gypsum handling system | a combination of precautionary measures, partial enclosure of conveyor, maintaining appropriate moisture content, and telescoping chute |

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- c. For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.
- d. Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05.
- e. The hourly emission limitations outlined in term A.I.1. for PE and PM₁₀ are based on the emissions unit's Potential to Emit. Therefore, no hourly records are required to demonstrate compliance with these limits.
- f. The following equipment associated with F004 is subject to 40 CFR 60.672 subpart OOO: limestone reclaim feeder, limestone reclaim conveyor, limestone feeders, and wet ball mills.
- g. If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affect facility must comply with the emission limits in 60.672(a), (b), and (c), or the building enclosing the affected facility or facilities must comply with the following emission limits:
 - i. No owner or operator shall cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor



belt or anyother affected facility any visible fugitive emissions except emissions from a vent as defined in 60.671.

- ii. No owner or operator shall cause to be discharged into the atmosphere from any vent of any building enclosing any transfer point on a conveyor belt or any other affected facility emissions which exceed the stack emissions limits in 60.672(a).

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s) minimum inspection frequency

Limestone handling system weekly

Gypsum handling system weekly

[Authority for term: PTI 07-00567 and 3745-77-07(C)(1)]

- (2) The above-mentioned inspections shall be performed during representative, normal operating conditions.

[Authority for term: PTI 07-00567 and 3745-77-07(C)(1)]

- (3) The permittee shall maintain records of the following information:

- a. the date and reason any required inspection was not performed;
b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
c. the dates the control measure(s) was (were) implemented; and
d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in (3)d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

[Authority for term: PTI 07-00567 and 3745-77-07(C)(1)]

e) Reporting Requirements



- (1) The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency; and
 - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.

[Authority for term: PTI 07-00567 and 3745-77-07(C)(1)]

- (2) The quarterly deviation reports shall be submitted in accordance with the requirements specified in Standard Terms and Conditions, A.2.C)(2) of this permit.

[Authority for term: PTI 07-00567 and 3745-77-07(C)(1)]

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emissions Limitations:

Fugitive PE from the FGD material handling system, transfer, conveying, underground reclaim hopper, wet ball mills and screens shall not exceed 3.95 pounds perhour.

Applicable Compliance Method:

The hourly emission limitations are based upon the emission unit's maximum potential to emit and the emissions data found in PTI 07-00567 application submitted March 15th, 2006.

- b. Emission Limitation:

Fugitive PM₁₀ from the FGD material handling system, transfer, conveying, underground reclaim hopper, wet ball mills and screens shall not exceed 1.65 pounds perhour.

Applicable Compliance Method:

The hourly emission limitations are based upon the emission unit's maximum potential to emit and the emissions data found in PTI 07-00567 application submitted March 15th, 2006.

- c. Emission Limitation:

Fugitive PE from the FGD material handling system, transfer, conveying, underground reclaim hopper, wet ball mills and screens shall not exceed 14.44 tons per year.



Applicable Compliance Method:

Compliance with the annual limitations shall be demonstrated by the emission factors and control efficiencies as submitted in PTI application 07-00567, received March 15th, 2006.

d. Emission Limitation:

Fugitive PM₁₀ from the FGD material handling system, transfer, conveying, underground reclaim hopper, wet ball mills and screens shall not exceed 6.65 tons per year.

Applicable Compliance Method:

Compliance with the annual limitations shall be demonstrated by the emission factors and control efficiencies as submitted in PTI application 07-00567, received March 15th, 2006.

e. Emission Limitation:

No owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emission which contains particulate matter in excess of 0.022 g/dscf.

Applicable Compliance Method:

In determining compliance with section 60.672(a) the owner or operator shall use Method 5 or Method 17 to determine the particulate matter concentration. The sample volume shall be at least 60 dscf. If Method 5 is used, the gas stream being sampled must be at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at temperature high enough, but no higher than 250 degree F to prevent water condensation on filter.

f. Emission Limitation:

No owner or operator shall cause to be discharged into the atmosphere from any baghouse that controls emissions from only an individual, enclosed storage bin, stack emissions which exhibit greater than 7 percent opacity.

Applicable Compliance Method:

In determining compliance with section 60.672(f) the owner or operator shall use procedures in 60.11 and Method 9. The duration of observations shall be 1 hour (ten 6-minute averages).

g. Emission Limitation:



No owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affect facility any fugitive emissions which exhibit greater than 10 percent opacity.

Applicable Compliance Method:

In determining compliance with section 60.672(b) the owner or operator shall use procedures in 60.11 and Method 9. The duration of observations shall be 3 hours (thirty 6-minute averages). Observations may be reduced to 1 hour (ten 6-minute averages) only if there are no individual readings greater than 10 percent opacity and there are no more than 3 readings of 10 percent for the 1-hour period. The minimum distance between the observer and the emission source shall be 15 feet. The observer shall minimize interference from other fugitive emission sources. When a water mist from dust supression is in use, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.

[Authority for term: PTI 07-00567 and 3745-77-07(C)(1)]

- (2) If required, compliance with the emission limitation in b)(2)g.of these terms andconditions shall be determined by using Method 22 to determine fugitive emissions.The performance test shall be conducted while all affected facilities inside the buildingare operating. The performance test for each building shall be at least 75 minutes induration, with each side of the building and the roof being observed for at least 15minutes.

[Authority for term: PTI 07-00567 and 3745-77-07(C)(1)]

- (3) If required, the permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulates and visible emissions limits for fugitive emissions for each material handling operation subject to 40 CFR Part 60, Subpart OOO.
 - b. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1 through 4, 5 or 17 for particulates, and method 9 for visible emissions. The test(s) shall be conducted while the emissions unit is operating at or near itsmaximum capacity, unless otherwise specified or approved by the Portsmouth Local Air Agency.
 - c. The test(s) shall be conducted while the emissions unit is operating at or near itsmaximum capacity, unless otherwise specified or approved by the Portsmouth Local Air Agency.
 - d. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an"Intent to Test" notification to the Portsmouth Local Air Agency. The "Intent toTest" notification shall describe in detail the proposed test methods and procedures,the emissions unit operating parameters, the time(s) and date(s) of



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the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

- e. Personnel from the Portsmouth Local Air Agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- f. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Portsmouth Local Air Agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Portsmouth Local Air Agency.

[Authority for term: PTI 07-00567 and 3745-77-07(C)(1)]

g) **Miscellaneous Requirements**

- (1) None.



6. F005, FGD Storage Piles

Operations, Property and/or Equipment Description:

Limestone and gypsum storage piles - load in and load out of storage piles and wind erosion from storage piles.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|--|--|
| a. | OAC rule 3745-31-05(A)(3) (PTI 07-00567 issued 4/04/2006) | <p>There shall be no visible particulate emissions except for one minute during any 60-minute period.</p> <p>The permittee shall implement bestavailable control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.</p> <p>See b)(2)b through b)(2)f.</p> <p>Fugitive particulate emissions (PE) from the load-in, load-out and wind erosion of limestone and gypsum storage piles shall not exceed 5.25 tons per year.</p> <p>Fugitive particulate matter with a diameter equal to or less than 10 microns (PM₁₀) from the load-in, load-out and wind erosion of limestone and gypsum storage piles shall not exceed 3.12 tons per year.</p> <p>See b)(2)g.</p> |

(2) Additional Terms and Conditions

- a. The storage piles that are covered by this permit and subject to the above-mentioned requirements are listed below:

All limestone and gypsum storage piles

- b. The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to the use of a telescoping chute, maintaining material moisture content, and precautionary measures (reduce drop heights) to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- c. The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.
- d. The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to precautionary measures including pile height control, reducing disturbed area, and maintaining moisture content to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- e. The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.
- f. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05.
- g. The annual emissions limitations for PE and PM₁₀ outlined are based upon the maximum production limitations established for the FGD material handling, transfer and conveying-Limestone and gypsum handling system.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, the permittee shall perform inspections of each load-in operation at each storage pile in accordance with the following frequencies:

| <u>storage pile identification</u> | <u>minimum load-in inspection frequency</u> |
|------------------------------------|---|
|------------------------------------|---|

All limestone and gypsum storage piles weekly

[Authority for term: PTI 07-00567 and 3745-77-07(C)(1)]

- (2) Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile in accordance with the following frequencies:

| <u>storage pile identification</u> | <u>minimum load-out inspection frequency</u> |
|------------------------------------|--|
|------------------------------------|--|

All limestone and gypsum storage piles weekly

[Authority for term: PTI 07-00567 and 3745-77-07(C)(1)]

- (3) Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

| <u>storage pile identification</u> | <u>minimum wind erosion inspection</u> |
|------------------------------------|--|
|------------------------------------|--|

All limestone and gypsum storage piles weekly

[Authority for term: PTI 07-00567 and 3745-77-07(C)(1)]

- (4) No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

[Authority for term: PTI 07-00567 and 3745-77-07(C)(1)]

- (5) The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.

[Authority for term: PTI 07-00567 and 3745-77-07(C)(1)]

- (6) The permittee shall maintain records of the following information:
- a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in (6)d. shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), and shall be updated on calendar quarter basis within 30 days after the end of each calendar quarter.

[Authority for term: PTI 07-00567 and 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit deviation reports that identify any of the following occurrences:
- a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

[Authority for term: PTI 07-00567 and 3745-77-07(C)(1)]

- (2) The quarterly deviation reports shall be submitted in accordance with the requirements specified in Standard Terms and Conditions, A.2.C)(2) of this permit.

[Authority for term: PTI 07-00567 and 3745-77-07(C)(1)]

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:



a. Emission Limitation:

There shall be no visible particulate emissions except for one minute during any 60-minute period.

Applicable Compliance Method:

If required, compliance with the visible emission limitations for the storage piles identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

b. Emission Limitation:

Fugitive PE from the load-in, load-out and wind erosion of limestone and gypsum storage piles shall not exceed 5.25 tons per year.

Applicable Compliance Method:

Compliance with the annual limitations shall be demonstrated by the emission factors and control efficiencies as submitted in PTI application 07-00567, received March 15th, 2006.

c. Emission Limitations:

Fugitive PM₁₀ emissions from the load-in, load-out and wind erosion of limestone and gypsum storage piles shall not exceed 3.12 tons per year.

Applicable Compliance Method:

Compliance with the annual limitations shall be demonstrated by the emission factors and control efficiencies as submitted in PTI application 07-00567, received March 15th, 2006.

[Authority for term: PTI 07-00567 and 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) None.



7. F006, Carter Hollow Landfill - Paved Roads

Operations, Property and/or Equipment Description:

Carter Hollow Landfill -paved roads

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|---|---|
| a. | ORC 3704.03(T) Best Available Technology (BAT) (PTI P0106503 issued 8/16/2011) | The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-10 through 20. See b)(2)b. |
| b. | OAC rules 3745-31-10 thru 20 (PTI P0106503 issued 8/16/2011) | Fugitive particulate emissions (PE) shall not exceed 90.63 tons per year. Fugitive particulate matter emissions less than or equal to 10 microns in diameter (PM ₁₀) shall not exceed 17.68 tons per year. There shall be no visible PE from paved roadways and parking areas except for a period of time not to exceed 1 minute during any 60-minute observation period. The permittee shall employ best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust. See b)(2)a through b)(2)f. |
| c. | OAC paragraph 3745-31-05(A)(3), as effective 11/30/01 (PTI P0106503 issued 8/16/2011) | Fugitive particulate matter emissions less than or equal to 2.5 microns in diameter (PM _{2.5}) shall not exceed 2.65 tons per year. |



| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|---|---|
| | | See b)(2)g. |
| d. | OAC paragraph 3745-31-05(A)(3), as effective 12/01/06 (PTI P0106503 issued 8/16/2011) | See b)(2)h. |

(2) Additional Terms and Conditions

- a. Based on the “Prevention of Significant Deterioration” (PSD) analysis conducted to ensure the application of “Best Available Control Technology” (BACT), it has been determined that the following control measures constitute BACT for PE and PM₁₀ emissions from this emissions unit.
 - i. Use of reduced speed limits, sweeping, (flushing) watering, good housekeeping, and the emission limitations listed under OAC rules 3745-31-10 through 20 above constitutes BACT for this emissions unit.

The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-10 through 3745-31-20 in b)(1)b above. The controls and practices that constitute BACT also meet the BAT requirements of ORC 3704.03(T).

- b. Compliance with ORC 3704.03(T) shall be demonstrated by the emission limitations and compliance with applicable fuel restrictions, BACT requirements, record keeping, reporting, and emissions testing required by this permit that are associated with the above ORC 3704.03(T) limitations and requirements.

The above-specified limitations under ORC 3704.03(T) represent best available technology (BAT) requirements that were triggered as a result of the New Source Review (NSR) major modification in this permit action for the Carter Hollow Landfill project which increased potential emissions of PE and PM₁₀.

- c. The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to treat the paved roadways and parking areas by using reduced speed limits, watering (flushing) and sweeping, at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- d. The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for paved roadways and parking areas that are covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control



measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

- e. The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
f. Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
g. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30,2001, in this permit. On December 1, 2006, paragraph (A)(3) or OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1,2006 version of 3745-31-05, then these emission limits/control measures no longer apply.
h. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM2.5 emissions from the roadways because they are less than 10 tons per year.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, the permittee shall perform inspections of each of the roadway segments and parking areas in accordance with the following frequencies:

Table with 2 columns: paved roadways and parking areas, minimum inspection frequency. Row 1: all roads and parking areas, daily during periods of active use

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

- (2) The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking

area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

(3) The permittee shall maintain records of the following information:

- a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
- b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
- c. the dates the control measures were implemented; and
- d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit deviation reports that identify any of the following occurrences:

- a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
- b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

(2) The quarterly deviation reports shall be submitted in accordance with the requirements specified in Standard Terms and Conditions, A.2.C)(2) of this permit.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

(3) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Fugitive PE shall not exceed 90.63 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the annual vehicle miles traveled (VMT) per year for the average vehicle fleet weight, in tons, times the calculated PM emission factor 6.62 lbs/VMT, times 0.10, assuming a 90% control efficiency for use of reduced speed limits, sweeping, (flushing) watering, and good housekeeping, then dividing by 2,000 lbs/ton. The particulate emission factors were calculated in accordance with AP-42 Section 13.2.1, Equation (1), dated 11/06. The control efficiency was obtained from RACM, Table 2.1.1-3, dated 08/83.

b. Emission Limitation:

Fugitive PM₁₀ emissions shall not exceed 17.68 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the annual vehicle miles traveled (VMT) per year for the average vehicle fleet weight in tons, times the calculated PM₁₀ emission factor 1.29 lb/VMT, times 0.10, assuming a 90% control efficiency, for use of reduced speed limits, sweeping, (flushing) watering, and good housekeeping and then dividing by 2,000 pounds/ton. The particulate emission factors were calculated in accordance with AP-42 Section 13.2.1, Equation (1), dated 11/06. The control efficiency was obtained from RACM, Table 2.1.1-3, dated 08/83.

c. Emission Limitation:

Fugitive PM_{2.5} emissions shall not exceed 2.65 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the annual vehicle miles traveled (VMT) per year for the average vehicle fleet weight in tons, times the calculated PM_{2.5} emission factor 0.193 lb/VMT, times 0.10, assuming a 90% control efficiency, for use of reduced speed limits, sweeping, (flushing) watering, and good housekeeping and then dividing by 2,000 pounds/ton. The particulate emission factors were calculated in accordance with AP-42 Section 13.2.1, Equation (1), dated 11/06. The control efficiency was obtained from RACM, Table 2.1.1-3, dated 08/83.



d. Emission Limitation:

There shall be no visible PE from paved roadways and parking areas except for a period of time not to exceed 1 minute during any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible PE limitation listed above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.



8. F007, Carter Hollow Landfill - Landfill Operations

Operations, Property and/or Equipment Description:

Gypsum, fly ash, bottom ash landfill operations including truck unloading, surface grading, and wind erosion.

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|---|---|
| a. | ORC 3704.03(T) Best Available Technology (BAT) (PTI P0106503 issued 8/16/2011) | The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-10 through 20. See b)(2)b and c)(1). |
| b. | OAC rules 3745-31-10 thru 20 (PTI P0106503 issued 8/16/2011) | Fugitive particulate emissions (PE) shall not exceed 10.62 tons per rolling, 12-month period. Fugitive particulate matter emissions less than or equal to 10 microns in diameter (PM ₁₀) shall not exceed 4.72 tons per rolling, 12-month period. There shall be no visible PE (including load-in, load-out and surface grading) except for 3 minutes during any 60-minute period. The permittee shall employ best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See b)(2)a through b)(2)f. |
| c. | OAC paragraph 3745-31-05(A)(3), as effective 11/30/01 (PTI P0106503 issued 8/16/2011) | Fugitive particulate matter emissions less than or equal to 2.5 microns in diameter (PM _{2.5}) shall not exceed 0.67 ton per |



| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|---|---|
| | | year. See b)(2)g. |
| d. | OAC paragraph 3745-31-05(A)(3), as effective 12/01/06 (PTI P0106503 issued 8/16/2011) | See b)(2)h. |

(2) Additional Terms and Conditions

- a. Based on the “Prevention of Significant Deterioration” (PSD) analysis conducted to ensure the application of “Best Available Control Technology” (BACT), it has been determined that the following control measures constitute BACT for PE and PM₁₀ emissions from this emissions unit.
 - i. use of speed reductions, watering, natural wind breaks, inherent high moisture content and the emission limitations listed under OAC rules 3745-31-10 through 20 above constitutes BACT for this emissions unit; and
 - ii. a 2,000,000 tons per rolling, 12-month period of gypsum, flyash, and bottom ash throughput limitation.

The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-10 through 3745-31-20 in b)(1)b above. The controls and practices that constitute BACT also meet the BAT requirements of ORC 3704.03(T).

- b. Compliance with ORC 3704.03(T) shall be demonstrated by the emission limitations and compliance with the applicable annual throughput restriction, BACT requirements, record keeping, reporting, and emissions testing required by this permit that are associated with the above ORC 3704.03(T) limitations and requirements.

The above-specified limitations under ORC 3704.03(T) represent best available technology (BAT) requirements that were triggered as a result of the New Source Review (NSR) major modification in this permit action for the Carter Hollow Landfill project which increased potential emissions of PE and PM₁₀.

- c. The permittee shall employ reasonably available control measures on all load-in and load-out operations associated with the landfill for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee’s permit application, the permittee has committed to handling material with sufficient moisture content to prevent visible fugitive dust emissions to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- d. The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of the landfill if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.
 - e. The permittee shall employ reasonably available control measures for wind erosion from the surfaces of the landfill for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to compacting the material, natural wind breaks, inherent high moisture content and using cover/vegetation to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
 - f. The above-mentioned control measure(s) shall be employed for wind erosion from the landfill if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary if the landfill is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.
 - g. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) or OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.
 - h. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM_{2.5} emissions from the gypsum and ash handling operations because they are less than 10 tons per year.
- c) Operational Restrictions
- (1) The maximum throughput for this emissions unit shall not exceed 2,000,000 tons of gypsum and/or bottom ash and fly ash, based upon a rolling, 12-month summation of the throughput rates.



To ensure enforceability during the first 12 calendar months after commencing operation in accordance with permit P0106503, the permittee shall not exceed the gypsum and/or bottom ash, fly ash throughput specified in the following table:

| <u>Month(s)</u> | <u>Maximum Allowable Throughput, Tons</u> |
|-----------------|---|
| 1 | 200,000 |
| 1-2 | 400,000 |
| 1-3 | 600,000 |
| 1-4 | 800,000 |
| 1-5 | 1,000,000 |
| 1-6 | 1,200,000 |
| 1-7 | 1,400,000 |
| 1-8 | 1,600,000 |
| 1-9 | 1,700,000 |
| 1-10 | 1,800,000 |
| 1-11 | 1,900,000 |
| 1-12 | 2,000,000 |

After the first 12 calendar months of operation in accordance with permit P0106503, compliance with the throughput limitation shall be based upon a rolling, 12-month summation of the gypsum and/or bottom ash, fly ash throughput.

[Authority for term: PTI P0106503 and 3745-77-07(A)(1)]

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall maintain monthly records of the following information for this emissions unit in order to monitor compliance with the applicable material throughput restriction:
 - a. the material throughput for each month; and
 - b. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the material throughput.

Also during the first 12 calendar months of operation after commencing operation in accordance with PTI P0106503, the permittee shall record the cumulative material throughput for each calendar month.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

- (2) Except as otherwise provided in this section, the permittee shall perform weekly inspections of each load-in operation, each load-out operation, and of the wind erosion at the landfill.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

- (3) No inspection shall be necessary for wind erosion from the surface of the landfill when the landfill is covered with snow and/or ice and for any landfill activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

- (4) The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out at the landfill, and wind erosion from the surface of the landfill. The inspections shall be performed during representative, normal landfill operating conditions.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

- (5) The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from the landfill surface, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in d)(5)d shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the landfill surface (wind erosion), and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month material throughput restriction, and for the first 12 calendar months of operation following issuance of this permit, all exceedances of the maximum allowable cumulative throughput levels.



[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

- (2) The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

- (3) The quarterly deviation reports shall be submitted in accordance with the requirements specified in Standard Terms and Conditions, A.2.C)(2) of this permit.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

- (4) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

f) **Testing Requirements**

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

Fugitive PE shall not exceed 10.62 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the rolling, 12-month emission limitation specified above shall be determined by the record keeping requirements specified in d)(1) above and the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), AP-42 Chapter 11.9-1 (Western Surface Coal Mining, dated 10/1998), AP-42 Chapter 13.2.5 (Industrial Wind Erosion, dated January 1995) and the parameters as listed in Permit to Install application P0106503, which was submitted to the Portsmouth Local Air Agency on June 16, 2010.

- b. Emission Limitation:

Fugitive PM₁₀ emissions shall not exceed 4.72 tons per rolling, 12-month period.

Applicable Compliance Method:



Compliance with the rolling, 12-month emission limitation specified above shall be determined by the record keeping requirements specified in d)(1) above and the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), AP-42 Chapter 11.9-1 (Western Surface Coal Mining, dated 10/1998), AP-42 Chapter 13.2.5 (Industrial Wind Erosion, dated January 1995) and the parameters as listed in Permit to Install application P0106503, which was submitted to the Portsmouth Local Air Agency on June 16, 2010.

c. Emission Limitation:

Fugitive PM_{2.5} emissions shall not exceed 0.67 ton per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the rolling, 12-month emission limitation specified above shall be determined by the record keeping requirements specified in d)(1) above and the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), AP-42 Chapter 11.9-1 (Western Surface Coal Mining, dated 10/1998), AP-42 Chapter 13.2.5 (Industrial Wind Erosion, dated January 1995) and the parameters as listed in Permit to Install application P0106503, which was submitted to the Portsmouth Local Air Agency on June 16, 2010.

d. Emission Limitation:

There shall be no visible PE (including load-in, load-out and surface grading) except for 3 minutes during any 60-minute period.

Applicable Compliance Method:

If required, compliance with the visible emissions limitation for fugitive dust from the material storage piles areas identified in this permit shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 22 and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) None.



9. P002, Carter Hollow Landfill - Crushing & Screening

Operations, Property and/or Equipment Description:

25 TPH Portable crusher-(4043T Impact Track Crusher) powered with a 300 hp-Caterpillar C-9 Tier III Diesel Engine or equivalent, and (Spyder 516T screening plant) powered with a 110 hp-Cummins QSB 4.5 Tier III Diesel Engine or equivalent.

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|--|---|
| a. | ORC 3704.03(T) Best Available Technology (BAT) (PTI P0106503 issued 8/16/2011) | <p>Nitrogen oxides (NO_x) emissions shall not exceed 2.48 pounds per hour and 10.87 tons per year (combined stack emissions - crusher and screener diesel engines).</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-10 through 20.</p> <p>See b)(2)b.</p> |
| b. | OAC rules 3745-31-10 through 20 (PTI P0106503 issued 8/16/2011) | <p>Particulate emissions (PE) shall not exceed 0.11 pound per hour and 0.50 ton per year (combined stack emissions - crusher and screener diesel engines).</p> <p>PE emissions shall not exceed 0.17 pound per hour and 0.74 ton per year (fugitive crushing/screening).</p> <p>Particulate matter emissions less than or equal to 10 microns in diameter (PM₁₀) shall not exceed 0.11 pound per hour and 0.50 ton per year (combined stack emissions - crusher and screener diesel engines).</p> <p>PM₁₀ emissions shall not exceed 0.06</p> |

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|---|--|
| | | <p>pound per hour and 0.24 ton per year(fugitive crushing/screening). Visible PE shall not exceed 20% opacity, as a 6-minute average (stack emissions from crusher exhaust and screener exhaust).</p> <p>Visible PE of fugitive dust shall not exceed 10% opacity, as a 6-minute average (fugitive transfer/screening).</p> <p>Visible PE of fugitive dust shall not exceed 15% opacity, as a 6-minute average (crusher).</p> <p>See b)(2)a through b)(2)h.</p> |
| c. | OAC rule 3745-17-11(B)(5)(a) (generator stack emissions-diesels) | The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-10 through 20. |
| d. | 40 CFR 60 Subpart OOO | Exempt per 40 CFR 60.670(c)(2) (capacity is 150 tons per hour or less). |
| e. | OAC rule 3745-18-06(G) | This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(B). |
| f. | OAC rule 3745-17-07(A) | The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rules 3745-10 through 20. |
| g. | OAC paragraph 3745-31-05(A)(3), as effective 11/30/01 (PTI P0106503 issued 8/16/2011) | <p>Carbon Monoxide (CO) emissions shall not exceed 0.80 pound per hour and 3.50 tons per year (combined stack emissions - crusher and screener diesel engines).</p> <p>Volatile Organic Compounds (VOC) emissions shall not exceed 1.82 pounds per hour and 7.98 tons per year (combined stack emissions - crusher and screener diesel engines).</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 0.84 pound per hour and 3.68 tons per year (combined stack emissions - crusher and screener diesel engines).</p> <p>Particulate matter emissions less than or equal to 2.5 microns in diameter (PM_{2.5})</p> |



| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|--|--|
| | | <p>shall not exceed 0.11 pound per hour and 0.50 ton per year (combined stack emissions - crusher and screener diesel engines).</p> <p>PM_{2.5} emissions shall not exceed 0.01 pound per hour and 0.04 ton per year (fugitive crushing/screening).</p> <p>See b)(2)c.</p> |
| h. | OAC paragraph 3745-31-05(A)(3), as effective 12/01/06 (PTI P0106503 issued 8/16/2011) | See b)(2)d. |
| i. | <p>40 CFR Part 63 Subpart ZZZZ</p> <p>In accordance with 40 CFR 63.6590(c)(7) both engines associated with this emissions unit are affected sources with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.</p> | <p>The new stationary compression ignition (CI) reciprocating internal combustion engines (RICE), located at a major source for hazardous air pollutants (HAPs), shall meet the requirements of 40 CFR Part 63, Subpart ZZZZ.</p> <p>See b)(2)i.</p> |
| j. | <p>40 CFR Part 60, Subpart IIII</p> <p>40 CFR 60.4204(b)</p> <p>40 CFR 60.4201(a)</p> <p>Table 1 to 40 CFR 89.112, Tier 3</p> | <p>The exhaust emissions from these engines shall not exceed:</p> <p>0.30 gram PM/kW-hr</p> <p>4.0 grams NO_x + NMHC/kW-hr</p> <p>5.0 grams CO/kW-hr</p> <p>See b)(2)j through b)(2)l.</p> |
| k. | <p>40 CFR 60.4207(b)</p> <p>40 CFR 80.510(b)</p> | <p>The sulfur content of the diesel fuel burned in this emissions unit shall not exceed 15 ppm or 0.0015% sulfur by weight.</p> <p>See terms b)(2)l, c)(4), d)(7), e)(4) and g)(3).</p> |
| l. | <p>40 CFR 89.113</p> <p>(certified by manufacturer)</p> | <p>Exhaust opacity from compression-ignition nonroad engines shall not exceed:</p> <p>20% opacity during the acceleration mode</p> <p>15% opacity during the lugging mode</p> |



| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|--|-------------------------------|--|
| | | 50% opacity during the peaks in either the acceleration or lugging modes |

(2) Additional Terms and Conditions

- a. Based on the “Prevention of Significant Deterioration” (PSD) analysis conducted to ensure the application of “Best Available Control Technology” (BACT), it has been determined that the following control measures constitute BACT for PE emissions from this emission unit:
 - i. the use of water spray nozzles/dust suppression system, minimizing the drop height into the feeder, and the emission limitations listed under OAC rules 3745-31-10 through 20 above constitutes BACT for this emissions unit; and
 - ii. the diesel crusher engines shall be Tier III CARB certified engines.

The emission limitations based on the BACT requirements are listed under OAC rules 3745-31-10 through 3745-31-20 in b)(1)b above. The controls and practices that constitute BACT also meet the BAT requirements of ORC 3704.03(T).

- b. Compliance with ORC 3704.03(T) shall be demonstrated by the emission limitations and compliance with applicable BACT requirements, record keeping, reporting, and emissions testing required by this permit that are associated with the above ORC 3704.03(T) limitations and requirements.

The above-specified limitations under ORC 3704.03(T) represent best available technology (BAT) requirements that were triggered as a result of the New Source Review (NSR) major modification in this permit action for the Carter Hollow Landfill project which increased potential emissions of PE and PM₁₀.

- c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30,2001, in this permit. On December 1, 2006, paragraph (A)(3) or OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio’s State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1,2006 version of 3745-31-05, then these emission limits/control measures no longer apply.



Effective Date: To be entered upon final issuance

- d. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the CO, VOC, SO₂ and PM_{2.5} emissions from the diesel generators and the PM_{2.5} emissions from crushing and screening operations because the CO, VOC, SO₂ and PM_{2.5} emissions are each less than 10 tons per year.

- e. The permittee shall employ reasonably available control measures to minimize or eliminate visible emissions of fugitive dust from emissions unit P002. If the inherent moisture in the aggregate and the continuous wet suppression system at the inlet and the outlet of the crusher is not sufficient to comply with the opacity restrictions of this permit, the permittee shall install additional equipment to apply water, or any other suitable dust suppressant, at appropriate locations in the production line.

- f. The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

Load in;
Crushing;
Screening;
Conveying; and
Transfer points.

- g. The permittee shall employ reasonably available control measures for the above-identified material handling operation(s) for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to perform the following control measure(s) to ensure compliance:

| <u>material handling operation(s)</u> | <u>control measure(s)</u> |
|---------------------------------------|--|
| loading into feed hopper | maintain a low drop height and a high moisture content for the material being processed |
| all conveyor and transfer points | maintain a high moisture content for the material being processed and use of water spray nozzles/dust suppression system |

Nothing in this paragraph shall prohibit the permittee from employing other equally-effective control measures to ensure compliance.

- h. For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with



the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

- i. Compliance with 40 CFR Part 63, Subpart ZZZZ shall be demonstrated through compliance with the New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart IIII.

- j. The stationary compression ignition (CI) internal combustion engine (ICE) is subject to and shall be operated in compliance with the requirements of 40 CFR Part 60, Subpart IIII, the standards of performance for stationary CI ICE.

[40 CFR 60.4200(a)]

- k. The stationary CI ICE has been or shall be purchased certified by the manufacturer to emission standards as stringent as those identified in 40 CFR 60.4201(a) and found in Tier 3 of 40 CFR 89.112, Table 1, for engines greater than or equal to 100 horsepower (75 kilowatt) and less than 175 horsepower (130 kilowatt), and certified to the opacity standards found in 40 CFR 89.113.

[40 CFR 60.4204(b)], [40 CFR 60.4201(a)], [40 CFR 60.4203], and [40 CFR 60.4211(c)]

- l. The quality of the diesel fuel burned in this emissions unit shall meet the following specifications on an "as received" basis:

- i. a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.0015 pound sulfur dioxide/MMBtu actual heat input; and 15 ppm sulfur or 0.0015% sulfur by weight;
- ii. a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent; and
- iii. a heating value greater than 135,000 Btu/gallon.

Compliance with the above-mentioned specifications shall be determined by using the analytical results provided by the permittee or oil supplier for each shipment of oil.

[40 CFR 60.4207(b)] and [40 CFR 80.510(b)]

c) Operational Restrictions

- (1) The permittee shall only use diesel fuel (or number 2 fuel oil) with a maximum sulfur content of 0.5%, by weight, for combustion in this emissions unit.

[Authority for term: PTI P0106503 and 3745-77-07(A)(1)]

- (2) The crusher water spray shall be in operation at all times when this emissions unit is operating to minimize or eliminate visible emissions of fugitive dust.

[Authority for term: PTI P0106503 and 3745-77-07(A)(1)]

- (3) The stationary CI ICE and any control device shall be installed, operated, and maintained according to the manufacturer's emission-related written instructions and the permittee shall only change those emission-related settings that are allowed by the manufacturer. The CI ICE must also be installed and operated to meet the applicable requirements from 40 CFR Part 89, Control of Emissions from New and In-use Non-road CI ICE; and Part 1068, the General Compliance Provisions for Engine Programs. The permittee shall operate and maintain the stationary CI ICE to achieve the emissions standards established in 40 CFR 60.4204 over the entire life of the engine(s).

[40 CFR 60.4206] and [40 CFR 60.4211(a)]

- (4) Diesel fuel burned in the CI, ICE shall not exceed the limit for sulfur as specified by 40 CFR 80.510(b), i.e., the maximum sulfur content of diesel fuel shall not exceed 15 ppm or 0.0015% sulfur by weight.

[40 CFR 60.4207(b)] and [40 CFR 80.510(b)]

- (5) If the stationary CI internal combustion engine is equipped with a diesel particulate filter to comply with the emission standards in 40 CFR 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the permittee when the high backpressure limit of the engine is approached.

[40 CFR 60.4209(b)]

d) **Monitoring and/or Recordkeeping Requirements**

- (1) For each day during which the permittee burns a fuel other than diesel fuel (or number 2 fuel oil) as specified in c)(1), the permittee shall maintain a record of the type, quantity and documentation of the sulfur content of fuel burned in this emissions unit.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

- (2) The permittee shall maintain records documenting any time period when the emissions unit was in operation and the wet suppression system at the inlet and the outlet of the crusher was not employed.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

- (3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., crusher, screens, and conveyor's transfer points) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the location and the color of the emissions;
- b. whether the emissions are representative of normal operations;



- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible emission incident; and
e. any corrective actions taken to eliminate the visible emissions

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

(4) Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

Table with 2 columns: material handling operation(s), minimum inspection frequency. Row 1: all operations, once during each day of operation

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

(5) The above-mentioned inspections shall be performed during representative, normal operating conditions.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

(6) The permittee shall maintain records of the following information:

- a. the date and reason any required inspection was not performed;
b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
c. the dates the control measure(s) was (were) implemented; and
d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in d)(6)d shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

(7) The permittee shall maintain a record of the diesel fuel burned in this ICE during each calendar year. The fuel oil usage can be calculated at the end of each year using the best method available to estimate the annual throughput which might include, but shall not be limited to: any flow meter installed on the engine, records of the volume of diesel fuel oil received with each delivery, the fuel oil levels recorded from the diesel storage tank, and/or the recorded or estimated hours of operation along with the manufacture's documentation of the fuel flow rate.

- (8) The permittee shall maintain the manufacturer's certification, to the applicable Tier 3 emission standards in Table 1 of 40 CFR 89.112, on site or at a central location for all facility ICE and it shall be made available for review upon request. If the manufacturer's certification is not kept on site, the permittee shall maintain a log for the location of each ICE and it shall identify the agency-assigned emissions unit number, the manufacturer's identification number, and the identification number of the certificate. The manufacturer's operations manual and any written instructions or procedures developed by the permittee and approved by the manufacturer shall be maintained at the same location as the ICE.

[40 CFR 60.4211(c) and 3745-77-07(C)(1)]

- (9) If the stationary CI internal combustion engine is equipped with a diesel particulate filter to comply with the emission standards in 40 CFR 60.4204, the permittee shall keep records of the date, time, and any corrective action(s) taken in response to the notification from the backpressure monitor, that the high backpressure limit of the engine has been approached or exceeded.

[40 CFR 60.4214(c) and 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit deviation reports that identify any of the following occurrences:
- a. each day during which an inspection of the material processing and handling operations was not performed by the required frequency;
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented; and
 - c. any exceedances of the sulfur content restriction identified in c)(1) and c)(4) above.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

- (2) The quarterly deviation reports shall be submitted in accordance with the requirements specified in the Standard Terms and Conditions, A.2.c)(2) of this permit.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

- (3) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

- (4) The permittee shall identify in the quarterly deviation report any period of time (date and number of hours) that the quality of oil burned in this emissions unit did not meet the requirements established in 40 CFR 80.510(b), based upon the required fuel records; and the amount of non-compliant fuel burned on each such occasion.

[Authority for term: 40 CFR 60.4207(b) and 40 CFR 80.510(b)]

- (5) If the stationary CI internal combustion engine is equipped with a diesel particulate filter to comply with the emission standards in 40 CFR 60.4204, the permittee shall include in the quarterly deviation report any records of the date, time and any corrective action(s) taken in response to the notification from the monitor that the backpressure has been approached or exceeded.

[Authority for term: 40 CFR 60.4214(c)]

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations:

NO_x emissions shall not exceed 2.48 pounds per hour and 10.87 tons per year (combined stack emissions - crusher and screener diesel engines).

Applicable Compliance Method:

The lb/hr emission limitations were determined by multiplying the following emission factor(0.006 lb/hp-hr) from the CARB certification by the maximum capacity of the crusher engine (300 hp-hr) and adding that to the emission factor (0.0062 lb/hp-hr) from the CARB certification by the maximum capacity of the screener engine (110 hp-hr).

If required, the permittee shall demonstrate compliance with the hourly allowable NO_x emission limitation based on an emission test performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 7.

The tpy emission limitation was developed by multiplying the short-term allowable NO_x emission limitation (2.48 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

b. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average (stack emissions from crusher exhaust and screener exhaust).



Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the VE limitation above through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

c. Emission Limitation:

Visible PE of fugitive dust shall not exceed 10% opacity, as a 6-minute average (fugitive transfer/screening).

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the VE limitation above through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

d. Emission Limitation:

Visible PE of fugitive dust shall not exceed 15% opacity, as a 6-minute average (crusher).

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the VE limitation above through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

e. Emission Limitation:

PE/PM₁₀/PM_{2.5} shall not exceed 0.11 pound per hour and 0.50 ton per year (combined stack emissions - crusher and screener diesel engines).

Applicable Compliance Method:

The lb/hr emission limitation was determined by multiplying the following calculated emission factor (0.0003 lb/hp-hr) from the CARB certification by the maximum capacity of the crusher engine (300 hp-hr) and adding that to the emission factor (0.00021 lb/hp-hr) from the CARB certification by the maximum capacity of the screener engine (110 hp-hr).

The tpy emission limitation was developed by multiplying the short-term allowable particulate emission limitation (0.11 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton.



Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

f. Emission Limitation:

PE emissions shall not exceed 0.17 pound per hour and 0.74 ton per year (fugitive crushing/screening).

Applicable Compliance Method:

The lb/hr emission limitation was determined by multiplying the following calculated emission factor(0.0224 lb/ton) derived from AP-42 section 13.2.4. by the maximum throughput of the crusher *(25 tons per hour), then multiplying by 0.30 assuming 70% control efficiency from water spray (RACM Table 2.18-2).

The tpy emission limitation was developed by multiplying the short-term allowable particulate emission limitation (0.17 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

* Because overburden being processed is only for cover use, assumed it to equal 10% of the total gypsum added to the landfill.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

g. Emission Limitation:

PM₁₀ emissions shall not exceed 0.06 pound per hour and 0.24 ton per year (fugitive crushing/screening).

Applicable Compliance Method:

The lb/hr emission limitation was determined by multiplying the following calculated emission factor(0.0078 lb/ton) derived from AP-42 section 13.2.4. by the maximum throughput of the crusher *(25 tons per hour), then multiplying by 0.30 assuming 70% control efficiency from water spray (RACM Table 2.18-2).

The tpy emission limitation was developed by multiplying the short-term allowable particulate emission limitation (0.06 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

* Because overburden being processed is only for cover use, assumed it to equal 10% of the total gypsum added to the landfill.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]



h. Emission Limitation:

PM_{2.5} emissions shall not exceed 0.01 pound per hour and 0.04 ton per year (fugitive crushing/screening).

Applicable Compliance Method:

The lb/hr emission limitation was determined by multiplying the following calculated emission factor (0.0012 lb/ton) derived from AP-42 section 13.2.4. by the maximum throughput of the crusher *(25 tons per hour), then multiplying by 0.30 assuming 70% control efficiency from water spray (RACM Table 2.18-2).

The tpy emission limitation was developed by multiplying the short-term allowable particulate emission limitation (0.01 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

* Because overburden being processed is only for cover use, assumed it to equal 10% of the total gypsum added to the landfill.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

i. Emission Limitation:

CO emissions shall not exceed 0.80 pound per hour and 3.50 tons per year (combined stack emissions - crusher and screener diesel engines).

Applicable Compliance Method:

The lb/hr emission limitation was determined by multiplying the following emission factor of (0.0021 lb/hp-hr) from the CARB certification by the maximum crusher engine capacity of 300 hp-hr = 0.63 lb/hr and adding that total to the following emission factor of (0.0015 lb/hp-hr) from the CARB certification by the maximum screener engine capacity of 110 hp-hr = 0.17 lb/hr.

The tpy emission limitation was developed by multiplying the short-term allowable CO emission limitation (0.80 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

j. Emission Limitation:

VOC emissions shall not exceed 1.82 pounds per hour and 7.98 tons per year (combined stack emissions - crusher and screener diesel engines).



Applicable Compliance Method:

The lb/hr emission limitations were determined by multiplying the following emission factor of (0.006 lbs/hp-hr) from the CARB certification by the maximum crusher engine capacity of 300 hp-hr = 1.80 lb/hr and adding that total to the following emission factor of (0.00015 lbs/hp-hr) from the CARB certification by the maximum screener engine capacity of 110 hp-hr = 0.02 lb/hr.

The tpy emission limitation was developed by multiplying the short-term allowable VOC emission limitation (1.82 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

k. Emission Limitation:

SO₂ emissions shall not exceed 0.84 pound per hour and 3.68 tons per year (combined stack emissions - crusher and screener diesel engines).

Applicable Compliance Method:

The lb/hr emission limitation was determined by multiplying the following emission factor of (0.00205 lb/hp-hr) obtained from AP-42 section 3.3, dated 10/96, by the maximum crusher engine capacity of 300 hp-hr = 0.62 lb/hr and adding that total to the following emission factor of 0.00205 lb/hp-hr obtained from AP-42 section 3.3, dated 10/96., by the maximum screener engine capacity of 110 hp-hr = 0.23 lb/hr.

The tpy emission limitation was developed by multiplying the short-term allowable SO₂ emission limitation (0.84 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

l. Opacity Limitation:

Exhaust opacity from compression-ignition nonroad engines shall not exceed:

20% opacity during the acceleration mode

15% opacity during the lugging mode

50% opacity during the peaks in either the acceleration or lugging modes



Applicable Compliance Method:

The ICE shall be purchased certified to the opacity standards of 40 CFR 89.113.
[40 CFR 60.4204(b)], [40 CFR 60.4201(a)], and [40 CFR 89.113]

m. Emission Limitation:

The exhaust emissions from these engines shall not exceed:

4.0 grams NO_x + NMHC/kW-hr

Applicable Compliance Method:

Compliance with the emission limitations shall be based on the manufacturer's certification and by maintaining the engine according to the manufacturer's specifications. The g/kW-hr limit is the emission limitation from Table 1 of 40 CFR 89.112, the Tier 3 exhaust emission standards for diesel engines between 100 and less than 175 horsepower (75 and 130 kilowatts).

For the purpose of reporting emissions, where the limit is for NO_x + NMHC, the NO_x and VOC limits shall be calculated using a ratio of 74.6% NO_x to 25.4% VOC.*

$$4.0 \text{ g NO}_x + \text{NMHC/kW-hr} \times 74.6\% \text{ NO}_x^* = 3.0 \text{ grams NO}_x/\text{kW-hr}$$

Compliance with the ton per year NO_x emissions limitation shall be determined by the following calculation:

$$3.0 \text{ g NO}_x/\text{kW-hr} \times \text{kw}/1.341 \text{ HP} \times 1 \text{ lb}/453.6 \text{ g} \times \text{HP} = \text{XX} \text{ lb NO}_x/\text{hr}$$

$$\text{XX} \text{ lbs NO}_x/\text{hr} \times \text{XX} \text{ hours/year} \times 1 \text{ ton}/2000 \text{ lbs} = \text{XX} \text{ tons NO}_x/\text{year}$$

If required, the permittee shall demonstrate compliance with the NO_x/NMHC emission limitation through performance tests conducted in accordance with the provisions in term f)(2) below.

[40 CFR 60.4204(b)], [40 CFR 60.4201(a)], [40 CFR 60.4211(c)], and [40 CFR 60.4212(a) and (c)]

n. Emission Limitation:

The exhaust emissions from these engines shall not exceed:

0.30 gram PM/kW-hr

Applicable Compliance Method:

Compliance with the emission limitations shall be based on the manufacturer's certification and by maintaining the engine according to the manufacturer's specifications. The g/kW-hr limit is the emission limitation from Table 1 of 40 CFR



89.112, the Tier 3 exhaust emission standards for diesel engines between 100 and less than 175 horsepower (75 and 130 kilowatts).

Compliance with the ton per rolling 12-month PE emissions limitation shall be determined by the following calculation:

$$E = \sum_{i=1}^n \left(G_i \frac{\text{Gallons}}{\text{Rolling 12 - months}} \right) \left(\frac{\text{kW}}{1.341 \text{ hp}} \right) \left(\frac{137,000 \text{ Btu}}{\text{Gallon}} \right) \left(\frac{\text{hp - hr}}{7000 \text{ Btu}} \right) \left(EFi \frac{0.30 \text{ gram}}{\text{kW - hr}} \right) \left(\frac{\text{Ton}}{907,185 \text{ gram}} \right)$$

where:

G_i = gallons of diesel fuel used per rolling 12-month period for engine type i ;

EF_i = the gram/kW-hr emission factor for the engine type i , 0.30 gram PM/kW-hr; and

E = total tons of PE/rolling 12-month period emitted.

If required, the permittee shall demonstrate compliance with the emission limitations through performance tests conducted in accordance with the provisions in term f)(2) below.

[40 CFR 60.4204(b)], [40 CFR 60.4201(a)], [40 CFR 60.4211(c)], [40 CFR 60.4212(a) and (c)], and [OAC rule 3745-31-05(D)]

o. Emission Limitations:

The exhaust emissions from these engines shall not exceed:

5.0 grams CO/kW-hr

Applicable Compliance Method:

Compliance with the emission limitations shall be based on the manufacturer's certification and by maintaining the engine according to the manufacturer's specifications. The g/kW-hr limit is the emission limitation from Table 4 or 5 of 40 CFR 1039.102, the interim Tier 4 phase-in exhaust emission standards for diesel engines between 75 and less than 175 horsepower (56 and <130 kW).

Compliance with the ton per rolling 12-month CO emissions limitation shall be determined by the following calculation:

$$E = \sum_{i=1}^n \left(G_i \frac{\text{Gallons}}{\text{Rolling 12 - months}} \right) \left(\frac{\text{kW}}{1.341 \text{ hp}} \right) \left(\frac{137,000 \text{ Btu}}{\text{Gallon}} \right) \left(\frac{\text{hp - hr}}{7000 \text{ Btu}} \right) \left(EFi \frac{5.0 \text{ grams}}{\text{kW - hr}} \right) \left(\frac{\text{Ton}}{907,185 \text{ gram}} \right)$$

where:

G_i = gallons of diesel fuel used per rolling 12-month period for engine type i ;



EF_i = the gram/kW-hr emission factor for the engine type i, 5.0 grams CO/kW-hr;
and

E = total tons of CO/rolling 12-month period emitted.

If required, the permittee shall demonstrate compliance with the emission limitations through performance tests conducted in accordance with the provisions in term f)(1)q. below.

[40 CFR 60.4204(b)], [40 CFR 60.4201(a)], [40 CFR 60.4211(c)], [40 CFR 60.4212(a) and (b)], and [OAC rule 3745-31-05(D)]

p. Sulfur Content Limitations for Diesel Fuel:

The sulfur content of the diesel fuel burned in this emissions unit shall not exceed 15 ppm or 0.0015% sulfur by weight.

Applicable Compliance Method:

Compliance shall be demonstrated through the record keeping requirements for the sulfur content of diesel oil received in section d)(7) above. If meeting the standards in 40 CFR 80.510(b), this calculates to approximately 0.0015 lb SO₂/MMBtu.

[40 CFR 60.4207(b)] and [40 CFR 80.510(b)]

(2) If it is determined by the Ohio EPA that a compliance demonstration is required through performance testing, it shall be conducted using one of the following test methods or procedures:

- a. in accordance with 40 CFR 60.4212, conduct the exhaust emissions testing using the in-use testing procedures found in 40 CFR Part 1039, Subpart F, measuring the emissions of the regulated pollutants as specified in 40 CFR 1065; or
- b. in accordance with 40 CFR 60.4213, conduct exhaust emissions testing using the test methods identified in Table 7 to Subpart IIII of Part 60.

If demonstrating compliance through the in-use testing procedures in 40 CFR part 1039, Subpart F, exhaust emissions from the stationary CI ICE shall not exceed the “not to exceed” (NTE) numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112, determined from the following equation:

$$\text{NTE requirement for each pollutant} = 1.25 \times \text{STD}$$

where:

STD = The standard specified for the pollutant in 40 CFR 89.112.

[40 CFR 60.4212(a) and (c)]

g) Miscellaneous Requirements

- (1) The permittee may relocate the portable source within the State of Ohio without first obtaining a permit-to-install and operate (PTIO) or a permit-to-install (PTI), providing the appropriate exemption requirements have been met and following the approval of the Director (the appropriate Ohio EPA District Office or local air agency). The Director may issue a ANotice of Site Approval if the following criteria are met, pursuant to the permanent exemption for portable sources in OAC rule 3745-31-03(A)(1):
 - a. the portable source is operated in compliance with any applicable best available technology (BAT) determination issued in a permit and all applicable state and/or federal rules and laws;
 - b. the portable source is operating pursuant to a currently effective PTIO or PTI and/or permit to operate (PTO) and continues to comply with the requirements of the permit;
 - c. the permittee has provided a minimum of 30 days notice of the intent to relocate the portable source to the permitting authority (the Ohio EPA District Office or local air agency that has issued the effective current permit) prior to the scheduled relocation;
 - d. the Ohio EPA district office or local air agency having jurisdiction over the new site has determined that the permitted emissions would not cause a nuisance and would be acceptable under OAC rule 3745-15-07; and
 - e. the Director has issued a ANotice of Site Approval, stating that the proposed site is acceptable and the relocation of the portable source, along with any supporting permitted emissions (e.g. roadways or storage piles), would not result in the installation of a major stationary source or a modification of an existing major stationary source at the new site.

The portable source can be relocated upon receipt of the Director's – 'A Notice of Site Approval' for the site.

- (2) If the relocation of the portable source would result in the installation of a major source or the modification of a major source, as defined in OAC rule 3745-31-01, the permittee shall submit an application and obtain a PTIO or PTI (as applicable) for the new location prior to moving the portable source.

When a portable source is located at a stationary source or at a site with multiple portable sources, the potential emissions of the portable source may be required to be added to that of the facility, in order to determine the potential to emit for Title V and PSD applicability. Relocation of any portable source that results in the creation of a major source, as defined in OAC rule 3745-77-01, must also meet all applicable requirements under the Title V program contained in OAC rule 3745-77, which may include the requirement to apply for a Title V permit.



The "Notice of Intent to Relocate" shall be submitted to the Ohio EPA District Office or local air agency responsible for issuing the permits for the portable source. Upon receipt of the notice, the permitting office shall notify the appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site. Failure to submit said notification or failure to receive Ohio EPA approval prior to relocation of the portable source may result in fines and civil penalties.

[Authority for term: PTI P0106503 and 3745-77-07(C)(1)]

- (3) *Useful life* means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for useful life for stationary CI ICE with a displacement of less than 10 liters per cylinder are given in 40 CFR 1039.101(g). The values for useful life for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder are given in 40 CFR 94.9(a).

[40 CFR 60.4203]and [40 CFR 60.4219]



10. Emissions Unit Group -Diesel generators: B006,B007,B008,B009

| EU ID | Operations, Property and/or Equipment Description |
|-------|---|
| B006 | Diesel Generator No.1 General Motors large bore, number two fuel oil-fired, stationary internal combustion engine, having a nominal heat input capacity of 33 mmBtu/hr, |
| B007 | Diesel Generator No.2 General Motors large bore, number two fuel oil-fired, stationary internal combustion engine, having a nominal heat input capacity of 33 mmBtu/hr, |
| B008 | Diesel Generator No.3 General Motors large bore, number two fuel oil-fired, stationary internal combustion engine, having a nominal heat input capacity of 33 mmBtu/hr, |
| B009 | Diesel Generator No.4 General Motors large bore, number two fuel oil-fired, stationary internal combustion engine, having a nominal heat input capacity of 33 mmBtu/hr, |

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
- (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|--|--|
| a. | OAC rule 3745-17-07(A) | Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule. |
| b. | OAC rule 3745-17-11(B)(5)(b) | Particulate emissions shall not exceed 0.062 lb/mmBtu actual heat input. |
| c. | OAC rule 3745-18-07(B)(1) | Sulfur dioxide (SO ₂) emissions shall not exceed 0.5 lb/mmBtu actual heat input. |
| d. | 40 CFR Part 63 Subpart ZZZZ [40 CFR63.6580 to 63.6675] In accordance with 40 CFR 63.6585, this emissions unit is a stationary internal combustion engine (ICE) subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines. | The existing stationary compression ignition (CI) reciprocating internal combustion engine (RICE), located at a major source for hazardous air pollutants (HAPs), shall meet the requirements of 40 CFR Part 63, Subpart ZZZZ. |
| e. | 40 CFR 63.6600(d) Table 2c #5 to Subpart ZZZZ | Emissions of carbon monoxide (CO) shall not exceed 23 ppmvd at 15% O ₂ or emissions of CO shall be reduced be |



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| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|------------------------------------|--|
| | | reduced by 70% or more. |
| f. | 40 CFR 63.6604 40 CFR 80.510(b) | The sulfur content of the diesel fuel burned in this emissions unit shall not exceed 15 ppm or 0.0015% sulfur, by weight. See b)(2)a. |
| g. | 40 CFR 63.1 – 63.15 | Table 8 – Applicability of General Provisions to Subpart ZZZZ of 40 CFR Part 63 show which parts of the General Provisions in 40 CFR 63.1 through 63.15 apply. |

(2) Additional Terms and Conditions

- a. The quality of the diesel fuel burned in this emission unit shall meet the following specifications on an “as received” basis:
 - i. a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.0015 pound sulfur dioxide/MMBtu actual heat input; and 15 ppm sulfur or 0.0015% sulfur by weight
 - ii. a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent; and
 - iii. a heating value greater than 135,000 Btu/gallon.

Compliance with the above-mentioned specifications shall be determined by using the analytical results provided by the permittee or oil supplier for each shipment of oil.

c) Operational Restrictions

- (1) The quality of oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in b)(1)c above.

[Authority for term: 3745-77-07(A)(1)]

- (2) The permittee shall burn only number two fuel oil in this emissions unit.

[Authority for term: 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain records of the oil burned in these emissions units in accordance with either Alternative 1 or Alternative 2 described below:



a. Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

b. Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods, such as ASTM methods D240 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter and D4294, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, or equivalent methods as approved by the Director.

[Authority for term: OAC rules 3745-18-04(E)(3), 3745-18-04(I), and 3745-77-07(C)(1)]

- (2) For each day during which the permittee burns a fuel other than number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[Authority for term: 3745-77-07(C)(1)]

- (3) The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:

| Applicable Rule | Requirement |
|-----------------|---|
| 63.6605 | General compliance requirements |
| 63.6625 | Monitoring, installation, collection, operation, and maintenance requirements |



| | |
|---------|--|
| 63.6635 | Monitoring and collecting data |
| 63.6655 | Record keeping requirements |
| 63.6660 | In what form & how long must I keep my records |

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall notify the Portsmouth Local Air Agency in writing of any record which shows a deviation of the allowable sulfur dioxide limitation specified in b)(1)c. above based upon the calculated sulfur dioxide emission rates from d)(1) above. The notification shall include a copy of such record and shall be sent to the Portsmouth Local Air Agency within 45 days after the deviation occurs.

[Authority for term: 3745-77-07(C)(1)]

- (2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for term: 3745-77-07(C)(1)]

- (3) The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:

| Applicable Rule | Requirement |
|-----------------|--------------------------|
| 63.6645 | Submitting notifications |
| 63.6650 | Submitting reports |

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated through visible emissions observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

Particulate emissions shall not exceed 0.062 lb/mmBtu actual heat input.



Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.062 lb/mmBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.4, Table 3.4-2 (10/96). If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(10).

c. Emission Limitation:

SO₂ emissions shall not exceed 0.5 lb/mmBtu actual heat input.

Applicable Compliance Method:

Compliance with the allowable sulfur dioxide emission limitation may be demonstrated by documenting that the sulfur content of each shipment of oil received or each daily sample collected during a calendar month meets the limitation. If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

d. Emission Limitations:

CO emissions shall not exceed 23 ppmvd at 15% O₂ or emissions of CO shall be reduced by 70% or more.

Applicable Compliance Method:

The appropriate test methods from Table 4 to Subpart ZZZZ shall be conducted based on the option chosen for compliance, i.e., the part per million concentration or percent reduction. The appropriate emission and/or operating limitations, required per 40 CFR 63.6630 and identified in Table 5, shall be established and compliance demonstrated during each performance test.

The temperature at the inlet to the catalyst shall be monitored during the performance test and maintained between 450 °F and 1350 °F. The 3-hour block average temperature at the inlet to the catalyst shall be documented during performance tests and the pressure drop shall be recorded to establish the operating range for the pressure drop across the catalyst. Per 63.6640(b), if the catalyst is changed or the control device replaced, a new performance test must be conducted to demonstrate compliance with the emission limitation and to reestablish the values for or compliance with the operating parameters.

Each performance test shall consist of 3 separate test runs and each test run shall last a minimum of 1 hour and shall be conducted during normal operations. The engine percent load, during the performance test, shall be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load and the estimated percent load shall be included in the notification of compliance.



A compliant performance test shall demonstrate that either the CO emissions have been reduced by 70% or that the average CO concentration is less than or equal to 23 ppmvd, corrected to 15 percent O₂ on a dry basis, and from three 1-hour or longer performance test runs.

If demonstrating compliance with the 70% control requirement for CO, the permittee may use a portable CO and O₂ analyzer at the inlet and outlet of the control device and use ASTM Method D6522-00 to meet the performance testing requirement in Table 4 to Subpart ZZZZ. The CO concentrations at the inlet and outlet of the control device must be normalized to a dry basis and to 15% oxygen, or an equivalent percent CO₂, as required in 40 CFR 63.6620(e).

The following test methods shall be employed to demonstrate compliance with the emission limitation for CO or may be used to demonstrate compliance with the control requirement for CO:

- i. Method 1 or 1A of 40 CFR Part 60, Appendix A to select the sampling port location and the number of traverse points
- ii. Method 3, 3A, or 3B of 40 CFR Part 60, Appendix A or ASTM Method D6522-00 to measure O₂ at the inlet and outlet of the control device to normalize the CO concentration(s).
- iii. Method 4 of 40 CFR Part 60, Appendix A; or Method 320 of 40 CFR Part 63, Appendix A; or ASTM D6348-03 to measure the moisture content at the inlet and outlet of the control device if demonstrating compliance through the percent control or to measure the moisture content of the stationary RICE exhaust.
- iv. Method 10 of 40 CFR Part 60, Appendix A; or Method 320 of 40 CFR Part 63, Appendix A; or ASTM D 6348-03 to measure CO at the inlet and outlet of the control device if demonstrating compliance through the percent control or to measure CO at the exhaust of the stationary ICE.
- v. The following equation shall be used to normalize the CO concentrations to a dry basis and to 15 percent oxygen (O₂)**:

$$C_{adj} = C_d (5.9 / 20.9 - \% O_2)$$

where:

C_{adj} = calculated CO concentration adjusted to 15 percent O₂;

C_d = measured concentration of CO, uncorrected;

5.9 = 20.9 percent O₂ – 15 percent O₂, the defined O₂ correction value, percent; and

%O₂ = measured O₂ concentration, dry basis, percent.



** Optionally, the pollutant concentrations can be corrected to 15% O₂ using a CO₂ correction factor, by calculating the fuel factor (F_o value) using Method 19 results obtained during the performance test (40 CFR 63.6620(e)(2)).

- vi. If compliance is demonstrated for the control efficiency for CO, the following equation shall be used to determine the percent reduction:

$$R = (C_i - C_o) / C_i \times 100$$

where:

C_i= concentration of CO at the control device inlet;

C_o= concentration of CO at the control device outlet; and

R = percent reduction of CO emissions.

If using CEMS to monitor and comply with the CO concentration limitation or requirement to reduce CO emissions, the permittee shall conduct annual relative accuracy test audits (RATA) using Performance Specifications 3 and 4A of 40 CFR Part 60 Appendix B and daily and periodic data quality checks in accordance with 40 CFR Part 60, Appendix F, Procedure 1;

If using a CPMS to demonstrate compliance, the permittee shall conduct subsequent performance tests for CO (concentration or % reduction) every 8,760 hours of operation or every 3 years, whichever comes first.

The permittee shall notify the Portsmouth Local Air Agency in writing of each scheduled performance test date or RATA for the CEMS at least 60 calendar days before it is scheduled, to allow the agency time to review and approve the site-specific test plan and to arrange for an observer to be present during the compliance demonstration.

Personnel from the Portsmouth Local Air Agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

[40 CFR 63.7(a)(2), (b)(1), and (e)], [40 CFR 63.6600(d)], [40 CFR 63.6610],[40 CFR 63.6615], [40 CFR 63.6620],[40 CFR 63.6630], [40 CFR 63.6640(a) and (b)], [40 CFR 63.6645(a)(3)], [Part 63, Subpart ZZZZ, Table 2c #5; Table 2b; Table 3 #4; Table 4 #1 or #3; Table 5 #1, #2, #5, or #6; and Table 6 #3 or #10], [OAC 3745-110-03(F)(3)], [OAC 3745-110-05(A) and (F)], [OAC rule 3745-15-04(A), and OAC 3745-77-07(C)(1)]

- (2) The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:



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| Applicable Rule | Requirement |
|-----------------|---|
| 63.6605 | General compliance requirements |
| 63.6610 | Testing and initial compliance requirements |
| 63.6615 | Conducting subsequent performance tests |
| 63.6620 | Performance tests and other procedures |
| 66.6630 | Demonstrating initial compliance with emission limitations and operating limits |
| 66.6640 | Demonstrating continuous compliance |

[Authority for term: 40 CFR Part 63 and 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) None.



11. Emissions Unit Group -Fire tube steam boilers: B010,B011,B012,

| EU ID | Operations, Property and/or Equipment Description |
|-------|--|
| B010 | 70.157 mmBtu/hr heat input No. 2 fuel oil and/or biodiesel fuel fired auxiliary steam boiler |
| B011 | 70.157 mmBtu/hr heat input No. 2 fuel oil and/or biodiesel fuel fired auxiliary steam boiler |
| B012 | 70.157 mmBtu/hr heat input No. 2 fuel oil and/or biodiesel fuel fired auxiliary steam boiler |

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
- (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|--|--|
| a. | ORC 3704.03(T) | Sulfur dioxide (SO ₂) emissions shall not exceed 0.37 lb/mmBtu of actual heat input. See c)(5). |
| b. | OAC rule 3745-31-05(A)(3), as effective 11/30/01 | The PM/PM ₁₀ /PM _{2.5} , NO _x , CO and VOC emissions requirements of this rule are equivalent to the rolling, 12-month PM/PM ₁₀ /PM _{2.5} , NO _x , CO and VOC emission limitations established pursuant to OAC rule 3745-31-05(D). The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart Dc. |
| c. | OAC rule 3745-31-05(A)(3), as effective 12/01/06 | See b)(2)b. |
| d. | OAC rule 3745-31-05(D) (Synthetic Minor restriction to qualify as a "limited use boiler" per 40 CFR Part 63, subpart DDDDD) (PTI P0116447, issued 6/18/14) | PM/PM ₁₀ /PM _{2.5} shall not exceed 0.45 ton per rolling, 12-month period. NO _x emissions shall not exceed 4.91 tons per rolling, 12-month period. CO emissions shall not exceed 1.12 tons per rolling, 12-month period. |

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|---|--|
| | | <p>Volatile organic compound(VOC) emissions shall not exceed 0.04 ton per rolling, 12-month period</p> <p>SO₂ emissions shall not exceed 11.10 tons per rolling, 12-month period.</p> <p>See c)(1) and c)(2).</p> |
| e. | OAC rule 3745-17-10(B)(1) | Particulate emissions shall not exceed 0.020 lb/mmBtu actual heat input. |
| f. | OAC rule 3745-17-07(A)(1) | The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to 40 CFR Part 60, Subpart Dc. |
| g. | OAC rule 3745-18-06 | The SO ₂ emission limitation required by this applicable rule is less stringent than the SO ₂ emission limitation established pursuant to ORC 3704.03(T). |
| h. | <p>40 CFR Part 60, Subpart Dc (40 CFR 60.40c – 60.48c) [In accordance with 40 CFR 60.40c(a), this emission unit is an existing steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr).]</p> | Visible PE shall not exceed 20% opacity as a 6-minute average, except for one 6-minute period per hour of not more than 27% opacity. |
| i. | 40 CFR 60.1 – 60.19 | General Provisions. |
| j. | <p>40 CFR Part 63, Subpart DDDDD (40 CFR 63.7480 – 63.7575) [In accordance 40 CFR 63.7500(c) this emissions unit is a limited-use boiler subject to the tune-up requirements specified in this section.]</p> | <p>Tune-up requirements specified in Table 3. [40 CFR 63.7540] See b)(2)c.</p> |
| k. | <p>40 CFR 63.1 – 63.16 (40 CFR 63.7565)</p> | Table 10 to Subpart DDDDD of 40 CFR Part 63 – Applicability of General Provisions to Subpart DDDDD shows which parts of the General Provisions in |



| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|--|-------------------------------|---|
| | | 40 CFR 63.1 – 63.16 apply. |

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B.265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio’s State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then the emission limits/control measures for VOC no longer apply.

- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

Permit to Install and operate P0116447 for these air contaminant sources takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purposes of avoiding BAT requirements under OAC rule 3745-31-05(A)(3) for PM/PM₁₀/PM_{2.5}, CO, NO_x and VOC.

- i. The maximum annual heat input for this emissions unit shall not exceed 61,458 MMBtu, based upon a rolling, 12-month summation of the monthly heat input values.
 - ii. PM/PM₁₀/PM_{2.5} shall not exceed 0.45 ton per rolling, 12-month period.
 - iii. CO emissions shall not exceed 1.12 tons per rolling, 12-month period.
 - iv. NO_x emissions shall not exceed 4.91 tons per rolling, 12-month period.
 - v. VOC emissions shall not exceed 0.04 ton per rolling, 12-month period.
- c. The permittee shall comply with the requirements and limits of 40 CFR Part 63, Subpart DDDDD for the facility’s existing boilers and shall be in compliance with this NESHAP no later than January 31, 2016.
 - i. This emissions unit is identified as limited-use boiler and is not subject to the emission limits in Table 2 of the subpart, the operating limits in Table 4 of the subpart, or the energy assessment requirements in Table 3 of the subpart.



- ii. The limited-use boiler is subject to 5-year tune-up requirements, conducted in accordance with 40 CFR 63.7540(a)(10)(i) through (vi) and Table 3 to the subpart: Each limited-use boiler identified above shall have a federally enforceable average annual capacity factor of no more than 10%.

- d. PTI 07-00595 established the following federally enforceable emission limitations for purposes of establishing the facility as a minor source for attainment New Source Review:
 - i. 17.6 tons NO_x per rolling, 12-month period from emissions units B010, B011, B012 and B013, combined; and
 - ii. 39.76 tons SO₂ per rolling, 12-month period from emissions units B010, B011, B012 and B013, combined.

These emission limitations were based on the fuel usage restrictions listed in the permit for the purpose of establishing federally enforceable emission limitations to avoid: "Prevention of Significant Deterioration" (PSD) applicability.

- e. The emission limitations in this permit are more stringent than PTI 07-00595 and include an annual heat input of 61,458 mmBtu/yr for each boiler, individually, resulting in the following federally enforceable emission limitations:
 - i. 4.91 tons NO_x per rolling, 12-month period from emission units B010, B011 and B012, individually; and
 - ii. 11.10 tons SO₂ per rolling, 12-month period from emission units B010, B011 and B012, individually.

c) Operational Restrictions

- (1) The maximum annual heat input for this emissions unit shall not exceed 61,458 MMBtu, based upon a rolling, 12-month summation of the monthly heat input values. The permittee has sufficient records to demonstrate compliance with the annual heat input limitation upon permit issuance in order to qualify as a "limited use boiler" per 40 CFR Part 63, Subpart DDDDD.

[Authority for term: PTI P0116447 and 3745-77-07(A)(1)]

- (2) The permittee shall perform all maintenance activities as specified per the manufacturer's recommendations. To the extent practicable, the permittee shall maintain and operate the boiler, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

[Authority for term: PTI P0116447 and 3745-77-07(A)(1)]

- (3) See 40 CFR Part 63, Subpart DDDDD (40 CFR 63.7480 – 63.7575).

[Authority for term: PTI P0116447 and 3745-77-07(A)(1)]

- (4) The permittee shall burn only No. 2 fuel oil or biodiesel fuel in this emissions unit.

[Authority for term: PTI P0116447 and 3745-77-07(A)(1)]

- (5) The quality of No. 2 fuel oil burned in this emissions unit shall have a combination of sulfur content and heat content sufficient to comply with the allowable SO₂ emission limitation of 0.37 lb/mmBtu of actual heat input and a sulfur content limit of less than or equal to 0.35 percent sulfur, by weight.

[Authority for term: PTI P0116447 and 3745-77-07(A)(1)]

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall maintain records of all maintenance activities performed in accordance with manufacturer's recommendations. Maintenance records for B010, B011 and B012 shall be made available to the Portsmouth Local Air Agency upon request.

[Authority for term: OAC rules 3745-18-04(E)(3), 3745-18-04(I), and 3745-77-07(C)(1)]

- (2) The permittee shall maintain monthly records of the following information for these emissions units:

- a. the monthly fuel usage of biodiesel and/or No. 2 fuel oil for B010, B011 and B012, in gallons;
- b. the monthly heat input rate for B010, B011 and B012, in MMBtu (calculated by multiplying d)(2)a by the oil heating value of biodiesel and/or No. 2 fuel oil); and
- c. the rolling, 12-month summation of the monthly heat input rates for B010, B011 and B012 (in MMBtu).

[Authority for term: PTI P0116447 and 3745-77-07(C)(1)]

- (3) The permittee shall maintain records of the oil burned in these emissions units in accordance with either Alternative 1 or Alternative 2 described below.

- a. **Alternative 1:**

For each shipment of oil received for burning in these emissions units, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lb/mmBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

b. Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods, such as ASTM methods D240 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter and D4294, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, or equivalent methods as approved by the Director.

- (4) See 40 CFR Part 60.48c(a) through 60.48c(j).
- (5) See 40 CFR Part 63, Subpart DDDDD (40 CFR 63.7480 – 63.7575).
[Authority for term: PTI P0116447, 40 CFR Part 63, and 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. all exceedances of the rolling, 12-month heat input limitation for emissions units B010, B011 and B012.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[Authority for term: PTI P0116447 and 3745-77-07(C)(1)]

- (2) The permittee shall notify the Portsmouth Local Air Agency of any record that shows a deviation of the allowable SO₂ allowable emission limitation and/or sulfur content limitation based upon the calculated emission rates from d)(3) above. The notification shall include a copy of such record and shall be sent to the Portsmouth Local Air Agency within 45 days after the deviation occurs.

[Authority for term: PTI P0116447 and 3745-77-07(C)(1)]



- (3) The permittee shall notify the Portsmouth Local Air Agency of any fuel burned in these emissions units other than biodiesel fuel or No. 2 fuel oil. The notification shall include a copy of such record and shall be sent to the Portsmouth Local Air Agency within 45 days after the deviation occurs.

[Authority for term: PTI P0116447 and 3745-77-07(C)(1)]

- (4) See 40 CFR Part 60.48c(a) through 60.48c(j).

[Authority for term: PTI P0116447 and 3745-77-07(C)(1)]

- (5) See 40 CFR Part 63, Subpart DDDDD (40 CFR 63.7480 – 63.7575).

[Authority for term: PTI P0116447, 40 CFR Part 63, and 3745-77-07(C)(1)]

f) **Testing Requirements**

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

SO₂ emissions shall not exceed 0.37 lb/mmBtu of actual heat input.

Applicable Compliance Methods:

For the use of No. 2 fuel oil and biodiesel fuel, the short term emission limitation is based upon the emission unit's potential to emit and the manufacturer's guaranteed emissions data as provided in PTI application 07-00595 submitted on May 20, 2008 and in PTI application P0116447 submitted on March 11, 2014.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

- b. Emission Limitation:

Visible PE shall not exceed 20% opacity as a 6-minute average, except for one 6-minute period per hour of not more than 27% opacity.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with Test Method 9, as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002.



c. Emission Limitations:

PM/PM₁₀/PM_{2.5} shall not exceed 0.45 ton per rolling, 12-month period.

NO_x emissions shall not exceed 4.91 tons per rolling, 12-month period.

CO emissions shall not exceed 1.12 tons per rolling, 12-month period.

VOC emissions shall not exceed 0.04 ton per rolling, 12-month period.

SO₂ emissions shall not exceed 11.10 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated by adding the current month's emissions to the preceding eleven calendar months. Monthly emissions shall be determined by multiplying the associated emission factors from AP-42 Section 1.3 (5/10) in lb/10³ gallons by the biodiesel fuel and/or No. 2 fuel oil consumed then divided by 2000.

d. Emission Limitation:

Particulate emissions shall not exceed 0.020 lb/mmBtu actual heat input.

Applicable Compliance Method:

For the use of No. 2 fuel oil and biodiesel fuel, the short term emission limitation is based upon the emission unit's potential to emit and the manufacturer's guaranteed emissions data as provided in PTI application 07-00595 submitted on May 20, 2008 and in PTI application P0116447 submitted on March 11, 2014.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

- (2) Compliance with the sulfur content shall be demonstrated by the record keeping required pursuant to section d)(3) above.

[Authority for term: PTI P0116447 and 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) None.