Hilcorp Alaska, LLC

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March 29, 2019

Alaska Department of Environmental Conservation
Air Permits Program-Attn: Compliance Technician
610 University Avenue
Fairbanks, AK 99709-3643

**Subject:** 2018 Annual Compliance Certification for Hilcorp Alaska, LLC

Dear Compliance Technician,

Enclosed are the original copies of the 2018 Annual Compliance Certifications for the Alaska Department of Environmental Conservation (ADEC) for the following facilities operated by Hilcorp Alaska, LLC. The required additional copies of the Annual Compliance Certifications were submitted to the Department via email to 'dec.aq.airreports@alaska.gov' on March 29, 2019. A third courtesy copy was submitted simultaneously to the U.S. Environmental Protection Agency (EPA).

| FACILITY | TITLE V AIR QUALITY OPERATING PERMIT NO. |
|---|---|
| Anna Platform | 062TVP03 |
| Beaver Creek Production Facility | 070TVP03 |
| Beluga River Unit | 942TVP01 Rev. 2 |
| Bruce Platform | 064TVP03 Rev. 1 |
| Dillon Platform | 065TVP03 |
| Dolly Varden Platform | 060TVP03 and 060TVP03 Rev. 2 |
| Endicott Production Facility | 181TVP02 Rev. 2, 181MSS04 Rev. 2, 181MSS08, 181MSS09, 181MSS10 |
| Granite Point Platform | 066TVP03 |
| Granite Point Tank Farm | 326TVP03 |
| Grayling Platform | 069TVP02, 069TVP03, 069MSS01, 069MSS03 |
| Kenai Gas Field Pad 14-6 | 094TVP03 |
| Kenai Gas Field Pad 34-31 | 087TVP03 |
| King Salmon Platform | 068TVP03 |
| Middle Ground Shoal (MGS) Platform A | 084TVP03 Rev. 1 |
| Middle Ground Shoal (MGS) Platform C | 085TVP03 |
| Milne Point Production Facility | 200TVP02 Rev. 4, 200MSS006, 200MSS07 |
| Monopod Platform | 067TVP02 Rev. 1, Rev. 2, 067MSS01 |

| FACILITY | TITLE V AIR QUALITY OPERATING PERMIT NO. |
|---|---|
| Northstar Production Facility | 503TVP02 Rev. 2 |
| Steelhead Platform | 009TVP03 |
| Swanson River Field | 059TVP02 Rev.3, Rev.2, Rev. 1 |
| Tyonek Platform | 091TVP02 |

*Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.*

Please contact Julieanna Potter at (907) 777-8444 or jupotter@hilcorp.com with any questions or concerns.

Sincerely,

David B. Wilkins
Senior Vice President
Hilcorp Alaska, LLC

Enclosure: Annual Compliance Certifications

cc: USEPA Region 10
Julieanna Potter, Hilcorp

## Annual Compliance Certification

Milne Point Production Facility Operating Permit No. AQ0200TVP02 Rev. 1, Rev. 3, Rev. 4
Reporting Period: January 1, 2018 to December 31, 2018

| Permit Condition No. | Permit Condition Summary/Description | Compliance Status | Method to Determine Status [40 C.F.R. 71.6(c)(5)(iii)(B)] | Comments |
|---|---|---|---|---|
| **Section 3. State Requirements** | | | | |
| **Visible Emissions Standards** | | | | |
| 1 | **Industrial Process and Fuel-Burning Equipment Visible Emissions.** The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from EU IDs 1 through 15, 17, 18, 18A, 21, 25, CP-1, CP-2, CP-3, CP-4, CP-6, CP-7, T-1, T-2, and T-3 listed in Table 1, and from all fuel burning units authorized in Conditions 36 and 37 (excluding nonroad engines (NREs)) to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes in any one hour.<br>1.1. For EU IDs 3 through 6, 9, 10, CP-1, CP-2, CP-4, CP-6, T-1, T-2, and T-3, burn only gas as fuel. Monitoring for these emission units shall consist of a statement in each operating report under Condition 95 indicating whether each of these emission units fired only gas during the period covered by the report. Report under Condition 94 if any fuel other than gas is burned.<br>1.2. For EU IDs 11 through 15, 17, and CP-3, as long as they do not exceed 400 hours of emergency and non-emergency operation per 12-month period, monitoring shall consist of an annual certification of compliance with the opacity standard under Condition 96 with the visible emissions standard. Otherwise, monitor, record, and report in accordance with Conditions 2 through 4, for that emission unit for the remainder of the permit term.<br>1.3. For EU IDs 1, 2, 7, and 8, use fuel gas as the primary fuel. Monitoring for these emission units shall consist of a statement in each operating report required in Condition 95 that each of these emission units fired only gas, except as follows: if operated on a back-up liquid fuel at any time during the operating report period, monitor, record and report according to Condition 12.<br>1.4. For EU IDs 18 and 18A (flares), monitor, record and report in accordance with Condition 5. | Continuous | Records Review and Field Verification/Interview | |
| | 1.5. For each heater and boiler authorized in Conditions 36 and 37 not meeting the definition of insignificant according to 18 AAC 50.326(d)-(i) and operated under this permit, the Permittee shall comply with the monitoring, recordkeeping, and reporting requirements in Conditions 2 through 4. | Continuous | Records Review | |
| **Visible Emissions Monitoring, Recordkeeping and Reporting** | | | | |
| 2 | **Visible Emissions Monitoring.** The Permittee shall observe the exhaust of EU IDs 1, 2, 7, 8, 11 through 15, 17, CP-3, CP-6, and each heater and boiler authorized in Conditions 36 and 37 for visible emissions using the Method 9 Plan under Condition 2.1 if required by Condition 1.2, 1.5, or Condition 12. The Permittee may for each unit elect to continue the visible emissions monitoring schedule in effect from the previous permit at the time a renewed permit is issued, if applicable. | Continuous | Records Review and Field Verification/Interview | |
| | 2.1. **Method 9 Plan.** For all 18-minute observations in this plan, observe exhaust, following 40 C.F.R. 60, Appendix A-4, Method 9, adopted by reference in 18 AAC 50.040(a), for 18 minutes to obtain 72 consecutive 15-second opacity observations.<br>a. The Permittee shall comply with the following for EU IDs 1, 2, 7, 8, 11 through 15, 17, CP-3, and CP-6:<br>(i) **First Method 9 Observation.** Perform the first Method 9 observation, as follows:<br>(A) For any liquid fuel fired unit replaced during the term of this permit, observe exhaust for 18 minutes within 30 days of startup.<br>(B) For any of EU IDs 11 through 15, 17, and CP-3 no longer considered insignificant as set out by Condition 1.2, observe exhaust for 18 minutes of operation within 45 days after the calendar month during which that threshold has been exceeded, or within 30 days of the unit's next operations, whichever is later.<br>(ii) **Monthly Method 9 Observations.** After the first Method 9 observation required by Condition 2.1.a(i), perform 18-minute observations at least once in each calendar month that an emission unit operates.<br>(iii) **Semiannual Method 9 Observations.** After observing emissions for three consecutive operating months under Condition 2.1.a(ii), unless a six-minute average is greater than 15 percent and one or more observations are greater than 20 percent, perform 18-minute observations:<br>(A) Within six months after the preceding observation, or<br>(B) For an emission unit with intermittent operations, during the next scheduled operation immediately following six months after the preceding observation.<br>(iv) **Annual Method 9 Observations.** After at least two semiannual 18-minute observations, unless a six-minute average is greater than 15 percent and one or more individual observations are greater than 20 percent, perform 18-minute observations:<br>(A) Within twelve months after the preceding observation; or<br>(B) For an emission unit with intermittent operations, during the next scheduled operation immediately following twelve months after the preceding observation<br>(v) **Increased Method 9 Frequency.** If a six-minute average opacity is observed during the most recent set of observations to be greater than 15 percent and one or more observations are greater than 20 percent, then increase or maintain the 18-minute observation frequency for that emission unit to at least monthly intervals as described in Condition 2.1.a(ii), until the criteria in Condition 2.1.a(iii) for semiannual monitoring are met. | Continuous | Records Review and Field Verification/Interview | |
| | b. For each heater and boiler authorized in Conditions 36 and 37, the Permittee shall perform visible emissions observations within two days of drill rig operation at a well pad. | Continuous | Records Review | |



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## Annual Compliance Certification

Milne Point Production Facility Operating Permit No. AQ0200TVP02 Rev. 1, Rev. 3, Rev. 4
Reporting Period: January 1, 2018 to December 31, 2018

| Permit Condition | | Compliance Status | Method to Determine Status | Comments |
|---|---|---|---|---|
| No. | Summary/Description | | [40 C.F.R. 71.6(c)(5)(iii)(B)] | |
| 3 | **Visible Emissions Recordkeeping.** When required by any of Conditions 1.1 through 1.3 and 1.5, or in the event of replacement of any emission unit during the permit term, the Permittee shall keep records as follows:<br>3.1. For all Method 9 observations of Condition 2.1, the observer shall record<br>a. the name of the stationary source, emission unit and location, emission unit type, observer's name and affiliation, and the date on the Visible Emissions Field Data Sheet in Section 13;<br>b. the time, estimated distance to the emissions location, sun location, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds), plume background, and operating mode (load or fuel consumption rate or best estimate if unknown) on the sheet at the time opacity observations are initiated and completed;<br>c. the presence or absence of an attached or detached plume and the approximate distance from the emissions outlet to the point in the plume at which the observations are made;<br>d. opacity observations to the nearest five percent at 15-second intervals on the Visible Emissions Observation record in Section 13, and<br>e. the minimum number of observations required by the permit; each momentary observation recorded shall be deemed to represent the average opacity of emissions for a 15-second period.<br>3.2. To determine the six-minute average opacity, divide the observations recorded on the record sheet into sets of 24 consecutive observations; sets need not be consecutive in time and in no case shall two sets overlap; for each set of 24 observations, calculate the average by summing the opacity of the 24 observations and dividing this sum by 24; record the average opacity on the sheet.<br>3.3. Calculate and record the highest 6-consecutive-minute and 18-consecutive-minute averages observed. | Continuous | Records Review | |
| 4 | **Visible Emissions Reporting.** When required by any of Condition 1.1 through 1.3 and 1.5, or in the event of replacement of any emission unit during the permit term, the Permittee shall report visible emissions as follows:<br>4.1. In each operating report under Condition 95, include for the period covered by the report:<br>a. copies of the observation results (i.e. opacity observations) for each emission unit that used the Method 9 Plan, except for the observations the Permittee has already supplied to the Department; and<br>b. a summary to include:<br>(i) number of days observations were made;<br>(ii) highest six-consecutive-minute average observed; and<br>(iii) dates when one or more observed six-minute averages were greater than 20 percent;<br>c. a summary of any monitoring or recordkeeping required under Condition 2 was not done;<br>4.2. Report under Condition 94:<br>a. the results of Method 9 observations that exceed an average of 20 percent opacity for any six-consecutive-minute period; and<br>b. if any monitoring under Condition 2 was not performed when required, report within three days of the date the monitoring was required. | Continuous | Records Review and Field Verification/Interview | |
| 5 | **Visible Emissions Monitoring, Recordkeeping, and Reporting.** The Permittee shall observe one daylight flare event within 12 months after the preceding flare event observation or within 12 months after the permit effective date, whichever is later. If no event exceeds 18 minutes within that 12-month period, then the Permittee shall observe the next planned daylight flare event.<br>5.1. Monitor flare events using Method-9<br>5.2. Record the following information for observed events:<br>a. the flare(s) EU ID number;<br>b. results of the Method-9 observations;<br>c. reason(s) for flaring;<br>d. date, beginning and ending time of event; and<br>e. volume of gas flared.<br>5.3. Monitoring of a flare event may be postponed for safety or weather reasons, or because a qualified observer is not available. If more than 12 months have elapsed since the last qualifying flare event was monitored, and monitoring of a flare event is postponed for any of the reasons described in this condition, the Permittee shall include in the next operating report required by Condition 95, an explanation of the reason that the flare event was not monitored. If no qualifying flare event occurs during the elapsed period then no flare event monitoring or reporting is required.<br>5.4. Attach copies of the records required by Condition 5.2 with the operating report required by Condition 95 for the period covered by that report, except for the observations the Permittee has already supplied to the Department.<br>5.5. Report under Condition 94 whenever the visible emission standard in Condition 1 is exceeded or the monitoring required under Condition 5 is not completed. | Continuous | Records Review and Field Verification/Interview | |



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## Annual Compliance Certification

Milne Point Production Facility Operating Permit No. AQ0200TVP02 Rev. 1, Rev. 3, Rev. 4
Reporting Period: January 1, 2018 to December 31, 2018

| Permit Condition No. | Permit Condition Summary/Description | Compliance Status | Method to Determine Status [40 C.F.R. 71.6(c)(5)(iii)(B)] | Comments |
|---|---|---|---|---|
| **Particulate Matter Emissions Standards** | | | | |
| 6 | **Industrial Process and Fuel-Burning Equipment Particulate Matter.** The Permittee shall not cause or allow particulate matter emitted from EU IDs 1 through 15, 17, 18, 18A, 21, 25, CP-1, CP-2, CP-3, CP-4, CP-6, CP-7, T-1, T-2, and T-3 listed in Table 1, and from all fuel burning units authorized in Conditions 36 and 37 (excluding NREs) to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.<br>6.1. For EU IDs 3 through 6, 9, 10, CP-1, CP-2, CP-4, CP-6, T-1, T-2, and T-3, burn only gas as fuel. Monitoring for these emission units shall consist of a certification in each operating report under Condition 95 indicating whether each of these emission units fired only gas during the period covered by the report. Report under Condition 94 if any fuel other than gas is burned.<br>6.2. For EU IDs 11 through 15, 17, and CP-3, as long as they do not exceed 400 hours of emergency and non-emergency operation per 12-month period, monitoring shall consist of an annual compliance certification under Condition 96 with the particulate matter standard. Otherwise, monitor, record, and report in accordance with Conditions 7 and 8 for that emission unit.<br>6.3. For EU IDs 18, 18A, 21, 25 and CP-7, the Permittee must annually certify compliance under Condition 96 with the particulate matter standard.<br>6.4. For EU IDs 1, 2, 7, and 8, use fuel gas as the primary fuel. Monitoring for these emission units shall consist of a statement in each operating report required in Condition 95 that each of these emission unit(s) fired only gas as the primary fuel, except as follows: if operated on a back-up liquid fuel at any time during the operating report period, monitor, record and report according to Condition 12.<br>6.5. For each heater and boiler authorized in Conditions 36 and 37 not meeting the definition of insignificant according to 18 AAC 50.326(d)-(i) and operated under this permit, the Permittee shall comply with the monitoring, recordkeeping, and reporting requirements in Conditions 9 through 11. | Continuous | Records Review and Field Verification/Interview | |
| **PM Monitoring, Recordkeeping, and Reporting** | | | | |
| 7 | **Particulate Matter Monitoring for Diesel Engines and Liquid Fuel-Fired Turbines.** The Permittee shall conduct source tests on liquid-fired turbines EU IDs 1 and 2 per Condition 7, and diesel engines EU IDs 11 through 15, 17, and CP-3 if required by Condition 6.2, to determine the concentration of particulate matter (PM) in the exhaust of a source as follows.<br>7.1. Except as provided in Condition 7.4, within six months of exceeding the criteria of Condition 7.2.a or 7.2.b, either<br>a. conduct a PM source test according to requirements set out in Section 7; or<br>b. make repairs so that emissions no longer exceed the criteria of Condition 7.2; to show that emissions are below those criteria, observe emissions as described in Condition 2.1 under load conditions comparable to those when the criteria were exceeded.<br>7.2. Conduct the PM source test or make repairs according to Condition 7.1 if<br>a. 18 consecutive minutes of Method 9 observations result in an 18-minute average opacity greater than 20 percent; or<br>b. for an emission unit with an exhaust stack diameter that is less than 18 inches, 18 consecutive minutes of Method 9 observations result in an 18-minute average opacity that is greater than 15 percent and not more than 20 percent, unless the Department has waived this requirement in writing.<br>7.3. During each one-hour PM source test run, observe the exhaust for 60 minutes in accordance with Method 9 and calculate the highest average 6-consecutive-minute opacity measured during each one-hour test run. Submit a copy of these observations with the source test report.<br>7.4. The automatic PM source test requirement in Condition 7.1 and 7.2 is waived for an emissions unit if a PM source test on that unit has shown compliance with the PM standard during this permit term. | Continuous | Records Review | |
| 8 | **Particulate Matter Reporting for Diesel Engines and Liquid-Fired Turbines.** The Permittee shall report as follows:<br>8.1. Report under Condition 94:<br>a. the results of any PM source test that exceeds the PM emissions limit; or<br>b. if one of the criteria of Condition 7.2 was exceeded and the Permittee did not comply with either Condition 7.1.a or 7.1.b, this must be reported by the day following the day compliance with Condition 7.1 was required;<br>8.2. Report observations in excess of the threshold of Condition 7.2.b within 30 days of the end of the month in which the observations occur;<br>8.3. In each operating report under Condition 95, include for the period covered by the report:<br>a. the dates, EU ID(s), and results when an observed 18-minute average was greater than an applicable threshold in Condition 7.2;<br>b. a summary of the results of any PM testing under Condition 7; and<br>c. copies of any visible emissions observation results (opacity observations) greater than the thresholds of Condition 7.2, if they were not already submitted. | Continuous | Records Review | |



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## Annual Compliance Certification

Milne Point Production Facility Operating Permit No. AQ0200TVP02 Rev. 1, Rev. 3, Rev. 4
Reporting Period: January 1, 2018 to December 31, 2018

| Permit Condition No. | Permit Condition Summary/Description | Compliance Status | Method to Determine Status [40 C.F.R. 71.6(c)(5)(iii)(B)] | Comments |
|---|---|---|---|---|
| 9 | **Particulate Matter Monitoring for Liquid Fuel-Fired Heaters.** The Permittee shall conduct source tests on EU IDs 7, 8, and each heater and boiler authorized in Conditions 36 and 37 when required by Condition 6.5 to determine the concentration of PM in the exhaust of the emission units as follows:<br>9.1. For EU IDs 7 and 8, except as required under Condition 9.4, conduct a PM source test according to the requirements set out in Section 7 no later than 180 calendar days after any time corrective maintenance fails to eliminate visible emissions greater than the 20 percent opacity threshold for two or more 18-minute observations in a consecutive six-month period.<br>9.2. For each heater and boiler authorized in Conditions 36 and 37, the Permittee shall demonstrate compliance with Condition 6 by conducting PM source tests on any emission unit for which observations under Condition 2.1.b show an exceedance of the limit in Condition 1.<br>a. Except as allowed under Condition 9.5, conduct PM source testing according to the requirements set out in Section 7 no later than 90 calendar days after the observation conducted under Condition 2.1.b.<br>9.3. During each one-hour PM source test run, observe the exhaust for 60 minutes in accordance with Method 9 and calculate the highest average 6-consecutive-minute opacity measured during each one-hour test run. Submit a copy of these observations with the source test report.<br>9.4. The PM source test requirement in Condition 9.1 is waived for an emission unit if:<br>a. a PM source test on that unit has shown compliance with the PM standard during the permit term; or<br>b. take corrective action and conduct two 18-minute visible emissions observations in a consecutive six-month period to show that the excess visible emissions described in Condition 9.1 no longer occurs.<br>9.5. The PM source test requirement in Condition 9.2 is waived for an emission unit if corrective action is taken to reduce visible emissions and an 18-minute visible emissions observation is conducted within 30 days to show that the excess visible emissions described in Condition 9.2 no longer occur. | Continuous | Records Review | |
| 10-11 | 10. **Particulate Matter Recordkeeping for Liquid Fuel-Fired Heaters.** The Permittee shall keep records of the results of any PM testing and visible emissions observations conducted under Condition 9.<br>11. **Particulate Matter Reporting for Liquid Fuel-Fired Heaters.** The Permittee shall report as follows:<br>11.1. In each operating report required by Condition 95, include for the period covered by the report:<br>a. a summary of the results of any PM testing and visible emissions observations conducted under Condition 9.<br>11.2. Report as excess emissions, in accordance with Condition 94:<br>a. any time the results of a source test for PM exceeds the PM emission limit stated in Condition 6.<br>b. the dates, EU ID(s), and results when an 18-minute opacity observation was greater than the applicable threshold criterion in Condition 2.1.a(v). | Continuous | Records Review | |
| 12 | **VE & PM MR&R for Dual Fuel-Fired Emission Units.** The Permittee shall monitor, record, and report the monthly hours of operation when operating on a back-up liquid fuel.<br>12.1. For any of EU IDs 1, 2, 7, and 8 that does not exceed 400 hours of operations per calendar year on a back-up liquid fuel, monitoring of compliance for visible emissions and particulate matter is not required for that emission unit and monitoring shall consist of an annual certification under Condition 96.<br>12.2. For any of EU IDs 1, 2, 7, and 8, notify the Department and begin monitoring the affected emission unit according to Condition 12.3 no later than 45 days after the end of a calendar month in which the cumulative hours of operation for the calendar year exceed any multiple of 400 hours on a back-up liquid fuel. If the observation exceeds the limit in Condition 1, monitor as described in Condition 7 or 9, as applicable by the type of emission unit. If the observation does not exceed the limit in Condition 1, no additional monitoring is required until the cumulative hours of operation exceed each subsequent multiple of 400 hours on back-up liquid fuel during a calendar year.<br>12.3. When required to do so by Condition 12.2, observe the exhaust, following 40 C.F.R. 60, Appendix A-4 Method 9 (adopted by reference in 18 AAC 50.040(a)), for 18-minutes to obtain 72 consecutive 15-second opacity observations.<br>12.4. Keep records and report in accordance with Conditions 3, 4, 7, 8, 9, 10 and/or 11 as applicable.<br>12.5. Report under Condition 94 if the Permittee fails to comply with Condition 12.2, 12.3 or 12.4 | Continuous | Records Review | |
| **Sulfur Compound Emission Standards Requirements** | | | | |
| 13 | **Sulfur Compound Emissions.** The Permittee shall not cause or allow sulfur compound emissions, expressed as $SO_2$, from EU IDs 1 through 15, 17, 18, 18A, 21, 25, CP-1, CP-2, CP-3, CP-4, CP-6, CP-7, T-1, T-2, and T-3 and from all fuel burning units authorized in Conditions 36 and 37 (excluding NREs), to exceed 500 ppm averaged over three hours.<br>13.1. Comply with Conditions 44 and 45 that require liquid fuel with no greater than 15 ppmw sulfur and Condition 49 that requires fuel gas with no greater than 100 ppm $H_2S$ by volume on a dry basis (ppmvd).<br>13.2. Monitor, record, and report the liquid fuel sulfur content and the fuel gas $H_2S$ content as described in Conditions 44 through 49 to demonstrate compliance with Condition 13.<br>13.3. Within six months after the permit effective date, analyze a representative sample of EU ID 25 regenerator vent gas to determine the total sulfur concentration using GPA Standard 6377, or listed method approved in 18 AAC 50.035(b)-(c) or 40 C.F.R. 60.17 incorporated by reference in 18 AAC 50.040(a)(1). Attach a copy of the result to the Operating Report required by Condition 95 for that reporting period. | Continuous | Records Review | |



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| Permit Condition No. | Permit Condition Summary/Description | Compliance Status | Method to Determine Status [40 C.F.R. 71.6(c)(5)(iii)(B)] | Comments |
|---|---|---|---|---|
| | 13.4. For liquid fuel from a North Slope topping plant, the Permittee shall obtain from the topping plant the results of a monthly fuel sulfur analysis.<br>13.5. The Permittee shall include in the operating report required by Condition 95, a list of the sulfur content measured for each month covered by the report.<br>13.6. Report as excess emissions, in accordance with Condition 94, whenever the fuel combusted causes sulfur compound emissions to exceed the standard of Condition 13. When reporting under this condition, include the calculated $SO_2$ emissions in ppm using Method 19 of 40 C.F.R. 60, Appendix A-7, adopted by reference in 18 AAC 50.040(a).<br>13.7. For liquid fuel obtained from a third-party supplier, the Permittee shall keep receipts from the supplier that specify sulfur content and amount for each shipment of fuel.<br>a. Include in the operating report required by Condition 95 a list of the sulfur content measured for each shipment received at the stationary source during the reporting period. | Continuous | Records Review | |
| **Insignificant Emission Units** | | | | |
| 14 | For emission units at the stationary source that are insignificant as defined in 18 AAC 50.326(d)-(i) that are not listed in this permit, the following apply:<br>14.1. **VE Standard:** The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from an industrial process, fuel-burning equipment, or an incinerator to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.<br>14.2. **PM Standard:** The Permittee shall not cause or allow particulate matter emitted from an industrial process or fuel-burning equipment to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.<br>14.3. **Sulfur Standard:** The Permittee shall not cause or allow sulfur compound emissions, expressed as $SO_2$, from an industrial process or fuel-burning equipment, to exceed 500 ppm averaged over three hours. | Continuous | Records Review and Field Verification/Interview | |
| | 14.4. **General MR&R for Insignificant Emission Units**<br>a. The Permittee shall submit the certification of compliance of Condition 96 based on reasonable inquiry;<br>b. The Permittee shall comply with the requirements of Condition 76;<br>c. The Permittee shall report in the operating report required by Condition 95 if an emission unit is insignificant because of historical actual emissions less than the thresholds of 18 AAC 50.326(e) and current actual emissions become greater than any of those thresholds; and<br>d. No other monitoring, recordkeeping or reporting is required. | Continuous | Records Review | |
| **Section 4. Federal Requirements** | | | | |
| **Emission Units Subject to Federal NSPS, Subpart A** | | | | |
| 15 | **NSPS Subpart A Notification.** For any affected facility or existing facility regulated under NSPS requirements in 40 C.F.R. 60, the Permittee shall furnish the Department and EPA written or electronic notification of:<br>15.1. the date that construction or reconstruction of an affected facility commences postmarked no later than 30 days after such date;<br>15.2. the actual date of initial startup of an affected facility postmarked within 15 days after such date;<br>15.3. any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies unless that change is specifically exempted under an applicable subpart or in 40 C.F.R. 60.14(e), postmarked 60 days or as soon as practicable before the change is commenced and shall include:<br>a. information describing the precise nature of the change,<br>b. present and proposed emission control systems,<br>c. productive capacity of the facility before and after the change, and<br>d. the expected completion date of the change;<br>15.4. the date of a continuous monitoring system performance demonstration, postmarked not less than 30 days prior to such date; | Continuous | Records Review and Field Verification/Interview | |
| | 15.5. any proposed replacement of an existing facility, for which the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, postmarked as soon as practicable, but no less than 60 days before commencement of replacement, and including the following information:<br>a. the name and address of owner or operator,<br>b. the location of the existing facility,<br>c. a brief description of the existing facility and the components that are to be replaced,<br>d. a description of the existing and proposed air pollution control equipment,<br>e. an estimate of the fixed capital cost of the replacements, and of constructing a comparable entirely new facility,<br>f. the estimated life of the existing facility after the replacements, and<br>g. a discussion of any economic or technical limitations the facility may have in complying with the applicable standards of performance after the proposed replacements. | Continuous | Records Review and Field Verification/Interview | |



ED_004016I_00012059-00007

## Annual Compliance Certification

Milne Point Production Facility Operating Permit No. AQ0200TVP02 Rev. 1, Rev. 3, Rev. 4
Reporting Period: January 1, 2018 to December 31, 2018

| No. | Permit Condition<br>Summary/Description | Compliance Status | Method to Determine Status<br>[40 C.F.R. 71.6(c)(5)(iii)(B)] | Comments |
|---|---|---|---|---|
| 16 | **NSPS Subpart A Startup, Shutdown, & Malfunction Requirements.** The Permittee shall maintain records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of EU IDs 1, 2, 3, 4, CP-2, CP-4, T-1, T-2 and/or T-3, any malfunctions of associated air-pollution control equipment, or any periods during which a continuous monitoring system or monitoring device for EU IDs 1, 2, CP-4, T-1, T-2, and/or T-3 is inoperative. | Continuous | Field Verification/Interview | |
| 17 | **NSPS Subpart A Excess Emissions and Monitoring Systems Performance Report.** Except as provided for in Condition 18, the Permittee shall submit to the Department and to EPA a written "excess emissions and monitoring systems performance report" (EEMSP) any time a limit in Conditions 24, 26, 27 or 28 has been exceeded as described in this condition for EU IDs 1, 2, CP-4, T-1, T-2, and T-3. Except as provided for in Condition 26.6, submit the EEMSP reports to EPA with the summary report form as required in Condition 18 and to the Department in accordance with Condition 97. Written reports of excess emissions shall include the following information:<br>17.1. The magnitude of excess emissions, any conversion factors used, the date and time of commencement and completion of each time period of excess emissions, and the process operating time during the reporting period.<br>17.2. A statement indicating whether or not any excess emissions occurred or the CMS was inoperative, repaired, or adjusted, at any time during the reporting period. | Continuous | Records Review | |
| 18 | **NSPS Subpart A Summary Report Form.** Except as provided for in Condition 26.6, the Permittee shall submit to the Department and to EPA one "summary report form" in the format shown in Figure 1 of 40 C.F.R. 60.7 (see Attachment A) for each pollutant monitored for EU IDs 1, 2, CP-4, T-1, T-2, and/or T-3. The report shall be submitted to EPA semiannually, postmarked by the 30th day following the end of each 6-month period, except when more frequent reporting is specifically required by an applicable subpart, case-by-case basis, or the EPA Administrator, and to the Department in accordance with Condition 97 as follows:<br>18.1. If the total duration of excess emissions for the reporting period is less than one percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than five percent of the total operating time for the reporting period, submit a summary report form **unless** the EEMSP report described in Condition 17 is requested by the Department or EPA, or<br>18.2. If the total duration of excess emissions for the reporting period is one percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is five percent or greater of the total time for the reporting period, then submit a summary report form **and the EEMSP** described in Condition 17. | Continuous | Records Review | |
| 19 | **NSPS Subpart A Performance (Source) Tests.** The Permittee shall conduct source tests according to Section 7 at such times as may be required by EPA, and shall provide the Department and EPA with a written report of the results of the source test. The Permittee shall:<br>19.1. Conduct source tests and reduce data as set out in 40 C.F.R. 60.8(b), and provide the Department copies of any EPA waivers or approvals of alternative methods.<br>19.2. Conduct source tests under conditions specified by EPA to be based on representative performance of EU IDs 1, 2, CP-4, T-1, T-2, and/or T-3.<br>19.3. Notify the Department and EPA at least 30 days in advance of the source test.<br>19.4. Provide adequate sampling ports, safe sampling platform(s), safe access to sampling platform(s), and utilities for sampling and testing equipment. | Continuous | Records Review | |
| 20 | **NSPS Subpart A Good Air Pollution Control Practice.** At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate EU IDs 1, 2, 3, 4, CP-2, CP-4, T-1, T-2 and/or T-3, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. The Administrator will determine whether acceptable operating and maintenance procedures are being used based on information available, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance records, and inspections of EU IDs 1, 2, 3, 4, CP-2, CP-4, T-1, T-2 and/or T-3. | Continuous | Records Review | |
| 21 | **NSPS Subpart A Credible Evidence.** For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of the standards set forth in Conditions 24, 26, 27, or 28 nothing in 40 C.F.R. Part 60 shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether EU IDs 1, 2, 3, 4, CP-2, CP-4, T-1, T-2, or T-3, would have been in compliance with applicable requirements of 40 C.F.R. Part 60 if the appropriate performance or compliance test or procedure had been performed. | Continuous | Advisory Provision | |
| 22 | **NSPS Subpart A Concealment of Emissions.** The Permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of a standard set forth in Conditions 24, 26, 27, or 28. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard that is based on the concentration of a pollutant in the gases discharged to the atmosphere. | Continuous | Field Verification/Interview | |
| **Steam Generating Units Subject to NSPS Subpart Dc** | | | | |
| 23 | **NSPS Subpart Dc Fuel Consumption.** For each of EU IDs 3, 4, and CP-2, the Permittee shall record and maintain records of the amount of each fuel combusted during each operating day in each EU; or monitor according to an EPA approved custom fuel-monitoring schedule.<br>23.1. As an alternative to meeting the requirements of Condition 23, the Permittee may elect to record and maintain records of the amount of fuel gas combusted during each calendar month in each EU. | Continuous | Records Review | |



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## Annual Compliance Certification

Milne Point Production Facility Operating Permit No. AQ0200TVP02 Rev. 1, Rev. 3, Rev. 4
Reporting Period: January 1, 2018 to December 31, 2018

| Permit Condition No. | Permit Condition Summary/Description | Compliance Status | Method to Determine Status [40 C.F.R. 71.6(c)(5)(iii)(B)] | Comments |
|---|---|---|---|---|
| **Turbines Subject to NSPS Subpart GG** | | | | |
| 24 | **NSPS Subpart GG NOx Standard.** The Permittee shall not allow the exhaust gas concentration of NOx from applicable emission units to exceed the following limits:<br>24.1. Except as provided in Condition 24.4 and 24.5, the Permittee shall not allow the corrected exhaust gas concentration from EU IDs 1 and 2 to exceed 215 ppmvd of NOx at ISO standard day conditions and 15% $O_2$ exhaust when firing fuel gas. Also, EU IDs 1 and 2 are exempt from the limit of this condition when firing emergency fuel, which includes periods when source tests required by Condition 65.1 are conducted.<br>24.2 The Permittee shall not allow the exhaust gas concentration of NOx from EU ID CP-4 to exceed 150 ppmvd at 15% $O_2$ exhaust basis.<br>24.3 Each of the temporary EU IDs T-1, T-2, and/or T-3 shall comply with applicable parts of 40 C.F.R. 60 Subpart GG, unless the emission unit is required to comply with 40 C.F.R. Subpart KKKK. For EU IDs T-1, T-2, and/or T-3, that are subject to 40 C.F.R. 60 Subpart GG the Permittee shall determine the maximum corrected gas concentrations of NOx based on the following equation. [See permit for equation] | Continuous | Records Review | |
| | 24.4 **Ice Fog Exemption and Reporting.** EU IDs 1 and 2 are exempt from Condition 24 when the Permittee deems ice fog a traffic hazard in accordance with 40 C.F.R. 60.332(f). Report in accordance with 40 C.F.R. 60.334(j)(3).<br>24.5. **Emergency Fuel Exemption and Reporting.** EU IDs 1 and 2 are exempt from Condition 24 when fired with liquid fuel during circumstances that make it impossible to fire fuel gas in the turbines. The Permittee shall report each exemption period in accordance with 40 C.F.R. 60.334(j)(4). | Continuous | Advisory Provision | |
| **Monitoring, Recordkeeping and Reoprting for EU IDs 1 and 2, CP-4, and T-1, T-2 and/or T-3** | | | | |
| | 24.6. **Monitoring.** For EU ID CP-4, conduct a NOx and $O_2$ source test under 40 C.F.R. 60, Appendix A, Method 20, or Method 7E and either Method 3 or 3A, within one year of the effective date of this permit and thereafter within five years of the latest source test. EU ID CP-4 is not required to be commissioned solely for the purposes of completing this source test requirement. If EU ID CP-4 is not recommissioned at the time the source test is required to be completed, EU ID CP-4 must complete the source test within 180 calendar days after startup. | Continuous | Records Review | |
| | 24.7. **Monitoring.** For EU IDs T-1, T-2, and/or T-3 if subject to 40 C.F.R. 60 Subpart GG, conduct a NOx and $O_2$ source test under 40 C.F.R. 60, Appendix A, Method 20, or Method 7E and either Method 3 or 3A, within one year after exceeding 400 hours of operation in a 12-month period.<br>a. Subsequent tests for EU IDs T-1, T-2, and/or T-3 if subject to 40 C.F.R. 60 Subpart GG:<br>(i) If the latest emissions source testing was certified as operating at less than or equal to 90 percent of the limit shown in Condition 24.1 through 24.3, conduct subsequent NOx and $O_2$ source test under 40 C.F.R. 60, Appendix A, Method 20, or Method 7E and either Method 3 or 3A, no later than five years after the preceding test.<br>(ii) If the latest emissions source testing was certified as operating at greater than 90 percent of the limit shown in Condition 24, the Permittee shall conduct a NOx and $O_2$ source test under 40 C.F.R. 60 Appendix A, Method 20, or Method 7E and either Method 3 or 3A, annually until two consecutive tests show performance results certified at less than or equal to 90 percent of the limit of Condition 24. | Continuous | Records Review | |
| | 24.8. **Substituting Test Data.** The Permittee may use a Method 20, or Method 7E and either Method 3 or 3A, test under Condition 24.6 or 24.7 performed on only one of a group of similarly configured turbines to satisfy the requirements of those conditions for the other turbines in the group if<br>a. the Permittee demonstrates that test results are less than or equal to 90 percent of the applicable emission limit of Condition 24, and are projected under Condition 24.8.d to be less than or equal to 90 percent of the applicable limit at maximum load;<br>b. for any source test done after the effective date of this permit, the Permittee identifies in a source test plan under Condition 86<br>(i) the turbine to be tested;<br>(ii) the other turbines in the group that are to be represented by the test; and<br>(iii) why the turbine to be tested is representative, including that each turbine in the group<br>(A) is located at a stationary source operated and maintained by the Permittee;<br>(B) operates under close to identical ambient conditions as the untested unit;<br>(C) is the same make and model and has identical injectors and combustor;<br>(D) uses the same fuel type from the same supply origin.<br>c. The Permittee may not use substitute test results to represent emissions from a turbine or group of turbines if that turbine or group of turbines is operating at greater than 90 percent of the emission limit of Condition 24. | Continuous | Records Review | |



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## Annual Compliance Certification

Milne Point Production Facility Operating Permit No. AQ0200TVP02 Rev. 1, Rev. 3, Rev. 4
Reporting Period: January 1, 2018 to December 31, 2018

| No. | Permit Condition<br>Summary/Description | Compliance Status | Method to Determine Status<br>[40 C.F.R. 71.6(c)(5)(iii)(B)] | Comments |
|---|---|---|---|---|
| | d. **Load.** The Permittee shall comply with the following:<br>(i) Conduct all tests under Condition 24.6, and 24.7 in accordance with 40 C.F.R. 60.335(b)(2), except as otherwise approved in writing by the Department, or by EPA if the circumstances at the time of the EPA approval are still valid. For the highest load condition, if it is not possible to operate the turbine during the test at maximum load, the Permittee will test the turbine when operating at the highest load achievable by the turbine under the ambient and stationary source operating conditions in effect at the time of the test.<br>(ii) Demonstrate in the source test plan for any test performed after the effective date of this permit whether the test is scheduled when maximum NOx emissions are expected.<br>(iii) If the highest operating rate tested is less than the maximum load of the tested turbine or another turbine represented by the test data,<br>(A) for each such turbine the Permittee shall provide to the Department as an attachment to the source test report<br>(1) additional test information from the manufacturer or from previous testing of units in the group of turbines; if using previous testing of the group of turbines, the information must include all available test data for the turbines in the group, and<br>(2) a demonstration based on the additional test information that projects the test results from Condition 24.6, and 24.7 to predict the highest load at which emissions will comply with any of the applicable limits in Condition 24 or 55; | Continuous | Records Review | |
| | (B) the Permittee shall not operate any turbine represented by the test data at loads for which the Permittee's demonstration predicts that emissions will exceed any of the applicable limits of Condition 24 or 55;<br>(C) the Permittee shall comply with a written finding prepared by the Department that<br>(1) the information is inadequate for the Department to reasonably conclude that compliance is assured at any load greater than the test load, and that the Permittee must not exceed the test load,<br>(2) the highest load at which the information is adequate for the Department to reasonably conclude that compliance assured is less than maximum load, and the Permittee must not exceed the highest load at which compliance is predicted, or<br>(3) the Permittee must retest during a period of greater expected demand on the turbine, and<br>(D) the Permittee may revise a load limit by submitting results of a more recent Method 20, or Method 7E and either Method 3 or 3A, test done at a higher load, and, if necessary, the accompanying information and demonstration described in Condition 24.8.d(iii)(A); the new limit is subject to any new Department finding under Condition 24.8.d(iii)(C).<br>(iv) In order to perform a Method 20, or Method 7E and either Method 3 or 3A, emission test, the Permittee may operate a turbine at a higher load than that prescribed by Condition 24.8.d(iii).<br>(v) For the purposes of Condition 24.6 through 24.10, maximum load means the hourly average load that is the smallest of<br>(A) 100 percent of manufacturer's design capacity of the gas turbine at ISO standard day conditions;<br>(B) the highest load allowed by an enforceable condition that applies to the turbine; or<br>(C) the highest load possible considering permanent physical restraints on the turbine or the equipment which it powers. | Continuous | Records Review | |
| | 24.9. **Recordkeeping.** For EU IDs 1, 2, CP-4 (and EU IDs T-1, T-2, and/or T-3 if subject to 40 C.F.R. 60 Subpart GG), the Permittee shall keep records as follows:<br>a. The Permittee shall comply with the following for each turbine for which a demonstration under Condition 24.8.d(iii) does not show compliance with any of the applicable limits of Condition 24 or 55 at maximum load.<br>(i) The Permittee shall keep records of<br>(A) load; or<br>(B) as approved by the Department, surrogate measurements for load and the method for calculating load from those measurements.<br>(ii) Records in Condition 24.9.a shall be hourly or otherwise as approved by the Department.<br>(iii) Within one month after submitting a demonstration under Condition 24.8.d(iii)(A)(2) that predicts that the highest load at which emissions will comply is less than maximum load, or within one month of a Department finding under Condition 24.8.d(iii)(C), whichever is earlier, the Permittee shall propose to the Department how they will measure load or load surrogates, and shall propose and comply with a schedule for installing any necessary equipment and beginning monitoring. The Permittee shall comply with any subsequent Department direction on the load monitoring methods, equipment, or schedule.<br>b. For any turbine subject to Condition 24, that will operate less than 400 hours in any 12 consecutive months, the Permittee shall keep monthly records of the hours of operation. | Continuous | Records Review | |



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| Permit Condition No. | Permit Condition Summary/Description | Compliance Status | Method to Determine Status [40 C.F.R. 71.6(c)(5)(iii)(B)] | Comments |
|---|---|---|---|---|
| | 24.10. **Reporting.** For EU IDs 1, 2, CP-4 (and EU IDs T-1, T-2, and/or T-3 if subject to 40 C.F.R. 60 Subpart GG), the Permittee shall keep report as follows:<br>a. In each operating report under Condition 95 the Permittee shall list for each turbine tested or represented by testing at less than maximum load and for which the Permittee must limit load under Condition 24.8.d(iii)<br>(i) the load limit;<br>(ii) the turbine identification; and<br>(iii) the highest load recorded under Condition 24.9.a during the period covered by the operating report.<br>b. In each operating report under Condition 95 for each turbine for which Condition 24.7 has not been satisfied because the turbine normally operates less than 400 hours in any 12 consecutive months, the Permittee shall identify<br>(i) the turbine;<br>(ii) the highest number of operating hours for any 12 consecutive months ending during the period covered by the report; and<br>(iii) any turbine that operated for 400 or more hours.<br>c. The Permittee shall report under Condition 94 if<br>(i) a test result exceeds the emission standard;<br>(ii) Method 20, or Method 7E and either Method 3 or 3A, testing is required under Condition 24.7.a or 24.7.a(ii) but not performed, or<br>(iii) the turbine was operated at a load exceeding that allowed by Condition 24.8.d(iii)(B) and 24.8.d(iii)(C); exceeding a load limit is deemed a single violation rather than a multiple violation of both monitoring and the underlying emission limit. | Continuous | Records Review | |
| 25 | **Periodic Monitoring, Recordkeeping and Reporting for NSPS Subpart GG $NO_X$ Emission Standard.** In addition to the NSPS monitoring, recordkeeping, and reporting requirements of Condition 24, source tests conducted in accordance with Condition 65.1 shall be used as the basis to determine compliance with the NOx emission limit of Condition 24 for EU IDs 1 and 2. Submit reports in accordance with Condition 94 any time the NOx emission rate exceeds the standard in Condition 24. | Continuous | Records Review | |
| 26 | **NSPS Subpart GG Sulfur Standard.** The Permittee shall comply with the following:<br>26.1. Do not allow the sulfur content for the fuel burned in EU IDs 1, 2, and CP-4 to exceed 0.8 percent by weight.<br>26.2. Each of the temporary EU IDs T-1, T-2, and/or T-3 shall comply with applicable parts of 40 C.F.R. 60 Subpart GG, unless the emission unit is required to comply with 40 C.F.R. Subpart KKKK.<br>26.3. **Monitoring.** The Permittee shall monitor compliance with the standards listed in this condition, as follows:<br>a. Monitor the total sulfur content of the fuel being fired in the turbine, except as provided in Condition 26.3.b and 26.3.c. The sulfur content of the fuel must be determined using total sulfur methods described in 40 C.F.R. 60.335(b)(10) and Condition 26.4. Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4000 ppmw), ASTM D4084-82, 94, D5504-01, D6228-98, or Gas Processors Association Standard 2377-86, which measure the major sulfur compounds may be used. | Continuous | Records Review | |
| | b. Notwithstanding the provisions of Condition 26.3a and 26.3c, and upon submittal of a certified statement to the Department that, pursuant to 40 C.F.R. 60.334(h)(3), the gaseous fuel is demonstrated to meet the definition of natural gas in 40 C.F.R. 60.331(u), the Permittee may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, regardless of whether an existing custom schedule approved by the Administrator requires such monitoring. The Permittee shall use one of the following sources of information to make the required demonstration:<br>(i) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or<br>(ii) Representative fuel sampling data, which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in 40 C.F.R. 75, Appendix D, Section 2.3.1.4 or 2.3.2.4 is required.<br>c. For any turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and for which a custom fuel monitoring schedule has previously been approved, the Permittee may, without submitting a special petition to the Administrator, continue monitoring on this schedule. | Continuous | Records Review | |
| | d. The frequency of determining the sulfur content of the fuel shall be as follows:<br>(i) **Fuel oil.** For fuel oil, use one of the total sulfur sampling options and the associated sampling frequency described in Sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of Appendix D of 40 C.F.R Part 75 ( i.e., flow proportional sampling, daily sampling, sampling from the unit's storage tank after each addition of fuel to the tank, or sampling each delivery prior to combining it with fuel oil already in the intended storage tank). If an emission allowance is being claimed for fuel-bound nitrogen, the nitrogen content of the oil shall be determined and recorded once per unit operating day.<br>(ii) **Gaseous fuel.** If the Permittee elects not to demonstrate sulfur content using options in Condition 26.3.b, and for which the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel shall be determined under Condition 26.3a and recorded once per unit operating day.<br>(iii) **Custom schedules.** Notwithstanding the requirements of Condition 26.3.d(ii), the Permittee may develop custom schedules for determination of the total sulfur content of gaseous fuels, based on the design and operation of the affected facility and the characteristics of the fuel supply according to the provisions and as allowed under 40 C.F.R. 60.334(i)(3). The two custom sulfur monitoring schedules set forth in 40 C.F.R. 60.334(i)(3)(i)(A) through (D) and 60.334(i)(3)(ii) are acceptable without prior Administrative approval. | Continuous | Records Review | |



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| No. | Permit Condition<br>Summary/Description | Compliance Status | Method to Determine Status<br>[40 C.F.R. 71.6(c)(5)(iii)(B)] | Comments |
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| | 26.4. **Test Methods and Procedures.** If the Permittee periodically determines the sulfur content of the fuel combusted in the turbine under Condition 26.3.a and 26.3.d, a minimum of three fuel samples shall be collected during the performance test. Analyze the samples for the total sulfur content of the fuel using:<br>a. **Liquid fuels.** For liquid fuels, use ASTM D129-00, D2622-98, D4294-02, D1266-98, D5453-00 or D1552-01; or<br>b. **Gaseous fuels.** For gaseous fuels, use ASTM D1072-80, 90; D3246-81, 92, 96; D4468-85; or D6667-01. The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the prior approval of the Administrator.<br>c. The fuel analyses required under Condition 26.3 and 26.4 may be performed by the Permittee, a service contractor retained by the Permittee, the fuel vendor, or any other qualified agency. | Continuous | Records Review | |
| | 26.5. **Recordkeeping.** Keep records of analyses conducted under Condition 26.3 and 26.4, and in accordance with Condition 90.<br>26.6. **Reporting.** The Permittee shall:<br>a. for each affected unit for which the Permittee elects to periodically determine the fuel sulfur content under Condition 26.3.a, 26.3.c, or 26.3.d,<br>(i) annually report the results of all sulfur monitoring to EPA by the 30th day following the end of each calendar year. Report to the Department as required under Condition 97.<br>(ii) include with the report submitted under Condition 26.6.a(i), a report of excess emissions and monitoring system downtime in accordance with 40 C.F.R. 60.7(c) as summarized in Conditions 17 and 18, and as defined under 40 C.F.R. 60.334(j)(2). Excess emissions shall be reported for all periods of unit operation, including startups, shutdowns, and malfunctions.<br>(iii) If periodic gaseous fuel sulfur monitoring is not required to be conducted because the demonstration under Condition 26.3.b has been made, reporting under Conditions 17 and 18 , and this condition is not required.<br>b. include a copy of the records required by Condition 26.3 with the operating report required by Condition 95 for the period covered by the report; and<br>c. report under Condition 94 if<br>(i) a test result exceeds the limit in Condition 26;<br>(ii) monitoring is required under Condition 26.3 but not performed; or<br>(iii) any reporting required under Condition 26.6 is not completed. | Continuous | Records Review | |
| **Turbines Subject to NSPS Subpart KKKK** (EU IDs T-1, T-2, and/or T-3 if applicable) | | | | |
| 27 | **NSPS Subpart KKKK $NO_X$ Standard.** If EU IDs T-1, T-2, and/or T-3 are subject to 40 C.F.R. 60 Subpart KKKK, the Permittee shall meet the NOx emission limits of 150 ppm at 15 percent $O_2$ or 1,100 ng/J of useful output (8.7 lb/MWh).<br>27.1. **Monitoring.** The Permittee shall perform annual performance tests in accordance with Condition 27.4 to demonstrate continuous compliance, as follows:<br>a. The Permittee shall conduct NOx emission testing annually. If the NOx emission results from two consecutive annual performance tests are less than or equal to 75 percent of the NOx emission limit in Condition 27, the Permittee may reduce the frequency of subsequent performance tests to once every 2 years (no more than 28 calendar months following the previous performance test).<br>b. If the results of any subsequent performance test exceed 75 percent of the NOx emission limit in Condition 27, the Permittee must resume annual performance tests, as specified in Condition 27.1.a.<br>27.2. **Recordkeeping.** The Permittee shall keep records of all performance tests data in accordance with Condition 90.<br>27.3. **Reporting.** For EU IDs T-1, T-2, and T-3, the Permittee shall submit a written report of the results of each performance test required under Condition 27.1 and 27.4 before the close of business on the 60th day following the completion of the performance test and in accordance with Condition 88. The Permittee will re-submit the executive summary in the FOR required under Condition 95 covering the period when the test report was originally submitted. | Continuous | Records Review | |
| | 27.4. **Performance Tests.** The Permittee shall conduct an initial performance test as required in Condition 19, and subsequent NOx performance tests, as provided in Condition 27.1.a and 27.1.b.<br>a. The Permittee may use either one of the two methodologies described below in Condition 27.4.a(i) or 27.4.a(ii) to conduct performance test. For each test run:<br>(i) Measure the NOx concentration (in ppm), using EPA Method 7E or EPA Method 20 in Appendix A of 40 C.F.R 60. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in Appendix A of 40 C.F.R 60, and measure and record the electrical and thermal output from the unit. Then, use the following equation to calculate the NOx emission rate: [See permit for equation]; or<br>(ii) Measure the NOx and diluent gas concentrations, using either EPA Methods 7E and 3A, or EPA Method 20 in Appendix A of 40 C.F.R. 60. Concurrently measure the heat input to the unit, using a fuel flow meter(s), and measure the electrical and thermal output of the unit. Use EPA Method 19 in Appendix A of 40 C.F.R. 60 to calculate the NOx emission rate in lb/MMBtu. Then, use Equations 1 and, if necessary, 2 and 3 in 40 C.F.R. 60.4350(f) to calculate the NOx emission rate in lb/MWh. | Continuous | Records Review | |



ED_004016I_00012059-00012

| No. | Permit Condition<br>Summary/Description | Compliance Status | Method to Determine Status<br>[40 C.F.R. 71.6(c)(5)(iii)(B)] | Comments |
|---|---|---|---|---|
| | b. Sampling traverse points for NOx and (if applicable) diluent gas are to be selected following EPA Method 20 or EPA Method 1 (non-particulate procedures), and sampled for equal time intervals. The sampling must be performed with a traversing single-hole probe, or, if feasible, with a stationary multi-hole probe that samples each of the points sequentially. Alternatively, a multi-hole probe designed and documented to sample equal volumes from each hole may be used to sample simultaneously at the required points.<br>c. Notwithstanding Condition 27.4.b, test at fewer points than are specified in EPA Method 1 or EPA Method 20 in Appendix A 40 C.F.R. 60 if the following conditions are met:<br>(i) Perform a stratification test for NOx and diluent pursuant to the procedures specified in Section 6.5.6.1(a) through (e) of Appendix A of 40 C.F.R. 75;<br>(ii) Once the stratification sampling is completed, use the following alternative sample point selection criteria for the performance test:<br>(A) If each of the individual traverse point NOx concentrations is within ±10 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±5 ppm or ±0.5 percent $CO_2$ (or $O_2$) from the mean for all traverse points, then you may use three points (located either 16.7, 50.0 and 83.3 percent of the way across the stack or duct, or, for circular stacks or ducts greater than 2.4 meters (7.8 feet) in diameter, at 0.4, 1.2, and 2.0 meters from the wall). The three points must be located along the measurement line that exhibited the highest average NOx concentration during the stratification test; or<br>(B) Sample at a single point, located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point NOx concentrations is within ±5 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±3 ppm or ±0.3 percent $CO_2$ (or $O_2$) from the mean for all traverse points; | Continuous | Records Review | |
| | d. The Permittee shall conduct performance test, as follows:<br>(i) The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load.<br>(ii) The Permittee may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice; and<br>(iii) The Permittee must conduct three separate test runs for each performance test at a minimum time of 20 minutes per run.<br>(iv) The ambient temperature must be greater than 0°F during the performance test.<br>e. Compliance with the applicable emission limit in Condition 27 must be demonstrated at each tested load level. Compliance is achieved if the three-run arithmetic average NOx emission rate at each tested level meets the applicable emission limit in Condition 27. | Continuous | Records Review | |
| 28 | **NSPS Subpart KKKK $SO_2$ Standard.** If EU IDs T-1, T-2, and T-3 are subject to 40 C.F.R. 60 Subpart KKKK, the Permittee shall comply with the requirements of Condition 28. The Permittee shall not burn in EU IDs T-1, T-2, and T-3, any fuel which contains total potential sulfur emissions in excess of 26 ng $SO_2$/J (0.060 lb $SO_2$/MMBtu) heat input. | Continuous | Records Review | |
| | 28.1. **Monitoring.** Monitor compliance with the standards listed in this condition as follows:<br>a. Except as provided in Condition 28.1.b, the sulfur content of the fuel must be determined using the total sulfur methods described in 40 C.F.R. 60.4415 and Condition 28.2. Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than half the applicable limit, ASTM D4084, D4810, D5504, or D6228, or Gas Processors Association Standard 2377, which measure the major sulfur compounds, may be used.<br>b. The Permittee may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng $SO_2$/J (0.060 lb $SO_2$/MMBtu) heat input. The Permittee shall use one of the following sources of information to make the required demonstration:<br>(i) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or<br>(ii) Representative fuel sampling data, which show that the sulfur content of the gaseous fuel does not exceed 26 ng $SO_2$/J (0.060 lb $SO_2$/MMBtu) heat input. At a minimum, the amount of fuel sampling data specified in 40 C.F.R. 75, Appendix D, Section 2.3.1.4 or 2.3.2.4 is required. | Continuous | Records Review | |
| | c. The frequency of determining the sulfur content of the fuel shall be as follows:<br>(i) **Fuel oil.** For fuel oil, use one of the total sulfur sampling options and the associated sampling frequency described in Sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of Appendix D to 40 C.F.R. 75 (i.e., flow proportional sampling, daily sampling, sampling from the unit's storage tank after each addition of fuel to the tank, or sampling each delivery prior to combining it with fuel oil already in the intended storage tank).<br>(ii) **Gaseous fuel.** For owners and operators that elect not to demonstrate sulfur content using options in Condition 28.1.b, and for which the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel shall be determined and recorded once per unit operating day.<br>(iii) **Custom schedules.** Notwithstanding the requirements of Condition 28.1.c(ii), operators or fuel vendors may develop custom schedules for determination of the total sulfur content of gaseous fuels, based on the design and operation of the affected facility and the characteristics of the fuel supply. Except as provided in 40 C.F.R. 60.4370(c)(1) and (c)(2), custom schedules shall be substantiated with data and shall be approved by the Administrator before they can be used to comply with the standard in Condition 28.1.c(ii). The two custom sulfur monitoring schedules set forth in 40 C.F.R. 60.4370(c)(1)(i) through (iv) and 60.4370(c)(2) are acceptable without prior Administrative approval. | Continuous | Records Review | |



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## Annual Compliance Certification

Milne Point Production Facility Operating Permit No. AQ0200TVP02 Rev. 1, Rev. 3, Rev. 4
Reporting Period: January 1, 2018 to December 31, 2018

| Permit Condition No. | Permit Condition Summary/Description | Compliance Status | Method to Determine Status [40 C.F.R. 71.6(c)(5)(iii)(B)] | Comments |
|---|---|---|---|---|
| | 28.2. **Test Methods and Procedures.** If the Permittee is required under Condition 28.1.c(i) or 28.1c(iii) to periodically determine the sulfur content of the fuel combusted in the turbine, the Permittee shall comply with the following:<br>a. Collect a representative fuel sample following ASTM D5287 for natural gas or ASTM D4177 for oil. Alternatively, for oil, follow the procedures for manual pipeline sampling in Section 14 of ASTM D4057.<br>b. Analyze the samples for the total sulfur content of the fuel using:<br>(i) For liquid fuels, ASTM D129, or alternatively D1266, D1552, D2622, D4294, or D5453; or<br>(ii) For gaseous fuels, ASTM D1072, or alternatively D3246, D4084, D4468, D4810, D6228, D6667, or Gas Processors Association Standard 2377.<br>c. The fuel analyses required under Condition 28.2 may be performed by the Permittee, a service contractor retained by the Permittee, the fuel vendor, or any other qualified agency and shall be conducted on an annual basis (no more than 12 calendar months following the previous performance test). | Continuous | Records Review | |
| | 28.3. **Recordkeeping.** Keep records as required by Condition 28.1 and 28.2, and in accordance with Condition 90.<br>28.4. **Reporting.** For each affected unit that periodically determines the fuel sulfur content under Condition 28.1.a, the Permittee shall submit reports of excess emissions and monitor downtime, in accordance with 40 C.F.R. 60.7(c) as summarized in Condition 17, except where otherwise approved by a custom fuel monitoring schedule. Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. | Continuous | Records Review | |
| 29 | **NSPS Subpart KKKK General Compliance Monitoring. Monitor compliance as follows:**<br>29.1. Operate and maintain EU IDs T-1, T-2, and T-3, air pollution control equipment (if applicable), and monitoring equipment (if applicable) in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction (if the emission units are subject to Subpart KKKK). | Continuous | Records Review | |
| **Emission Units Subject to Federal NESHAPs Subpart A** | | | | |
| 30 | **NESHAP Subpart A.** The Permittee shall comply with the applicable requirements of 40 C.F.R. 63 Subpart A in accordance with the provisions for applicability of Subpart A in Table 8 of Subpart ZZZZ after the compliance dates listed in Condition 31, and Table 3 to Subpart CCCCCC. | Continuous | Records Review | |
| **Emission Units Subject to Federal NESHAPs Subpart ZZZZ** | | | | |
| 31 | **NESHAP Subpart ZZZZ Stationary Reciprocating Internal Combustion Engines.** For EU IDs 11 through 15, 17, and CP-3, the Permittee shall comply with the applicable work practice and maintenance standards no later than May 3, 2013. For EU ID CP-6, the Permittee shall comply with the applicable work practice and maintenance standards no later than October 19, 2013.<br>31.1. **NESHAP Subpart ZZZZ Requirements.** For EU IDs 11 through 15, 17, CP-3 and CP-6, comply with the following requirements at all times: | Continuous | Records Review | |
| | a. **Subpart ZZZZ Good Air Pollution Control Practices.** Operate and maintain EU IDs 11 through 15, 17, CP-3 and CP-6, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of EU IDs 11 through 15, 17, CP-3 and CP-6. The Permittee shall comply with either:<br>(i) the manufacturer's emission-related written operation and maintenance instructions; or<br>(ii) a maintenance plan developed by the Permittee which must provide, to the extent practicable, for the maintenance and operation of the engine(s) in a manner consistent with good air pollution control practice for minimizing emissions. | Continuous | Records Review | |
| | b. For EU IDs 11 through 15, 17, CP-3 and CP-6, minimize the time spent at idle during startup and minimize the startup time to a period needed for appropriate and safe loading, not to exceed 30 minutes. | Continuous | Records Review | |
| | c. To be classified as an emergency stationary engine, EU IDs 11, 12, 13, 17 and CP-3 must be operated according to the requirements of Conditions 31.1.c(i) through 31.1.c(v). Otherwise, the engine will not be considered an emergency engine under Subpart ZZZZ and will need to meet all Subpart ZZZZ requirements for non-emergency engines according to Condition 31.5:<br>(i) Any operation of EU IDs 11, 12, 13, 17 and CP-3 for purposes other than emergency operation, maintenance and testing as described in Condition 31.1.c(iii), and operation in non-emergency situations for up to 50 hours per calendar year, as permitted in Condition 31.1.c(v), is prohibited.<br>(ii) There is no time limit on the use of EU IDs 11, 12, 13, 17 and CP-3 in emergency situations.<br>(iii) EU IDs 11, 12, 13, 17 and CP-3 may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of these units is limited to 100 hours per calendar year per engine. | Continuous | Records Review | |
| | (iv) The Permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.<br>(v) EU IDs 11, 12, 13, 17 and CP-3 may be operated up to 50 hours per calendar year in non-emergency situations, but those hours shall be counted towards the 100 hours per calendar year provided for in Condition 31.1.c(iii). The 50 hours per calendar year of non-emergency usage of EU IDs 11, 12, 13, 17 and CP-3 may not be used for peak shaving or to generate income for a stationary source to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. | Continuous | Records Review | |



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## Annual Compliance Certification

Milne Point Production Facility Operating Permit No. AQ0200TVP02 Rev. 1, Rev. 3, Rev. 4
Reporting Period: January 1, 2018 to December 31, 2018

| Permit Condition No. | Permit Condition Summary/Description | Compliance Status | Method to Determine Status [40 C.F.R. 71.6(c)(5)(iii)(B)] | Comments |
|---|---|---|---|---|
| | d. Monitor EU IDs 11, 12, 13, 17 and CP-3 using a non-resettable hour meter at all times that the emission unit is operating except for monitor malfunctions, associated repairs, and required quality assurance or control activities.<br>e. **Subpart ZZZZ Emissions Management Practices.** For EU IDs 11, 12, 13, 17 and CP-3, existing emergency stationary CI RICE located at an area source of HAP emissions, the Permittee shall comply with the following emissions management practices no later than May 3, 2013, except as allowed by Condition 31.1f:<br>(i) Change the oil and filter every 500 hours of operation or annually, whichever comes first;<br>(ii) Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first; and<br>(iii) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. | Continuous | Records Review | |
| | f. **Subpart ZZZZ Emissions Management Practices.** For EU ID CP-6, existing non-emergency stationary SI RICE located at an area source of HAP emissions, the Permittee shall comply with the following emissions management practices no later than October 19, 2013:<br>(i) Change the oil and filter every 2,160 hours of operation or annually, whichever comes first;<br>(ii) Inspect the air cleaner every 2,160 hours of operation or annually, whichever comes first; and<br>(iii) Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.<br>g. If any of EU IDs 11, 12, 13, 17 or CP-3 is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required under Condition 31.1.e, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice required under Condition 31.1.e should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. | Continuous | Records Review | |
| | 31.2. **Subpart ZZZZ Recordkeeping.** For each of EU IDs 11, 12, 13, 17 and CP-3 keep the following records beginning no later than May 3, 2013. Records of maintenance conducted on each of EU IDs 11, 12, 13, 17 and CP-3 to demonstrate that the engines and after-treatment control device (if any) are operated and maintained according to the Permittee's own maintenance plan, if maintenance is performed as allowed under Condition 31.1.a(ii). These records must include, at a minimum: oil and filter change dates and corresponding hour on the hour meter; inspection and replacement dates for air cleaners, hoses, and belts; and records of other emission-related repairs and maintenance performed; and:<br>a. Records of the hours of operation for each of EU IDs 11, 12, 13, 17 and CP-3, including:<br>(i) the number of hours spent for emergency operation and what classified the operation as an emergency; and<br>(ii) the calendar year total number of hours spent for non-emergency operation.<br>b. Keep records in a form suitable and readily available for expeditious inspection and review, readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 C.F.R. 63 Subpart A applicable requirements. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. | Continuous | Records Review | |
| | 31.3. **Subpart ZZZZ Reporting.** Report to the Department according to Condition 94 any deviation from the limitations in Condition 31.1.a through 31.1.e.<br>31.4. Report to EPA Region 10 and the Department whenever an applicable requirement in 40 C.F.R. 63, Subpart A (Table 8 of Subpart ZZZZ) was not met. | Continuous | Records Review | |
| Operational Flexibility under NESHAP Subpart ZZZZ | | | | |
| | 31.5. **Operational Flexibility under NESHAP Subpart ZZZZ for Generator Engines.** The Permittee may change the classification of generator EU IDs 11, 12, 13, 17 and CP-3, from emergency to non-emergency and may operate the engine(s) as non-emergency engines when the requirements of Condition 31.5.a and 31.5.b have been met:<br>a. Comply with the requirements of Condition 102;<br>b. Include the following information in addition to that required by Condition 102.2 in the written notification required by Condition 102.1:<br>(i) a comprehensive list of the requirements of 40 C.F.R. 63 Subparts A and ZZZZ that will apply as a result of the change in operational status;<br>(ii) a certification that the engine(s) changing classification meet or will meet the new applicable emission, operation, and fuel sulfur limits listed in the notification as required under Condition 31.5.b(i) prior to the stated date of the intended change in operational status;<br>(iii) the information required in 40 C.F.R. 63.9(b)(2)(i)-(v). | Continuous | Records Review | |
| NESHAP Subpart ZZZZ Performance Testing | | | | |
| | 31.6. **Initial Performance Test.** For any engine that undergoes a change in classification under Condition 31.5, conduct an initial performance test or other initial compliance demonstration within 180 days after changing from an emergency engine to a non-emergency engine or 180 days after the compliance date set in Condition 31 (i.e., by October 30, 2013 for EU IDs 11 through 13, 17, and CP-3 and by April 17, 2014 for EU ID CP-6), whichever is later according to the provisions in 40 C.F.R. 63.7(a)(2) and 40 C.F.R. 63.6620.<br>a. Comply with the performance test notification and reporting requirements and deadlines outlined in 40 C.F.R. 63.7(b), §63.7(c), §63.9(h)(2), and §63.10(d)(2). | Continuous | Records Review | |



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## Annual Compliance Certification

Milne Point Production Facility Operating Permit No. AQ0200TVP02 Rev. 1, Rev. 3, Rev. 4
Reporting Period: January 1, 2018 to December 31, 2018

| Permit Condition No. | Permit Condition Summary/Description | Compliance Status | Method to Determine Status [40 C.F.R. 71.6(c)(5)(iii)(B)] | Comments |
|---|---|---|---|---|
| **Emission Units Subject to Federal NESHAP Subpart CCCCCC For Gasoline Dispensing Facilities (EU ID 26)** | | | | |
| 32 | **Subpart CCCCCC Good Air Pollution Control Practices.** The Permittee must operate and maintain EU ID 26, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.<br>32.1. The Permittee must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited, to the following:<br>a. Minimize gasoline spills;<br>b. Clean up spills as expeditiously as practicable;<br>c. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;<br>d. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.<br>32.2. The Permittee must only load gasoline into storage tanks by utilizing submerged filling. Submerged fill pipes must be no more than 6 inches from the bottom of the tank.<br>32.3. The Permittee must have records available within 24 hours of a request by EPA or the Department to document gasoline throughput. | Continuous | Records Review and Field Verification/Interview | |
| | 32.4. **Recordkeeping and Reporting.** The Permittee shall keep the following records:<br>a. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.<br>b. Records of actions taken during periods of malfunction to minimize emissions including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.<br>32.5. The Permittee shall report, by March 15 of each year, the number, duration, and a brief description of each type of malfunction which occurred during the previous calendar year and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an Permittee during a malfunction of an affected source to minimize emissions, including actions taken to correct a malfunction. No report is necessary for a calendar year in which no malfunctions occurred. | Continuous | Records Review | |
| **Heaters Exempted from Federal NESHAPs Subpart JJJJJJ (EU IDs 7 and 8)** | | | | |
| **NESHAP Subpart JJJJJJ Operating Limitations and Associated Monitoring (EU IDs 7 and 8)** | | | | |
| 33 | **Dual-fuel Fired Boiler.** The Permittee shall monitor, record, and report as follows to document that EU IDs 7 and 8 qualify for the gas-fired boiler exemption in 40 C.F.R. 63 Subpart JJJJJJ:<br>33.1. Each month, monitor and record the calendar-year-to-date operating time on liquid-fuel for each of EU IDs 7 and 8.<br>33.2. Report using the operating report of Condition 95, the data recorded for each month under Condition 33.1 for the period covered by the report. | Continuous | Records Review and Field Verification/Interview | |
| | 33.3. Certify annually under Condition 96, that the calendar-year total operating time of each of EU IDs 7 and 8 on liquid fuel has not exceeded 48 hours while testing on liquid fuel and operated EU IDs 7 and 8 on diesel fuel only during periods of gas curtailment or gas supply emergencies.<br>33.4. Report as a permit deviation under Condition 94 any period of liquid fuel-fired operation when gas was available or if periodic testing on liquid fuel exceeded 48 hours per calendar year per emission unit. | Continuous | Records Review | |
| **General Federal Requirements** | | | | |
| 34, 35 | **Asbestos NESHAP.** The Permittee shall comply with the requirements set forth in 40 C.F.R. 61.145, and 61.150 of Subpart M, and the applicable sections set forth in 40 C.F.R. 61, Subpart A and Appendix A. | Continuous | Field Verification/Interview | |
| | **Protection of Stratospheric Ozone Requirements**<br>35.1. **Subpart F: Refrigerant Recycling and Disposal.** The Permittee shall comply with the standards for recycling and emission reduction of refrigerants set forth in 40 C.F.R. 82, Subpart F. Applicable requirements include 40 C.F.R. 82.154, 82.156, 82.161, 82.162, and 82.166.<br>35.2. **Subpart G – Significant New Alternatives Policy.** The Permittee shall comply with the applicable prohibitions set out in 40 C.F.R. 82.174(b) through (d) (Protection of Stratospheric Ozone Subpart G).<br>35.3. **Subpart H – Halon Emissions Reduction.** The Permittee shall comply with the applicable prohibitions set out in 40 C.F.R. 82.270(b) through (f) (Protection of Stratospheric Ozone Subpart H). | | | |
| **Section 5. Construction and Minor Permit Requirements** | | | | |
| **Emission Unit Authorizations** | | | | |
| 36 | **Authorization.** The Permittee is authorized to operate up to 12 concurrently operating transportable drill rigs listed in Section 12, in accordance with the terms and conditions of this permit, for drilling operations that are conducted at aggregated well pads associated with the Milne Point Production Facility. | Continuous | Records Review | |
| 37 | **Alternative Rigs.** The Permittee may use an alternative drill rig not listed in Section 12 without requesting a permit revision as follows:<br>37.1. No less than seven days prior to operating an alternative drill rig, provide notification to the Department via email or facsimile. Include in the notification a list of the emission units (EUs) and associated ratings.<br>37.2. The alternative drill rigs shall be operated in accordance with all terms and conditions of this permit. | Continuous | Records Review | |



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Reporting Period: January 1, 2018 to December 31, 2018

| Permit Condition | | Compliance Status | Method to Determine Status | Comments |
|---|---|---|---|---|
| No. | Summary/Description | | [40 C.F.R. 71.6(c)(5)(iii)(B)] | |
| 38 | The Permittee shall notify the Department via email or facsimile when relocating a drill rig to or from a well pad location where drilling operations are authorized under this permit. | Continuous | Records Review | |
| | 38.1. In each operating report required by Condition 71, provide a summary of drilling operations that were covered by this permit during the reporting period, and projected operations during the next reporting period. In the summary, indicate, for each drill rig and associated equipment operating under this permit, the well pad location of each drilling activity that occurred or is occurring during the reporting period. | Continuous | Records Review | |
| 39-40 | 39. The permit does not authorize drilling operations at sales oil production pads governed by the Milne Point Production Facility operating permit, unless the Permittee has obtained written authorization from the Department following submittal of a demonstration that AAAQS are protected.<br>40. The simultaneous use of incinerators or flares in conjunction with drilling activities at any well pad governed by this permit is prohibited. | Continuous | Records Review | |
| 41 | **Maintenance.** For the emission units in Section 12, the Permittee shall keep a copy of, and maintain equipment according to the manufacturer's or operator's maintenance procedures. | Continuous | Records Review | |
| **Supplemental Power Installation** | | | | |
| 42-43 | 42. **Replacement of Electric Generators:** The Permittee may replace the 20 megawatt (MW) electric generators, EU IDs 1 and 2 with 32 MW electric generators.<br>43. **Maintenance.** The Permittee shall maintain equipment according to the manufacturer's or operator's maintenance procedures. | Continuous | Records Review | |
| **Emission Units Subject to Owner Requested Limits for Ambient Air Quality Protection** | | | | |
| 44 | **Liquid Fuel Sulfur Requirements.** The Permittee shall burn liquid fuel with no greater than 15 ppmw sulfur in any of the liquid fuel-burning equipment listed in Table 1 of this permit in order to protect the 3-hour, 24-hour and annual Class II $SO_2$ increments. Monitor, record, and report as follows:<br>44.1. For EU IDs 1 and 2 (Subpart GG turbines) obtain records of the sulfur content of the liquid fuel as required in Condition 26.3.<br>44.2. For all other fuel burning equipment listed in Table 1, measure the sulfur content of the fuel oil in the sales tank at the Prudhoe Bay or Kuparuk Topping Unit according to ASTM D396-92 every time the fuel supply changes.<br>44.3. Keep records of the results of each liquid fuel sulfur analysis, and all test results and calculations.<br>44.4. Submit a report in accordance with Condition 94 whenever liquid fuel sulfur content exceeds the sulfur limit in Condition 44.<br>44.5. Submit with the operating report required by Condition 95, copies of the records required under Condition 44.3. | Continuous | Records Review | |
| 45 | **Liquid Fuel Sulfur Requirements.** To protect the 1-hour, 3-hour, and 24-hour $SO_2$ Alaska Ambient Air Quality Standards (AAAQS) the Permittee shall fire only liquid fuels with a sulfur content not to exceed 15 ppmw (ultra-low sulfur diesel (ULSD)) in all EUs composing any drill rig authorized under this permit (including nonroad engines) when operating on liquid fuel.<br>45.1. Clearly label fuel tank(s) for the drill rig EUs as "ULSD Only".<br>45.2. For each shipment of fuel, keep receipts that specify fuel grade and amount.<br>45.3. Include copies of the records specified in Condition 45.2 with the operating report required by Condition 95.<br>45.4. Report in accordance with Condition 94 whenever the fuel sulfur content exceeds the limit specified in Condition 45. | Continuous | Records Review<br>Field Verification/Interview | |



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## Annual Compliance Certification

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Reporting Period: January 1, 2018 to December 31, 2018

| Permit Condition No. | Permit Condition Summary/Description | Compliance Status | Method to Determine Status [40 C.F.R. 71.6(c)(5)(iii)(B)] | Comments |
|---|---|---|---|---|
| 46-47 | 46. To protect the 1-hour, 3-hour, and 24-hour $SO_2$ AAAQS and the 24-hour PM-10 AAAQS, the Permittee shall limit total fuel usage to 490 gallons per hour, per well pad. The fuel use limit is cumulative for drill rig EUs authorized by this permit and used during drilling operations at a single pad during any 1-hour time period. Demonstrate compliance by either:<br>46.1. Submitting the maximum fuel rating for each emission unit used in drilling operations and the cumulative maximum fuel rating for all emission units used in drilling operations at a single pad during any 1-hour time period, prior to operation, and once per calendar year with the operating report required by Condition 95; or<br>46.2. Installing and operating fuel flow meters for monitoring the total hourly fuel usage by each drill rig EU that operates under this permit during drilling operations at each well pad.<br>a. Monitor and record the total amount of liquid fuel fired in all drill rig EUs operating under this permit on a single well pad during all hours of operation.<br>b. Report in the operating report as required by Condition 95, the highest hourly fuel use value recorded in Condition 46.2.a for each month of the reporting period for all well pad locations where drilling occurs under this permit.<br>c. Report in accordance with Condition 94 whenever the total hourly fuel usage per well pad exceeds the limit specified in Condition 46.<br>47. To protect the annual $NO_2$, annual $SO_2$, and annual PM-2.5 AAAQS, the Permittee shall limit the rolling 12-month fuel usage to 1,250,000 gallons per well pad. The annual fuel use limit is cumulative for drill rig EUs authorized by this permit and used during drilling operations at a single pad, with allowance for the fuel use equivalency factor in Table 2 when operating Tier 2/Tier 3 engines. The Permittee shall monitor, record, and report as follows:<br>47.1. By the last day of each calendar month, calculate and record the total volume of fuel consumed during the previous calendar month for each well pad where drilling operations occur under this permit. Then calculate and record the rolling 12-month fuel usage for each well pad, applying the following equation: *Fuel Use = Actual Fuel Consumed x Equivalency Factor*<br>Where the Equivalency Factor equals 0.596 for drill rigs equipped with only Tier 2/Tier 3 engines, and 1.0 for all other drill rigs.<br>47.2. Include copies of records specified in Condition 47.1 with the operating report required by Condition 95.<br>47.3. Report in accordance with Condition 94 whenever the total rolling 12-month fuel usage per well pad exceeds the limit specified in Condition 47. | Intermittent | Records Review | One permit deviation was submitted on 3/29/2019 for failing to provide the max fuel rating with the 4Q18 FOR. |
| 48 | **Liquid Fuel Consumption Limit.** Burn no more than one million gallons of liquid fuel per 12 consecutive months at the CFP, B-Pad, and E-Pad in all of the equipment listed in Table 1 of this permit, and all other fuel burning equipment that may be present on the specified pads. Liquid fuel burned in motor vehicles and insignificant EUs as defined under 18 AAC 50.326(d) through (i) is excluded from the one million gallons limit. EUs on rotary drill rigs shall not be excluded as insignificant EUs. Monitor, record, and report as follows:<br>48.1. Measure the monthly total liquid fuel delivered to the facility as follows:<br>a. Use the liquid fuel meters installed on EU IDs 1 and 2.<br>b. For other liquid fuel burning EUs, estimate the fuel use by calculations approved by the Department. Liquid fuel meters used must be calibrated and certified by the manufacturers to be accurate within five percent.<br>48.2. Record the total liquid fuel burned in the previous 12 consecutive months.<br>48.3. Submit a report in accordance with Condition 94 whenever the quantity of liquid fuel used exceeds the liquid fuel limit in Condition 48.<br>48.4. Include with the operating report required by Condition 95, copies of the records required under Condition 48.2 for the period covered by the report. | Continuous | Records Review | |
| 49 | **Fuel Gas Sulfur Requirements.** The $H_2S$ content of the fuel gas burned in the fuel gas-fired equipment listed in Table 1 of this permit shall not exceed 100 ppmv at any time.<br>49.1. For fuel gas burning equipment listed in Table 1, measure the $H_2S$ content of the fuel gas monthly using length-of-stain-tube analysis as indicated in the EPA approval letter dated January 18, 1990.<br>49.2. Submit a report in accordance with Condition 94 whenever the fuel gas $H_2S$ content exceeds the $H_2S$ limit in Condition 49.<br>49.3. Keep records of the fuel gas $H_2S$ content and all test results.<br>49.4.Include copies of the records required by Condition 49.3 with the operating report required by Condition 95. | Continuous | Records Review | |
| 50 | **Operating Hour Restrictions.** The Permittee shall comply with the annual operating hour limits shown in Table 3.<br>50.1. The Permittee shall maintain a daily log that includes the operating time in hours for each emission unit listed in Table 3.<br>50.2. Each month, calculate the monthly operating time for the previous month in hours for each emission unit listed in Table 3 and summarize the operating time in hours for the previous twelve months.<br>50.3. Submit a report in accordance with Condition 94 whenever the previous 12-month operating hours summarized under Condition 50.2 exceed the limits listed in Table 3.<br>50.4. Include with the operating report required by Condition 95, copies of the records required by Condition 50.2. | Continuous | Records Review | |



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## Annual Compliance Certification

Milne Point Production Facility Operating Permit No. AQ0200TVP02 Rev. 1, Rev. 3, Rev. 4
Reporting Period: January 1, 2018 to December 31, 2018

| Permit Condition No. | Permit Condition Summary/Description | Compliance Status | Method to Determine Status [40 C.F.R. 71.6(c)(5)(iii)(B)] | Comments |
|---|---|---|---|---|
| 51 | **Daily Operating Scenarios.** The Permittee shall comply with the daily operating scenarios shown in Table 4 to protect the 24-hour PM-10 Class II increment and as follows:<br>51.1. Operate under Scenario 1 except as provided in Condition 51.2.<br>51.2. Operate under Scenario 2 only if fuel gas is unavailable. Prorate operation of each scenario used during each day.<br>51.3. Record the following:<br>a. For each emission unit listed in Table 4, maintain a daily log that includes the operating scenario and compliance data.<br>b. Each month, summarize the daily operating scenarios for the previous month.<br>51.4. Submit a report in accordance with Condition 94, for any violation of the daily operating scenarios in Table 4.<br>51.5. Include with the operating report required by Condition 95, copies of the records required by Condition 51.3. | Continuous | Records Review | |
| 52-53 | 52. **Flare Operational Limit:** For flare system EU IDs 18 and 18A, the Permittee shall comply with Condition 60 of this permit.<br>53. To protect the annual Class II $NO_2$ increment, the Permittee shall comply with Conditions 59.1 and 59.3. | Continuous | Records Review | |
| **Heaters Subject to BACT Limits** (EU IDs 3 through 10) | | | | |
| 54 | **Heater CO and NOx BACT Limits.** The Permittee shall not cause or allow CO or NOx emissions from EU IDs 3 through 10 to exceed the limits in Table 5.<br>54.1. Do not operate EU IDs 9 and 10 on liquid fuel at any time.<br>54.2. The Permittee shall monitor compliance with the short-term NOx BACT limit and CO BACT limit in Table 5 - Heater BACT Limits for EU IDs 3 through 10 by conducting source tests on each of the EU IDs no later than 12 months after the effective date of this permit and every five years thereafter. If the EU is dual-fuel configured, then conduct a test under each fuel type (gas or oil). Record and report results of the source tests in accordance with Section 7. In addition, express EU ID 7 and 8 fuel oil CO test results as lb/1000 gallons.<br>54.3. Substituting test data is allowed if the Permittee documents within the test plan, their intent to substitute testing for multiple heaters and if tests meet all other requirements of Conditions 24.8.b through 24.8.c as they would apply to heaters and the limits in Table 5.<br>54.4. **Recordkeeping and Reporting**<br>a. Monitor, record and report by following established preventative maintenance guidelines and maintaining records of maintenance completed. Retain maintenance records for five years, and submit records to the Department upon request.<br>b. Submit a report in accordance with Condition 94 for any exceedance of a NOx emission limit specified in Table 5.<br>c. Submit a copy of the source tests results to the Department as required by Condition 88. | Continuous | Records Review | |
| **Turbines Subject to BACT and PSD Avoidance Limits** (EU IDs 1, 2 and T-1, T-2 and T-3 as applicable) | | | | |
| 55 | **Turbine CO, NOx, $SO_2$, and PM BACT and PSD Avoidance Limits.** The Permittee shall not cause or allow CO, NOx, $SO_2$, and PM emissions from EU IDs 1 and 2 to exceed the limits in Table 6.<br>55.1. Submit a report in accordance with Condition 94 for any exceedance of an emission limit specified in Table 6.<br>55.1. **Monitoring, Recordkeeping and Reporting.** Monitor, record and report as per Condition 24.7, 24.9 and 24.10. | Continuous | Records Review | |
| 56 | **Turbine NOx Load Limits.** The Permittee shall comply with the NOx BACT limit in Table 6 for EU IDs 1 and 2.<br>56.1. Comply as follows:<br>a. Except during Direct Water Injection (DWI) start-up, emergency fuel transfer, emergency prorations, and other emergencies, use DWI at all times when operating the turbines on liquid fuel at a load above 9,500 kW. During DWI start-up, emergency fuel transfer, emergency prorations, and other emergencies, the Permittee shall operate no more than two hours per turbine per incident without DWI. For the purpose of this condition, an emergency is a sudden and reasonably unforeseeable event beyond the control of the Permittee, that requires immediate corrective action to restore normal operation.<br>b. If not using DWI and burning fuel gas, operate at no greater than 21,371 kilowatts (kW) generator output, each; | Continuous | Records Review<br>Field Verification/Interview | |
| | c. If using DWI, restrict load to the maximum at which compliance was demonstrated for fuel gas or fuel oil during any source test required under Condition 65.1.a(ii) and 65.1.a(iii); | Continuous | Records Review | |
| | d. During scheduled maintenance of the AquaChem water treatment system, operate for no more than two hours without DWI when burning liquid fuel in the turbine(s);<br>e. Keep records of NOx source tests conducted on EU IDs 1 and 2;<br>f. Once per hour record the load in kW and annotate whether DWI was used;<br>g. Submit a report in accordance with Condition 94 for any violation of operating load limits in Condition 56.1.b and 56.1.c and any violation of the emission rate limits in Table 6.<br>h. Include copies of the records required by Condition 56.1.f with the report required by Condition 95.<br>i. When not using DWI and burning liquid fuel; except for DWI start-up periods, emergency fuel transfer, emergency prorations, and other emergencies; operate at no greater than 8,166 kW (generator output) each. | Continuous | Records Review<br>Field Verification/Interview | |



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## Annual Compliance Certification

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| Permit Condition No. | Permit Condition Summary/Description | Compliance Status | Method to Determine Status [40 C.F.R. 71.6(c)(5)(iii)(B)] | Comments |
|---|---|---|---|---|
| **Volatile Organic Compounds BACT Limits for Oil Reserve Tanks** (EU ID 23) | | | | |
| 57 | The Permittee shall comply with the volatile organic compounds BACT limits for vents as follows:<br>57.1. Provide a gas blanketing and back pressure relief valve for EU ID 23 (oil reserve tanks). | Continuous | Field Verification/Interview | |
| **VOC BACT for Vents B-Pad Vents (EU ID 21) and C-Pad Vents** (EU ID CP-7) | | | | |
| 58 | The Permittee shall:<br>58.1. Limit vent emissions from B-Pad and C-Pad to no greater than 36.5 tons of VOCs for each 12 month rolling period per vent;<br>58.2. Monitor by calculating VOC emissions from Well Pad-B and Well Pad-C as follows:<br>a. Determine the VOC content of a representative sample of the gas stream at Well Pad B (EU ID 21) and Well Pad C (EU ID CP-7) at least once each rolling twelve months using ASTM D-1945; or an alternate method approved in writing by the Department;<br>b. Determine the mass of VOC per standard cubic feet of fuel gas using the analysis conducted per Condition 58.2.a;<br>c. Monitor and record the number of routine venting events that occurred at B-Pad and C-Pad. On a monthly basis calculate the amount of VOC vented at each pad;<br>d. Determine the total tons of VOC vented during the previous 12 months by summing the monthly VOC emissions at each Well Pad B and Well Pad C;<br>e. Report the VOC emissions for each well pad in the Stationary Source Operating Report required by Condition 95 for the period covered by the report; and<br>f. Report the VOC emissions in the Excess Emissions and Deviations Report required by Condition 94 if the VOC emissions from Well Pad-B or Well Pad-C exceed 36.5 tons per 12 consecutive months. | Continuous | Records Review | |
| **Owner Requested Limits to Avoid PSD Modification for Nox, CO, $SO_2$, and PM, and minor permitting under 18 AAC 50.502(c)(3) for NOx** | | | | |
| 59 | **Operation of Temporary Combustion Turbines.** For the supplemental combustion turbines (EUs T-1 through T-3):<br>59.1. To avoid a minor permit under 18 AAC 50.502(c)(3) for NOx, limit the concurrent operation of one or more of the supplemental turbines with both EUs 1 and 2 to no more than 1,000 hours during any 12 consecutive month period.<br>a. Monitor and record concurrent operations of each supplemental turbine with both EU IDs 1 or 2.<br>b. Report according to Condition 94 if concurrent operations exceed the limit set out in Condition 59.<br>59.2. Operate each supplemental turbine on fuel gas only.<br>59.3. For any interval during which a supplemental turbine replaces EU ID 1 or 2, include supplemental turbine emissions in the annual emission limits for NOx and CO listed in Condition 55, Table 6.<br>a. Monitor hours of operation for each supplemental turbine.<br>b. Using the hours of operation from Condition 59.3.a, calculate NOx and CO emissions in tons per month from each supplemental turbine using emission factors of 6.1 lb NOx/hr and 7.5 lb CO/hr for the previous month. Add the cumulative monthly supplemental turbine emissions to that of the out-of-service EU IDs 1 and/or 2 for determining compliance with the 12-month rolling NOx and CO emission cap set out in Condition 55, Table 6. | Continuous | Records Review | |
| 60 | **Flare Operational Limit to Avoid PSD Modification.** For flare system EU IDs 18 and 18A, the Permittee shall:<br>60.1. limit combined flare gas combustion from EU IDs 18 and 18A to no greater than 83 million standard cubic feet per day (MMscf/day);<br>60.2. not flare gas through EU ID 18 concurrently with EU ID 18A, except during flare system shutdown or startup. Limit concurrent operations to no greater than 72 hours during each flare system shutdown or startup; and<br>60.3. maintain a log on site, and record which flare is in service at any given time. Note in the log any operational considerations, including dates of concurrent operations, dates of changeover from one flare to the other, or dates of flaring greater than 44 MMscf/day.<br>60.4. **Reporting.** To demonstrate compliance with the PSD Avoidance Limit of Condition 60.1, the Permittee shall provide copies of the log kept in Condition 60.3 in the operating report required by Condition 95 for the period covered by the report. | Continuous | Records Review | |
| 61 | **Monitoring, Recordkeeping, and Reporting for Turbine PSD Avoidance Limits.** Monitor, record, and report for EU IDs 1 and 2 as follows:<br>61.1. **NOx PSD Avoidance Limit.** The Permittee shall avoid classification as a PSD modification for NOx by emitting no more than 625 tons per year of from EU IDs 1 and 2 combined.<br>a. Limit operating load and/or use DWI technology on EU IDs 1 and 2.<br>b. Calculate monthly the NOx emissions in tons per month for the previous calendar month using Equation 1. [See permit for equation].<br>c. Calculate and record the combined 12-month rolling total NOx emissions for EU IDs 1 and 2 by adding the combined total NOx emissions for the prior calendar month to the monthly totals for the preceding eleven months.<br>d. Submit a report according to Condition 94 if the total NOx emissions calculated under Condition 61.1.c exceed the limit in Condition 61.1.<br>e. Attach a summary of the monthly NOx emissions calculated under Condition 61.1.b and the combined 12 month rolling total calculated under Condition 61.1.c to the operating report required by Condition 95. | Continuous | Records Review | |



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## Annual Compliance Certification

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| No. | Permit Condition<br>Summary/Description | Compliance Status | Method to Determine Status<br>[40 C.F.R. 71.6(c)(5)(iii)(B)] | Comments |
|---|---|---|---|---|
| | 61.2. **CO PSD Avoidance Limit for EU IDs 1 and 2.** The Permittee shall emit no more than 94.4 tons per year of CO from each of EU IDs 1 and 2.<br>a. Calculate monthly CO emissions in tons per month for the previous calendar month using Equation 2. [See permit for equation].<br>b. Calculate and record the combined 12-month rolling total CO emissions for EU IDs 1 and 2 by adding the combined total CO emissions for the prior calendar month to the monthly totals for the preceding eleven months.<br>c. Submit a report according to Condition 94 if the total CO emissions calculated under Condition 61.2.b exceed the limit in Condition 61.2.<br>d. Attach a summary of the total CO emissions calculated under Condition 61.2a and the combined 12 month rolling total calculated under Condition 61.2.b to the operating report required by Condition 95. | Continuous | Records Review | |
| | 61.3. **CO PSD Avoidance Limit for EU IDs 7 and 8.** The Permittee shall emit no more than five pounds of CO per 1,000 gallons of fuel combusted by each of EU IDs 7 and 8 when firing liquid fuel. Follow established preventative maintenance guidelines, and maintain records of maintenance completed. Retain maintenance records for five years and submit the records to the Department upon request.<br>61.4. **$SO_2$ PSD Avoidance Limit.** For the $SO_2$ PSD avoidance limit, comply with the fuel sulfur limits, monitoring, recordkeeping and reporting requirements set out in Conditions 44 through 49. | Continuous | Records Review and Field Verification/Interview | |
| | 61.5. **PM PSD Avoidance Limit.** EUs 1 and 2 shall emit no more than 28 tpy of PM with aerodynamic diameter less than or equal to a nominal 10 micrometers (PM-10). Monitor, record, and report as follows:<br>a. Maintain fuel flow meters on EU IDs 1 and 2 to measure fuel gas and liquid fuel usage. Maintain copies of documentation showing that the meters were calibrated to an accuracy of plus or minus five percent.<br>b. Calculate PM-10 emissions from fuel gas using Equation 3. [See permit for equation].<br>(i) Determine the emission factor to be used in Condition 61.5.b as follows.<br>(A) Until a source test is required by Condition 61.5.d, use an initial emission factor of 6.93 lb/MMscf;<br>(B) Once a source test required by Condition 61.5.d has been conducted, use the PM emission factor for fuel gas in lb/MMscf from the source test. | Continuous | Records Review | |
| | c. Calculate the 12-month PM-10 emissions from liquid fuel using Equation 4. [See permit for equation].<br>(i) determine the emission factor to be used in Condition 61.5.c as follows.<br>(A) Until a source test is required by Condition 61.5.d, use an initial emission factor of 0.012 lb/MMBtu.<br>(B) Once a source test required by Condition 61.5.d has been conducted, use the PM emission factor for liquid fuel in lb/MMBtu, based on HHV, from the source test. | Continuous | Records Review | |
| | d. Calculate and record the 12-month total PM-10 emissions for the turbines by adding emissions from Condition 61.5.b and 61.5.c.<br>(i) The first time that the 12-month total from Condition 61.5.d exceeds 26 tons, determine PM-10 emission factors for the turbines, in lb/MMscf for fuel gas firing with and without DWI, and in lb/MMBtu (based on HHV), for liquid fuel-firing, with DWI, by conducting source tests in accordance with Section 7. Consider the end of the month that resulted in the 12-month total exceeding 26 tons as the date of the Department's request for source test under Condition 80.<br>(ii) If the 12-month total from Condition 61.5.d exceeds 28 tons, notify the Department in accordance with Condition 94.<br>e. Attach a summary of the 12-month PM-10 emissions totals to the operating report required by Condition 95. Keep records documenting the emission calculation. | Continuous | Records Review | |
| 62 | **Turbine NOx and CO Monitoring Requirements.** To monitor compliance with the NOx PSD avoidance standard and the CO BACT limits in Table 6, the Permittee shall monitor process parameters hourly and calculate the NOx and CO emission rates in pph no less than once per month for EU IDs 1 and 2 in accordance with Condition 62.1 or 62.2 as follows: | Continuous | Records Review | |
| | 62.1. Unless required to use a continuous emissions monitoring system (CEMS) by Condition 62.1.b for either NOx or for CO, calculate emission rates for EU IDs 1 and 2 using the best-fit correlation most recently approved by the Department or most recently submitted for approval by the Permittee under Condition 63.<br>a. Revise a correlation based on results of any biennial relative accuracy (RA) source test required by Condition 65. Submit the revisions for Department approval in accordance with Condition 63.<br>b. If two consecutive RA tests performed under Condition 65 for the Department-approved correlation exceed the limits in Condition 62.1.b(i) or 62.1.b(ii), install and use a CEMS as described in Condition 64 no later than 120 days after submitting the report for the second failing test. The RA shall not exceed:<br>(i) 20 percent when the Reference Method (RM) value is used in the denominator of the RA equation in 40 C.F.R. 60, Appendix B, Performance Specification 2, Section 12, Equation 2-6 (average emissions during test are greater than 50 percent of the emission standard); or<br>(ii) 10 percent when the applicable emission standard is used in the denominator of the RA equation in 40 C.F.R. 60, Appendix B, Performance Specification 2, Section 12, Equation 2-6 (average emissions during test are greater than 50 percent of the emission standard).<br>62.2. Use a CEMS for NOx or for CO as indicated in Condition 64. | Continuous | Records Review | |



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## Annual Compliance Certification

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| Permit Condition No. | Permit Condition Summary/Description | Compliance Status | Method to Determine Status [40 C.F.R. 71.6(c)(5)(iii)(B)] | Comments |
|---|---|---|---|---|
| 63 | **Best-Fit Correlation Method.** Submit to the Department for written approval, a report that describes any changes to the best-fit correlations between the emission rates for NOx and CO from completed source tests and turbine process parameters. Include:<br>63.1. the methodology, assumptions, analysis with sample calculations, supporting notes, a list of all process parameters used in the correlations, and an analysis of their statistical relevance for their correlation (i.e. an $r^2$ analysis of curve fit);<br>63.2. quality assurance procedures for the process parameters used in developing the correlation between the emission rates and the completed source tests; and | Continuous | Records Review | |
| 64 | **Continuous Emissions Monitoring System (CEMS).** Unless required by Condition 62.1.b, the Permittee may choose to install a CEMS instead of using the best fit correlation. The Permittee must install, calibrate, and conduct applicable continuous monitoring system performance test listed in 40 C.F.R. 60, Appendix B, effective July 1, 1999 (revised October 8, 2009) and certify test results; operate, and maintain air contaminant emissions and process monitoring equipment on the emission units as described herein. Submit monitoring equipment, siting, operation, maintenance plans, and procedures for approval by the Department. | Continuous | Records Review | |
| | 64.1. Comply with each applicable monitoring system equipment, as listed in 40 C.F.R. 60, Appendix A (Method 19), Appendix F, 65 FR 61744 (Performance Specification 2), and the *EPA Quality Assurance Handbook for Air Pollution Measurements Systems, EPA/600 R-94/038b.*<br>64.2. Attach to the operating report required by Condition 95 the following information for the period covered by the report:<br>a. A copy of each quarterly report CEMS data assessment report for the Quality Assurance Procedures conducted in accordance with 40 C.F.R. 60, Appendix F, and<br>b. A copy of each quarterly monitoring systems performance report in accordance with 40 C.F.R. 60.7. | Continuous | Records Review | |
| 65 | **Relative Accuracy (RA) Test Procedures for NOx and CO.** The Permittee shall determine biennially the RA of all correlations approved under Condition 63 as follows:<br>65.1. Once every two calendar years, conduct RM tests for NOx and CO as follows:<br>a. Conduct a minimum of three sets of RM source tests as described in Condition 82 at each of three loads (high, medium, and low), on one of either EU ID 1 or EU ID 2, for each of the following operating scenarios listed in Condition 65.1.a(i) through 65.1.a(iii). Alternate each two year test between EU IDs 1 and 2 except as otherwise approved in writing by the Department.<br>(i) Fuel gas, without DWI,<br>(ii) Fuel gas, with DWI,<br>(iii) Fuel oil, with DWI. | Continuous | Records Review | |
| | b. Record each statistically relevant process parameter during each RM source test no less than once every 15 minutes. Mark the beginning and end of each RM source test on the output record.<br>c. Record the NOx and CO emission concentrations in ppm for each RM source test period ("RM value") for each of the operating scenarios in Condition 65.1.a.<br>d. Determine the integrated average NOx and CO emission rates in pph for each RM test period using the best fit correlations approved by the Department under Condition 64. | Continuous | Records Review | |
| | 65.2. Calculate the relative accuracy of a correlation compared to a RM test as follows:<br>a. If the RM has an instrumental or integrated non-instrumental sampling technique, make a direct comparison of the RM value and the correlation value.<br>b. If the RM has a grab sampling technique, first average the results from all grab samples taken during the test run, and then compare this average value against the value obtained from the correlation during the run.<br>c. Using the procedures in 40 C.F.R. 60, Appendix B, Performance Specification 2, Section 12 and summarizing the results on a data sheet similar to that shown in Section 18 calculate the<br>(i) arithmetic mean of the difference between the "RM value" and the "correlation value",<br>(ii) standard deviation,<br>(iii) confidence coefficient, and<br>(iv) relative accuracy.<br>65.3. For turbine operation with a wet combustion liner, if an RA verification of any correlation is greater than the allowable limits in Condition 62.1.b, the Permittee must commence annual RA testing until five consecutive RA tests demonstrate compliance with the limits, then biennial testing may resume.<br>a. The Permittee shall apply for and obtain a significant modification to this permit to revise the monitoring requirements of this condition prior to operation with a dry combustion liner.<br>65.4. Include with the operating report required under Condition 95, copies of the results of all RM tests (including any rejected test results) conducted under Condition 65.1.a. | Continuous | Records Review | |
| **Section 6. General Conditions** | | | | |
| **Standard Terms and Conditions** | | | | |
| 66 | Each permit term and condition is independent of the permit as a whole and remains valid regardless of a challenge to any other part of the permit. | Continuous | Advisory Provision | |
| 67 | The permit may be modified, reopened, revoked and reissued, or terminated for cause. A request by the Permittee for modification, revocation and re-issuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any permit condition. | Continuous | Advisory Provision | |



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| Permit Condition No. | Permit Condition Summary/Description | Compliance Status | Method to Determine Status [40 C.F.R. 71.6(c)(5)(iii)(B)] | Comments |
|---|---|---|---|---|
| 68 | The permit does not convey any property rights of any sort, nor any exclusive privilege. | Continuous | Advisory Provision | |
| 69 | **Administration Fees.** The Permittee shall pay to the Department all assessed permit administration fees. Administration fee rates are set out in 18 AAC 50.400-405. | Continuous | Accounting Records Review | |
| 70 | **Assessable Emissions.** The Permittee shall pay to the Department an annual emission fee based on the stationary source's assessable emissions as determined by the Department under 18 AAC 50.410. The assessable emission fee rate is set out in 18 AAC 50.410. The Department will assess fees per ton of each air pollutant that the stationary source emits or has the potential to emit in quantities greater than 10 tons per year. The quantity for which fees will be assessed is the lesser of<br>70.1. the stationary source's assessable potential to emit of 1,645 TPY; or<br>70.2. the stationary source's projected annual rate of emissions that will occur from July 1 to the following June 30, based upon actual annual emissions emitted during the most recent calendar year or another 12-month period approved in writing by the Department, when demonstrated by<br>a. an enforceable test method described in 18 AAC 50.220;<br>b. material balance calculations;<br>c. emission factors from EPA's publication AP-42, Vol. I, adopted by reference in 18 AAC 50.035; or<br>d. other methods and calculations approved by the Department. | Continuous | Accounting Records Review | |
| 71 | **Assessable Emission Estimates.** Emission fees will be assessed as follows:<br>71.1. no later than March 31 of each year, the Permittee may submit an estimate of the stationary source's assessable emissions to ADEC, Air Permits Program, ATTN: Assessable Emissions Estimate, Box 111800, 410 Willoughby Ave., Suite 303, Juneau, AK 99811-1800; the submittal must include all of the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the Department can verify the estimates; or<br>71.2. if no estimate is submitted on or before March 31 of each year, emission fees for the next fiscal year will be based on the potential to emit set forth in Condition 70.1. | Continuous | Records Review | |
| 72 | **Good Air Pollution Control Practice.** Except as noted in Condition 72.4, the Permittee shall do the following for EU IDs 5-18, 18A, CP-1, CP-3, CP-6, 21, CP-7, 23, and 25:<br>72.1. perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;<br>72.2. keep records of any maintenance that would have a significant effect on emissions; the records may be kept in electronic format; and<br>72.3. keep a copy of either the manufacturer's or the operator's maintenance procedures.<br>72.4. EU IDs 11-15, 17, CP-3, and CP-6 are subject to this condition only until the applicable compliance date as set forth in Condition 31. | Continuous | Records Review | |
| 73 | **Dilution.** The Permittee shall not dilute emissions with air to comply with this permit. Monitoring shall consist of an annual certification that the Permittee does not dilute emissions to comply with this permit. | Continuous | Field Verification/Interview | |
| 74 | **Reasonable Precautions to Prevent Fugitive Dust.** A person who causes or permits bulk materials to be handled, transported, or stored, or who engages in an industrial activity or construction project shall take reasonable precautions to prevent particulate matter from being emitted into the ambient air.<br>74.1. Report according to Condition 76. | Continuous | Field Verification/Interview | |
| 75 | **Stack Injection.** The Permittee shall not release materials other than process emissions, products of combustion, or materials introduced to control pollutant emissions from a stack at a source constructed or modified after November 1, 1982, except as authorized by a construction permit, Title V permit, or air quality control permit issued before October 1, 2004. | Continuous | Field Verification/Interview | |



ED_004016I_00012059-00023

## Annual Compliance Certification

Milne Point Production Facility Operating Permit No. AQ0200TVP02 Rev. 1, Rev. 3, Rev. 4
Reporting Period: January 1, 2018 to December 31, 2018

| No. | Permit Condition<br>Summary/Description | Compliance Status | Method to Determine Status<br>[40 C.F.R. 71.6(c)(5)(iii)(B)] | Comments |
|---|---|---|---|---|
| 76 | **Air Pollution Prohibited.** No person may permit any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property.<br>76.1. **Monitoring, Recordkeeping, and Reporting:**<br>a. If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to Condition 94.<br>b. As soon as practicable after becoming aware of a complaint that is attributable to emissions from the stationary source, the Permittee shall investigate the complaint to identify emissions that the Permittee believes have caused or are causing a violation of Condition 76.<br>76.2. The Permittee shall initiate and complete corrective action necessary to eliminate any violation identified by a complaint or investigation as soon as practicable if<br>a. after an investigation because of a complaint or other reason, the Permittee believes that emissions from the stationary source have caused or are causing a violation of Condition 76; or<br>b. the Department notifies the Permittee that it has found a violation of Condition 76.<br>76.3. The Permittee shall keep records of<br>a. the date, time, and nature of all emissions complaints received;<br>b. the name of the person or persons that complained, if known;<br>c. a summary of any investigation, including reasons the Permittee does or does not believe the emissions have caused a violation of Condition 76; and<br>d. any corrective actions taken or planned for complaints attributable to emissions from the stationary source. | Continuous | Records Review<br>Field Verification/Interview | |
| | 76.4. With each operating report under Condition 95, for the period covered by the report, the Permittee shall include a brief summary report which must include:<br>a. the number of complaints received;<br>b. the number of times the Permittee or the Department found corrective action necessary;<br>c. the number of times action was taken on a complaint within 24 hours; and<br>d. the status of corrective actions the Permittee or Department found necessary that were not taken within 24 hours.<br>76.5. The Permittee shall notify the Department of a complaint that is attributable to emissions from the stationary source within 24 hours after receiving the complaint, unless the Permittee has initiated corrective action within 24 hours of receiving the complaint. | Continuous | Records Review<br>Field Verification/Interview | |
| 77 | **Technology-Based Emission Standard.** If an unavoidable emergency, malfunction, or non-routine repair, as defined in 18 AAC 50.235(d), causes emissions in excess of a technology-based emission standard listed in Conditions 24, 26, 27, 54, 55, 57, 58, or 35 (refrigerants) , the Permittee shall take all reasonable steps to minimize levels of emissions that exceed the standard. Excess emissions reporting under Condition 94 requires information on the steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under Condition 94. | Continuous | Records Review | |
| **NESHAPs Applicability Determinations** | | | | |
| 78 | The Permittee shall determine rule applicability and designation of affected sources under National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories (40 C.F.R. 63) in accordance with the procedures described in 40 C.F.R. 63.1(b) and 63.10(b)(3). If a source becomes affected by an applicable subpart of 40 C.F.R. 63, the Permittee shall comply with such standard by the compliance date established by the Administrator in the applicable subpart, in accordance with 40 C.F.R. 63.6(c).<br>78.1. After the effective date of any relevant standard promulgated by the Administrator under this part, an owner or operator who constructs a new affected source that is not major-emitting or reconstructs an affected source that is not major-emitting that is subject to such standard, or reconstructs a source such that the source becomes an affected source subject to the standard, must notify the Administrator and the Department of the intended construction or reconstruction. The notification must be submitted in accordance with the procedures in §63.9(b). | Continuous | Records Review | |
| **Open Burning Requirements** | | | | |
| 79 | **Open Burning.** If the Permittee conducts open burning at this stationary source, the Permittee shall comply with the requirements of 18 AAC 50.065.<br>79.1. The Permittee shall keep written records to demonstrate that the Permittee complies with the limitations in this condition and the requirements of 18 AAC 50.065. Upon request by the Department, submit copies of the records.<br>79.2. Compliance with this condition shall be an annual certification conducted under Condition 96. | Continuous | Field Verification/Interview | |



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## Annual Compliance Certification

Milne Point Production Facility Operating Permit No. AQ0200TVP02 Rev. 1, Rev. 3, Rev. 4
Reporting Period: January 1, 2018 to December 31, 2018

| Permit Condition No. | Summary/Description | Compliance Status | Method to Determine Status [40 C.F.R. 71.6(c)(5)(iii)(B)] | Comments |
|---|---|---|---|---|
| **Section 7. General Source Testing and Monitoring Requirements** | | | | |
| 80 | **Requested Source Tests.** In addition to any source testing explicitly required by the permit, the Permittee shall conduct source testing as requested by the Department to determine compliance with applicable permit requirements. | Continuous | Records Review | |
| 81 | **Operating Conditions.** Unless otherwise specified by an applicable requirement or test method, the Permittee shall conduct source testing<br>81.1. at a point or points that characterize the actual discharge into the ambient air; and<br>81.2. at the maximum rated burning or operating capacity of the emission unit or another rate determined by the Department to characterize the actual discharge into the ambient air. | Continuous | Records Review | |
| 82 | **Reference Test Methods.** The Permittee shall use the following as reference test methods when conducting source testing for compliance with this permit:<br>82.1. Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(a) must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 60.<br>82.2. Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(b) must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 61.<br>82.3. Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(c) must be conducted in accordance with the source test methods and procedures specified in 40 C.F.R. 63.<br>82.4. Source testing for the reduction in visibility through the exhaust effluent must be conducted in accordance with the procedures set out in Reference Method 9 and may use the form in Section 13 to record data.<br>82.5. Source testing for emissions of total particulate matter, sulfur compounds, nitrogen compounds, carbon monoxide, lead, volatile organic compounds, fluorides, sulfuric acid mist, municipal waste combustor organics, metals, and acid gases must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 60, Appendix A.<br>82.6. Source testing for emissions of PM-10 must be conducted in accordance with the procedures specified in 40 C.F.R. 51, Appendix M, Methods 201 or 201A and 202.<br>82.7. Source testing for emissions of any pollutant may be determined using an alternative method approved by the Department in accordance with 40 C.F.R. 63 Appendix A, Method 301. | Continuous | Records Review | |
| 83 | **Excess Air Requirements.** To determine compliance with this permit, standard exhaust gas volumes must include only the volume of gases formed from the theoretical combustion of the fuel, plus the excess air volume normal for the specific emission unit type, corrected to standard conditions (dry gas at 68°F and an absolute pressure of 760 millimeters of mercury). | Continuous | Records Review | |
| 84 | **Test Exemption.** The Permittee is not required to comply with Conditions 86, 87, and 88 when the exhaust is observed for visible emissions by Method 9 Plan (Condition 2.1). | Continuous | Advisory Provision | |
| 85 | **Test Deadline Extension.** The Permittee may request an extension to a source test deadline established by the Department. The Permittee may delay a source test beyond the original deadline only if the extension is approved in writing by the Department's appropriate division director or designee. | Continuous | Records Review | |
| 86 | **Test Plans.** Except as provided in Condition 84, before conducting any source tests, the Permittee shall submit a plan to the Department. The plan must include the methods and procedures to be used for sampling, testing, and quality assurance and must specify how the emission unit will operate during the test and how the Permittee will document that operation. The Permittee shall submit a complete plan within 60 days after receiving a request under Condition 80 and at least 30 days before the scheduled date of any test unless the Department agrees in writing to some other time period. Retesting may be performed without resubmitting the plan. | Continuous | Records Review | |
| 87 | **Test Notification.** Except as provided in Condition 84, at least 10 days before conducting a source test, the Permittee shall give the Department written notice of the date and the time the source test will begin. | Intermittent | Records Review | One permit deviation was submitted on 7/12/2018 for failing to notify ADEC 10 days prior to source testing for EU IDs 4, 5, and 7. |
| 88 | **Test Reports.** Except as provided in Condition 84, within 60 days after completing a source test, the Permittee shall submit two copies of the results in the format set out in the Source Test Report Outline, adopted by reference in 18 AAC 50.030. The Permittee shall additionally certify the results in the manner set out in Condition 91. If requested in writing by the Department, the Permittee must provide preliminary results in a shorter period of time specified by the Department. | Continuous | Records Review | |



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## Annual Compliance Certification

Milne Point Production Facility Operating Permit No. AQ0200TVP02 Rev. 1, Rev. 3, Rev. 4
Reporting Period: January 1, 2018 to December 31, 2018

| No. | Permit Condition<br>Summary/Description | Compliance Status | Method to Determine Status<br>[40 C.F.R. 71.6(c)(5)(iii)(B)] | Comments |
|---|---|---|---|---|
| 89 | **Particulate Matter Calculations.** In source testing for compliance with the particulate matter standards in Conditions 6 and 14.2, the three-hour average is determined using the average of three one-hour test runs. The source testing must account for those emissions caused by soot blowing, grate cleaning, or other routine maintenance activities by ensuring that at least one test run includes the emissions caused by the routine maintenance activity and is conducted under conditions that lead to representative emissions from that activity. The emissions must be quantified using the following equation: [See permit for equation]. | Continuous | Records Review | |
| **Section 8. General Recordkeeping and Reporting Requirements** | | | | |
| **Recordkeeping Requirements** | | | | |
| 90 | **Recordkeeping Requirements.** The Permittee shall keep all records required by this permit for at least five years after the date of collection, including:<br>90.1. Copies of all reports and certifications submitted pursuant to this section of the permit; and<br>90.2. Records of all monitoring required by this permit, and information about the monitoring including:<br>a. the date, place, and time of sampling or measurements;<br>b. the date(s) analyses were performed;<br>c. the company or entity that performed the analyses;<br>d. the analytical techniques or methods used;<br>e. the results of such analyses; and,<br>f. the operating conditions as existing at the time of sampling or measurement. | Continuous | Records Review | |
| **Reporting Requirements** | | | | |
| 91 | **Certification.** The Permittee shall certify any permit application, report, affirmation, or compliance certification submitted to the Department and required under the permit by including the signature of a responsible official for the permitted stationary source following the statement: *"Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete."* Excess emission reports must be certified either upon submittal or with an operating report required for the same reporting period. All other reports and other documents must be certified upon submittal.<br>91.1. The Department may accept an electronic signature on an electronic application or other electronic record required by the Department if<br>a. a certifying authority registered under AS 09.25.510 verifies that the electronic signature is authentic; and<br>b. the person providing the electronic signature has made an agreement, with the certifying authority described in Condition 91.1.a, that the person accepts or agrees to be bound by an electronic record executed or adopted with that signature. | Continuous | Records Review | |
| 92 | **Submittals.** Unless otherwise directed by the Department or this permit, the Permittee shall send an original and one copy of reports, compliance certifications, and other submittals required by this permit to ADEC, Air Permits Program, 610 University Ave., Fairbanks, AK 99709-3643, ATTN: Compliance Technician. The Permittee may, upon consultation with the Compliance Technician regarding software compatibility, provide electronic copies of data reports, source test reports, or other records under a cover letter certified in accordance with Condition 91. | Continuous | Records Review | |
| 93 | **Information Requests.** The Permittee shall furnish to the Department, within a reasonable time, any information the Department requests in writing to determine whether cause exists to modify, revoke and reissue, or terminate the permit or to determine compliance with the permit. Upon request, the Permittee shall furnish to the Department copies of records required to be kept by the permit. The Department may require the Permittee to furnish copies of those records directly to the Federal Administrator. | Continuous | Records Review | |
| 94 | **Excess Emissions and Permit Deviation Reports.**<br>94.1. Except as provided in Condition 76, the Permittee shall report all emissions or operations that exceed or deviate from the requirements of this permit as follows:<br>a. in accordance with 18 AAC 50.240(c), as soon as possible after the event commenced or was discovered, report<br>(i) emissions that present a potential threat to human health or safety; and<br>(ii) excess emissions that the Permittee believes to be unavoidable;<br>b. in accordance with 18 AAC 50.235(a), within two working days after the event commenced or was discovered, report an unavoidable emergency, malfunction, or nonroutine repair that causes emissions in excess of a technology based emission standard; | Continuous | Records Review | |
| | c. report all other excess emissions and permit deviations<br>(i) within 30 days after the end of the month during which the excess emissions or other permit deviation occurred, except as provided in Condition 94.1.c(ii) and 94.1.c(iii); or | Continuous | Records Review | |
| | (ii) if a continuous or recurring excess emissions is not corrected within 48 hours of discovery, within 72 hours of discovery unless the Department provides written permission to report under Condition 94.1.c(i); or<br>(iii) according to the required deadline for failure to monitor as specified in Conditions 4.2.b and 8.1.b.<br>94.2. When reporting either excess emissions or permit deviations, the Permittee shall report using either the Department's on-line form, which can be found at http://www.dec.state.ak.us/air/ap/site.htm or https://myalaska.state.ak.us/deca/air/airtoelsweb/, or if the Permittee prefers, the form contained in Section 15 of this permit. The Permittee must provide all information called for by the form that is used.<br>94.3. If requested by the Department, the Permittee shall provide a more detailed written report as requested to follow up an excess emissions report. | Continuous | Records Review | |



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## Annual Compliance Certification

Milne Point Production Facility Operating Permit No. AQ0200TVP02 Rev. 1, Rev. 3, Rev. 4
Reporting Period: January 1, 2018 to December 31, 2018

| Permit Condition No. | Permit Condition Summary/Description | Compliance Status | Method to Determine Status [40 C.F.R. 71.6(c)(5)(iii)(B)] | Comments |
|---|---|---|---|---|
| 95 | **Operating Reports.** During the life of this permit, the Permittee shall submit to the Department an original and one copy of an operating report by May 15 for the period January 1 to March 31, by August 15 for the period April 1 to June 30, by November 15 for the period July 1 to September 30, and by February 15 for the period October 1 to December 31 of the previous year.<br>95.1. The operating report must include all information required to be in operating reports by other conditions of this permit for the period covered by the report.<br>95.2. When excess emissions or permit deviations that occurred during the reporting period are not reported with the operating report under Condition 95.1, the Permittee shall identify:<br>a. the date of the deviation;<br>b. the equipment involved;<br>c. the permit condition affected;<br>d. a description of the excess emissions or permit deviation; and<br>e. any corrective action or preventive measures taken and the date of such actions; or<br>95.3. When excess emissions or permit deviations have already been reported under Condition 94 the Permittee shall cite the date or dates of those reports. | Intermittent | Records Review | One permit deviation was submitted on 3/29/2019 for failing to provide all required information in the FOR. |
| | 95.4. The operating report must include for the period covered by the report, a listing of emissions monitored under Conditions 1.2, 2.1.a(v), 6.2, 12.2, or 24.7 which trigger additional testing or monitoring, whether or not the emissions monitored exceed an emission standard. The Permittee shall include in the report.<br>a. the date of the emissions;<br>b. the equipment involved;<br>c. the permit condition affected; and<br>d. the monitoring result which triggered the additional monitoring.<br>95.5. **Transition from expired to renewed permit.** For the first period of this renewed operating permit, also provide the previous permit's facility operating report elements covering that partial period immediately preceding the effective date of this renewed permit. | Continuous | Records Review | |
| 96 | **Annual Compliance Certification.** Each year by March 31, the Permittee shall compile and submit to the Department an annual compliance certification report.<br>96.1. Certify the compliance status of the stationary source over the preceding calendar year consistent with the monitoring required by this permit, as follows:<br>a. identify each term or condition set forth in Section 3 through Section 10, that is the basis of the certification;<br>b. briefly describe each method used to determine the compliance status;<br>c. state whether compliance is intermittent or continuous; and<br>d. identify each deviation and take it into account in the compliance certification;<br>96.2. **Transition from expired to renewed permit.** For the first period of this renewed operating permit, also provide the previous permit's annual compliance certification report elements covering that partial period immediately preceding the effective date of this renewed permit.<br>96.3. In addition, submit a copy of the report directly to the EPA-Region 10, Office of Air Quality, M/S OAQ-107, 1200 Sixth Avenue, Seattle, WA 98101. | Continuous | Records Review | |
| 97 | **NSPS and NESHAP Reports.** The Permittee shall:<br>97.1. **Reports:** Attach to the operating report required by Condition 95 for the period covered by the report, a copy of any NSPS and NESHAPs reports submitted to the U.S. Environmental Protection Agency (EPA) Region 10; and<br>97.2. **Waivers:** Upon request by the Department, provide a copy of any EPA-granted alternative monitoring requirement, custom monitoring schedule or waiver of the Federal emission standards, recordkeeping, monitoring, performance testing, or reporting requirements. The Permittee shall keep a copy of each U.S. EPA issued monitoring waiver or custom monitoring schedule with the permit. | Continuous | Records Review | |
| 98 | **Emission Inventory Reporting.** The Permittee shall submit to the Department reports of actual emissions, by emission unit, of CO, $NH_3$, NOx, $PM_{10}$, $PM_{2.5}$, $SO_2$, VOCs and Lead (Pb) (and lead compounds) for the previous calendar year using the form in Section 16 of this permit, as follows:<br>98.1. Each year by March 31, since the stationary source's potential to emit emissions for the previous calendar year equal or exceed 250 tons per year (TPY) of VOCs.<br>98.2. The Permittee shall commence reporting in 2013 for the calendar year of 2012, 2014 for calendar year 2013, etc.<br>98.3. Include in the report required by this condition, the required data elements contained within the form in Section 16 or those contained in Table 2A of Appendix A to Subpart A of 40 C.F.R. 51 (final rule published in 73 FR 76556 (December 17, 2008)) for each stack associated with an emission unit. | Continuous | Records Review | |



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## Annual Compliance Certification

Milne Point Production Facility Operating Permit No. AQ0200TVP02 Rev. 1, Rev. 3, Rev. 4
Reporting Period: January 1, 2018 to December 31, 2018

| No. | Permit Condition<br>Summary/Description | Compliance Status | Method to Determine Status<br>[40 C.F.R. 71.6(c)(5)(iii)(B)] | Comments |
|---|---|---|---|---|
| **Section 9. Permit Changes and Renewal** | | | | |
| 99 | **Permit Applications and Submittals.** The Permittee shall comply with the following requirements for submitting application information to the EPA Region 10:<br>99.1. The Permittee shall provide a copy of each application for modification or renewal of this permit, including any compliance plan, or application addenda, at the time the application or addendum is submitted to the Department;<br>99.2. The information shall be submitted to the same address as in Condition 96.3.<br>99.3. To the extent practicable, the Permittee shall provide to EPA applications in portable document format (PDF); MS Word format (.doc); or other computer-readable format compatible with EPA's national database management system; and<br>99.4. The Permittee shall maintain records as necessary to demonstrate compliance with this condition. | Continuous | Records Review | |
| 100 | **Emissions Trading.** No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit. | Continuous | Advisory Provision | |
| 101 | **Off Permit Changes.** The Permittee may make changes that are not addressed or prohibited by this permit other than those subject to the requirements of 40 C.F.R. Part 72 through 78 or those that are modifications under any provision of Title I of the Act to be made without a permit revision, provided that the following requirements are met:<br>101.1. Each such change shall meet all applicable requirements and shall not violate any existing permit term or condition;<br>101.2. Provide contemporaneous written notice to EPA and the Department of each such change, except for changes that qualify as insignificant under 18 AAC 50.326(d) - (i). Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change;<br>101.3. The change shall not qualify for the shield under 40 C.F.R. 71.6(f);<br>101.4. The Permittee shall keep a record describing changes made at the stationary 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. | Continuous | Records Review | |
| 102 | **Operational Flexibility.** The Permittee may make changes within the permitted stationary source without requiring a permit revision if the changes are not modifications under any provision of Title I of the Act and the changes do not exceed the emissions allowable under this permit (whether expressed therein as a rate of emissions or in terms of total emissions):<br>102.1. The Permittee shall provide EPA and the Department with a written notification no less than 7 days in advance of the proposed change.<br>102.2. For each such change, the written notification required by Condition 102.1 shall include a brief description of the change within the permitted stationary source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.<br>102.3. The permit shield described in 40 C.F.R. 71.6(f) shall not apply to any change made pursuant to Condition 102. | Continuous | Records Review | |
| 103 | **Permit Renewal.** To renew this permit, the Permittee shall submit an application under 18 AAC 50.326 no sooner than **September 19, 2016** and no later than **September 19, 2017.** The renewal application shall be complete before the permit expiration date listed on the cover page of this permit. Permit expiration terminates the stationary source's right to operate unless a timely and complete renewal application has been submitted consistent with 40 C.F.R. 71.7(b) and 71.5(a)(1)(iii). | Continuous | Records Review | |
| **Section 10. Compliance Requirements** | | | | |
| **General Compliance Requirements** | | | | |
| 104 | Compliance with permit terms and conditions is considered to be compliance with those requirements that are<br>104.1. included and specifically identified in the permit; or<br>104.2. determined in writing in the permit to be inapplicable. | N/A | Advisory Provision | |
| 105 | The Permittee must comply with each permit term and condition. | N/A | Advisory Provision | |
| | 105.1. For applicable requirements with which the stationary source is in compliance, the Permittee will continue to comply with such requirements | N/A | Advisory Provision | |
| | 105.2. Noncompliance with a permit term or condition constitutes a violation of AS 46.14.120(c), 18 AAC 50, and, except for those terms or conditions designated in the permit as not Federally enforceable, the Clean Air Act, and is grounds for<br>a. an enforcement action;<br>b. permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280; or<br>c. denial of an operating permit renewal application. | N/A | Advisory Provision | |
| 106 | It is not a defense in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with a permit term or condition. | N/A | Advisory Provision | |
| 107 | The Permittee shall allow the Department or an inspector authorized by the Department, upon presentation of credentials and at reasonable times with the consent of the owner or operator to<br>107.1. enter upon the premises where a source subject to the permit is located or where records required by the permit are kept;<br>107.2. have access to and copy any records required by the permit;<br>107.3. inspect any stationary source, equipment, practices, or operations regulated by or referenced in the permit; and<br>107.4. sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements. | N/A | Advisory Provision | |



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# Annual Compliance Certification

Milne Point Production Facility Minor Permit No. AQ0200MSS06
Reporting Period: January 1, 2018 to December 31, 2018

| Permit Condition | | Compliance Status | Method to Determine Status |
|---|---|---|---|
| No. | Condition | | [40 CFR 71.6(c)(5)(iii)(B)] |
| **Section 1. Emission Unit Authorizations** | | | |
| 1 | ~~**Authorization.** Minor Permit No. AQ0200MSS06 authorizes the Permittee to operate up to 12 concurrently operating transportable drill rigs listed in Section 8, in accordance with the terms and conditions of this permit, for drilling operations that are conducted at aggregated well pads associated with the Milne Point Production Facility.~~ | Replaced by MSS07 Condition 4 | |
| 2 | **Alternative Rigs.** The Permittee may use an alternative drill rig not listed in Section 8 without requesting a permit revision as follows:<br>2.1. No less than seven days prior to operating an alternative drill rig, provide notification to the Department via email or facsimile. Include in the notification a list of the emission units (EUs) and associated ratings.<br>2.2. The alternative drill rig shall be operated in accordance with all terms and conditions of this permit. | Continuous | Records Review |
| 3 | The Permittee shall notify the Department via email or facsimile when relocating a drill rig to or from a well pad location where drilling operations are authorized under this permit. | Continuous | Records Review |
| | 3.1. In each operating report required by Condition 22, provide a summary of drilling operations that were covered by this permit during the reporting period, and projected operations during the next reporting period. In the summary, indicate, for each drill rig and associated equipment operating under this permit, the well pad location of each drilling activity that occurred or is occurring during the reporting period. | Continuous | Records Review |
| 4 | ~~This permit does not authorize drilling operations at sales oil production pads governed by the Milne Point Production Facility operating permit, unless the Permittee has obtained written authorization from the Department following submittal of a demonstration that AAAQS are protected.~~ | Rescinded by MSS07 | |
| 5 | The simultaneous use of incinerators or flares in conjunction with drilling activities at any well pad governed by this permit is prohibited. | Continuous | Records Review |
| 6 | **Maintenance.** The Permittee shall keep a copy of, and maintain equipment according to, the manufacturer's or operator's maintenance procedures. | Continuous | Records Review |
| **Section 2. Emission and Compliance Fees** | | | |
| 7 | **Assessable Emissions.** The Permittee shall pay to the Department an annual emission fee based on the stationary source's assessable emissions as determined by the Department under 18 AAC 50.410. The assessable emission fee rate is set out in 18 AAC 50.410. The Department will assess fees per ton of each air pollutant that the stationary source emits or has the potential to emit in quantities greater than 10 tons per year. The quantity for which fees will be assessed is the lesser of<br>7.1. The stationary source's assessable potential to emit of **1,622 tpy** ; or<br>7.2. The stationary source's projected annual rate of emissions that will occur from July 1 to the following June 30, based upon actual annual emissions emitted during the most recent calendar year or another 12-month period approved in writing by the Department, when demonstrated by<br>a. an enforceable test method described in 18 AAC 50.220;<br>b. material balance calculations;<br>c. emission factors from EPA's publication AP-42, Vol. I, adopted by reference in 18 AAC 50.035; or<br>d. other methods and calculations approved by the Department. | Continuous | Records Review |
| **Section 3. State Emission Standards** | | | |
| 10 | **Industrial Process and Fuel-Burning Equipment Visible Emissions.** The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from all fuel burning units(excluding nonroad engines (NREs)) operated under this permit to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes. | Continuous | Records Review and Field Verification/Interview |
| | 10.1. For each heater and boiler not meeting the definition of insignificant according to 18 AAC 50.326(d)-(i) and operated under this permit, the Permittee shall comply with the monitoring, recordkeeping, and reporting requirements in Conditions 10.2 through 10.4. | Continuous | Records Review |
| | 10.2. **Visible Emissions Monitoring.** The Permittee shall observe the exhaust for visible emissions according to 40 C.F.R. 60, Appendix A-4, Method 9. | Continuous | Records Review |
| | a. The Permittee shall perform visible emissions observations within two days of drill rig operation at a well pad. The observations shall be conducted for 18 minutes to obtain 72 consecutive 15-second opacity observations. | Continuous | Records Review |



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## Annual Compliance Certification

Milne Point Production Facility Minor Permit No. AQ0200MSS06
Reporting Period: January 1, 2018 to December 31, 2018

| Permit Condition | | Compliance Status | Method to Determine Status |
|---|---|---|---|
| No. | Condition | | [40 CFR 71.6(c)(5)(iii)(B)] |
| | 10.3. **Visible Emissions Recordkeeping.** The Permittee shall keep records as follows:<br>a. When using Method 9, the observer shall record:<br>(i) The name of the stationary source, emission unit and location, emission unit type, observer's name and affiliation, and the date on the Visible Emission Observation Form in Attachment 1.<br>(ii) The time, estimated distance to the emissions location, sun location, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds), plume background, and operating mode (load or fuel consumption rate or best estimate if unknown) on the sheet at the time opacity observations are initiated and completed;<br>(iii) The presence or absence of an attached or detached plume and the approximate distance from the emissions outlet to the point in the plume at which the observations are made;<br>(iv) Opacity observations to the nearest five percent at 15-second intervals on the Visible Emission Observation Form in Attachment 1, and<br>(v) The minimum number of observations required by the permit; each momentary observation recorded shall be deemed to represent the average opacity of emissions for a 15-second period.<br>b. To determine the six-minute average opacity, divide the observations recorded on the record sheet into sets of 24 consecutive observations; sets need not be consecutive in time and in no case shall two sets overlap; for each set of 24 observations, calculate the average by summing the opacity of the 24 observations and dividing this sum by 24; record the average opacity on the sheet.<br>c. Calculate and record the highest 6-consecutive-minute averages observed. | Continuous | Records Review |
| | 10.4. **Visible Emissions Reporting.** The Permittee shall report visible emissions as follows:<br>a. Include in each operating report required by Condition 22 for the period covered by the report:<br>(i) Copies of the observation results (i.e. opacity observations) for each emission unit, except for the observations the Permittee has already supplied to the Department;<br>(ii) A summary to include:<br>(A) number of days observations were made;<br>(B) highest six-minute average observed; and<br>(C) dates when one or more observed six-minute averages were greater than 20 percent; and<br>(iii) a summary of any monitoring or recordkeeping required under Conditions 10.2 and 10.3 that was not done;<br>b. Submit a report as described in Condition 21:<br>(i) the results of Method 9 observations that exceed an average of 20 percent opacity for any six-minute period; and<br>(ii) if any monitoring under Condition 10.2 was not performed when required, report within three days of the date the monitoring was required. | Continuous | Records Review |
| 11 | **Industrial Process and Fuel-Burning Equipment Particulate Matter.** The Permittee shall not cause or allow particulate matter emitted from all fuel burning units (excluding NREs) operated under this permit to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.<br>11.1. For each heater and boiler not meeting the definition of insignificant according to 18 AAC 50.326(d)-(i) and operated under this permit, the Permittee shall comply with the monitoring, recordkeeping, and reporting requirements in Condition 11.2<br>11.2. The Permittee shall demonstrate compliance with Condition 11 by conducting PM source tests on any emission unit for which observations under Condition 10.2 show an exceedance of the limit in Condition 10.<br>a. Except as allowed under Condition 11.2b, conduct PM source testing according to the requirements set out in Section 7 no later than 90 calendar days after the observation conducted under Condition 10.2.<br>(i) During each one-hour PM source test run, observe the exhaust for 60 minutes in accordance with Method 9 and calculate the highest average six minute opacity that was measured during each one-hour test run. Submit a copy of these observations with the source test report.<br>b. The PM source test requirement in Condition 11.2a is waived for an emission unit if corrective action is taken to reduce visible emissions and an 18-minute visible emissions observation is conducted within 30 days to show that the excess visible emissions described in Condition 11.2 no longer occur.<br>c. The Permittee shall keep records of the results of any PM testing and visible emissions observations conducted under Condition 11.2.<br>d. For any visible emission observations conducted under Condition 11.2b, comply with the reporting requirments under Condition 10.4a.<br>e. Report as excess emissions, in accordance with Condition 21, any time the results of a source test for PM exceeds the PM emission limit stated in Condition 11. | Continuous | Records Review |



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## Annual Compliance Certification

Milne Point Production Facility Minor Permit No. AQ0200MSS06
Reporting Period: January 1, 2018 to December 31, 2018

| Permit Condition No. | Condition | Compliance Status | Method to Determine Status [40 CFR 71.6(c)(5)(iii)(B)] |
|---|---|---|---|
| 12 | **Sulfur Compound Emissions.** In accordance with 18 AAC 50.055(c), the Permittee shall not cause or allow sulfur compound emissions, expressed as $SO_2$, from all fuel burning units (excluding NREs) operated under this permit to exceed 500 ppm averaged over three hours.<br>12.1. For each heater and boiler not meeting the definition of insignificant according to 18 AAC 50.326(d)-(i) and operated under this permit, the Permittee shall comply with the monitoring, recordkeeping, and reporting requirements in Condition 14. | Continuous | Records Review |
| 13 | **Insignificant Emission Units.** For emission units that are insignificant, as defined in 18 AAC 50.326(d)-(i), the Permittee shall monitor, record and report in accordance with Condition 13.1.<br>13.1. General MR&R for Insignificant Emission Units<br>a. The Permittee shall submit the certification of compliance in accordance with Condition 23 based on reasonable inquiry;<br>b. The Permittee shall comply with the requirements of Condition 24;<br>c. The Permittee shall report in the operating report required by Condition 22, if an emission unit is insignificant because of actual emissions less than the thresholds of 18 AAC 50.326(e) and actual emissions become greater than any of those thresholds; and<br>d. No other monitoring, recordkeeping or reporting is required. | Continuous | Records Review<br>Field Verification/Interview |
| **Section 4. Ambient Air Quality Protection Requirements** | | | |
| 14 | To protect the 1-hour, 3-hour, and 24-hour $SO_2$ Alaska Ambient Air Quality Standards (AAAQS) the Permittee shall:<br>14.1. Fire only liquid fuels with a sulfur content not to exceed 15 ppmw (ultra-low sulfur diesel (ULSD)) in all EUs composing any drill rig authorized under this permit (including nonroad engines) when operating on liquid fuel.<br>a. Clearly label fuel tank(s) for the drill rig EUs as"ULSD Only".<br>b. For each shipment of fuel, keep receipts that specify fuel grade and amount.<br>c. Include copies of the records specified in Condition 14.1b with the operating report required by Condition 22.<br>d. Report in accordance with Condition 21 whenever the fuel sulfur content exceeds the limit specified in Condition 14.1. | Continuous | Records Review |
| 15 | To protect the 1-hour, 3-hour, and 24-hour $SO_2$ AAAQS and the 24-hour PM-10 AAAQS, the Permittee shall:<br>15.1. Limit total fuel usage to 490 gallons per hour, per well pad. The fuel use limit is cumulative for drill rig EUs authorized by this permit and used during drilling operations at a single pad during any 1-hour time period. Demonstrate compliance by either:<br>a. Submitting the maximum fuel rating for each emission unit used in drilling operations and the cumulative maximum fuel rating for all emission units used in drilling operations at a single pad during any 1-hour time period, prior to operation, and once per calendar year with the operating report required by Condition 22; or<br>b. Installing and operating fuel flow meters for monitoring the total hourly fuel usage by each drill rig EU that operates under this permit during drilling operations at each well pad.<br>(i) Monitor and record the total amount of liquid fuel fired in all drill rig EUs operating under this permit on a single well pad during all hours of operation.<br>(ii) Report in the operating report as required by Condition 22, the highest hourly fuel use value recorded in Condition 15.1b(i) for each month of the reporting period for all well pad locations where drilling occurs under this permit.<br>(iii) Report in accordance with Condition 21 whenever the total hourly fuel usage per well pad exceeds the limit specified in Condition 15.1. | Continuous | Records Review |
| 16 | To protect the annual $NO_2$, annual $SO_2$, and annual PM-2.5 AAAQS, the Permittee shall:<br>16.1. Limit the rolling 12-month fuel usage to 1,250,000 gallons per well pad. The annual fuel use limit is cumulative for drill rig EUs authorized by this permit and used during drilling operations at a single pad, with allowance for the fuel use equivalency factor in Table 1 when operating Tier 2/Tier 3 engines. The Permittee shall monitor, record, and report as follows:<br>a. By the last day of each calendar month, calculate and record the total volume of fuel consumed during the previous calendar month for each well pad where drilling operations occur under this permit. Then calculate and record the rolling 12-month fuel usage for each well pad, applying the following equation:<br>Fuel Use = Actual Fuel Consumed * Equivalency Factor<br>Where the Equivalency Factor equals 0.596 for drill rigs equipped with only Tier2/Tier 3 engines, and 1.0 for all other drill rigs.<br>b. Include copies of records specified in Condition 16.1a with the operating report required by Condition 22.<br>c. Report in accordance with Condition 21 whenever the total rolling 12-month fuel usage per well pad exceeds the limit specified in Condition 16.1. | Continuous | Records Review |



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## Annual Compliance Certification

Milne Point Production Facility Minor Permit No. AQ0200MSS06
Reporting Period: January 1, 2018 to December 31, 2018

| Permit Condition | | Compliance Status | Method to Determine Status |
|---|---|---|---|
| No. | Condition | | [40 CFR 71.6(c)(5)(iii)(B)] |
| **Section 5. General Recordkeeping and Reporting Requirements** | | | |
| 17 | **Recordkeeping Requirements.** The Permittee shall keep all records required by this permit for at least five years after the date of collection, including:<br>17.1. copies of all reports and certifications submitted pursuant to this section of the permit; and<br>17.2. records of all monitoring required by this permit, and information about the monitoring including:<br>a. the date, place, and time of sampling or measurements;<br>b. the date(s) analyses were performed;<br>c. the company or entity that performed the sampling and analyses;<br>d. the analytical techniques or methods used;<br>e. the results of such analyses; and,<br>f. the operating conditions as existing at the time of sampling or measurement. | Continuous | Records Review |
| 18 | **Certification.** The Permittee shall certify any permit application, report, affirmation, or compliance certification submitted to the Department and required under the permit by including the signature of a responsible official for the permitted stationary source following the statement: *"Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete."* Excess emission reports must be certified either upon submittal or with an operating report required for the same reporting period. All other reports and other documents must be certified upon submittal. | Continuous | Records Review |
| 19 | **Submittals.** Unless otherwise directed by the Department or this permit, the Permittee shall send an original and one copy of reports, compliance certifications, and other submittals required by this permit to ADEC, Air Permits Program, 610 University Ave., Fairbanks, AK 99709-3643, ATTN: Compliance Technician. The Permittee may, upon consultation with the Compliance Technician regarding software compatibility, provide electronic copies of data reports, emission source test reports, or other records under a cover letter certified in accordance with Condition 18. | Continuous | Records Review |
| 20 | **Information Requests.** The Permittee shall furnish to the Department, within a reasonable time, any information the Department requests in writing to determine whether cause exists to modify, revoke and reissue, or terminate the permit or to determine compliance with the permit. Upon request, the Permittee shall furnish to the Department copies of records required to be kept by the permit. The Department may require the Permittee to furnish copies of those records directly to the federal Administrator. | Continuous | Records Review |
| 21 | **Excess Emissions and Permit Deviation Reports.**<br>21.1. The Permittee shall report all emissions or operations that exceed or deviate from the requirements of this permit as follows:<br>a. in accordance with 18 AAC 50.240(c), as soon as possible after the event commenced or is discovered, report<br>(i) emissions that present a potential threat to human health or safety; and<br>(ii) excess emissions that the Permittee believes to be unavoidable;<br>b. in accordance with 18 AAC 50.235(a), within two working days after the event commenced or was discovered, report an unavoidable emergency, malfunction, or nonroutine repair that causes emissions in excess of a technology based emission standard;<br>c. report all other excess emissions and permit deviations<br>(i) within 30 days of the end of the month in which the emissions or deviation occurs or is discovered, except as provided in Conditions 21.1c(ii) and 21.1c(iii);<br>(ii) if a continuous or recurring excess emissions is not corrected within 48 hours of discovery, within 72 hours of discovery unless the Department provides written permission to report under Condition 21.1c(i); and<br>(iii) for failure to monitor, as required in other applicable conditions of this permit.<br>21.2. The Permittee must report using either the Department's on-line form, which can be found at http://www.dec.state.ak.us/air/ap/site.htm, or if the Permittee prefers, the form contained in Attachment 2 of this permit. The Permittee must provide all information called for by the form that is used.<br>21.3. If requested by the Department, the Permittee shall provide a more detailed written report as requested to follow up an excess emissions report. | Continuous | Records Review |



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## Annual Compliance Certification

Milne Point Production Facility Minor Permit No. AQ0200MSS06
Reporting Period: January 1, 2018 to December 31, 2018

| Permit Condition | | Compliance Status | Method to Determine Status |
|---|---|---|---|
| No. | Condition | | [40 CFR 71.6(c)(5)(iii)(B)] |
| 22 | **Operating Reports.** During the life of this permit, the Permittee shall submit to the Department an original and one copy of an operating report by August 1 for the period January 1 to June 30 of the current year, and by February 1 for the period July 1 to December 31 of the previous year.<br>22.1. The operating report must include all information required to be in operating reports by other conditions of this permit.<br>22.2. If excess emissions or permit deviations that occurred during the reporting period are not reported under Condition 22.1, either<br>a. The Permittee shall identify<br>(i) the date of the deviation;<br>(ii) the equipment involved;<br>(iii) the permit condition affected;<br>(iv) a description of the excess emissions or permit deviation; and<br>(v) any corrective action or preventive measures taken and the date of such actions; or<br>b. When excess emissions or permit deviations have already been reported under Condition 21, the Permittee may cite the date or dates of those reports. | Continuous | Records Review |
| 23 | **Annual Compliance Certification.** Each year by March 31, the Permittee shall compile and submit to the Department an original and one copy of an annual compliance certification report.<br>23.1. Certify the compliance status of the stationary source over the preceding calendar year consistent with the monitoring required by this permit, as follows:<br>a. identify each term or condition set forth in Section 3 through Section 7 that is the basis of the certification;<br>b. briefly describe each method used to determine the compliance status;<br>c. state whether compliance is intermittent or continuous; and<br>d. identify each deviation and take it into account in the compliance certification; | Continuous | Records Review |
| 24 | **Air Pollution Prohibited.** No person may permit any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property.<br>24.1. Monitoring, Recordkeeping, and Reporting for Air Pollution Prohibited<br>a. If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to Condition 21.<br>b. As soon as practicable after becoming aware of a complaint that is attributable to emissions from the stationary source, the Permittee shall investigate the complaint to identify emissions that the Permittee believes have caused or are causing a violation of Condition 24.<br>24.2. The Permittee shall initiate and complete corrective action necessary to eliminate any violation identified by a complaint or investigation as soon as practicable if<br>a. after an investigation because of a complaint or other reason, the Permittee believes that emissions from the stationary source have caused or are causing a violation of Condition 24; or<br>b. the Department notifies the Permittee that it has found a violation of Condition 24.<br>24.3. The Permittee shall keep records of<br>a. the date, time, and nature of all emissions complaints received;<br>b. the name of the person or persons that complained, if known;<br>c. a summary of any investigation, including reasons the Permittee does or does not believe the emissions have caused a violation of Condition 24; and<br>d. any corrective actions taken or planned for complaints attributable to emissions from the stationary source. | Continuous | Records Review<br>Field Verification/Interview |
| | 24.4. With each stationary source operating report under Condition 22 the Permittee shall include a brief summary report which must include<br>a. the number of complaints received;<br>b. the number of times the Permittee or the Department found corrective action necessary;<br>c. the number of times action was taken on a complaint within 24 hours; and<br>d. the status of corrective actions the Permittee or Department found necessary that were not taken within 24 hours.<br>24.5. The Permittee shall notify the Department of a complaint that is attributable to emissions from the stationary source within 24 hours after receiving the complaint, unless the Permittee has initiated corrective action within 24 hours of receiving the complaint. | Continuous | Records Review<br>Field Verification/Interview |



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## Annual Compliance Certification

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Reporting Period: January 1, 2018 to December 31, 2018

| Permit Condition | | Compliance Status | Method to Determine Status |
|---|---|---|---|
| No. | Condition | | [40 CFR 71.6(c)(5)(iii)(B)] |
| **Section 6. Standard Terms and Conditions** | | | |
| 25 | The Permittee must comply with each permit term and condition. Noncompliance with a permit term or condition constitutes a violation of AS 46.14, 18 AAC 50, and, except for those terms or conditions designated in the permit as not federally enforceable, the Clean Air Act, and is grounds for<br>25.1. an enforcement action; or<br>25.2. permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280. | Continuous | Records Review |
| 26 | It is not a defense in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with a permit term or condition. | Continuous | Advisory Provision |
| 27 | The Permittee shall allow the Department or an inspector authorized by the Department, upon presentation of credentials and at reasonable times with the consent of the owner or operator to<br>27.1. enter upon the premises where a source subject to the permit is located or where records required by the permit are kept;<br>27.2. have access to and copy any records required by the permit;<br>27.3. inspect any stationary source, equipment, practices, or operations regulated by or referenced in the permit; and<br>27.4. sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements. | Continuous | Field Verification/Interview |
| 28 | Each permit term and condition is independent of the permit as a whole and remains valid regardless of a challenge to any other part of the permit. | Continuous | Advisory Provision |
| 29 | The permit may be modified, reopened, revoked and reissued, or terminated for cause. A request by the Permittee for modification, revocation and reissuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any permit condition. | Continuous | Advisory Provision |
| 30 | The permit does not convey any property rights of any sort, nor any exclusive privilege. | Continuous | Advisory Provision |
| **Section 7. General Source Test Requirements** | | | |
| 31 | **Requested Source Tests.** In addition to any source testing explicitly required by the permit, the Permittee shall conduct source testing as requested by the Department to determine compliance with applicable permit requirements. | Continuous | Records Review |
| 32 | **Operating Conditions.** Unless otherwise specified by an applicable requirement or test method, the Permittee shall conduct source testing<br>32.1. at a point or points that characterize the actual discharge into the ambient air; and<br>32.2. at the maximum rated burning or operating capacity of the emission unit or another rate determined by the Department to characterize the actual discharge into the ambient air. | Continuous | Records Review |
| 33 | **Reference Test Methods.** The Permittee shall use the following as reference test methods when conducting source testing for compliance with this permit:<br>33.1. Source testing for the reduction in visibility through the exhaust effluent must be conducted in accordance with the procedures set out in 40 C.F.R. 60, Appendix A-4, Method 9 and may use the form in Attachment 1 to record data.<br>33.2. Source testing for emissions of total particulate matter, sulfur compounds, nitrogen compounds, carbon monoxide, lead, volatile organic compounds, fluorides, sulfuric acid mist, municipal waste combustor organics, metals, and acid gases must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 60, Appendix A.<br>33.3. Source testing for emissions of PM-10 must be conducted in accordance with the procedures specified in 40 C.F.R. 51, Appendix M, Methods 201 or 201A and 202.<br>33.4. Source testing for emissions of any pollutant may be determined using an alternative method approved by the Department in accordance with 40 C.F.R. 63 Appendix A, Method 301. | Continuous | Records Review |
| 34 | **Excess Air Requirements.** To determine compliance with this permit, standard exhaust gas volumes must include only the volume of gases formed from the theoretical combustion of the fuel, plus the excess air volume normal for the specific emission unit type, corrected to standard conditions (dry gas at 68° F and an absolute pressure of 760 millimeters of mercury). | Continuous | Records Review |
| 35 | **Test Deadline Extension.** The Permittee may request an extension to a source test deadline established by the Department. The Permittee may delay a source test beyond the original deadline only if the extension is approved in writing by the Department's appropriate division director or designee. | Continuous | Advisory Provision |
| 36 | **Test Exemption.** The Permittee is not required to comply with Conditions 37, 38, and 39 (Test Plans, Test Notification and Test Reports) for visible emissions observations using Method 9. | Continuous | Records Review |



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| Permit Condition | | Compliance Status | Method to Determine Status |
|---|---|---|---|
| No. | Condition | | [40 CFR 71.6(c)(5)(iii)(B)] |
| 37 | **Test Plans.** Except as provided in Condition 36, before conducting any source tests, the Permittee shall submit a plan to the Department. The plan must include the methods and procedures to be used for sampling, testing, and quality assurance, and must specify how the emission unit will operate during the test and how the Permittee will document that operation. The Permittee shall submit a complete plan within 60 days after receiving a request under Condition 31 and at least 30 days before the scheduled date of any test unless the Department agrees in writing to some other time period. Retesting may be done without resubmitting the plan. | Continuous | Records Review |
| 38 | **Test Notification**. Except as provided in Condition 36, at least 10 days before conducting a source test, the Permittee shall give the Department written notice of the date and the time the source test will begin. | Continuous | Records Review |
| 39 | **Test Reports.** Except as provided in Condition 36, within 60 days after completing a source test, the Permittee shall submit two copies of the results in the format set out in the *Source Test Report Outline*, adopted by reference in 18 AAC 50.030. The Permittee shall certify the results in the manner set out in Condition 17. If requested in writing by the Department, the Permittee must provide preliminary results in a shorter period of time specified by the Department. | Continuous | Records Review |



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# Annual Compliance Certification

Milne Point Production Facility Minor Permit No. AQ0200MSS07
Reporting Period: January 1, 2018 to December 31, 2018

| Permit Condition | | Compliance Status | Method to Determine Status |
|---|---|---|---|
| No. | Condition | | [40 CFR 71.6(c)(5)(iii)(B)] |
| **Section 1. Permit Specific Requirements** | | | |
| 4 | **Authorization.** Minor Permit AQ0200MSS06 authorizes the Permittee to operate up to 12 concurrently operating transportable drill rigs listed in Section 8 of Minor Permit AQ0200MSS06, in accordance with the terms and conditions of Minor Permit AQ0200MSS06, for drilling operations that are conducted at B-Pad, C-Pad, and E-Pad | N/A | Advisory Provision |



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