| Title V Citation | .egory | Regulation | Requirement | Compliance | | | Comments |
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| | | | | Method | Y/ N | Type C/I | |
| V.I.4.e.3 | Recordkeeping | | Maintaining records of the source of make-up water to document conformance with the requirement for acceptable make-up water in Condition V.I.1.b.2) above. | Record Review | Y | C | |
| V.I.5.a | Reporting | §2103.12.k; §2103.12.k | The permittee shall submit semiannual reports to the Department in accordance General Condition III.15.d above of the record keeping information required in Conditions V.I.4.a and V.I.4.b above. | Record Review | Y | C | |
| V.I.5.b | Reporting | §2103.12.k; §2103.12.h.6; §63.7327(e) | For each coke oven battery, the permittee shall demonstrate initial compliance with the work practice standards for quenching in Condition V.I.6.a below by certifying in your notification of compliance status that you have met the requirements of Conditions V.I.5.b.1 and V.I.5.b.2 below: | Record Review | Y | C | |
| V.I.5.b.1 | Reporting | | Installed the required equipment in each quench tower; and | Record Review | Y | C | |
| V.I.5.b.2 | Reporting | | You will meet each of the work practice requirements beginning no later than April 14, 2006 | Record Review | Y | C | |
| V.I.5.c | Reporting | §2103.12.k; §2103.12.h.6; §63.7341(a) | Unless the Department has approved a different schedule, the permittee must submit semiannual compliance reports for the quench towers to the Department according to the requirements in Conditions V.I.5.c.1) and V.I.5.c.2) below: | Record Review | Y | C | |
| V.I.5.c.1 | Reporting | | Each semiannual compliance report shall cover the semiannual reporting period as specified in General Condition III.15.d above. All semiannual compliance reports must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. | Record Review | Y | C | |
| V.I.5.c.2 | Reporting | | For each affected source that is subject to permitting regulations pursuant to 40 CFR Part 70 or 40 CFR Part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in Conditions V.I.5.c.1) above. | Record Review | Y | C | |
| V.I.5.d | Reporting | §63.7341(c) | Semiannual compliance report contents. Each compliance report must provide information on compliance with the emission limitations, work practice standards, and operation and maintenance requirements for the quench tower. The reports must include the information in Conditions V.I.5.d.1) through V.I.5.d.3) below, and as applicable, Conditions V.I.5.d.4) through V.I.5.d.6) below. | Record Review | Y | C | |
| V.I.5.d.1 | Reporting | | Company name and address. | Record Review | Y | C | |
| V.I.5.d.2 | Reporting | | Statement by a responsible official, with the official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. | Record Review | Y | C | |
| V.I.5.d.3 | Reporting | | Date of report and beginning and ending dates of the reporting period. | Record Review | Y | C | |
| V.I.5.d.4 | Reporting | | If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i). | Record Review | Y | C | |

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| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
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| V.I.5.d.5 | Reporting | | If there were no deviations from the continuous compliance requirements in Conditions V.I.3.b, V.I.3.c and V.I.4.c above (for the quench tower), a statement that there were no deviations from the emission limitations, work practice standards, or operation and maintenance requirements during the reporting period. | Record Review | Y | C | |
| V.I.5.d.6 | Reporting | | For each deviation from an emission limitation in 40 CFR 63, Subpart CCCCC (including quench water limits) and for each deviation from the requirements for work practice standards in 40 CFR 63, Subpart CCCCC that occurs at the quench tower, the compliance report must contain the information in Conditions V.I.5.d.4) and V.I.5.d.6)a) through V.I.5.d.6)b). This includes periods of startup, shutdown, and malfunction. | Record Review | Y | C | |
| V.I.5.d.6.a | Reporting | | The total operating time of the quench tower during the reporting period. | Record Review | Y | C | |
| V.I.5.d.6.b | Reporting | | Information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable and the corrective action taken. | Record Review | Y | C | |
| V.I.6.a | Work Practices | [§2103.12.h.6; §63.7295(b)] | For quench towers 1,5,7 and B, the permittee shall meet each of the following requirements: | Record Review | Y | C | |
| V.I.6.a.1 | Work Practices | | The permittee shall equip each quench tower with baffles such that no more than 5 percent of the cross sectional area of the tower may be uncovered or open to the sky. | Record Review | Y | C | |
| V.I.6.a.2 | Work Practices | | The permittee shall wash the baffles in each quench tower once each day that the tower is used to quench coke, except as specified in the following conditions: | Record Review | Y | C | |
| V.I.6.a.2.a | Work Practices | | You are not required to wash the baffles in a quench tower if the highest measured ambient temperature remains less than 30 degrees Fahrenheit throughout that day (24-hour period). If the measured ambient temperature rises to 30 degrees Fahrenheit or more during the day, you must resume daily washing according to the schedule in your operation and maintenance plan. | Record Review | Y | C | |
| V.I.6.a.2.b | Work Practices | | You must continuously record the ambient temperature on days that the baffles were not washed. | Record Review | Y | C | |
| V.I.6.a.3 | Work Practices | | Inspect each quench tower monthly for damaged or missing baffles and blockage. | Record Review | Y | C | |
| V.I.6.a.4 | Work Practices | | Initiate repair or replacement of damaged or missing baffles within 30 days and complete as soon as practicable. | Record Review | Y | C | |
| V.I.6.b | Work Practices | §2103.12.h.6; §63.7295(c) | As provided in §63.6(g), the permittee may request to use an alternative to the work practice standards in Condition V.I.6.a above. | Record Review | Y | C | |
| V.I.7 | Additional Requirements | | None except as provided elsewhere. | N/A | Y | C | |

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| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
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| Title V Citation | Category | Regulation | Requirement | Compliance Method | Compliance Y/N | Compliance Type C/I | Comments |
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| V.J.1.a | Restrictions | §2105.21.g | The permittee shall not quench, or allow the quenching of, coke unless the emissions from such quenching are vented through a baffled quench tower and the water used for such quenching is equivalent to, or better than, the water quality standards established for the nearest stream or river by regulations promulgated by the DEP under the Pennsylvania Clean Streams Law, Act of June 22, 1937, PL. 1987, as amended, 35 P.S. 691.1 et seq., except that water from the nearest stream or river may be used for the quenching of coke. The nearest stream or river to the USX Corporation facility in Clairton, PA, shall be the Monongahela River. | Record Review | Y | C* | The certification contained in this report is based on the understanding that make-up water used for the quenching of coke will be "equivalent to, or better than, the water quality standards established for the Monongahela River by regulation promulgated by the DEP under the Pennsylvania Clean Streams Law, - except that water from the Monongahela River may be used for" such quenching make-up. |
| V.J.1.b | Restrictions | §2103.12.h.6; §63.7295(a) | The permittee shall meet the following requirements for each quench tower and backup quench station: | Record Review | Y | C | |
| V.J.1.b.1 | Restrictions | §2103.12.h.6; §63.7295(a)(1) | For the quenching of hot coke, the permittee shall meet one of the following requirements: | Record Review | Y | C | |
| V.J.1.b.1.a | Restrictions | | The concentration of total dissolved solids (TDS) in the water used for quenching must not exceed 1,100 milligrams per liter (mg/L); or | Direct Measurement & Record Review | Y | C | |
| V.J.1.b.1.b | Restrictions | | The sum of the concentrations of benzene, benzo (a) pyrene, and naphthalene in the water used for quenching must not exceed the applicable site-specific limit approved by the Department. | Direct Measurement & Record Review | Y | C | |
| V.J.1.b.2 | Restrictions | §2103.12.h.6; §63.7295(a)(2) | The permittee shall use acceptable makeup water, as defined in §63.7352, for quenching | Record Review | Y | C | |
| V.J.1.c | Restrictions | §2103.12.h.6; §63.7326(d) | For each by-product coke oven batteries subject to the requirements for quench water in V.J.1.b.1), the permittee shall submit a notification of compliance status containing the results of the quench water performance test (TDS or constituent limit) before the close of business on the 30th calendar days following the completion of the compliance demonstration. For each particulate matter emission limitation that applies to you, the permittee shall submit a notification of compliance status containing the results of the performance test before the close of business on the 60th calendar days following completion of the performance test according to §63.10(d)(2). | Record Review | Y | C | |
| V.J.2.a | Testing | §2103.12.h.6; §63.7320(b) and §63.7283(a) | The permittee shall conduct performance tests to demonstrate compliance with the TDS limit or constituent limit for quench water in §63.7295(a)(1) by April 14, 2006 | Record Review | Y | C | |

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|---|---|---|---|---|---|---|---|
| V.J.2.b | Testing | §2103.12.h.6; §63.7325(a) | If the permittee elects the TDS limit for quench water in V.J.1.b.1)a), the permittee shall conduct each performance test according to the following conditions: | Record Review | Y | C | |
| V.J.2.b.1 | Testing | | Take the quench water sample from a location that provides a representative sample of the quench water as applied to the coke (e.g., from the header that feeds water to the quench tower reservoirs). Conduct sampling under normal and representative operating conditions. | Record Review | Y | C | |
| V.J.2.b.2 | Testing | | Determine the TDS concentration of the sample using Method 160.1 in 40 CFR Part 136.3 (see "residue—filterable"), except that you must dry the total filterable residue at 103 to 105 [deg] C (degrees Centigrade) instead of 180 [deg] C. | Record Review | Y | C | |
| V.J.2.c | Testing | §2103.12.h.6; §63.7325(b) | If at any time the permittee elects to meet the alternative requirements for quench water in V.J.1.b.1)b) above, the permittee shall establish a site-specific constituent limit according to the procedures in Conditions V.J.2.c.1) through V.J.2.c.4) below: | Record Review | Y | C | |
| V.J.2.c.1 | Testing | | Take a minimum of nine quench water samples from a location that provides a representative sample of the quench water as applied to the coke (e.g., from the header that feeds water to the quench tower reservoirs). Conduct sampling under normal and representative operating conditions. | Record Review | Y | C | |
| V.J.2.c.2 | Testing | | For each sample, determine the TDS concentration according to the requirements in Condition V.J.2.b above, and the concentration of benzene, benzo(a)pyrene, and naphthalene using the applicable methods in 40 CFR Part 136 or an approved alternative method. | Record Review | Y | C | |
| V.J.2.c.3 | Testing | | Determine and record the highest sum of the concentrations of benzene, benzo(a)pyrene, and naphthalene in any sample that has a TDS concentration less than or equal to the TDS limit of 1,100 mg/L. This concentration is the site-specific constituent limit. | Record Review | Y | C | |
| V.J.2.c.4 | Testing | | Submit the site-specific limit, sampling results, and all supporting data and calculations to Department for review and approval. | Record Review | Y | C | |
| V.J.2.d | Testing | §2103.12.h.6; §63.7325(c) | If the permittee elects the constituent limit for quench water in V.J.1.b.1)b), the permittee shall conduct each performance test according to the conditions in Conditions V.J.2.d.1) and V.J.2.d.2) below: | Record Review | Y | C | |
| V.J.2.d.1 | Testing | | Take a quench water sample from a location that provides a representative sample of the quench water as applied to the coke (e.g., from the header that feeds water to the quench tower reservoirs). Conduct sampling under normal and representative operating conditions. | Record Review | Y | C | |
| V.J.2.d.2 | Testing | | Determine the sum of the concentration of benzene, benzo(a)pyrene, and naphthalene in the sample using the applicable methods in 40 CFR Part 136 or an approved alternative method | Record Review | Y | C | |

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| V.J.2.e | Testing | §2103.12.h.1 | The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 above and Article XXI §2108.02. | Record Review | Y | C | |
| V.J.3.a | Monitoring | §2103.12.i | The permittee shall inspect the quench tower monthly for damaged or missing baffles and blockage and initiate repair or replacement of damaged or missing baffles within 30 days and complete as soon as practicable. | Record Review | Y | C | |
| V.J.3.b | Monitoring | §2103.12.h.6; §63.7333(f) | Beginning on the first day compliance is required under §63.7283, the permittee shall demonstrate continuous compliance with the TDS limit for quenching in §63.7295(a)(1)(i) by meeting the requirements in Conditions V.J.3.b.1) and V.J.3.b.2): | Record Review | Y | C | |
| V.J.3.b.1 | Monitoring | | Maintaining the TDS content of the water used to quench hot coke at 1,100 mg/L or less; and | Record Review | Y | C | |
| V.J.3.b.2 | Monitoring | | Determining the TDS content of the quench water at least weekly according to the requirements in Condition V.J.2.b and recording the sample results. | Record Review | Y | C | |
| V.J.3.c | Monitoring | 63.7333(g) | The permittee shall demonstrate continuous compliance with the constituent limit for quenching in Condition V.J.1.b.1)b) by meeting the following requirements: | Record Review | Y | C | |
| V.J.3.c.1 | Monitoring | | Maintaining the sum of the concentrations of benzene, benzo(a)pyrene, and naphthalene in the water used to quench hot coke at levels less than or equal to the site-specific limit approved by the permitting authority; and | Record Review | Y | C | |
| V.J.3.c.2 | Monitoring | | Determining the sum of the constituent concentrations at least monthly according to the requirements in §63.7325(c) and recording the sample results. | Record Review | Y | C | |
| V.J.4.a | Recordkeeping | §2103.12.j | The permittee shall maintain records of all quench tower inspections when missing or damaged baffles or blockages are discovered. | Record Review | Y | C | |
| V.J.4.b | Recordkeeping | §2103.12.j | The permittee shall maintain records of all repairs or replacement of baffles. The record keeping shall include a description of the repair or replacement, the date repairs and/or replacements were initiated and the date repairs and/or replacements were completed. | Record Review | Y | C | |
| V.J.4.c | Recordkeeping | §2103.12.j; §2103.12.h.6; §63.7342(d) | The permittee shall keep the records required in Conditions V.J.3.a and V.J.3.b above to show continuous compliance with each emission limitation, work practice standard, and operation and maintenance requirement that applies to you. | Record Review | Y | C | |
| V.J.4.d | Recordkeeping | §2103.12.j; §2103.12.h.6; §63.7343(a) | The permittee shall keep records in a form suitable and readily available for expeditious review, according to §63.10(b)(1). | Record Review | Y | C | |
| V.J.5.a | Reporting | §2103.12.k | At least every six (6) months, the permittee shall submit semiannual reports to the Department in accordance General Condition III.15.d above of the record keeping information required in Conditions V.J.4.a and V.J.4.b above. | Record Review | Y | C | |
| V.J.5.b | Reporting | §2103.12.k; §2103.12.h.6; §63.7341(a) | Unless the Department has approved a different schedule, the permittee must submit semiannual compliance reports for the quench towers to the Department according to the requirements in Conditions V.J.5.b.1) and V.J.5.b.2) below: | Record Review | Y | C | |

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| V.J.5.b.1 | Reporting | | Each semiannual compliance report shall cover the semiannual reporting period as specified in General Condition III.15.d above. All semiannual compliance reports must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period | Record Review | Y | C | |
| V.J.5.b.2 | Reporting | | For each affected source that is subject to permitting regulations pursuant to 40 CFR Part 70 or 40 CFR Part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in Conditions V.J.5.b.1) above | Record Review | Y | C | |
| V.J.5.c | Reporting | §63.7341(c) | Semiannual compliance report contents. Each compliance report must provide information on compliance with the emission limitations, work practice standards, and operation and maintenance requirements for the quench tower. The reports must include the information in Conditions V.J.5.c.1) through V.J.5.c.3) below, and as applicable, Conditions V.J.5.c.4) through V.J.5.c.6) below | Record Review | Y | C | |
| V.J.5.c.1 | Reporting | | Company name and address. | Record Review | Y | C | |
| V.J.5.c.2 | Reporting | | Statement by a responsible official, with the official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report | Record Review | Y | C | |
| V.J.5.c.3 | Reporting | | Date of report and beginning and ending dates of the reporting period. | Record Review | Y | C | |
| V.J.5.c.4 | Reporting | | If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i) | Record Review | Y | C | |
| V.J.5.c.5 | Reporting | | If there were no deviations from the continuous compliance requirements in Conditions V.J.3.b and V.J.3.c above (for the quench tower), a statement that there were no deviations from the emission limitations, work practice standards, or operation and maintenance requirements during the reporting period | Record Review | Y | C | |
| V.J.5.c.6 | Reporting | | For each deviation from an emission limitation in 40 CFR 63, Subpart CCCCC (including quench water limits) and for each deviation from the requirements for work practice standards in 40 CFR 63, Subpart CCCCC that occurs at the quench tower, the compliance report must contain the information in Conditions V.J.5.c.4) and V.J.5.c.6)a) through V.J.5.c.6)b). This includes periods of startup, shutdown, and malfunction. | Record Review | Y | C | |
| V.J.5.c.6.a | Reporting | | The total operating time of the quench tower during the reporting period. | Record Review | Y | C | |
| V.J.5.c.6.b | Reporting | | Information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable and the corrective action taken | Record Review | Y | C | |
| V.J.6 | Work Practice | | None except as provided elsewhere | N/A | Y | C | |
| V.J.7 | Additional Requirements | | None except as provided elsewhere | N/A | Y | C | |

*Note: The statements below pertain to the period of March 27 through October 29, 2012 for Quench Tower 6 when it became inaccessible and the period of March 27 through November 12, 2012 for Quench Tower 8 when it became inaccessible. The towers were removed from service on as part of the construction project authorized by IP0052 - 1014.*

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
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| | | | | Method | Y/N | Type C/I | |
| V.K.1.a | Restrictions | §2105.06, RACT Plan 234 | The SCOT Plant incinerator shall be properly maintained and operated according to good engineering and air pollution control practices at all times. | Engineering Judgement | Y | C | |
| V.K.1.b | Restrictions | §2104.01.a | The permittee shall not operate, or allow to be operated, the desulfurization plant in such manner that the opacity of visible emissions from a flue or process fugitive emissions from the desulfurization plant, excluding uncombined water: | N/A | | | |
| V.K.1.b.1 | Restrictions | | Equal or exceed an opacity of 20% for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or, | Record Review | Y | C | |
| V.K.1.b.2 | Restrictions | | Equal or exceed an opacity of 60% at any time. | Record Review | Y | C | |
| V.K.1.c | Restrictions | Enforcement Order No. 200, November 18, 1994 | The permittee shall, at all times: | N/A | | | |
| V.K.1.c.1 | Restrictions | | Properly maintain two Claus Plants at the coke oven gas desulfurization facility. Each Claus Plant shall be capable of independently processing all of the coke oven gas produced by the coke plant at full production. | Engineering Judgement | Y | C* | Except as identified in the attached Deviation Report as previously provided to the Department on January 30, 2013. |
| V.K.1.c.2 | Restrictions | | Operate one Claus Plant when coke oven gas is being produced. | Record Review | Y | C | |
| V.K.1.c.3 | Restrictions | | Have its second Claus Plant ready for start-up and operation when a breakdown of the first Claus Plant occurs, except when the second Claus Plant is down for repairs, maintenance or modification. All repairs, maintenance and modifications to Claus Plants shall be made as expeditiously as practicable. The second Claus Plant shall start up and be fully operational within 18 hours of each breakdown on the first Claus Plant if the plant production is below 5,000 tons of coke per day at the time of the breakdown, or within 30 minutes of each such breakdown if the production is 5,000 tons of coke per day or greater. | Record Review | Y | C* | Except as identified in the attached Deviation Report as previously provided to the Department on January 30, 2013. |
| V.K.1.d | Restrictions | Enforcement Order No. 200, November 18, 1994 | The permittee shall: | N/A | | | |
| V.K.1.d.1 | Restrictions | | Operate and maintain an HCN (hydrogen cyanide) Destruct Unit at all times that coke oven gas is being produced. | Record Review | Y | C* | Except as identified in the attached Deviation Report as previously provided to the Department on January 30, 2013. |
| V.K.1.d.2 | Restrictions | | Have two catalytic reactors in the HCN Destruct Unit, each of which is capable of independently processing all of the feed gas to the HCN Destruct Unit when the coke plant is operating at full production. The second catalytic reactor shall be ready for immediate operation at all times except when the second catalytic reactor is down for repairs. All repairs to catalytic reactors shall be made as expeditiously as practicable. | Record Review | Y | C* | |

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| Title V Citation | Category | Regulation | Requirement | Compliance Method | Y/N | Type C/I | Comments |
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| V.K.1.e | Restrictions | Enforcement Order No. 200, November 18, 1994 | The permittee shall: | N/A | | | |
| V.K.1.e.1 | Restrictions | | Operate and maintain a Vacuum Carbonate Unit at all times that coke oven gas is being produced at the Clairton Works. | Record Review | Y | C* | Except as identified in the attached Deviation Report as previously provided to the Department on January 30, 2013. |
| V.K.1.e.2 | Restrictions | | Have two absorber columns in the Vacuum Carbonate Unit, each of which is capable of independently processing all of the gas flow through the Vacuum Carbonate Unit when the coke plant is operating at full production. | Process Knowledge | Y | C* | |
| V.K.1.e.3 | Restrictions | | Have two Axi compressors in the Vacuum Carbonate Unit, each of which is capable of independently processing all of the acid gases generated at the Vacuum Carbonate Unit when the coke plant is operating at full production. | Process Knowledge | Y | C* | |
| V.K.1.e.4 | Restrictions | | Operate one absorber column and one Axi compressor at all times when coke oven gas is being produced. | Record Review | Y | C* | |
| V.K.1.e.5 | Restrictions | | Have its second absorber column and its second Axi compressor in the Vacuum Carbonate Unit ready at all times for operation within two hours except when the second absorber column or second Axi compressor is down for repairs, maintenance or modifications, or when there is a sudden, unexpected failure of a primary unit(s). If there is a sudden, unexpected failure of the primary absorber column or the primary Axi compressor, the secondary unit(s) shall be operational within eight hours of such failure(s). All repairs, maintenance and modifications to absorber columns and the Axi compressors shall be made as expeditiously as practicable. | Record Review | Y | C* | |
| V.K.1.f | Restrictions | Enforcement Order No. 200, November 18, 1994 | The permittee shall: | N/A | | | |
| V.K.1.f.1 | Restrictions | | At all times, properly maintain two strippers in the Vacuum Carbonate Unit at the coke oven gas desulfurization facility. | Engineering Judgement | Y | C | |
| V.K.1.f.2 | Restrictions | | Insure that each stripper shall be capable of independently processing all of the solution from the absorber column. | Process Knowledge | Y | C* | Except as identified in the attached Deviation Report as previously provided to the Department on January 30, 2013. |
| V.K.1.f.3 | Restrictions | | Operate one stripper in its Vacuum Carbonate Unit at all times when coke oven gas is being produced. | Record Review | Y | C* | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
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| V.K.1.f.4 | Restrictions | | At all times, have its second stripper ready for operation within three (3) hours except when the second stripper is down for repairs, maintenance or modification. All repairs, maintenance and modifications to the strippers shall be made as expeditiously as practicable. | Record Review | Y | C | |
| V.K.1.g | Restrictions | Enforcement Order No. 200, November 18, 1994 | The permittee shall, at all times: | N/A | | | |
| V.K.1.g.1 | Restrictions | | Maintain in good working order spare heat exchangers in the Vacuum Carbonate units at the Clairton Works coke oven gas desulfurization facility as appropriate:<br><br>Listing of Critical Heat Exchangers and Spare Heat Exchangers<br>For the Vacuum Carbonate Unit at the Clairton Works<br>Coke Oven Gas Desulfurization Facility<br><br>Unit | Engineering Judgement | Y | C | |
| V.K.1.g.1.a | Restrictions | | 100 Vacuum Carbonate Units<br>Carbonate Reboiler | Record Review | Y | C | |
| V.K.1.g.1.b | Restrictions | | Process Water Cooler | Record Review | Y | C | |
| V.K.1.g.1.c | Restrictions | | Carbonate Solution Heat Exchanger | Record Review | Y | C | |
| V.K.1.g.1.d | Restrictions | | 600 Vacuum Carbonate Units<br>Carbonate Reboiler | Record Review | Y | C | |
| V.K.1.g.1.e | Restrictions | | Carbonate Solution Heat Exchanger | Record Review | Y | C | |
| V.K.1.g.1.f | Restrictions | | Process Water Cooler | Record Review | Y | C | |
| V.K.1.g.1.g | Restrictions | | For Both 100 and 600 Vacuum Carbonate Units<br>Vacuum Pump After-cooler | Record Review | Y | C | |
| V.K.1.g.2 | Restrictions | | Maintain in good working order spare pumps in the Vacuum Carbonate Units at the coke oven gas desulfurization facility as appropriate:<br><br>Listing of Critical Pumps and Spare Pumps<br>For the Vacuum Carbonate Units at the Clairton Works<br>Coke Oven Gas Desulfurization Facility<br><br>Unit | Engineering Judgement | Y | C | |
| V.K.1.g.2.a | Restrictions | | 100 Vacuum Carbonate Units<br>Compressor Lube Oil | Record Review | Y | C | |
| V.K.1.g.2.b | Restrictions | | Turbine Lube Oil | Record Review | Y | C | |
| V.K.1.g.2.c | Restrictions | | Lean Carbonate Solution | Record Review | Y | C | |
| V.K.1.g.2.d | Restrictions | | Direct Condenser | Record Review | Y | C | |
| V.K.1.g.2.e | Restrictions | | Rich Carbonate Solution | Record Review | Y | C | |

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| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
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| | | | | Method | Y/N | Type C/I | |
| V.K.1.g.2.f | Restrictions | | 600 Vacuum Carbonate Units | Record Review | Y | C | |
| V.K.1.g.2.g | Restrictions | | Rich Solution | Record Review | Y | C | |
| V.K.1.g.2.h | Restrictions | | Lean Carbonate Solution | Record Review | Y | C | |
| V.K.1.g.2.i | Restrictions | | Direct Condenser Water | Record Review | Y | C | |
| V.K.1.g.2.j | Restrictions | | Common Spare for Rich Solution, Lean Carbonate Solution, and Direct Condenser Water | Record Review | Y | C | |
| V.K.1.g.2.k | Restrictions | | Lube Oil | Record Review | Y | C | |
| V.K.1.h | Restrictions | §2104.02.b | The permittee shall not operate, or allow to be operated, any process in such manner that emissions of particulate matter from such process exceed seven (7) pounds in any 60 minute period or 100 pounds in any 24 hour period, except that no person subject to these requirements shall be required to reduce emissions to a greater degree than 99 percent. This condition shall apply to the sum of all stack emissions from such process including all emissions from any air pollution control device outlet(s) associated with such process. All fugitive emissions from such process shall be included in the sum of all stack emissions for purposes of this Subsection unless the stack emissions can be accurately measured and all fugitive emissions do not exceed the standards established by §2104.01 of this Article or any alternative standard(s) established for such source pursuant to §2104.01 of Article XXI. | Direct Measurement & Record Review | Y | C | |
| V.K.1.i | Restrictions | §2104.03.c | The permittee shall not operate, or allow to be operated, any process, except for miscellaneous sulfur-emitting processes for which there is an emissions standard under Part E of Article XXI, in such manner that the concentration of sulfur oxides, expressed as sulfur dioxide, in the effluent gas exceeds 500 ppm (dry basis) at any time. | Direct Measurement & Record Review | Y | C | |
| V.K.1.j | Restrictions | §2105.21.h | The permittee shall not operate, or allow to be operated, any source in such manner that unburned coke oven gas is emitted into the open air. In addition, no person shall flare, mix, or combust coke oven gas, or allow such gas to be flared, mixed, or combusted, unless the concentration of sulfur compounds, measured as hydrogen sulfide, in such gas is less than or equal to the following concentrations: | Record Review | Y | C | |
| V.K.1.j.1 | Restrictions | | For coke batteries designated 13, 14, 15, 20, and B, a concentration of ten (10) grains per hundred dry cubic feet of coke oven gas; | Direct Measurement & Record Review | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
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| | | | | Method | Y/ N | Type C/I | |
| V.K.1.j.2 | Restrictions | | The standard set forth in V.K.1.k.1) above for coke oven batteries designated 13, 14, 15, 20, and B shall be deemed satisfied for such batteries if the coke oven gas from batteries designated 1, 2, 3, 13, 14, 15, 19 , 20 and B and treated by the Clairton Works coke oven gas desulfurization system in existence as of June 24, 1993, has a sulfur compound concentration, measured as H2S, of no greater than 40 grains per hundred dry standard cubic feet of coke oven gas produced by the Clairton Works, when all sulfur emissions from its Claus Sulfur Recovery Plant and the tail gas cleaning equipment thereon, expressed as equivalent H2S, are added to the measured H2S. The concentration of sulfur compounds shall include tail-gas sulfur, measured as hydrogen sulfide, emitted from sulfur removal equipment. | Direct Measurement & Record Review | Y | C | |
| V.K.2.a | Testing | Enforcement Order No. 200 (11/18/94) and §2108.02 | At least once every two (2) years, the permittee shall perform a stack test of the SCOT plant incinerator waste gas stream to measure the emission rate of sulfur compounds. This shall be determined by the performance of three sets of two-hour average measurements of sulfur compounds in the waste gas stream and the associated volume gas flows. All concentration and flow measurements for each run shall be performed over the same two-hour sampling period. Acceptable H2S and organic sulfide measurement techniques are specified in Chapters 15 and 16 of the Department's Source Testing Manual. Waste gas stream flow rates shall be determined by calibrated pitot tube measurements. All testing shall be performed in accordance with Article XXI. | Record Review | Y | C | |
| V.K.2.b | Testing | §2103.12.h.1; §2108.02.b, §2108.02.e. | The permittee shall perform emission tests on the SCOT Plant for all the criteria pollutants and benzene (PM, PM10, NOx, SO2, CO, VOC and benzene) to develop emission factors that can be applied to quantify criteria pollutants and benzene emissions. Such testing shall be conducted in accordance with approved EPA methods in Appendix A of 40 CFR Part 60, Article XXI §2108.02, and as approved by the Department. Reports of the stack testing shall be submitted to the Department within 90 days of the date of the stack test(s). | Record Review | Y | C | |
| V.K.2.c | Testing | §2103.12.h.1 | The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 above and Article XXI §2108.02. | Record Review | Y | C | |
| V.K.3 | Monitoring | §2103.12.i | In order to demonstrate compliance with the concentration of sulfur compounds in the clean coke oven gas as specified in §2105.21.h, the permittee shall continuously monitor the concentration of sulfur compounds, measured as H2S, in the desulfurized coke oven gas according to the continuous Method approved by the Department. | Record Review | Y | C | |
| V.K.4.a | Record Keeping | §2103.12.j | The permittee shall maintain records of all repairs, maintenance and modifications to: | N/A | | | |
| V.K.4.a.a | Record Keeping | | The two Claus Plants; and | Record Review | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance Method | Y/N | Type C/I | Comments |
|---|---|---|---|---|---|---|---|
| V.K.4.a.b | Record Keeping | | The absorber columns, strippers and axi compressors in the Vacuum Carbonate Unit. | Record Review | Y | C | |
| V.K.4.b | Record Keeping | §2103.12.i | The permittee shall maintain records of the following information: | N/A | | | |
| V.K.4.b.1 | Record Keeping | | For each day and for the month, the average grains of H2S per 100 dscf of coke oven gas (COG) processed by the desulfurization system: | N/A | | | |
| V.K.4.b.1.a | Record Keeping | | In the raw COG delivered; | Record Review | Y | C | |
| V.K.4.b.1.b | Record Keeping | | In the clean COG; | Record Review | Y | C | |
| V.K.4.b.1.c | Record Keeping | | In the tail gas; and | Record Review | Y | C | |
| V.K.4.b.1.d | Record Keeping | | In the total of the clean COG and the tail gas; | Record Review | Y | C | |
| V.K.4.b.2 | Record Keeping | | The number of days on which the average grains H2S per 100 dscf of COG (total of clean COG measurements and tail gas measurements) exceed the applicable standard, rounding off to the nearest 0.1 grain; and | Record Review | Y | C | |
| V.K.4.b.3 | Record Keeping | | The monthly percentage availability (on-line time) of the desulfurization system, based on the total hours of coke operations and the total hours that both the plant was fully available and all COG was normally processed; and | Record Review | Y | C | |
| V.K.4.b.4 | Record Keeping | | For each full or partial outage of the desulfurization system, including any full or partial bypassing of the system: | N/A | | | |
| V.K.4.b.4.a | Record Keeping | | The starting and ending dates and times; | Record Review | Y | C | |
| V.K.4.b.4.b | Record Keeping | | The total time of each outage, and the total for the month, to the nearest tenth of an hour; | Record Review | Y | C | |
| V.K.4.b.4.c | Record Keeping | | The corresponding Department Breakdown Number; and the reason(s) or cause(s) for the outage. | Record Review | Y | C | |
| V.K.5.a | Reporting | §2103.12.k and Enforcement Order 3/28/90 | The permittee shall report any event that causes the breakdown or unavailability of: | N/A | | | |
| V.K.5.a.1 | Reporting | | Any Claus plant, stripper, absorber column or axi compressor to be ready for immediate operation, or to be available as spare equipment; | Record Review | Y | C | |
| V.K.5.a.2 | Reporting | | Both a heat exchanger and its respective spare, as set forth in V.K.1.g.1) above or | Record Review | Y | C | |
| V.K.5.a.3 | Reporting | | Both a pump and its respective spare, as set forth in V.K.1.g.2) above. | Record Review | Y | C | |
| V.K.5.b | Reporting | §2103.12.k and Enforcement Order 3/28/90 | No later than twenty (20) days after the end of each month, a written report of a summary of the following during each such month shall be submitted to the Department: | Record Review | Y | C | |
| V.K.5.b.1 | Reporting | | For each day and for the month, the average grains of H2S per 100 dscf of coke oven gas (COG) processed by the desulfurization system: | Record Review | Y | C | |
| V.K.5.b.1.a | Reporting | | In the raw COG delivered; | Record Review | Y | C | |
| V.K.5.b.1.b | Reporting | | In the clean COG; | Record Review | Y | C | |
| V.K.5.b.1.c | Reporting | | In the tail gas; and | Record Review | Y | C | |
| V.K.5.b.1.d | Reporting | | In the total of the clean COG and the tail gas; | Record Review | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
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| | | | | Method | Y/N | Type C/I | |
| V.K.5.b.2 | Reporting | | The number of days on which the average grains H2S per 100 dscf of COG (total of clean COG measurements and tail gas measurements) exceed the applicable standard, rounding off to the nearest 0.1 grain; and | Record Review | Y | C | |
| V.K.5.b.3 | Reporting | | The monthly percentage availability (on-line time) of the desulfurization system, based on the total hours of coke operations and the total hours that both the plant was fully available and all COG was normally processed; and | Record Review | Y | C | |
| V.K.5.b.4 | Reporting | | For each full or partial outage of the desulfurization system, including any full or partial bypassing of the system: | N/A | | | |
| V.K.5.b.4.a | Reporting | | The starting and ending dates and times; | Record Review | Y | C | |
| V.K.5.b.4.b | Reporting | | The total time of each outage, and the total for the month, to the nearest tenth of an hour; | Record Review | Y | C | |
| V.K.5.b.4.c | Reporting | | The corresponding Department Breakdown Number; and the reason(s) or cause(s) for the outage. | Record Review | Y | C | |
| V.K.6 | Work Practice Standards | | None except as provided elsewhere in this permit. | N/A | | | |
| V.K.7 | Additional Requirements | | The permittee shall conduct an engineering evaluation of the SCOT Plant stack emissions within 8 months of permit issuance and submit a report to the Department within 30 days of completion of the evaluation. The engineering evaluation will include but not limited to the following: | Record Review | Y | C | |
| V.K.7.a | Additional Requirements | | General review of existing equipment; | Record Review | Y | C | |
| V.K.7.b | Additional Requirements | | General review of existing operating and maintenance procedures; | Record Review | Y | C | |
| V.K.7.c | Additional Requirements | | Evaluation of gas combustion to ensure complete combustion; and | Record Review | Y | C | |
| V.K.7.d | Additional Requirements | | Evaluation of the desulfurization process to determine factors affecting SCOT plant stack emissions | Record Review | Y | C | |

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| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
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| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
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| | | | | Method | Y/ N | Type C/I | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/N | Type C/I | |
| V.L.1.a | Restrictions | §2104.02.h | The permittee shall not operate, or allow to be operated, the Keystone cooling tower unless there is a mist eliminator installed, maintained and operated consistently with good air pollution control practice. | Engineering Judgement | Y | C | |
| V.L.1.b | Restrictions | §2103.12.a. | The permittee shall only cool non-contact water in the cooling tower. | Record Review | Y | C | |
| V.L.1.c | Restrictions | §2104.02.h | The permittee shall not operate, or allow to be operated, the Keystone cooling tower unless the water used for such cooling is equivalent to, or better than, the water quality standards established for the Monongahela River by regulations promulgated by the DEP under the Pennsylvania Clean Streams Law, Act of June 22, 1937, P.L. 1987, as amended, 35 P.S. §691.1 et seq., except that water from the Monongahela River may be used for such cooling. | Record Review | Y | C* | The certification contained in this report is based on the understanding that make-up water used for the quenching of coke will be "equivalent to, or better than, the water quality standards established for the Monongahela River by regulation promulgated by the DEP under the Pennsylvania Clean Streams Law, - except that water from the Monongahela River may be used for" such quenching make-up |
| V.L.2 | Testing Requirements | | None, except as provided elsewhere in this permit. | N/A | | | |
| V.L.3 | Monitoring Requirements | | None, except as provided elsewhere in this permit. | N/A | | | |
| V.L.4 | Record Keeping Requirements | | None, except as provided elsewhere in this permit. | N/A | | | |
| V.L.5 | Reporting Requirements | | None, except as provided elsewhere in this permit. | N/A | | | |
| V.L.6 | Work Practice Standards | | None except as provided elsewhere. | N/A | | | |
| V.L.7 | Additional Requirements | | None except as provided elsewhere. | N/A | | | |

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| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
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| | | | | Method | Y/N | Type C/I | |
| V.M.1.a | Restrictions | [§2105.06; RACT Plan 234] | At no time shall the permittee operate the by-products plant unless the clean coke oven gas blanketing system is being properly maintained and operated at all times while the plant process units blanketed by the system are emitting VOCs, with the exception of emergency or planned outages, repairs or maintenance. | Records Review | Y | C | |
| V.M.1.b | Restrictions | [§2105.06; RACT Plan 234] | All VOC emissions processed by the blanketing system shall be incinerated by combustion in the facilities coke batteries or boilers or by downstream consumers. | Procedures | Y | C | |
| V.M.1.c | Restrictions | [§61.132(a)(1)] | The permittee shall enclose and seal all openings on each process vessel, tar storage tank, and tar-intercepting sump. | Procedures | Y | C | |
| V.M.1.d | Restrictions | [§61.132(a)(2)] | The permittee shall duct gases from each process vessel, tar storage tank and tar-intercepting sump to the gas collection system, gas distribution system, or other enclosed point in the by-product recovery process where benzene in the gas will be recovered or destroyed. This control system shall be designed and operated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined by the methods specified in Reference Method 21 of Appendix A, 40 CFR Part 60. This system can be designed as a closed, positive pressure, gas blanketing system. | Design Parameter | Y | C | |
| V.M.1.d.1 | Restrictions | | Except, the permittee may elect to install, operate, and maintain a pressure relief device, vacuum relief device, an access hatch, and a sampling port on each process vessel, tar storage tank and tar-intercepting sump. Each access hatch and sampling port must be equipped with a gasket and a cover, seal or lid that must be kept in a closed position at all times, unless in actual use. | Design Parameter | Y | C | |
| V.M.1.d.2 | Restrictions | | The permittee may elect to leave open to the atmosphere the portion of the liquid surface in each tar decanter necessary to permit operation of a sludge conveyor. If the permittee elects to maintain an opening on part of the liquid surface of the tar decanter, the permittee shall install, operate, and maintain a water leg seal on the tar decanter roof near the sludge discharge chute to ensure enclosure of the major portion of liquid surface not necessary for the operation of the sludge conveyor. | Engineering Judgement | Y | C | |
| V.M.1.e | Restrictions | [§61. 132(d)] | The permittee shall comply with the requirements of V.M.1.c and V.M.1.d above, and V.M.3.a and V.M.3.b below for each benzene storage tank, BTX storage tank, light-oil storage tank, and excess ammonia-liquor storage tank. | Administrative Requirement | Y | C | |
| V.M.1.f | Restrictions | [§ 61.133(a)] | The permittee shall enclose and seal the liquid surface in the light oil sump to form a closed system to contain the emissions. | Procedures | Y | C | |

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| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
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| | | | | Method | Y/ N | Type C/I | |
| V.M.1.f.1 | Restrictions | | Except, the permittee may elect to install, operate, and maintain a vent on the light-oil sump cover. Each vent pipe must be equipped with a water leg seal, a pressure relief device, or vacuum relief device. | Engineering Judgement | Y | C | |
| V.M.1.f.2 | Restrictions | | Except, the permittee may elect to install, operate, and maintain an access hatch on each light-oil sump cover. Each access hatch must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use. | Engineering Judgement | Y | C | |
| V.M.1.f.3 | Restrictions | | The light-oil sump cover may be removed for periodic maintenance but must be replaced (with seal) at completion of the maintenance operation. | Procedures | Y | C | |
| V.M.1.g | Restrictions | [§ 61.133(b)] | The venting of steam or other gases from the by-product process to the light-oil sump is not permitted. | Procedures | Y | C | |
| V.M.1.h | Restrictions | [§61.134(a)] | The permittee shall allow no ("zero") emissions from naphthalene processing, final coolers and final-cooler cooling tower. | Procedures | Y | C | |
| V.M.1.i | Restrictions | [§61.135(a) & (b)] | The permittee of equipment in benzene service shall comply with the requirements of 40 CFR Part 61, Subpart V, except as provided in V.M.1.j and V.M.3.d below Also, the provisions of §61.242--3 and §61.242--9 of 40 CFR Subpart V do not apply to 40 CFR 61, Subpart L. | Administrative Requirement | Y | C | |
| V.M.1.j | Restrictions | [§61.135(c)] | Each piece of equipment in benzene service to which 40 CFR 61, Subpart L applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment in benzene service. | Procedures | Y | C | |
| V.M.1.k | Restrictions | [§61.136(a)] | The permittee subject to the provisions of 40 CFR 61, Subpart L, shall demonstrate compliance with the requirements of V.M.1.c through V.M.1.j above and V.M.3.a through V.M.3.h below, except as provided under Conditions V.M.1.nn through V.M.1.uu below. | Administrative Requirement | Y | C | |
| V.M.1.l | Restrictions | [§61.136(b)] | Compliance with 40 CFR 61, Subpart L shall be determined by a review of records, review of performance test results, inspections, or any combination thereof, using the methods and procedures specified in V.M.2.a below. | Records Review | Y | C | |
| V.M.1.m | Restrictions | [§61.136(d)] | The permittee may request permission to use an alternative means of emission limitation to meet the requirements in Conditions V.M.1.c through V.M.1.g above, V.M.1.i and V.M.1.j above, and V.M.3.a through V.M.3.h below, V.M.1.l through V.M.1.t below, V.M.3.r through V.M.3.z below, V.M.3.ii through V.M.3.tt below and V.M.1.mm below. | Administrative Requirement | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/N | Type C/I | |
| V.M.1.m.1 | Restrictions | | Permission to use an alternative means of emission limitation shall be requested as specified in §61.12(d). | Administrative Requirement | Y | C | |
| V.M.1.m.2 | Restrictions | | When the Administrator and the Department evaluates requests for permission to use alternative means of emission limitation for sources subject to Conditions V.M.1.e through V.M.1.g above and V.M.3.a through V.M.3.c below (except tar decanters) the Administrator and the Department shall compare test data for the means of emission limitation to a benzene control efficiency of 98 percent. For tar decanters, the Administrator and the Department shall compare test data for the means of emission limitation to a benzene control efficiency of 95 percent. | Administrative Requirement | Y | C | |
| V.M.1.m.3 | Restrictions | | For any requests for permission to use an alternative to the work practices required under Conditions V.M.1.i and V.M.1.j above, and V.M.3.d through V.M.3.h below, the provisions of Condition V.M.1.xx below shall apply. | Administrative Requirement | Y | C | |
| V.M.1.n | Restrictions | [§61.242-1(a)] | The permittee subject to the provisions of 40 CFR Part 61, Subpart V shall demonstrate compliance with the requirements of V.M.1.n through V.M.1.mm below, and V.M.3.i through V.M.3.tt below as required in 40 CFR 61.05, except as provided in Conditions V.M.1.nn through V.M.1.rr below and Conditions V.M.1.vv through V.M.1.zz below. | Administrative Requirement | Y | C | |
| V.M.1.o | Restrictions | [§61.242-1(b)] | Compliance with this 40 CFR 61, Subpart V shall be determined by review of records, review of performance test results, and inspection using the methods and procedures specified in V.M.3.uu through V.M.3.vv below. | Records Review | Y | C | |
| V.M.1.p | Restrictions | [§61.242-1(c)(1)] | The permittee may request a determination of alternative means of emission limitation to the requirements of §61.242–2; 61.242–3; 61.242–5; 61.242–6; 61.242–7; 61.242–8 and 61.242–11 as provided in §61.244. | Administrative Requirement | Y | C | |
| V.M.1.q | Restrictions | [§61.242-1(c)(2)] | If the Administrator and Department make a determination that a means of emission limitation is at least a permissible alternative to the requirements of §61.242–2; 61.242–3; 61.242–5; 61.242–6; 61.242–7; 61.242–8 or 61.242–11, an owner or operator shall comply with the requirements of that determination. | Administrative Requirement | Y | C | |
| V.M.1.r | Restrictions | [§61.242-1(d)] | Each piece of equipment to which 40 CFR 61, Subpart V applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment. | Procedures | Y | C | |
| V.M.1.s | Restrictions | [§61.242-1(e)] | Equipment that is in vacuum service is excluded from the requirements of V.M.1.t through V.M.1.mm below and V.M.3.i through V.M.1.rr below if it is identified as required in V.M.4.g.5) below. | Administrative Requirement | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/N | Type C/I | |
| V.M.1.t | Restrictions | [§61.242-3(a)] | Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to atmosphere, except as provided in §61.242-1(c) and Conditions V.M.1.bb and V.M.1.cc below. | Design Parameter | Y | C | |
| V.M.1.u | Restrictions | [§61.242-3(b)] | Each compressor seal system as required in Condition V.M.1.t above shall be: | Design Parameter | Y | C | |
| V.M.1.u.1 | Restrictions | | Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or | Design Parameter | Y | C | |
| V.M.1.u.2 | Restrictions | | Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of Conditions V.M.3.ii through V.M.3.tt below and V.M.1.mm below; or | Design Parameter | Y | C | |
| V.M.1.u.3 | Restrictions | | Equipped with a system that purges the barrier fluid into a process stream with zero VHAP emissions to atmosphere. | Design Parameter | Y | C | |
| V.M.1.v | Restrictions | [§61.242-3(c)] | The barrier fluid shall not be in VHAP service and, if the compressor is covered by standards under 40 CFR part 60, shall not be in VOC service. | Procedures | Y | C | |
| V.M.1.w | Restrictions | [§61.242-3(d)] | Each barrier fluid system as described in Conditions V.M.1.t through V.M.1.v above shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both. | Design Parameter | Y | C | |
| V.M.1.x | Restrictions | [§61.242-3(e)(1)] | Each sensor as required in Condition V.M.1.w above shall be checked daily or shall be equipped with an audible alarm unless the compressor is located within the boundary of an unmanned plant site. | Procedures/Records Review | Y | C | |
| V.M.1.y | Restrictions | [§61.242-3(e)(2)] | The permittee shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. | Engineering Judgement | Y | C | |
| V.M.1.z | Restrictions | [§61.242-3(f)] | If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under Condition V.M.1.y above, a leak is detected. | Procedures | Y | C | |
| V.M.1.aa | Restrictions | [§61.242-3(g)] | When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Conditions V.M.3.dd through V.M.3.hh below. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. | Procedures/Records Review | Y | C | |
| V.M.1.bb | Restrictions | [§61.242-3(h)] | A compressor is exempt from the requirements of Conditions V.M.1.t and V.M.1.u above if it is equipped with a closed-vent system to capture and transport leakage from the compressor drive shaft back to a process or fuel gas system or to a control device that complies with the requirements of V.M.3.ii through V.M.3.tt below and V.M.1.mm below, except as provided in Condition V.M.1.cc below. | Administrative Requirement | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/N | Type C/I | |
| V.M.1.cc | Restrictions | [§61.242-3(i)] | Any Compressor that is designated, as described in Condition V.M.4.g.2) below, for no detectable emission as indicated by an instrument reading of less than 500 ppm above background is exempt from the requirements of paragraphs V.M.1.t through V.M.1.bb above if the compressor: | Design Parameter | Y | C | |
| V.M.1.cc.1 | Restrictions | | Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in V.M.3.vv below; and | Records Review | Y | C | |
| V.M.1.cc.2 | Restrictions | | Is tested for compliance with paragraph V.M.1.cc.1) above initially upon designation, annually, and at other times requested by the Administrator and the Department. | Procedures/Records Review | Y | C | |
| V.M.1.dd | Restrictions | [§61.242-4(a)] | Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in §61.245(c) or V.M.3.vv. | Procedures | Y | C | |
| V.M.1.ee | Restrictions | [§61.242-5(a)] | The permittee shall equip each sampling connection system with a closed-purge, closed loop, or closed vent system, except as provided in V.M.1.p and V.M.1.q. Gases displaced during filling of the sample container are not required to be collected or captured. | Design Parameter | Y | C | |
| V.M.1.ff | Restrictions | [§61.242-5(b)] | Each closed-purge, closed loop or closed vent system as required in Condition V.M.1.ee above shall: | Design Parameter | Y | C | |
| V.M.1.ff.1 | Restrictions | | Return the purged process fluid directly to the process line; or | Design Parameter | Y | C | |
| V.M.1.ff.2 | Restrictions | | Collect and recycle the purged process fluid; or | Design Parameter | Y | C | |
| V.M.1.ff.3 | Restrictions | | Be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of Conditions V.M.3.ii through V.M.3.tt below and V.M.1.mm below, or | Design Parameter | Y | C | |
| V.M.1.ff.4 | Restrictions | | Collect, store, and transport the purged process fluid to any of the following systems or facilities: | Design Parameter | Y | C | |
| V.M.1.ff.4.a | Restrictions | | A waste management unit as defined in §63.111 if the waste management unit is subject to and operated in compliance with the provisions of 40 CFR Part 63, Subpart G, applicable to Group 1 wastewater streams; or | Administrative Requirement | Y | C | |
| V.M.1.ff.4.b | Restrictions | | A treatment, storage, or disposal facility subject to regulation under 40 CFR Part 262, 264, 265, or 266; or | Administrative Requirement | Y | C | |
| V.M.1.ff.4.c | Restrictions | | A facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR Part 261. | Administrative Requirement | Y | C | |
| V.M.1.gg | Restrictions | [§61.242-5(c)] | In-situ sampling systems and sampling systems without purges are exempt from the requirements of Conditions V.M.1.ee and V.M.1.ff above. | Administrative Requirement | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/N | Type C/I | |
| V.M.1.hh | Restrictions | [§61.242-6(a)] | The permittee shall equip each open-ended valve or line with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 61.242-1(c). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. | Design Parameter | Y | C | |
| V.M.1.ii | Restrictions | [§61.242-6(b)] | Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. | Design Parameter | Y | C | |
| V.M.1.jj | Restrictions | [§61.242-6(c)] | When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with Condition V.M.1.hh above at all other times. | Procedures | Y | C | |
| V.M.1.kk | Restrictions | [§61.242-6(d)] | Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of Conditions V.M.1.hh through V.M.1.jj above. | Administrative Requirement | Y | C | |
| V.M.1.ll | Restrictions | [§61.242-6(e)] | Open-ended valves or lines containing materials which would auto-catalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in Conditions V.M.1.hh through V.M.1.jj above are exempt from the requirements of Conditions V.M.1.hh through V.M.1.ii above. | Administrative Requirement | Y | C | |
| V.M.1.mm | Restrictions | [§61.242-11(m)] | Closed vent systems and control devices used to comply with provisions of 40 CFR Part 61, Subpart V shall be operated at all times when emissions may be vented to them. | Procedures | Y | C | |
| V.M.1.nn | Restrictions | [§61.243-1(a)] | The permittee may elect to have all valves within a process unit to comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent. | Records Review | Y | C | |
| V.M.1.oo | Restrictions | [§61.243-1(b)] | The following requirements shall be met if the permittee decides to comply with an allowable percentage of valves leaking: | Administrative Requirement | Y | C | |
| V.M.1.oo.1 | Restrictions | | The permittee must notify the Administrator and the Department that the permittee has elected to have all valves within a process unit to comply with the allowable percentage of valves leaking before implementing this alternative standard, as specified in Condition V.M.5.d below. | Report Submission | Y | C | |
| V.M.1.oo.2 | Restrictions | | A performance test as specified in Condition V.M.1.pp below shall be conducted initially upon designation, annually, and at other times requested by the Administrator and the Department. | Records Review | Y | C | |
| V.M.1.oo.3 | Restrictions | | If a valve leak is detected, it shall be repaired in accordance with Condition V.M.5.d below. | Procedures | Y | C | |
| V.M.1.pp | Restrictions | [§61.243-1(c)] | Performance tests shall be conducted in the following manner: | Procedures | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/N | Type C/I | |
| V.M.1.pp.1 | Restrictions | | All valves in VHAP service within the process unit shall be monitored within 1 week by the methods specified in Condition V.M.3.uu below. | Physical Inspection/Records Review | Y | C | |
| V.M.1.pp.2 | Restrictions | | If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. | Physical Inspection/Records Review | Y | C | |
| V.M.1.pp.3 | Restrictions | | The leak percentage shall be determined by dividing the number of valves in VHAP service for which leaks are detected by the number of valves in VHAP service within the process unit. | Procedures | Y | C | |
| V.M.1.qq | Restrictions | [§61.243-1(d)] | The permittee who elects to have all valves comply with this alternative standard shall not have a process unit with a leak percentage greater than 2.0 percent. | Records Review | Y | C | |
| V.M.1.rr | Restrictions | [§61.243-1(e)] | If the permittee decides no longer to comply with Conditions V.M.1.nn through V.M.1.qq above, the permittee must notify the Administrator and the Department in writing that the work practice standard described in Conditions V.M.3.r through V.M.3.v below will be followed. | Report Submission | Y | C | |
| V.M.1.ss | Restrictions | [§61.243-2(a)(1)] | The permittee may elect for all valves within a process unit to comply with one of the alternative work practices specified in Conditions V.M.1.oo.2) and V.M.1.oo.3) above. | Engineering Judgement | Y | C | |
| V.M.1.tt | Restrictions | [§61.243-2(a)(2)] | The permittee shall notify the Administrator and the Department before implementing one of the alternative work practices, as specified in Condition V.M.3.u below. | Report Submission | Y | C | |
| V.M.1.uu | Restrictions | [§61.243-2(b)] | The permittee shall: | Administrative Requirement | Y | C | |
| V.M.1.uu.1 | Restrictions | | Comply initially with the requirements for valves, as described in Conditions V.M.3.r through V.M.3.y below. | Administrative Requirement | Y | C | |
| V.M.1.uu.2 | Restrictions | | After 2 consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2.0, an owner or operator may begin to skip one of the quarterly leak detection periods for the valves in VHAP service. | Records Review | Y | C | |
| V.M.1.uu.3 | Restrictions | | After five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2.0, an owner or operator may begin to skip three of the quarterly leak detection periods for the valves in VHAP service. | Records Review | Y | C | |
| V.M.1.uu.4 | Restrictions | | If the percentage of valves leaking is greater than 2.0, the owner or operator shall comply with the requirements as described in Conditions V.M.3.r through V.M.3.y below but may again elect to use this section. | Records Review | Y | C | |
| V.M.1.vv | Restrictions | [§61.244(a)] | Permission to use an alternative means of emission limitation under section 112(e)(3) of the Clean Air Act shall be governed by the procedures in Conditions V.M.1.ww through V.M.1.zz below: | Administrative Requirement | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/N | Type C/I | |
| V.M.1.ww | Restrictions | [§61.244(b)] | Where the standard is an equipment, design, or operational requirement: | Administrative Requirement | Y | C | |
| V.M.1.ww.1 | Restrictions | | The permittee applying for permission shall be responsible for collecting and verifying test data for an alternative means of emission limitation to test data for the equipment, design, and operational requirements. | Records Review | Y | C | |
| V.M.1.ww.2 | Restrictions | | The Administrator and the Department may condition the permission on requirements that may be necessary to assure operation and maintenance to achieve the same emission reduction as the equipment, design, and operational requirements. | Engineering Judgement | Y | C | |
| V.M.1.xx | Restrictions | [§61.244(c)] | Where the standard is a work practice: | Administrative Requirement | Y | C | |
| V.M.1.xx.1 | Restrictions | | Each owner or operator applying for permission shall be responsible for collecting and verifying test data for an alternative means of emission limitation. | Process Knowledge/Records Review | Y | C | |
| V.M.1.xx.2 | Restrictions | | For each source for which permission is requested, the emission reduction achieved by the required work practices shall be demonstrated for a minimum period of 12 months. | Records Review | Y | C | |
| V.M.1.xx.3 | Restrictions | | For each source for which permission is requested, the emission reduction achieved by the alternative means of emission limitation shall be demonstrated. | Procedures | Y | C | |
| V.M.1.xx.4 | Restrictions | | Each owner or operator applying for permission shall commit in writing each source to work practices that provide for emission reductions equal to or greater than the emission reductions achieved by the required work practices. | Administrative Requirement | Y | C | |
| V.M.1.xx.5 | Restrictions | | The Administrator and the Department will compare the demonstrated emission reduction for the alternative means of emission limitation to the demonstrated emission reduction for the required work practices and will consider the commitment in conditions V.M.1.xx.4) above. | Administrative Requirement | Y | C | |
| V.M.1.xx.6 | Restrictions | | The Administrator and the Department may condition the permission on requirements that may be necessary to assure operation and maintenance to achieve the same emission reduction as the required work practices of 40 CFR 61, Subpart V. | Administrative Requirement | Y | C | |
| V.M.1.yy | Restrictions | [§61.244(d)] | An owner or operator may offer a unique approach to demonstrate the alternative means of emission limitation. | Administrative Requirement | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/ N | Type C/I | |
| V.M.1.zz | Restrictions | [§61.244(e)] | Manufacturers of equipment used to control equipment leaks of a VHAP may apply to the Administrator and the Department for permission for an alternative means of emission limitation that achieves a reduction in emissions of the VHAP achieved by the equipment, design, and operational requirements of 40 CFR 61, Subpart V. The Administrator and Department will grant permission according to the provisions of conditions V.M.1.ww through V.M.1.yy above. | Administrative Requirement | Y | C | |
| V.M.1.aaa | Restrictions | [61.342(a)] | If the total annual benzene quantity from facility waste is less than 10 megagrams per year (Mg/yr) (11 ton/yr) the permittee shall be exempt from the requirements of paragraphs §61.342(b) and (c). The total annual benzene quantity from facility waste is the sum of the annual benzene quantity for each waste stream at the facility that has a flow-weighted annual average water content greater than 10 percent or that is mixed with water, or other wastes, at any time and the mixture has an annual average water content greater than 10 percent. The benzene quantity in a waste stream is to be counted only once without multiple counting if other waste streams are mixed with or generated from the original waste stream. Other specific requirements for calculating the total annual benzene waste quantity are as follows: | Records Review | Y | C | |
| V.M.1.aaa.1 | Restrictions | | Wastes that are exempted from control under §§ 61.342(c)(2) and 61.342(c)(3) are included in the calculation of the total annual benzene quantity if they have an annual average water content greater than 10 percent, or if they are mixed with water or other wastes at any time and the mixture has an annual average water content greater than 10 percent. | Records Review | Y | C | |
| V.M.1.aaa.2 | Restrictions | | The benzene in a material subject to 40 CFR 61, Subpart FF that is sold is included in the calculation of the total annual benzene quantity if the material has an annual average water content greater than 10 percent. | Records Review | Y | C | |

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| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/N | Type C/I | |
| V.M.1.aaa.3 | Restrictions | | Benzene in wastes generated by remediation activities conducted at the facility, such as the excavation of contaminated soil, pumping and treatments of groundwater, and the recovery of product from soil or groundwater, are not included in the calculation of total annual benzene quantity for that facility. If the facility's total annual benzene quantity is 10 Mg/yr (11 ton/yr) or more, wastes generated by remediation activities are subject to the requirements of §61.342(c) through 61.342(h). If the facility is managing remediation waste generated offsite, the benzene in this waste shall be included in the calculation of total annual benzene quantity in facility waste, if the waste streams have an annual average water content greater than 10 percent, or if they are mixed with water or other wastes at any time and the mixture has an annual average water content greater than 10 percent. | Records Review | Y | C | |
| | | | The total annual benzene quantity is determined based upon the quantity of benzene in the waste before any waste treatment occurs to remove the benzene except as specified in Conditions V.M.2.d.1)a)i) through V.M.2.d.1)a)iii) below. | | Y | C | |
| V.M.1.bbb | Restrictions | [§2105.12.b] | No person shall place or store, or allow to be placed or stored, a volatile organic compound having a vapor pressure greater than 1.5 psia under actual storage conditions in any stationary tank, reservoir, or other container with a capacity greater than 40,000 gallons, unless such tank, reservoir, or other container is a pressure tank capable of maintaining working pressure sufficient to at all times prevent vapor or gas loss to the atmosphere or is equipped with: | Procedures | Y | C | |
| V.M.1.bbb.1 | Restrictions | | An external or internal floating roof, except that this control equipment shall not be permitted if the volatile organic compounds have a vapor pressure of 11.0 psia or greater under actual storage conditions; or | Records Review | Y | C | |
| V.M.1.bbb.2 | Restrictions | | A vapor recovery and disposal system reducing uncontrolled emissions of volatile organic compounds by at least 90% by weight. Compliance testing shall be done in accordance with the provisions of §2107.04 of this Article. | Design Parameter | Y | C | |
| V.M.1.ccc | Restrictions | [ACHD Installation Permit 0052-I004a and §2102.04.b.6] | The permittee shall not operate or allow to be operated methanol storage tanks V-400 and V-410 unless gas blanketing system reducing emissions of VOC by at least 98% by weight is in place and operating. | Design Parameter/Records Review | Y | C | |
| V.M.1.ddd | Restrictions | [ACHD Installation Permit 0052-I004a and §2102.04.b.6] | The throughput for each methanol storage tank V-400 and V-410 shall not exceed 867,000 gallons per year, for the tank V-430 (MEA/methanol tank) throughput shall not exceed 160,000gallons per year. | Design Parameter | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/N | Type C/I | |
| V.M.1.eee | Restrictions | [§2103.13(d)] | Per General Condition III.17 above, the permittee shall not reactivate any tank that has been out of operation for a period of one year or more unless the permittee has submitted a reactivation plan request to, and received a written reactivation plan approval from the Department. | Report Submission | Y | C | |
| V.M.1.eee.1 | Restrictions | [§2103.13(d)(5)] | The reactivation of a tank that has been deactivated for more than ten (10) years shall constitute a new source under Article XXI requiring the issuance of a new source Installation Permit. | Administrative Requirement | Y | C | |
| V.M.1.eee.2 | Restrictions | [§2103.13(d)(7)] | All tanks deactivated for more than one (1) year shall constitute new sources upon reactivation unless the permittee, by no later than one (1) year following actual deactivation, submits a maintenance plan for the tank to be implemented during the period of deactivation. | Report Submission | Y | C | |
| V.M.1.eee.3 | Restrictions | [§2103.13(d)(8)] | Any reactivation plan issued for a tank which has been deactivated for more than five (5) years shall require the implementation of BACT prior to actual reactivation. | Administrative Requirement | Y | C | |
| V.M.1.fff | Restrictions | [§2105.03; Installation Permit 91-I-0021 P)] | Emissions Limitations: Emissions from sources in the by-products recovery area and regulated by the benzene NESHAPS (40 CFR Part 61 Subpart L) shall not exceed the limits listed in Table V-M-1 at any time: | Records Review | Y | C | |
| V.M.1.fff | Restrictions | | POLLUTANT ANNUAL LIMIT | | Y | C | |
| V.M.1.fff | Restrictions | | VOC 68.0 | | Y | C | |
| V.M.1.fff | Restrictions | | Benzene 54.0 | | Y | C | |
| V.M.1.fff | Restrictions | | A year is defined as any consecutive 12-month period | | Y | C | |
| V.M.2.a | Testing | [§61.137(b)] | To determine whether or not a piece of equipment is in benzene service, the methods in V.M.3.ww through V.M.3.yy below shall be used, except that, for exhausters, the percent benzene shall be 1 percent by weight, rather than the 10 percent by weight described in Conditions V.M.3.ww through V.M.3.yy below. | Records Review | Y | C | |
| V.M.2.b | Testing | [§61.355(a)] | The permittee shall determine the total annual benzene quantity from facility waste by the following procedure: | Administrative Requirement | Y | C | |
| V.M.2.b.1 | Testing | | For each waste stream subject to this 40 CFR 61, Subpart FF having a flow-weighted annual average water content greater than 10 percent water, on a volume basis as total water, or is mixed with water or other wastes at any time and the resulting mixture has an annual average water content greater than 10 percent as specified in Condition V.M.1.aaa above, the permittee shall: | Records Review | Y | C | |
| V.M.2.b.1.a | Testing | | Determine the annual waste quantity for each waste stream using the procedures specified in paragraph V.M.2.c). | Records Review | Y | C | |
| V.M.2.b.1.b | Testing | | Determine the flow-weighted annual average benzene concentration for each waste stream using the procedures specified in paragraph V.M.2.c). | Records Review | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/N | Type C/I | |
| V.M.2.b.1.c | Testing | | Calculate the annual benzene quantity for each waste stream by multiplying the annual waste quantity of the waste stream times the flow-weighted annual average benzene concentration. | Records Review | Y | C | |
| V.M.2.b.2 | Testing | | Total annual benzene quantity from facility waste is calculated by adding together the annual benzene quantity for each waste stream generated during the year and the annual benzene quantity for each process unit turnaround waste annualized according to Condition V.M.2.b.4) below. | Records Review | Y | C | |
| V.M.2.b.3 | Testing | | If the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr (11 ton/yr), then the permittee shall comply with the requirements of §61.342 (c), (d), or (e). | Records Review | Y | C | |
| V.M.2.b.4 | Testing | | If the total annual benzene quantity from facility waste is less than 10 Mg/yr (11 ton/yr) but is equal to or greater than 1 Mg/yr (1.1 ton/yr), then the permittee shall: | Records Review | Y | C | |
| V.M.2.b.4.a | Testing | | Comply with the recordkeeping requirements of V.M.4.o below and reporting requirements of V.M.5.e below; and | Administrative Requirement | Y | C | |
| V.M.2.b.4.b | Testing | | Repeat the determination of total annual benzene quantity from facility waste at least once per year and whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 10 Mg/yr (11 ton/yr) or more. | Records Review | Y | C | |
| V.M.2.b.5 | Testing | | If the total annual benzene quantity from facility waste is less than 1 Mg/yr (1.1 ton/yr), then the permittee shall: | Records Review | Y | C | |
| V.M.2.b.5.a | Testing | | Comply with the recordkeeping requirements of V.M.4.o below and reporting requirements of V.M.5.e below; and | Procedures | Y | C | |
| V.M.2.b.5.b | Testing | | Repeat the determination of total annual benzene quantity from facility waste whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 1 Mg/yr (1.1 ton/yr) or more. | Records Review | Y | C | |
| V.M.2.b.6 | Testing | | The benzene quantity in a waste stream that is generated less than one time per year, except as provided for process unit turnaround waste in condition V.M.2.c.4) below, shall be included in the determination of total annual benzene quantity from facility waste for the year in which the waste is generated unless the waste stream is otherwise excluded from the determination of total annual benzene quantity from facility waste in accordance with conditions V.M.2.b through V.M.2.d. The benzene quantity in this waste stream shall not be annualized or averaged over the time interval between the activities that resulted in generation of the waste, for purposes of determining the total annual benzene quantity from facility waste. | Procedures | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/ N | Type C/I | |
| V.M.2.c | Testing | [§61.355(b)] | The permittee shall determine the annual waste quantity at the point of waste generation, unless otherwise provided in Conditions V.M.2.c.(1) through (4) by one of the methods given in Conditions V.M.2.c.5) through 7) below | Procedures | Y | C | |
| V.M.2.c.1 | Testing | | The determination of annual waste quantity for sour water streams that are processed in sour water strippers shall be made at the point that the water exits the sour water stripper. | Procedures | Y | C | |
| V.M.2.c.2 | Testing | | The determination of annual waste quantity for wastes at coke by-product plants subject to and complying with the control requirements of §61.132, §61.133, §61.134, or §61.139 of 40 CFR subpart L shall be made at the location that the waste stream exits the process unit component or waste management unit controlled by that subpart or at the exit of the ammonia still, provided that the following conditions are met: | Procedures | Y | C | |
| V.M.2.c.2.i | Testing | | The transfer of wastes between units complying with the control requirements of 40 CFR Part 61, Subpart L, process units, and the ammonia still is made through hard piping or other enclosed system. | Design Parameter | Y | C | |
| V.M.2.c.2.ii | Testing | | The ammonia still meets the definition of a sour water stripper in §61.341. | Records Review | Y | C | |
| V.M.2.c.3 | Testing | | The determination of annual waste quantity for wastes that are received at hazardous waste treatment, storage, or disposal facilities from offsite shall be made at the point where the waste enters the hazardous waste treatment, storage, or disposal facility. | Procedures | Y | C | |
| V.M.2.c.4 | Testing | | The determination of annual waste quantity for each process unit turnaround waste generated only at 2 year or greater intervals, may be made by dividing the total quantity of waste generated during the most recent process unit turnaround by the time period (in the nearest tenth of a year) between the turnaround resulting in generation of the waste and the most recent preceding process turnaround for the unit. The resulting annual waste quantity shall be included in the calculation of the annual benzene quantity as provided in V.M.2.b.1)c) above for the year in which the turnaround occurs and for each subsequent year until the unit undergoes the next process turnaround. For estimates of total annual benzene quantity as specified in the 90-day report, required under §61.357(a)(1), the owner or operator shall estimate the waste quantity generated during the most recent turnaround, and the time period between turnarounds in accordance with good engineering practices. | Records Review | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/ N | Type C/I | |
| | | | If the owner or operator chooses not to annualize process unit turnaround waste, as specified in this paragraph, then the process unit turnaround waste quantity shall be included in the calculation of the annual benzene quantity for the year in which the turnaround occurs. | | Y | C | |
| V.M.2.c.5 | Testing | | Select the highest annual quantity of waste managed from historical records representing the most recent 5 years of operation or, if the facility has been in service for less than 5 years but at least 1 year, from historical records representing the total operating life of the facility; | Records Review | Y | C | |
| V.M.2.c.6 | Testing | | Use the maximum design capacity of the waste management unit; or | Procedures | Y | C | |
| V.M.2.c.7 | Testing | | Use measurements that are representative of maximum waste generation rates. | Procedures | Y | C | |
| V.M.2.d | Testing | [§61.355(c)] | For the purposes of the calculation required by paragraph V.M.2.b above, the permittee shall determine the flow-weighted annual average benzene concentration in a manner that meets the requirements given in paragraph V.M.2.d.1) below using either of the methods given in paragraphs V.M.2.e or V.M.2.f below. | Administrative Requirement | Y | C | |
| V.M.2.d.1 | Testing | | The determination of flow-weighted annual average benzene concentration shall meet all of the following criteria: | Administrative Requirement | Y | C | |
| V.M.2.d.1.a | Testing | | The determination shall be made at: | Administrative Requirement | Y | C | |
| V.M.2.d.1.a.i | Testing | | The location that the waste stream exits the process unit component or waste management unit controlled by 40 CFR Part 61, Subpart L or at the exit of the ammonia still, provided that the following conditions are met: | Physical Inspection/Records Review | Y | C | |
| V.M.2.d.1.a.i.1 | Testing | | The transfer of wastes between units complying with the control requirements of 40 CFR Part 61, Subpart L, process units, and the ammonia still is made through hard piping or other enclosed system. | Design Parameter | Y | C | |
| V.M.2.d.1.a.i.2 | Testing | | The ammonia still meets the definition of a sour water stripper in §61.341. | Records Review | Y | C | |
| V.M.2.d.1.a.ii | Testing | | The determination for wastes that are received from offsite shall be made at the point where the waste enters the hazardous waste treatment, storage, or disposal facility. | Physical Inspection/Records Review | Y | C | |
| V.M.2.d.1.a.iii | Testing | | The determination of flow-weighted annual average benzene concentration for process unit turnaround waste shall be made using either of the methods given in paragraphs V.M.2.e or V.M.2.f below. The resulting flow-weighted annual average benzene concentration shall be included in the calculation of annual benzene quantity as provided in paragraph V.M.2.b.1)c) above for the year in which the turnaround occurs and for each subsequent year until the unit undergoes the next process unit turnaround. | Records Review | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
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| | | | | Method | Y/N | Type C/I | |
| V.M.2.d.1.b | Testing | | Volatilization of the benzene by exposure to air shall not be used in the determination to reduce the benzene concentration. | Procedures | Y | C | |
| V.M.2.d.1.c | Testing | | Mixing or diluting the waste stream with other wastes or other materials shall not be used in the determination -- to reduce the benzene concentration. | Procedures | Y | C | |
| V.M.2.d.1.d | Testing | | The determination shall be made prior to any treatment of the waste that removes benzene, except as specified in paragraphs V.M.2.b.1)a) above. | Procedures | Y | C | |
| V.M.2.d.1.e | Testing | | For wastes with multiple phases, the determination shall provide the weighted-average benzene concentration based on the benzene concentration in each phase of the waste and the relative proportion of the phases. | Records Review | Y | C | |
| V.M.2.e | Testing | [§61.355(c)(2)] | The permittee shall provide sufficient information to document the flow-weighted annual average benzene concentration of each waste stream. Examples of information that could constitute knowledge include material balances, records of chemical purchases, or previous test results provided the results are still relevant to the current waste stream conditions. If test data are used, then the permittee shall provide documentation describing the testing protocol and the means by which sampling variability and analytical variability were accounted for in the determination of the flow-weighted annual average benzene concentration for the waste stream. When the permittee and the Administrator and the Department do not agree on determinations of the flow-weighted annual average benzene concentration based on knowledge of the waste, the procedures in paragraph V.M.2.f below shall be used to resolve the disagreement. | Records Review | Y | C | |
| V.M.2.f | Testing | [§61.355(c)(3)] | Measurements of the benzene concentration in the waste stream in accordance with the following procedures: | Records Review | Y | C | |
| V.M.2.f.1 | Testing | | Collect a minimum of three representative samples from each waste stream. Where feasible, samples shall be taken from an enclosed pipe prior to the waste being exposed to the atmosphere. | Direct Measurement | Y | C | |
| V.M.2.f.2 | Testing | | For waste in enclosed pipes, the following procedures shall be used: | Administrative Requirement | Y | C | |
| V.M.2.f.2.a | Testing | | Samples shall be collected prior to the waste being exposed to the atmosphere in order to minimize the loss of benzene prior to sampling. | Procedures | Y | C | |
| V.M.2.f.2.b | Testing | | A static mixer shall be installed in the process line or in a by-pass line unless the owner or operator demonstrates that installation of a static mixer in the line is not necessary to accurately determine the benzene concentration of the waste stream. | Design Parameter | Y | C | |
| V.M.2.f.2.c | Testing | | The sampling tap shall be located within two pipe diameters of the static mixer outlet. | Design Parameter | Y | C | |

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| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
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| | | | | Method | Y/N | Type C/I | |
| V.M.2.f.2.d | Testing | | Prior to the initiation of sampling, sample lines and cooling coil shall be purged with at least four volumes of waste. | Procedures | Y | C | |
| V.M.2.f.2.e | Testing | | After purging, the sample flow shall be directed to a sample container and the tip of the sampling tube shall be kept below the surface of the waste during sampling to minimize contact with the atmosphere. | Procedures | Y | C | |
| V.M.2.f.2.f | Testing | | Samples shall be collected at a flow rate such that the cooling coil is able to maintain a waste temperature less than 10 °C (50 °F). | Procedures | Y | C | |
| V.M.2.f.2.g | Testing | | After filling, the sample container shall be capped immediately (within 5 seconds) to leave a minimum headspace in the container. | Procedures | Y | C | |
| V.M.2.f.2.h | Testing | | The sample containers shall immediately be cooled and maintained at a temperature below 10 °C (50 °F) for transfer to the laboratory. | Procedures | Y | C | |
| V.M.2.f.3 | Testing | | When sampling from an enclosed pipe is not feasible, a minimum of three representative samples shall be collected in a manner to minimize exposure of the sample to the atmosphere and loss of benzene prior to sampling. | Direct Measurement | Y | C | |
| V.M.2.f.4 | Testing | | Each waste sample shall be analyzed using one of the following test methods for determining the benzene concentration in a waste stream: | Administrative Requirement | Y | C | |
| V.M.2.f.4.a | Testing | | Method 8020, Aromatic Volatile Organics, in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in §61.18 of 40 CFR 61); | Procedures | Y | C | |
| V.M.2.f.4.b | Testing | | Method 8021, Volatile Organic Compounds in Water by Purge and Trap Capillary Column Gas Chromatography with Photo-ionization and Electrolytic Conductivity Detectors in Series in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in §61.18 of 40 CFR 61); | Procedures | Y | C | |
| V.M.2.f.4.c | Testing | | Method 8240, Gas Chromatography/Mass Spectrometry for Volatile Organics in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in § 61.18 of 40 CFR 61); | Procedures | Y | C | |
| V.M.2.f.4.d | Testing | | Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics: Capillary Column Technique in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in § 61.18 of 40 CFR 61); | Procedures | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/N | Type C/I | |
| V.M.2.f.4.e | Testing | | Method 602, Purgeable Aromatics, as described in 40 CFR part 136, appendix A, Test Procedures for Analysis of Organic Pollutants, for wastewaters for which this is an approved EPA methods; or | Procedures | Y | C | |
| V.M.2.f.4.f | Testing | | Method 624, Purgeables, as described in 40 CFR Part 136, appendix A, Test Procedures for Analysis of Organic Pollutants, for wastewaters for which this is an approved EPA method. | Procedures | Y | C | |
| V.M.2.f.5 | Testing | | The flow-weighted annual average benzene concentration shall be calculated by averaging the results of the sample analyses as follows: $${}_{W}\bar{C} = \frac{1}{Q_t} \times \sum_{i=1}^{n} (Q_i)(C_i)$$ C =Flow-weighted annual average benzene concentration for waste stream, ppmw. Qt=Total annual waste quantity for waste stream, kg/yr (lb/yr). n=Number of waste samples (at least 3). Qi=Annual waste quantity for waste stream represented by Ci, kg/yr (lb/yr). Ci=Measured concentration of benzene in waste sample i, ppmw. | Records Review | Y | C | |
| | | | | | Y | C | |
| | | | | | Y | C | |
| | | | | | Y | C | |
| | | | | | Y | C | |
| | | | | | Y | C | |
| | | | | | Y | C | |
| V.M.3.a | Monitoring | [§61.132(b)] | Following the installation of any control equipment used to meet the requirements of V.M.1.c and V.M.1.d above, the permittee shall monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Reference Method 21 of 40 CFR Part 60, Appendix A and procedures specified in §61.245(c), and shall visually inspect each source (including sealing materials) and the ductwork of the control system for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted on a semiannual basis and at any other time after the control system is re-pressurized with blanketing gas following removal of the cover or opening of the access hatch. | Physical Inspection/Records Review | Y | C | |
| V.M.3.a.1 | Monitoring | | If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Method 21, a leak is detected. | Records Review | Y | C | |
| V.M.3.a.2 | Monitoring | | If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected | Records Review | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/ N | Type C/I | |
| V.M.3.a.3 | Monitoring | | When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected | Procedures | Y | C* | Except as identified in the attached Deviation Report as previously provided to the Department on January 30, 2013. |
| V.M.3.a.4 | Monitoring | | A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected. | Procedures | Y | C* | Except as identified in the attached Deviation Report as previously provided to the Department on January 30, 2013. |
| V.M.3.b | Monitoring | [§61.132(c)] | Following the installation of any control system used to meet the requirements of Conditions V.M.1.c and V.M.1.d above, the permittee shall conduct a maintenance inspection of the control system on an annual basis for evidence of system abnormalities, such as blocked or plugged lines, sticking valves, plugged condensate traps, and other maintenance defects that could result in abnormal system operation. The permittee shall make a first attempt at repair within 5 days, with repair within 15 days of detection | Physical Inspection/Records Review | Y | C* | Except as identified in the attached Deviation Report as previously provided to the Department on January 30, 2013. |
| V.M.3.c | Monitoring | [§61.133(c)] | Following the installation of any control equipment used to meet the requirements of Condition V.M.1.f above, the permittee shall monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Method 21 (40 CFR part 60, appendix A) and the procedures specified in V.M.3.vv below, and shall visually inspect each source (including sealing materials) for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted semiannually and at any other time the cover is removed | Physical Inspection/Records Review | Y | C | |
| V.M.3.c.1 | Monitoring | | If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Method 21, a leak is detected. | Records Review | Y | C | |
| V.M.3.c.2 | Monitoring | | If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected. | Procedures | Y | C | |
| V.M.3.c.3 | Monitoring | | When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected. | Procedures | Y | C | |
| V.M.3.c.4 | Monitoring | | A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected. | Procedures | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/N | Type. C/I | |
| V.M.3.d | Monitoring | [§61.135(d)] | Each exhauster shall be monitored quarterly to detect leaks by the methods specified in V.M.3.uu below except as provided in §61.136(d) and paragraphs V.M.3.e through V.M.3.g below. | Records Review | Y | C | |
| V.M.3.d.1 | Monitoring | | If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. | Records Review | Y | C | |
| V.M.3.d.2 | Monitoring | | When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after it is detected, except as provided in V.M.3.aa and V.M.3.bb below. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. | Procedures | Y | C | |
| V.M.3.e | Monitoring | [§61.135(e)] | Each exhauster equipped with a seal system that includes a barrier fluid system and that prevents leakage of process fluids to the atmosphere is exempt from the requirements of Condition V.M.3.d above provided the following requirements are met: | Design Parameter | Y | C | |
| V.M.3.e.1 | Monitoring | | Each exhauster seal system is: | Administrative Requirement | Y | C | |
| V.M.3.e.1.a | Monitoring | | Operated with the barrier fluid at a pressure that is greater than the exhauster stuffing box pressure; or | Design Parameter | Y | C | |
| V.M.3.e.1.b | Monitoring | | Equipped with a barrier fluid system that is connected by a closed vent system to a control device that complies with the requirements of Conditions V.M.3.ii through V.M.3.tt below and V.M.1.mm above; or | Design Parameter | Y | C | |
| V.M.3.e.1.c | Monitoring | | Equipped with a system that purges the barrier fluid into a process stream with zero benzene emissions to the atmosphere. | Design Parameter | Y | C | |
| V.M.3.e.2 | Monitoring | | The barrier fluid is not in benzene service. | Procedures | Y | C | |
| V.M.3.e.3 | Monitoring | | Each barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both. | Design Parameter | Y | C | |
| V.M.3.e.4 | Monitoring | | Each sensor as described in Condition V.M.3.e.3) above: | Administrative Requirement | Y | C | |
| V.M.3.e.4.a | Monitoring | | Shall be checked daily or shall be equipped with an audible alarm. | Procedures/Design Parameter | Y | C | |
| V.M.3.e.4.b | Monitoring | | The permittee shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. | Records Review | Y | C | |
| V.M.3.e.5 | Monitoring | | If the sensor indicates failure of the seal system, the barrier system, or both (based on the criterion determined under Condition V.M.3.e.4)b) above, a leak is detected. | Records Review | Y | C | |
| V.M.3.e.6 | Monitoring | | When a leak is detected: | Administrative Requirement | Y | C | |
| V.M.3.e.6.a | Monitoring | | It shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Conditions V.M.3.dd through V.M.3.hh below. | Procedures | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/N | Type C/I | |
| V.M.3.e.6.b | Monitoring | | A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. | Procedures | Y | C | |
| V.M.3.f | Monitoring | [§61.135(f)] | An exhauster is exempt from the requirements of Condition V.M.3.d above if it is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a control device that complies with the requirements of Conditions V.M.3.ii through V.M.3.tt below and V.M.1.mm above except as provided in Condition V.M.3.g.1) below. | Design Parameter | Y | C | |
| V.M.3.g | Monitoring | [§61.135(g)] | Any exhauster that is designated, as described in V.M.4.g below for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of Condition V.M.3.d above if the exhauster: | Records Review | Y | C | |
| V.M.3.g.1 | Monitoring | | Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the methods specified in §61.245(c); and | Records Review | Y | C | |
| V.M.3.g.2 | Monitoring | | Is tested for compliance with Condition V.M.3.g.1) above initially upon designation, annually, and at other times requested by the Administrator and the Department. | Records Review | Y | C | |
| V.M.3.h | Monitoring | [§61.135(h)] | Any exhauster that is in vacuum service is excluded from the requirements of this 40 CFR 61, Subpart L if it is identified as required in Condition V.M.4.g.5) below. | Design Parameter | Y | C | |
| V.M.3.i | Monitoring | [§61.242-2(a)] | Each pump shall be: | Administrative Requirement | Y | C | |
| V.M.3.i.1 | Monitoring | | Monitored monthly to detect leaks by the methods specified in Condition V.M.3.uu below, except as provided §61.242-1(c) and V.M.1.r and V.M.1.s above. | Records Review | Y | C | |
| V.M.3.i.2 | Monitoring | | Checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. | Physical Inspection/Records Review | Y | C | |
| V.M.3.j | Monitoring | [§61.242-2(b)] | If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. If there are indications of liquids dripping from the pump seal, a leak is detected. | Records Review | Y | C | |
| V.M.3.k | Monitoring | [§61.242-2(c)] | When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Conditions V.M.3.dd through V.M.3.hh below. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. | Procedures | Y | C | |
| V.M.3.l | Monitoring | [§61.242-2(d)] | Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements in Conditions V.M.3.i and V.M.3.j above, provided the following requirements are met: | Design Parameter | Y | C | |

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| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/N | Type C/I | |
| V.M.3.I.1 | Monitoring | | Each dual mechanical seal system is: | Administrative Requirement | Y | C | |
| V.M.3.I.1.a | Monitoring | | Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or | Procedures | Y | C | |
| V.M.3.I.1.b | Monitoring | | Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of §61.242-11; or | Design Parameter | Y | C | |
| V.M.3.I.1.c | Monitoring | | Equipped with a system that purges the barrier fluid into a process stream with zero VHAP emissions to atmosphere. | Design Parameter | Y | C | |
| V.M.3.I.2 | Monitoring | | The barrier fluid is not in VHAP service and, if the pump is covered by standards under 40 CFR part 60, is not in VOC service. | Records Review | Y | C | |
| V.M.3.I.3 | Monitoring | | Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both. | Design Parameter | Y | C | |
| V.M.3.I.4 | Monitoring | | Each pump is checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. | Physical Inspection/Records Review | Y | C | |
| V.M.3.I.4.a | Monitoring | | If there are indications of liquid dripping from the pump seal at the time of the weekly inspection, the pump shall be monitored as specified in §61.245 to determine the presence of VOC and VHAP in the barrier fluid. | Records Review | Y | C | |
| V.M.3.I.4.b | Monitoring | | If the monitor reading (taking into account any background readings) indicates the presence of VHAP, a leak is detected. For the purpose of this paragraph, the monitor may be calibrated with VHAP, or may employ a gas chromatography column to limit the response of the monitor to VHAP, at the option of the owner or operator. | Records Review | Y | C | |
| V.M.3.I.4.c | Monitoring | | If an instrument reading of 10,000 ppm or greater (total VOC) is measured, a leak is detected. | Records Review | Y | C | |
| V.M.3.I.5 | Monitoring | | Each sensor as described in Condition V.M.3.I.3) above is checked daily or is equipped with an audible alarm. | Procedures/Design Parameter | Y | C | |
| V.M.3.I.6 | Monitoring | | Based on design considerations and operating experience, the permittee determines: | Administrative Requirement | Y | C | |
| V.M.3.I.6.a | Monitoring | | Criteria applicable to the presence and frequency of drips and to the sensor that indicates failure of the seal system, the barrier fluid system, or both. | Procedures | Y | C | |
| V.M.3.I.6.b | Monitoring | | If indications of liquids dripping from the pump seal exceed the criteria established in Condition V.M.3.I.6)a) above, or if, based on the criteria established in Condition V.M.3.I.6)a) above, the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected. | Records Review | Y | C | |

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| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/ N | Type C/I | |
| V.M.3.l.6.c | Monitoring | | When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after it is detected, except as provided in V.M.3.dd through V.M.3.hh below. | Procedures | Y | C | |
| V.M.3.l.6.d | Monitoring | | A first attempt at repair shall be made no later than five calendar days after each leak is detected. | Procedures | Y | C | |
| V.M.3.m | Monitoring | [§61.242-2(e)] | Any pump that is designated, as described in V.M.4.g below, for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements in Conditions V.M.3.i, V.M.3.k and V.M.3.l above if the pump: | Records Review | Y | C | |
| V.M.3.m.1 | Monitoring | | Has no externally actuated shaft penetrating the pump housing, | Design Parameter | Y | C | |
| V.M.3.m.2 | Monitoring | | is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in §61.245(c), and | Records Review | Y | C | |
| V.M.3.m.3 | Monitoring | | Is tested for compliance with Condition V.M.3.m.2) above initially upon designation, annually, and at other times requested by the Administrator and the Department. | Records Review | Y | C | |
| V.M.3.n | Monitoring | [§61.242-2(f)] | If any pump is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal or seals to a process or fuel gas system or to a control device that complies with the requirements of ConditionsV.M.3.ii through V.M.3.tt below and V.M.1.mm above, it is exempt from the requirements of Conditions V.M.3.i through V.M.3.m above. | Design Parameter | Y | C | |
| V.M.3.o | Monitoring | [§61.242-2(g) | Any pump that is designated, as described in Condition V.M.4.h.1) below, as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of Conditions V.M.3.i and V.M.3.l.4) through V.M.3.l.6) above if: | Records Review | Y | C | |
| V.M.3.o.1 | Monitoring | | The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with Condition V.M.3.i above; and | Engineering Judgement | Y | C | |
| V.M.3.o.2 | Monitoring | | The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in Condition V.M.3.k above if a leak is detected. | Procedures | Y | C | |
| V.M.3.p | Monitoring | [61.242-4(b)(1)] | After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in Conditions V.M.3.dd through V.M.3.hh below. | Records Review | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/N | Type C/I | |
| V.M.3.q | Monitoring | [§61.242-4(b)(2)] | No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in Condition V.M.3.vv below. | Procedures | Y | C | |
| V.M.3.r | Monitoring | [§61.242-7(a)] | Each valve shall be monitored monthly to detect leaks by the method specified in V.M.3.uu below and shall comply with Conditions V.M.3.s through V.M.3.v below, except as provided in Conditions V.M.3.w, V.M.3.x, and V.M.3.y below, V.M.1.nn through V.M.1.uu above and §61.242-1(c). | Procedures | Y | C | |
| V.M.3.s | Monitoring | [§61.242-7(b)] | If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. | Records Review | Y | C | |
| V.M.3.t | Monitoring | [§61.242-7(c)] | Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months. | Procedures/Records Review | Y | C | |
| V.M.3.u | Monitoring | [§61.242-7(d)] | When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in Conditions V.M.3.dd through V.M.3.hh below. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. | Procedures | Y | C | |
| V.M.3.v | Monitoring | [§61.242-7(e)] | First attempts at repair include, but are not limited to, the following best practices where practicable: | Administrative Requirement | Y | C | |
| V.M.3.v.1 | Monitoring | | Tightening of bonnet bolts; | Procedures | Y | C | |
| V.M.3.v.2 | Monitoring | | Replacement of bonnet bolts; | Procedures | Y | C | |
| V.M.3.v.3 | Monitoring | | Tightening of packing gland nuts; and | Procedures | Y | C | |
| V.M.3.v.4 | Monitoring | | Injection of lubricant into lubricated packing. | Procedures | Y | C | |
| V.M.3.w | Monitoring | [§61.242-7(f)] | Any valve that is designated, as described in Condition V.M.4.g.2) below, for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of Condition V.M.3.r above if the valve: | Records Review | Y | C | |
| V.M.3.w.1 | Monitoring | | Has no external actuating mechanism in contact with the process fluid; | Design Parameter | Y | C | |
| V.M.3.w.2 | Monitoring | | Is operated with emissions less than 500 ppm above background, as measured by the method specified in Condition V.M.3.vv below; and | Procedures | Y | C | |
| V.M.3.w.3 | Monitoring | | Is tested for compliance with Condition V.M.3.w.2) above initially upon designation, annually, and at other times requested by the Administrator and the Department. | Records Review | Y | C | |
| V.M.3.x | Monitoring | [§61.242-7(g)] | Any valve that is designated, as described in V.M.4.h.1) below, as an unsafe-to-monitor valve is exempt from the requirements of Condition V.M.3.r above if: | Records Review | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
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| | | | | Method | Y/N | Type C/I | |
| V.M.3.x.1 | Monitoring | | The permittee of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with Condition V.M.3.r above; and | Engineering Judgement | Y | C | |
| V.M.3.x.2 | Monitoring | | The permittee of the valve has a written plan that requires monitoring of the valve as frequent as practicable during safe-to-monitor times. | Procedures | Y | C | |
| V.M.3.y | Monitoring | [§61.242-7(h)] | Any valve that is designated, as described in Condition V.M.4.h.2) below, as a difficult-to-monitor valve is exempt from the requirements of Condition V.M.3.r above if: | Procedures | Y | C | |
| V.M.3.y.1 | Monitoring | | The permittee of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface; | Records Review | Y | C | |
| V.M.3.y.2 | Monitoring | | The process unit within which the valve is located is an existing process unit; and | Records Review | Y | C | |
| V.M.3.y.3 | Monitoring | | The permittee of the valve follows a written plan that requires monitoring of the valve at least once per calendar year. | Procedures | Y | C | |
| V.M.3.z | Monitoring | [§61.242-8] | If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pressure relief devices in liquid service and connectors, the permittee shall follow either one of the following procedures, except as provided in §61.242-1(c): | Administrative Requirement | Y | C | |
| V.M.3.z.1 | Monitoring | | The permittee shall monitor the equipment within 5 days by the method specified in V.M.3.uu below or §61.245(b) and shall comply with the requirements of Conditions V.M.3.aa through V.M.3.cc below. | Procedures/Records Review | Y | C | |
| V.M.3.z.2 | Monitoring | | The permittee shall eliminate the visual, audible, olfactory, or other indication of a potential leak. | Procedures | Y | C | |
| V.M.3.aa | Monitoring | [§61.242-8(b)] | If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. | Records Review | Y | C | |
| V.M.3.bb | Monitoring | [§61.242-8(c)] | When a leak is detected: | Administrative Requirement | Y | C | |
| V.M.3.bb.1 | Monitoring | | It shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Conditions V.M.3.dd through V.M.3.hh below. | Procedures | Y | C | |
| V.M.3.bb.2 | Monitoring | | The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. | Procedures | Y | C | |
| V.M.3.cc | Monitoring | [§61.242-8(d)] | First attempts at repair include, but are not limited to, the best practices described under Condition V.M.3.v above. | Procedures | Y | C | |
| V.M.3.dd | Monitoring | [§61.242-10(a)] | Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown. | Procedures | Y | C | |

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| V.M.3.ee | Monitoring | [§61.242-10(b)] | Delay of repair of equipment for which leaks have been detected will be allowed for equipment that is isolated from the process and that does not remain in VHAP service. | Procedures | Y | C | |
| V.M.3.ff | Monitoring | | Delay of repair for valves will be allowed if: | Administrative Requirement | Y | C | |
| V.M.3.ff.1 | Monitoring | | The permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and | Records Review | Y | C | |
| V.M.3.ff.2 | Monitoring | [§61.242-10(c)] | When repair procedures are affected, the purged material is collected and destroyed or recovered in a control device complying with Conditions V.M.3.ii through V.M.3.tt below and V.M.1.mm above. | Procedures | Y | C | |
| V.M.3.gg | Monitoring | [§61.242-10(d)] | Delay of repair for pumps will be allowed if: | Administrative Requirement | Y | C | |
| V.M.3.gg.1 | Monitoring | | Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and | Procedures | Y | C | |
| V.M.3.gg.2 | Monitoring | | Repair is completed as soon as practicable, but not later than 6 months after the leak was detected. | Procedures | Y | C | |
| V.M.3.hh | Monitoring | [§61.242-10(e)] | Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown. | Procedures | Y | C | |
| V.M.3.ii | Monitoring | [§61.242-11(a)] | The permittee of closed-vent systems and control devices used to comply with provisions of 40 CFR Part 61, Subpart V shall comply with the provisions of Conditions V.M.1.n through V.M.1.mm above and V.M.3.i through V.M.3.tt below, except as provided in §61.242-1(c). | Design Parameter | Y | C | |
| V.M.3.jj | Monitoring | [§61.242-11(b)] | Vapor recovery systems (for example, condensers and absorbers) shall be designed and operated to recover the organic vapors vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent. | Design Parameter | Y | C | |
| V.M.3.kk | Monitoring | [§61.242-11(c)] | Enclosed combustion devices shall be designed and operated to reduce the VHAP emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent, or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760 °C. | Design Parameter | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
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| | | | | Method | Y/N | Type C/I | |
| V.M.3.ll | Monitoring | [§61.242-11(d)] | Flares used to comply with 40 CFR 61, Subpart V shall comply with the requirements of §60.18. | Administrative Requirement | Y | C | |
| V.M.3.mm | Monitoring | [§61.242-11(e)] | The permittee of control devices that are used to comply with the provisions of 40 CFR Part 61, Subpart V shall monitor these control devices to ensure that they are operated and maintained in conformance with their design. | Procedures/Records Review | Y | C | |
| V.M.3.nn | Monitoring | [§61.242-11(f)] | Except as provided in Conditions V.M.3.qq through V.M.3.ss below, each closed vent system shall be inspected according to the following procedures and schedule, as applicable. | Administrative Requirement | Y | C | |
| V.M.3.nn.1 | Monitoring | | If the vapor collection system or closed vent system is constructed of hard-piping, the permittee shall comply with the following requirements: | Design Parameter | Y | C | |
| V.M.3.nn.1.a | Monitoring | | Conduct an initial inspection according to the procedures in Condition V.M.3.uu below; and | Administrative Requirement | Y | C | |
| V.M.3.nn.1.b | Monitoring | | Conduct annual visual inspections for visible, audible, or olfactory indications of leaks. | Physical Inspection/Records Review | Y | C | |
| V.M.3.nn.2 | Monitoring | | If the vapor collection system or closed vent system is constructed of ductwork, the permittee shall: | Design Parameter | Y | C | |
| V.M.3.nn.2.a | Monitoring | | Conduct an initial inspection according to the procedures in Condition V.M.3.uu below; and | Physical Inspection/Records Review | Y | C | |
| V.M.3.nn.2.b | Monitoring | | Conduct annual inspections according to the procedures in Condition V.M.3.uu below. | Physical Inspection/Records Review | Y | C | |
| V.M.3.oo | Monitoring | [§61.242-11(g)] | Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided for in Condition V.M.3.pp below. | Records Review | Y | C | |
| V.M.3.oo.1 | Monitoring | | A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. | Procedures | Y | C | |
| V.M.3.oo.2 | Monitoring | | Repair shall be completed no later than 15 calendar days after the leak is detected. | Procedures | Y | C | |
| V.M.3.pp | Monitoring | [§61.242-11(h)] | Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown, or if the permittee determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown. | Procedures | Y | C | |
| V.M.3.qq | Monitoring | [§61.242-11(i)] | If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of Conditions V.M.3.nn.1)a) through V.M.3.nn.2) above. | Design Parameter | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
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| | | | | Method | Y/N | Type C/I | |
| V.M.3.rr | Monitoring | [§61.242-11(j)] | Any parts of the closed vent system that are designated, as described in Condition V.M.3.tt.1) below, as unsafe-to-inspect are exempt from the inspection requirements of Conditions V.M.3.nn.1)a) through V.M.3.nn.2) above if they comply with the following requirements: | Records Review | Y | C | |
| V.M.3.rr.1 | Monitoring | | The permittee determines that the equipment is unsafe-to-inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with Conditions V.M.3.nn.1)a) through V.M.3.nn.2) above; and | Engineering Judgement | Y | C | |
| V.M.3.rr.2 | Monitoring | | The permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times. | Physical Inspection/Records Review | Y | C | |
| V.M.3.ss | Monitoring | [§61.242-11(k)] | Any parts of the closed vent system that are designated as difficult-to-inspect are exempt from the inspection requirements of Conditions V.M.3.nn.1)a) through V.M.3.nn.2) above if they comply with the following requirements: | Records Review | Y | C | |
| V.M.3.ss.1 | Monitoring | | The permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and | Records Review | Y | C | |
| V.M.3.ss.2 | Monitoring | | The permittee has a written plan that requires inspection of the equipment at least once every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum. | Physical Inspection/Records Review | Y | C | |
| V.M.3.tt | Monitoring | [§61.242-11(l)] | The permittee shall record the following information: | Administrative Requirement | Y | C | |
| V.M.3.tt.1 | Monitoring | | Identification of all parts of the closed vent system that are designated as unsafe-to-inspect, an explanation of why the equipment is unsafe-to-inspect, and the plan for inspecting the equipment. | Records Review | Y | C | |
| V.M.3.tt.2 | Monitoring | | Identification of all parts of the closed vent system that are designated as difficult-to-inspect, an explanation of why the equipment is difficult-to-inspect, and the plan for inspecting the equipment. | Records Review | Y | C | |
| V.M.3.tt.3 | Monitoring | | For each inspection during which a leak is detected, a record of the information specified in Condition V.M.4.e. | Administrative Requirement | Y | C | |
| V.M.3.tt.4 | Monitoring | | For each inspection conducted in accordance with Condition V.M.3.uu below during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. | Physical Inspection/Records Review | Y | C | |
| V.M.3.tt.5 | Monitoring | | For each visual inspection conducted in accordance with Condition V.M.3.nn.1)b) above during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. | Physical Inspection/Records Review | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
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| | | | | Method | Y/N | Type C/I | |
| V.M.3.uu | Monitoring | [§61.245(b)] | Monitoring, as required in Conditions V.M.1.n through V.M.1.rr above, V.M.3.i through V.M.3.tt above, §V.M.1.vv through V.M.1.zz above, V.M.1.i and V.M.1.j above and V.M.3.d through V.M.3.h above, shall comply with the following requirements: | Administrative Requirement | Y | C | |
| V.M.3.uu.1 | Monitoring | | Monitoring shall comply with Method 21 of Appendix A of 40 CFR Part 60. | Procedures | Y | C | |
| V.M.3.uu.2 | Monitoring | | The detection instrument shall meet the performance criteria of Method 21. | Design Parameter | Y | C | |
| V.M.3.uu.3 | Monitoring | | The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21. | Procedures | Y | C | |
| V.M.3.uu.4 | Monitoring | | Calibration gases shall be: | Administrative Requirement | Y | C | |
| V.M.3.uu.4.a | Monitoring | | Zero air (less than 10 ppm of hydrocarbon in air); and | Procedures | Y | C | |
| V.M.3.uu.4.b | Monitoring | | A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane. | Procedures | Y | C | |
| V.M.3.uu.5 | Monitoring | | The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21. | Procedures | Y | C | |
| V.M.3.vv | Monitoring | [§61.245(c)] | When equipment is tested for compliance with or monitored for no detectable emissions, the permittee shall comply with the following requirements: | Administrative Requirement | Y | C | |
| V.M.3.vv.1 | Monitoring | | The requirements of Conditions V.M.3.uu.1) through V.M.3.uu.4) above shall apply. | Administrative Requirement | Y | C | |
| V.M.3.vv.2 | Monitoring | | The background level shall be determined, as set forth in Method 21. | Procedures | Y | C | |
| V.M.3.vv.3 | Monitoring | | The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21. | Procedures | Y | C | |
| V.M.3.vv.4 | Monitoring | | The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance. | Procedures | Y | C | |
| V.M.3.ww | Monitoring | [§61.245(d)(1)] | Each piece of equipment within a process unit that can conceivably contain equipment in VHAP service is presumed to be in VHAP service unless the permittee demonstrates that the piece of equipment is not in VHAP service. For a piece of equipment to be considered not in VHAP service, it must be determined that the percent VHAP content can be reasonably expected never to exceed 10 percent by weight. For purposes of determining the percent VHAP content of the process fluid that is contained in or contacts equipment, procedures that conform to the methods described in ASTM Method D-2267 (incorporated by the reference as specified in §61.18) shall be used. | Procedures | Y | C | |

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| V.M.3.xx | Monitoring | [§61.245(d)(2)] | The permittee may use engineering judgment rather than the procedures in Condition V.M.3.ww above to demonstrate that the percent VHAP content does not exceed 10 percent by weight, provided that the engineering judgment demonstrates that the VHAP content clearly does not exceed 10 percent by weight. When the permittee and the Department do not agree on whether a piece of equipment is not in VHAP service, however, the procedures in Condition V.M.3.ww above shall be used to resolve the disagreement. If the permittee determines that a piece of equipment is in VHAP service, the determination can be revised only after following the procedures in Condition V.M.3.ww above. | Engineering Judgement | Y | C | |
| V.M.3.yy | Monitoring | [§61.245(d)(3)] | Samples used in determining the percent VHAP content shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare. | Records Review | Y | C | |
| V.M.3.zz | Monitoring | [ACHD Installation Permit 0052-I004a and §2102.04.e] | The permittee shall inspect the Methanol tanks (V-400 and V-410) and the MEA/Methanol tank (V-430) daily in order to comply with Condition V.M.1.ccc above when the equipment is in operation. | Physical Inspection/Records Review | Y | C | |
| V.M.4.a | Record Keeping | [§61.138(a)] | The following information pertaining to the design of control equipment installed to comply with Conditions V.M.1.a through V.M.1.g above and Conditions V.M.3.a and V.M.3.b shall be recorded and kept in a readily accessible location. | Records Review | Y | C | |
| V.M.4.a.1 | Record Keeping | | Detailed schematics, design specifications, and piping and instrumentation diagrams. | Records Review | Y | C | |
| V.M.4.a.2 | Record Keeping | | The dates and descriptions of any changes in the design specifications. | Records Review | Y | C | |
| V.M.4.b | Record Keeping | [§61.138(b)] | The following information pertaining to sources subject to Conditions V.M.1.a through V.M.1.e above and sources subject to Conditions V.M.1.f and V.M.1.g above shall be recorded and maintained for 2 years following each semiannual (and other) inspection and each annual maintenance inspection: | Records Review | Y | C | |
| V.M.4.b.1 | Record Keeping | | The date of the inspection and the name of the inspector. | Records Review | Y | C | |
| V.M.4.b.2 | Record Keeping | | A brief description of each visible defect in the source or control equipment and the method and date of repair of the defect. | Records Review | Y | C | |
| V.M.4.b.3 | Record Keeping | | The presence of a leak, as measured using the method described in Condition V.M.3.vv above. The record shall include the date of attempted and actual repair and method of repair of the leak. | Records Review | Y | C | |
| V.M.4.b.4 | Record Keeping | | A brief description of any system abnormalities found during the annual maintenance inspection, the repairs made, the date of attempted repair, and the date of actual repair. | Records Review | Y | C | |

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| | | | | Method | Y/N | Type C/I | |
| V.M.4.c | Record Keeping | [§61.246(a)] | Each permittee subject to the provisions of 40 CFR 61, Subpart V shall comply with the recordkeeping requirements of this section. The permittee of more than one process unit subject to the provisions of this 40 CFR Part 61, Subpart V may comply with the recordkeeping requirements for these process units in one recordkeeping system if the system identifies each record by each process unit. | Records Review | Y | C | |
| V.M.4.d | Record Keeping | [§61.246(b)] | When each leak is detected as specified in Conditions V.M.3.i through V.M.3.k above, V.M.1.t through V.M.1.cc above, V.M.3.r through V.M.3.cc above and V.M.3.d through V.M.3.h above, the following requirements apply: | Records Review | Y | C | |
| V.M.4.d.1 | Record Keeping | | A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment. | Records Review | Y | C | |
| V.M.4.d.2 | Record Keeping | | The identification on a valve may be removed after it has been monitored for 2 successive months as specified in Condition V.M.3.t above and no leak has been detected during those 2 months. | Records Review | Y | C | |
| V.M.4.d.3 | Record Keeping | | The identification on equipment, except on a valve, may be removed after it has been repaired. | Records Review | Y | C | |
| V.M.4.e | Record Keeping | [§61.246(c)] | When each leak is detected as specified in Conditions V.M.3.i through V.M.3.k above, V.M.1.t through V.M.1.cc above, V.M.3.r through V.M.3.cc above and V.M.3.d through V.M.3.h above, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location: | Records Review | Y | C | |
| V.M.4.e.1 | Record Keeping | | The instrument and operator identification numbers and the equipment identification number. | Records Review | Y | C | |
| V.M.4.e.2 | Record Keeping | | The date the leak was detected and the dates of each attempt to repair the leak. | Records Review | Y | C | |
| V.M.4.e.3 | Record Keeping | | Repair methods applied in each attempt to repair the leak. | Records Review | Y | C | |
| V.M.4.e.4 | Record Keeping | | Above 10,000 if the maximum instrument reading measured by the methods specified in Conditions V.M.3.uu through V.M.3.xx above after each repair attempt is equal to or greater than 10,000 ppm. | Records Review | Y | C | |
| V.M.4.e.5 | Record Keeping | | "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak. | Records Review | Y | C | |
| V.M.4.e.6 | Record Keeping | | The signature of the permittee (or designate) whose decision it was that repair could not be effected without a process shutdown. | Records Review | Y | C | |
| V.M.4.e.7 | Record Keeping | | The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days. | Records Review | Y | C | |
| V.M.4.e.8 | Record Keeping | | Dates of process unit shutdowns that occur while the equipment is unrepaired. | Records Review | Y | C | |
| V.M.4.e.9 | Record Keeping | | The date of successful repair of the leak. | Records Review | Y | C | |

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| V.M.4.f | Record Keeping | [§61.246(d)] | The following information pertaining to the design requirements for closed-vent systems and control devices described in V.M.3.ii through V.M.3.tt above and V.M.1.mm above shall be recorded and kept in a readily accessible location: | Records Review | Y | C | |
| V.M.4.f.1 | Record Keeping | | Detailed schematics, design specifications, and piping and instrumentation diagrams. | Records Review | Y | C | |
| V.M.4.f.2 | Record Keeping | | The dates and descriptions of any changes in the design specifications. | Records Review | Y | C | |
| V.M.4.f.3 | Record Keeping | | A description of the parameter or parameters monitored, as required in Condition V.M.3.mm above, to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring. | Records Review | Y | C | |
| V.M.4.f.4 | Record Keeping | | Periods when the closed-vent systems and control devices required in Conditions V.M.3.i through V.M.3.k above, V.M.1.d through V.M.1.i above, V.M.3.p and V.M.3.q above, and V.M.1.dd through V.M.1.gg above are not operated as designed, including periods when a flare pilot light does not have a flame. | Records Review | Y | C | |
| V.M.4.f.5 | Record Keeping | | Dates of startups and shutdowns of the closed-vent systems and control devices required in Conditions V.M.3.i through V.M.3.k above, V.M.1.d through V.M.1.i above, V.M.3.p and V.M.3.q above, and V.M.1.dd through V.M.1.gg above. | Records Review | Y | C | |
| V.M.4.g | Record Keeping | [§61.246(e)] | The following information pertaining to all equipment to which a standard applies shall be recorded in a log that is kept in a readily accessible location: | Records Review | Y | C | |
| V.M.4.g.1 | Record Keeping | | A list of identification numbers for equipment (except welded fittings) subject to the requirements of this 40 CFR Part 60, Subpart V. | Records Review | Y | C | |
| V.M.4.g.2 | Record Keeping | | A list of identification numbers for equipment that the permittee elects to designate for: | Records Review | Y | C | |
| V.M.4.g.2.a | Record Keeping | | No detectable emissions as indicated by an instrument reading of less than 500 ppm above background. | Records Review | Y | C | |
| V.M.4.g.2.b | Record Keeping | | The designation of this equipment for no detectable emissions shall be signed by the permittee. | Records Review | Y | C | |
| V.M.4.g.3 | Record Keeping | | A list of equipment identification numbers for pressure relief devices required to comply with Condition V.M.1.dd above. | Records Review | Y | C | |
| V.M.4.g.4 | Record Keeping | | The following information shall be recorded: | Records Review | Y | C | |
| V.M.4.g.4.a | Record Keeping | | The dates of each compliance test required in Conditions V.M.1.y above, V.M.1.dd above, V.M.3.p and V.M.3.q above, V.M.3.w above, and V.M.3.g above. | Records Review | Y | C | |
| V.M.4.g.4.b | Record Keeping | | The background level measured during each compliance test. | Records Review | Y | C | |
| V.M.4.g.4.c | Record Keeping | | The maximum instrument reading measured at the equipment during each compliance test. | Records Review | Y | C | |

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| V.M.4.g.5 | Record Keeping | | A list of identification numbers for equipment in vacuum service. | Records Review | Y | C | |
| V.M.4.h | Record Keeping | [§61.246(f)] | The following information pertaining to all valves subject to the requirements of Conditions V.M.4.h and V.M.4.i below and to all pumps subject to the requirements of §61.242-2(g) shall be recorded in a log that is kept in a readily accessible location: | Records Review | Y | C | |
| V.M.4.h.1 | Record Keeping | | A list of identification numbers for valves and pumps that are designated as unsafe to monitor, an explanation for each valve or pump stating why the valve or pump is unsafe to monitor, and the plan for monitoring each valve or pump. | Records Review | Y | C | |
| V.M.4.h.2 | Record Keeping | | A list of identification numbers for valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve. | Records Review | Y | C | |
| V.M.4.i | Record Keeping | | The following information shall be recorded for valves complying with Conditions V.M.1.ss through V.M.1.uu above. | Records Review | Y | C | |
| V.M.4.i.1 | Record Keeping | | A schedule of monitoring. | Records Review | Y | C | |
| V.M.4.i.2 | Record Keeping | | The percent of valves found leaking during each monitoring period. | Records Review | Y | C | |
| V.M.4.j | Record Keeping | [§61.246(h)] | The following information shall be recorded in a log that is kept in a readily accessible location: | Records Review | Y | C | |
| V.M.4.j.1 | Record Keeping | | Design criterion required in V.M.1.y and V.M.3.e.4) above and an explanation of the design criterion; and | Records Review | Y | C | |
| V.M.4.j.2 | Record Keeping | | Any changes to this criterion and the reasons for the changes. | Records Review | Y | C | |
| V.M.4.k | Record Keeping | [§61.246(i)] | The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in the applicability section of 40 CFR 61, Subpart V and other specific subparts: | Records Review | Y | C | |
| V.M.4.k.1 | Record Keeping | | An analysis demonstrating the design capacity of the process unit, and | Records Review | Y | C | |
| V.M.4.k.2 | Record Keeping | | An analysis demonstrating that equipment is not in VHAP service. | Records Review | Y | C | |
| V.M.4.l | Record Keeping | [§61.246(j)] | Information and data used to demonstrate that a piece of equipment is not in VHAP service shall be recorded in a log that is kept in a readily accessible location. | Records Review | Y | C | |
| V.M.4.m | Record Keeping | [§2103.12.j] | The permittee shall maintain records of the monthly amount of coke oven gas, in mmcf, that is: | Records Review | Y | C | |
| V.M.4.m.1 | Record Keeping | | Combusted in coke battery underfiring; | Records Review | Y | C | |
| V.M.4.m.2 | Record Keeping | | Combusted in boilers and other facilities at the Clairton Works; | Records Review | Y | C | |
| V.M.4.n | Record Keeping | [§2103.12.j] | The permittee shall maintain records of the monthly amount of natural gas, in mmcf, received from the Koppers facility gas blanketing system. | Records Review | Y | C | |

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| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
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| | | | | Method | Y/N | Type C/I | |
| V.M.4.o | Record Keeping | [§61.356(a) & §2103.12.j] | The permittee shall maintain the following records regarding benzene in facility wastes in a readily accessible location at the facility site for a period not less than five (5) years from the date the information is recorded unless otherwise specified. This information shall include: | Records Review | Y | C | |
| V.M.4.o.1 | Record Keeping | [§61.356(b)] | The identification of each waste stream at the facility subject 40 CFR Part 61, Subpart FF, and indicate whether or not the waste stream is controlled for benzene emissions in accordance with 40 CFR Part 61, Subpart FF. | Records Review | Y | C | |
| V.M.4.o.2 | Record Keeping | [§61.356(b)(1)] | For each waste stream not controlled for benzene emissions in accordance with 40 CFR Part 61, Subpart FF, the records shall include all test results, measurements, calculations, and other documentation used to determine the following information for the waste stream: waste stream identification, water content, whether or not the waste stream is a process wastewater stream, annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity. | Records Review | Y | C | |
| V.M.4.p | Record Keeping | [ACHD Installation Permit No. 0052-I004a and §2103.12.j] | The permittee shall keep monthly records of the throughput, the types of liquids stored and the maximum true vapor pressure of the liquid as stored in storage tanks V-400, V-410 and V-430. | Records Review | Y | C | |
| V.M.4.q | Record Keeping | [§2105.12(d)] | For volatile organic compounds whose storage temperature is governed by ambient weather conditions, the vapor pressure under actual storage conditions shall be determined using a temperature which is representative of the average storage temperature for the hottest month of the year in which such storage takes place. | Records Review | Y | C | |
| V.M.5.a | Reporting | [§61.138(e)] | The permittee shall submit a statement in writing notifying the Administrator and the Department that the requirements of 40 CFR 61, Subparts L & V, have been implemented. The statement is to contain the following information for each source: | Report Submission | Y | C | |
| V.M.5.a.1 | Reporting | | Type of source (e.g., a light-oil sump or pump). | Records Review | Y | C | |
| V.M.5.a.2 | Reporting | | For equipment in benzene service, equipment identification number and process unit identification; percent by weight benzene in the fluid at the equipment; and process fluid state in the equipment (gas/vapor or liquid). | Records Review | Y | C | |
| V.M.5.a.3 | Reporting | | Method of compliance with the standard (e.g., "gas blanketing," "monthly leak detection and repair," or "equipped with dual mechanical seals"). | Records Review | Y | C | |
| V.M.5.b | Reporting | [§61.138(f)] | The permittee shall submit a report semiannually in accordance with General Condition III.15.d above, which includes the following information: | Report Submission | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/N | Type C/I | |
| V.M.5.b.1 | Reporting | | For sources subject to Conditions V.M.1.a through V.M.1.e above and sources subject to Conditions V.M.1.f and V.M.1.g above, | Records Review | Y | C | |
| V.M.5.b.1.a | Reporting | | A brief description of any visible defect in the source or ductwork, | Records Review | Y | C | |
| V.M.5.b.1.b | Reporting | | The number of leaks detected and repaired, and | Records Review | Y | C | |
| V.M.5.b.1.c | Reporting | | A brief description of any system abnormalities found during each annual maintenance inspection that occurred in the reporting period and the repairs made. | Records Review | Y | C | |
| V.M.5.b.2 | Reporting | | For equipment in benzene service subject to V.M.1.i above, information required by V.M.5.c. | Records Review | Y | C | |
| V.M.5.b.3 | Reporting | | For each exhauster subject to V.M.1.i and V.M.1.j above and V.M.3.d through V.M.3.h above for each quarter during the semiannual reporting period, | Records Review | Y | C | |
| V.M.5.b.3.a | Reporting | | The number of exhausters for which leaks were detected as described in Conditions V.M.3.d and V.M.3.e.5) above, | Records Review | Y | C | |
| V.M.5.b.3.b | Reporting | | The number of exhausters for which leaks were repaired as required in Conditions V.M.3.d and V.M.3.e.6) above | Records Review | Y | C | |
| V.M.5.b.3.c | Reporting | | The results of performance tests to determine compliance with Condition V.M.3.g above conducted within the semiannual reporting period. | Records Review | Y | C | |
| V.M.5.b.4 | Reporting | | A statement signed by the permittee stating whether all provisions of 40 CFR Part 61, Subpart L, have been fulfilled during the semiannual reporting period. | Records Review | Y | C | |
| V.M.5.b.5 | Reporting | | Revisions to items reported according to Condition V.M.5.a above if changes have occurred since the initial report or subsequent revisions to the initial report. | Records Review | Y | C | |
| V.M.5.c | Reporting | [§61.247(b)] | The semiannual report in Condition V.M.5.b above shall also include the following information: | Records Review | Y | C | |
| V.M.5.c.1 | Reporting | | Process unit identification. | Records Review | Y | C | |
| V.M.5.c.2 | Reporting | | For each month during the semiannual reporting period, | Records Review | Y | C | |
| V.M.5.c.2.a | Reporting | | Number of valves for which leaks were detected as described in V.M.3.s above or V.M.1.ee through V.M.1.gg above. | Records Review | Y | C | |
| V.M.5.c.2.b | Reporting | | Number of valves for which leaks were not repaired as required in V.M.3.u above. | Records Review | Y | C | |
| V.M.5.c.2.c | Reporting | | Number of pumps for which leaks were detected as described in V.M.3.j above. | Records Review | Y | C | |
| V.M.5.c.2.d | Reporting | | Number of pumps for which leaks were not repaired as required in V.M.3.k above. | Records Review | Y | C | |
| V.M.5.c.2.e | Reporting | | Number of compressors for which leaks were detected as described in V.M.1.v above. | Records Review | Y | C | |
| V.M.5.c.2.f | Reporting | | Number of compressors for which leaks were not repaired as required in V.M.1.w above. | Records Review | Y | C | |
| V.M.5.c.2.g | Reporting | | The facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible. | Records Review | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/ N | Type C/I | |
| V.M.5.c.2.h | Reporting | | Dates of process unit shutdowns which occurred within the semiannual reporting period. | Records Review | Y | C | |
| V.M.5.c.2.i | Reporting | | The results of all performance tests and monitoring to determine compliance with no detectable emissions and with Conditions V.M.1.nn through V.M.1.aaa above conducted within the semiannual reporting period. | Records Review | Y | C | |
| V.M.5.d | Reporting | [§61.247(d)] | An owner or operator electing to comply with the provisions of Conditions V.M.1.nn through V.M.1.aaa above shall notify the Administrator and the Department of the alternative standard selected 90 days before implementing either of the provisions. | Records Review | Y | C | |
| V.M.5.e | Reporting | [§61.357(a)(1), (a)(2), (a)(3) and (c)] | If the total annual benzene quantity from facility waste is less than 10 Mg/yr (11 ton/yr) but is equal to or greater than 1 Mg/yr (1.1 ton/yr), then the permittee shall submit to the Administrator and the Department a report that updates the following information: | Records Review | Y | C | |
| V.M.5.e.1 | Reporting | [§61.357(a)(1)] | Total annual benzene quantity from facility waste determined in accordance with Condition V.M.2.b above. | Records Review | Y | C | |
| V.M.5.e.2 | Reporting | [§61.357(a)(2)] | A table identifying each waste stream and whether or not the waste stream will be controlled for benzene emissions in accordance with the requirements of 40 CFR 61, Subpart FF. | Records Review | Y | C | |
| V.M.5.e.3 | Reporting | [§61.357(a)(3)] | For each waste stream identified as not being controlled for benzene emissions in accordance with the requirements of 40 CFR 61, Subpart FF, the following information shall be added to the table: | Records Review | Y | C | |
| V.M.5.e.3.a | Reporting | | Whether or not the water content of the waste stream is greater than 10 percent; | Records Review | Y | C | |
| V.M.5.e.3.b | Reporting | | Whether or not the waste stream is a process wastewater stream, product tank drawdown, or landfill leachate; | Records Review | Y | C | |
| V.M.5.e.3.c | Reporting | | Annual waste quantity for the waste stream; | Records Review | Y | C | |
| V.M.5.e.3.d | Reporting | | Range of benzene concentrations for the waste stream; | Records Review | Y | C | |
| V.M.5.e.3.e | Reporting | | Annual average flow-weighted benzene concentration for the waste stream; and | Records Review | Y | C | |
| V.M.5.e.3.f | Reporting | | Annual benzene quantity for the waste stream. | Records Review | Y | C | |
| V.M.5.e.4 | Reporting | [§61.357(c)] | The report shall be submitted annually and whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 10 Mg/yr (11 ton/yr) or more. If the information in the annual report required by Conditions V.M.5.e.1) through V.M.5.e.3) above is not changed in the following year, the permittee may submit a statement to that effect. | Report Submission | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/N | Type C/I | |
| V.M.5.f | Reporting | [ACHD Installation Permit No. 0052-I004a and §2103.12.k.1] | The types of liquid stored in storage tanks V-400, V-410 and V-430, and the 12-month rolling totals of the throughput shall be reported to the Department on a semi-annual basis. | Records Review | Y | C | |
| V.M.5.g | Reporting | [ACHD Installation Permit No. 0052-I004a and §2103.12.k.1] | The permittee shall submit notification of intent to store any new material in storage tanks V-400, V-410 and V-430 other than methanol (V-400 and V-410) or MEA/methanol (V-430), to the Department a minimum of ten (10) working days prior to the intended store date. This notification shall at a minimum include the Material Safety Data Sheet and emission calculation for the new material. | Report Submission | Y | C | |
| V.M.6.a | Work Practice Standards | [§2105.06; RACT Plan 234] | The By-Products Plant Clean Coke Oven Gas Blanketing System and all process units blanketed by this system shall be properly maintained and operated according to good engineering and air pollution control practices at all times. | Records Review | Y | C | |

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| Title V Citation | :gory | Regulation | Requirement | Compliance | | | C .ents |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/ N | Type C/I | |
| V.N.1.a | Restrictions | §2105.40.a; §60.254(a) | The permittee shall not operate, or allow to be operated, the continuous barge unloaders in such manner that the opacity of visible emissions from the coal unloading operation, excluding uncombined water: | N/A | | | |
| V.N.1.a.1 | Restrictions | | Equal or exceed an opacity of 20% for a period or periods aggregating more than three (3) minutes in any 60 minute period; or, | Direct Measurement & Record Review | Y | C | |
| V.N.1.a.2 | Restrictions | | Equal or exceed an opacity of 60% at any time. | Direct Measurement & Record Review | Y | C | |
| V.N.1.b | Restrictions | §2104.05 | The permittee shall not conduct, or allow to be conducted, any materials handling operation in such manner that emissions from such operation are visible at or beyond the property line of the affected source. | Direct Measurement & Record Review | Y | C | |
| V.N.1.c | Restrictions | §60.254(a) | The permittee shall not cause to be discharged into the atmosphere from the No. 2 Continuous Barge Unloader gases which exhibit 20 percent opacity or greater. | Direct Measurement & Record Review | Y | C | |
| V.N.1.d | Restrictions | §60.11(c) | The opacity standards in condition V.N.1.c shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in 40CFR Part 60 Subpart Y. | Direct Measurement & Record Review | Y | C | |
| V.N.2.a | Testing | §60255(a) | An owner or operator of each affected facility that commenced construction, reconstruction, or modification on or before April 28, 2008, must conduct all performance tests required by §60.8 to demonstrate compliance with the applicable emission standards using the methods identified in §60.257. | Record Review | Y | C | |
| V.N.2.b | Testing | §60.11(b) | Compliance with opacity standards in condition V.N.1.c shall be determined by conducting observations in accordance with Method 9 in appendix A of subpart 60 or any alternative method that is approved by the Administrator and the Department, or as provided in §60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard). | Record Review | Y | C | |
| V.N.2.c | Testing | §2103.12.h.1 | The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 above and Article XXI §2108.02. | Record Review | Y | C | |
| V.N.3.a | Monitoring | §2103.12.i] | The permittee shall perform annual visible emission observations for a period of one hour for the No. 1 and No. 2 Continuous Barge Unloaders to determine compliance with Condition V.N.1.a above. | Record Review | Y | C | |
| V.N.4 | Record Keeping | §2103.12.j | The permittee shall record the annual visible emission observations. | Record Review | Y | C | |
| V.N.5 | Reporting | §2103.12.k | The permittee shall submit semiannual reports to the Department and the annual visible emission observations in accordance with General Condition III.15.d above. | Record Review | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/ N | Type C/I | |
| V.N.6.a | Work Practice Standards | §60.11(d) | At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator and the Department which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. | Engineering Judgement | Y | C | |
| V.N.7.a | Additional Requirements | §60.11(g) | For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. | Administrative | Y | C | |
| V.N.7.b | Additional Requirements | §60.12 | No owner or operator subject to the provisions of this part shall 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 an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. | Administrative | Y | C | |

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| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/ N | Type C/I | |
| V.O.1.a | Restrictions | §2105.40.a | The permittee shall not operate, or allow to be operated, the pedestal crane unloader in such manner that the opacity of visible emissions from the coal unloading operation, excluding uncombined water: | N/A | | | |
| V.O.1.a.1 | Restrictions | | Equal or exceed an opacity of 20% for a period or periods aggregating more than three (3) minutes in any 60 minute period; or, | Direct Measurement & Record Review | Y | C | |
| V.O.1.a.2 | Restrictions | | Equal or exceed an opacity of 60% at any time. | Direct Measurement & Record Review | Y | C | |
| V.O.1.b | Restrictions | §2104.05 | The permittee shall not conduct, or allow to be conducted, any materials handling operation in such manner that emissions from such operation are visible at or beyond the property line of the affected source. | Record Review | Y | C | |
| V.O.2 | Testing | §2103.12.h.1 | The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 above and Article XXI §2108.02. | Record Review | Y | C | |
| V.O.3 | Monitoring | §2103.12.i | The permittee shall perform annual visible emission observations for a period of one (1) hour for the Pedestal Crane Unloader to determine compliance with Condition V.N.1.a above. | Record Review | Y | C | |
| V.O.4 | Record Keeping | §2103.12.j | The permittee shall record the annual visible emission observations. | Record Review | Y | C | |
| V.O.5 | Reporting | §2103.12.k | The permittee shall submit semiannual reports to the Department and the annual visual emission observations in accordance with General Condition III.15.d above. | Record Review | Y | C | |

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| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
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| | | | | Method | Y/ N | Type C/I | |
| V.P.1.a | Restrictions | §2104.40.a | The permittee shall not operate, or allow to be operated, the clam shell unloader in such manner that the opacity of visible emissions from the coal unloading operation, excluding uncombined water: | N/A | | | |
| V.P.1.a.1 | Restrictions | | Equal or exceed an opacity of 20% for a period or periods aggregating more than three (3) minutes in any 60 minute period; or, | Direct Measurement & Record Review | Y | C | |
| V.P.1.a.2 | Restrictions | | Equal or exceed an opacity of 60% at any time. | Direct Measurement & Record Review | Y | C | |
| V.P.1.b | Restrictions | §2104.05 | The permittee shall not conduct, or allow to be conducted, any materials handling operation in such manner that emissions from such operation are visible at or beyond the property line of the affected source. | Record Review | Y | C | |
| V.P.2 | Testing | §2103.12.h.1 | The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 above and Article XXI §2108.02. | Record Review | Y | C | |
| V.P.3 | Monitoring | §2103.12.i | The permittee shall perform annual visible emission observations for a period of one (1) hour for the Wharf Crane Unloader to determine compliance with Condition V.P.1.a above. | Record Review | Y | C | |
| V.P.4 | Record Keeping | §2103.12.j | The permittee shall record the annual visual emission observations. | Record Review | Y | C | |
| V.P.5 | Reporting | §2103.12.k | The permittee shall submit semiannual reports to the Department and the annual visual emission observations in accordance with General Condition III.15.d above. | Record Review | Y | C | |

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| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
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| | | | | Method | Y/ N | Type C/I | |
| V.Q.1.a | Restrictions | §2104.40.a | The permittee shall not operate, or allow to be operated, the Coal Transfer Station (P026) in such manner that the opacity of visible emissions from the coal unloading operation, excluding uncombined water: | N/A | | | |
| V.Q.1.a.1 | Restrictions | | Equal or exceed an opacity of 20% for a period or periods aggregating more than three (3) minutes in any 60 minute period; or, | Direct Measurement & Record Review | Y | C | |
| V.Q.1.a.2 | Restrictions | | Equal or exceed an opacity of 60% at any time. | Direct Measurement & Record Review | Y | C | |
| V.Q.1.b | Restrictions | §2104.02.e.4 | The permittee shall maintain and operate the deflector plates, hoppers and chutes installed on belts 1A and 1B. | Record Review | Y | C | |
| V.Q.1.c | Restrictions | §2104.05 | The permittee shall not conduct, or allow to be conducted, any materials handling operation in such manner that emissions from such operation are visible at or beyond the property line of the affected source. | Record Review | Y | C | |
| V.Q.2 | Testing | | The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 above and Article XXI §2108.02. (§2103.12.h.1) | Record Review | Y | C | |
| V.Q.3 | Monitoring | §2103.12.i | The permittee shall perform annual visible emission observations for a period of one (1) hour for the Coal Transfer Station (P026) to determine compliance with Condition V.Q.1.a above. | Record Review | Y | C | |
| V.Q.4 | Record Keeping | §2103.12.j | The permittee shall record the annual visual emission observations. | Record Review | Y | C | |
| V.Q.5 | Reporting | §2103.12.k | The permittee shall submit semiannual reports to the Department and the annual visual emission observations in accordance with General Condition III.15.d above. | Record Review | Y | C | |

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| Title V Citation | Category | Regulation | Requirement | Compliance Method | Compliance Y/N | Compliance Type C/I | Comments |
|---|---|---|---|---|---|---|---|
| V.R.1.a | Restrictions | §2104.01.a | The permittee shall not operate, or allow to be operated, the No. 1 Primary Coal Pulverizer in such manner that the opacity of visible emissions from the coal pulverizing operation, excluding uncombined water: | N/A | | | |
| V.R.1.a.1 | Restrictions | | Equal or exceed an opacity of 20% for a period or periods aggregating more than three (3) minutes in any 60 minute period; or, | Record Review | Y | C | |
| V.R.1.a.2 | Restrictions | | Equal or exceed an opacity of 60% at any time. | Record Review | Y | C | |
| V.R.1.b | Restrictions | §2104.02.e | The permittee shall not operate, or allow to be operated, any primary or secondary coal pulverizer listed below unless there is installed on such process an emission control device, nor shall any person operate, or allow to be operated, any pulverizer listed below in such manner that emissions of PM-10 from such process exceed at any time the applicable rate set forth below for a volume source for ambient air quality impact dispersion modeling purposes, or if the required emission control device results in the process becoming a point source for ambient air quality impact dispersion modeling purposes, a rate which results in no more adverse ambient air quality impact than the applicable rate set forth below for a volume source. | Record Review | Y | C | |
| | | §2104.02.e.1 through e.4 | This requirement shall apply to the sum of all stack emissions from the coal pulverizers listed below including all emissions from any air pollution control device outlet(s) associated with the pulverizers. All fugitive emissions from the coal pulverizers shall be included in the sum of all stack emissions unless the stack emissions can be accurately measured and all fugitive emissions do not exceed the standards established by §2104.01 or any alternative standard(s) established for such source pursuant to §2104.01 | Process Knowledge | Y | C | |
| | | | **SPECIFIC PROCESS SOURCE** — **VOLUME SOURCE MAXIMUM ALLOWABLE EMISSION RATE** | | | | |
| | | | 1. #1 Primary Coal Pulverizer — 5.17 grains/ton of coal | Process Knowledge | Y | C | |
| | | | 2. #1 Secondary Coal Pulverizer — 11.86 grains/ton of coal | Process Knowledge | Y | C | |
| | | | 3. #2 Primary Coal Pulverizer — 8.26 grains/ton of coal | Process Knowledge | Y | C | |
| | | | 4. #2 Secondary Coal Pulverizer — 11.02 grains/ton of coal | Process Knowledge | Y | C | |
| | | | The permittee shall install a direct feed chute and distribution plough at the #2 secondary pulverizer and enclose all coal feed chutes on the pulverzers. | Process Knowledge | Y | C* | The compliance certification contained in this application is based on the understanding that §2104.02.e "...enclose all coal feed chutes...", requires the enclosure of all feed chutes to the pulverizers per Paragraph 14, page 7 of the GASP Agreement, "...enclose all feed chutes to the pulverizers..." |
| V.R.1.c | Restrictions | §2104.02.e.1 through e.4 | The permittee shall use dust suppressant (e.g. chemical, oil, or water suppressant to minimize emissions) on coal prior to entry into any pulverizer. | Record Review | Y | C | |

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| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/N | Type C/I | |
| V.R.1.d | Restrictions | §2104.05 | The permittee shall not conduct, or allow to be conducted, any materials handling operation in such manner that emissions from such operation are visible at or beyond the property line of the U. S. Steel Clairton Works. | Record Review | Y | C | |
| V.R.2 | Testing | §2103.12.h.1 | The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 above and Article XXI §2108.02. | Record Review | Y | C | |
| V.R.3 | Monitoring | §2103.12.i | The permittee shall monitor the total amount and type of dust suppressant applied to the coal at all of the pulverizers on a monthly basis. | Record Review | Y | C | |
| V.R.4 | Record Keeping | §2103.12.j | The permittee shall record and maintain monthly records of the tons of coal processed through the Primary and Secondary Coal Pulverizers. | Record Review | Y | C | |
| V.R.5 | Reporting | §2103.12.k | The permittee shall submit reports semiannually to the Department as required in General Condition III.15.d above and the type and total amount of dust suppressant applied al all of the pulverizers. | Record Review | Y | C | |

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| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/ N | Type C/I | |
| V.S.1.a | Restrictions | §2104.40.a | The permittee shall not operate, or allow to be operated, the pulverized coal surge bins and bunkers (P031) in such manner that the opacity of visible emissions from the coal unloading operation, excluding uncombined water: | N/A | | | |
| V.S.1.a.1 | Restrictions | | Equal or exceed an opacity of 20% for a period or periods aggregating more than three (3) minutes in any 60 minute period; or, | Direct Measurement & Record Review | Y | C | |
| V.S.1.a.2 | Restrictions | | Equal or exceed an opacity of 60% at any time. | Direct Measurement & Record Review | Y | C | |
| V.S.1.b | Restrictions | §2104.05 | The permittee shall not conduct, or allow to be conducted, any materials handling operation in such manner that emissions from such operation are visible at or beyond the property line of the affected source. | Record Review | Y | C | |
| V.S.2 | Testing | §2103.12.h.1 | The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 above and Article XXI §2108.02. | Record Review | Y | C | |
| V.S.3 | Monitoring | §2103.12.i | The permittee shall perform annual visible emission observations for a period of one (1) hour at the Coal Surge Bins and Bunkers (P031) to determine compliance with Condition V.S.1.a.1) above. | Record Review | Y | C | |
| V.S.4 | Recordkeeping | §2103.12.j | The permittee shall record the annual visual emission observations. | Record Review | Y | C | |
| V.S.5 | Reporting | §2103.12.k | The permittee shall submit semiannual reports to the Department and the annual visible emission observations in accordance with General Condition III.15.d above. | Record Review | Y | C | |

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| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/ N | Type C/I | |
| V.T.1.a | Restrictions: | §2104.40.a | The permittee shall not operate, or allow to be operated, the coke transfer operations (P032 and P033) in such manner that the opacity of visible emissions from the coal unloading operation, excluding uncombined water: | N/A | | | |
| V.T.1.a.1 | Restrictions: | | Equal or exceed an opacity of 20% for a period or periods aggregating more than three (3) minutes in any 60 minute period; or, | Direct Measurement & Record Review | Y | C | |
| V.T.1.a.2 | Restrictions: | | Equal or exceed an opacity of 60% at any time. | Direct Measurement & Record Review | Y | C | |
| V.T.1.b | Restrictions: | §2104.05 | The permittee shall not conduct, or allow to be conducted, any materials handling operation in such manner that emissions from such operation are visible at or beyond the property line of the affected source. | Record Review | Y | C | |
| V.T.2 | Testing | §2103.12.h.1 | The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 above and Article XXI §2108.02. | Record Review | Y | C | |
| V.T.3 | Monitoring | §2103.12.i | The permittee shall perform annual visible emission observations for a period of one (1) hour for the Coke Transfer operations (P032 & P033) to determine compliance with Condition V.T.1.aV.N.1.a above. | Record Review | Y | C | |
| V.T.4 | Record Keeping | §2103.12.j | The permittee shall record the annual visual emission observations. | Record Review | Y | C | |
| V.T.5 | Reporting | §2103.12.k | The permittee shall submit semiannual reports to the Department and the annual visual emission observations in accordance with General Condition III.15.d above. | Record Review | Y | C | |

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| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/ N | Type C/I | |
| V.U.1.a | Restrictions: | §2104.40.a | The permittee shall not operate, or allow to be operated, the No. 1 or No. 2 Coke Screening Station (P034 & P035) in such manner that the opacity of visible emissions from the screening operation, excluding uncombined water: | N/A | | | |
| V.U.1.a.1 | Restrictions: | | Equal or exceed an opacity of 20% for a period or periods aggregating more than three (3) minutes in any 60 minute period; or, | Direct Measurement & Record Review | Y | C | |
| V.U.1.a.2 | .Restrictions: | | Equal or exceed an opacity of 60% at any time. | Direct Measurement & Record Review | Y | C | |
| V.U.1.b | Restrictions: | §2104.02.g | The permittee shall not operate or allow to be operated, the No. 1 or No. 2 Coke Screening Station unless each screening station, at a minimum, is located and maintained within the enclosure in existence as of February 1, 1994. | Record Review | Y | C | |
| V.U.1.c | Restrictions: | §2104.05 | The permittee shall not conduct, or allow to be conducted, any materials handling operation in such manner that emissions from such operation are visible at or beyond the property line of the affected source. | Record Review | Y | C | |
| V.U.2 | Testing | §2103.12.h.1 | The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 above and Article XXI §2108.02. | Record Review | Y | C | |
| V.U.3 | Monitoring | §2103.12.i | The permittee shall perform annual visible emission observations for a period of one (1) hour for the No. 1 and No. 2 Coke Screening Stations (P03 & P035) to determine compliance with Condition V.U.1.a V.N.1.a above. | Record Review | Y | C | |
| V.U.4 | Record Keeping | §2103.12.j | The permittee shall record the coke screening stations (P034 & P035) annual visible emission observations. | Record Review | Y | C | |
| V.U.5 | Reporting | §2103.12.k | The permittee shall submit semiannual reports to the Department and the annual visual emission observations in accordance with General Condition III.15.d above. | Record Review | Y | C | |

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| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/ N | Type C/I | |
| V.V.1.a | Restrictions | Installation Permit 0052-I003, 1/23/98 and §2104.40.a | The permittee shall not operate, or allow to be operated, Coke Screening Station No. 3 (P036) in such manner that the opacity of visible emissions from the coke loading operation, excluding uncombined water: | N/A | | | |
| V.V.1.a.1 | Restrictions | | Equal or exceed an opacity of 20% for a period or periods aggregating more than three (3) minutes in any 60 minute period; or, | Record Review | | | |
| V.V.1.a.2 | Restrictions | | Equal or exceed an opacity of 60% at any time. | Record Review | | | |
| V.V.1.b | Restrictions | Installation Permit 0052-I003, 1/23/98 and §2104.05 | The permittee shall not conduct, or allow to be conducted, any materials handling operation in such manner that emissions from such operation are visible at or beyond the property line of the affected source. | Record Review | | | |
| V.V.1.c | Restrictions | Installation Permit 0052-I003, 1/23/98 | Particulate emissions from the baghouse outlet at the No. 3 Screening Station shall not exceed 0.78 lb/hour or 3.42 tons/year. | Direct Measurement & Record Review | | | |
| V.V.1.d | Restrictions | §2104.02.f and Consent Order and Agreement (COA), Third Amendment, July 6, 2011, Condition K | The permittee shall not operate, or allow to be operated, the Coke Screening #3 process, unless there is installed on such process an emission control device, nor shall the permittee operate, or allow to be operated such process in such manner that emissions of PM-10 from such process exceed 2.8 grains/ton of coke at any time. | Direct Measurement & Record Review | | | |
| V.V.1.e | Restrictions | §2104.02.f | The emission limitation in Condition V.V.1.d above shall apply to the sum of all stack emissions from Coke Screening #3 process including all emissions from any air pollution control device outlet(s) associated with the No. 3 Screening Station. All fugitive emissions from the screening station shall be included in the sum of all stack emissions for purposes of this condition unless the stack emissions can be accurately measured and+D14 all fugitive emissions do not exceed the standards established by §2104.01 or any alternative standard(s) established for the No. 3 Screening Station such pursuant to §2104.01. | Record Review | | | |
| V.V.1.f | Restrictions | Installation Permit 0052-I003, 1/23/98 and §2105.03 | The baghouse for the No. 3 Screening Station shall be properly installed, maintained and operated consistent with good air pollution control practice, and in accordance with the manufacturer's recommendations and practices at all times that coke is screened, conveyed, and loaded out. | Engineering Judgement | | | |
| V.V.1.g | Restrictions | §2105.3; COA, Third Amendment, July 6, 2011 | The pressure drop across the No. 3 Coke Screening Station baghouse shall be maintained between 1 and 8 inches W.C. | Direct Measurement & Record Review | | | |

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| Title V Citation | Category | Regulation | Requirement | Compliance Method | Compliance Y/N | Compliance Type C/I | Comments |
|---|---|---|---|---|---|---|---|
| V.V.1.h | Restrictions | Installation Permit 0052-I003, 1/23/98; §2105.03 and COA, Third Amendment, July 6, 2011 | Emissions from Coke Screening Station No. 3 (PO36) shall not exceed the limits listed in Table V-V-1 at any time: | Direct Measurement & Record Review | | | The No 3 Screening was not in operation during the report period. It has been replaced by the No 4 Screening Station. It no longer exists. |
| | | | POLLUTANT HOURLY LIMIT (lb/hr) ANNUAL LIMIT | | | | |
| | | | PM/PM 10 (Coke screening baghouse) 0.78 3.42 | | | | |
| V.V.2.a | Testing Requirements | §2102.04.e and §2108.02.e | The permittee shall perform testing on the No. 3 coke screening station baghouse outlet and shall conduct subsequent emission testing at least once every five (5) years thereafter, to determine compliance with the PM/PM-10 emission limitation of 0.78 lbs/hour as specified in Table 1 above. Particulate emission tests shall be conducted according to the methodology specified in 40 CFR 60, Appendix A, Methods 1 through 5. The permittee shall submit a stack test protocol to the Department at least 45 days prior to the test dates. During each stack test performed, simultaneous visible emission evaluations shall be conducted according to the methodology specified in 40 CFR 60, Appendix A, Method 9, except for the provisions of Section 2.5 of Method 9. | Record Review | | | |
| V.V.2.b | Testing Requirements | §2103.12.h.1 | The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 above and Article XXI §2108.02. | Record Review | | | |
| V.V.3 | Monitoring Requirements | §2103.12.i and Consent Order and Agreement (COA), Third Amendment, July 6, 2011 | The permittee shall monitor and record the pressure drop across the baghouse. | Record Review | | | |
| V.V.4.a | Record Keeping Requirements | Installation Permit 0052-I003, 1/23/98 and §2103.12.j | Monthly records shall be maintained of all coke tonnages processed and loaded out through the screening station. Monthly records shall be kept of all inspections, maintenance, repairs, and emission control unit operating data. | Record Review | | | |
| V.V.4.b | Record Keeping Requirements | §2103.12.j and Consent Order and Agreement (COA), Third Amendment, July 6, 2011 | The permittee shall record the pressure drop across the baghouse at least once per day. | Record Review | | | |

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| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/ N | Type C/I | |
| V.V.5 | Reporting Requirements | §2103.12.k | The permittee shall submit semiannual reports to the Department in accordance with the General Condition III.15.d above of the monthly tons of coke throughput to the No. 3 Coke Screening Station and the daily reading of the pressure drop across the baghouse as specified in Condition V.V.4.b above. | Record Review | | | |
| V.V.6 | Workpractice Requirements | §2103.12.h.1; §2108.02.b, §2108.02.c. | None except as provided elsewhere in the permit | Record Review | | | |
| V.V.7 | Additional Requirements | §2103.12.d; COA, Third Amendment, July 6, 2011 | The permittee shall achieve continuous compliance with the No. 3 Screening Station particulate emission limitations in Article XXI, §2104.02.f, or when the proposed revision to §2104.02.f is approved by U. S. EPA in a SIP revision. | Record Review | | | |
| V.V.7.1 | Additional Requirements: | | Begin construction of a new baghouse six months after receipt of an installation permit and revision of the emission limit in §2104.02.f; and | Record Review | | | |
| V.V.7.2 | Additional Requirements | | Complete construction of the new baghouse 12 months after receipt of installation permit. | Record Review | | | |

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| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/ N | Type C/I | |
| V.W.1.a | Restrictions | §2104.01.a | The permittee shall not operate, or allow to be operated, the boom conveyor (P041) in such manner that the opacity of visible emissions excluding uncombined water: | N/A | | | |
| V.W.1.a.1 | Restrictions | | Equal or exceed an opacity of 20% for a period or periods aggregating more than three (3) minutes in any 60 minute period; or, | Direct Measurement & Record Review | Y | C | |
| V.W.1.a.2 | Restrictions | | Equal or exceed an opacity of 60% at any time. | Direct Measurement & Record Review | Y | C | |
| V.W.1.b | Restrictions | §2104.05 | The permittee shall not conduct, or allow to be conducted, any materials handling operation in such manner that emissions from such operation are visible at or beyond the property line of the affected source. | Record Review | Y | C | |
| V.W.2 | Testing Requirements | | None, except as may be provided elsewhere in this permit. | N/A | | | |
| V.W.3 | Monitoring Requirements: | §2103.12.i | The permittee shall perform monthly visible emission observations of the boom conveyor operations (P026) to determine compliance with Condition V.W.1.a above. | Record Review | Y | C | |
| V.W.4 | Record Keeping Requirements: | §2103.12.j | The permittee shall record the monthly tons of coal transferred by the boom conveyor and the monthly visual emission observations. | Record Review | Y | C | |
| V.W.5 | Reporting Requirements | §2103.12.k | The permittee shall submit semiannual reports to the Department in accordance with General Condition III.15.d above of the monthly tons of coal transferred by the boom conveyor and the monthly visual emission observations. | Record Review | Y | C | |

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| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/ N | Type C/I | |
| V.X.1.a | Restrictions | §2104.01.a | The permittee shall not operate, or allow to be operated, the coal and coke recycle screening operation (P042) in such manner that the opacity of visible emissions from the screening operation, excluding uncombined water | N/A | | | |
| V.X.1.a.1 | Restrictions | | Equal or exceed an opacity of 20% for a period or periods aggregating more than three (3) minutes in any 60 minute period; or, | Direct Measurement & Record Review | Y | C | |
| V.X.1.a.2 | Restrictions | | Equal or exceed an opacity of 60% at any time. | Direct Measurement & Record Review | Y | C | |
| V.X.1.b | Restrictions | §2104.02.c.3 | The permittee shall not operate, or allow to be operated, the Coal and Coke Recycle Screening (P042) operation, in such manner that emissions of particulate matter from such process exceed 11.2 pounds per hour (lb/hr) at any time as determined by the formula set forth in §2104.02.c. This emission limitation shall apply to the sum of all stack emissions from process P042 process including all emissions from any air pollution control device outlet(s) associated with process P042. All fugitive emissions from process P042 shall be included in the sum of all stack emissions for purposes of this emission limitation, unless the stack emissions can be accurately measured and all fugitive emissions do not exceed the standards established by §2104.01 or any alternative standard(s) established for process P042 pursuant to §2104.01. | Record Review | Y | C | |
| V.X.2 | Testing Requirements | | None, except as may be provided elsewhere in this permit. | N/A | | | |
| V.X.3 | Monitoring Requirements | §2103.12.i | The permittee shall perform annual visible emission observations for a period of one (1) hour for the coal and coke recycle screening operations (P026) to determine compliance with Condition V.X.1.aV.N.1.a above. | Record Review | Y | C | |
| V.X.4 | Record Keeping Requirements | §2103.12.j | The permittee shall record the recycle screening station annual visible emission observations. | Record Review | Y | C | |
| V.X.5 | Reporting Requirements | §2103.12.k | The permittee shall submit semiannual reports to the Department in accordance with General Condition III.15.d above the annual visible emission observations. | Record Review | Y | C | |

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| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/ N | Type C/I | |
| V.Y.1.a | Restrictions | §2104.01.a | The permittee shall not operate, or allow to be operated, the coke screening operation (P043) in such manner that the opacity of visible emissions from the screening operation, excluding uncombined water: | N/A | | | |
| V.Y.1.a.1 | Restrictions | | Equal or exceed an opacity of 20% for a period or periods aggregating more than three (3) minutes in any 60 minute period; or, | Direct Measurement & Record Review | Y | C | |
| V.Y.1.a.2 | Restrictions | | Equal or exceed an opacity of 60% at any time. | Direct Measurement & Record Review | Y | C | |
| V.Y.1.b | Restrictions | §2104.02.c.3 | The permittee shall not operate, or allow to be operated, the Peters Creek Coke Screening operation, in such manner that emissions of particulate matter from such process exceed 31.3 pounds per hour (lb/hr) at any time as determined by the formula set forth in §2104.02.c. This emission limitation shall apply to the sum of all stack emissions from coke screening (P043) including all emissions from any air pollution control device outlet(s) associated with process P043. All fugitive emissions from process P043 shall be included in the sum of all stack emissions for purposes of this emission limitation unless the stack emissions can be accurately measured and all fugitive emissions do not exceed the standards established by §2104.01 of this Article or any alternative standard(s) established for process P043 pursuant to §2104.01 of this Article. | Record Review | Y | C | |
| V.Y.2 | Testing Requirements | | None, except as may be provided elsewhere in this permit. | N/A | | | |
| V.Y.3 | Monitoring Requirements | §2103.12.i | The permittee shall perform annual visible emission observations for a period of one hour for the coke screening (P043) operations to determine compliance with Condition V.Y.1.aV.N.1.a above. | Record Review | Y | C | |
| V.Y.4 | Record Keeping Requirements | §2103.12.j | The permittee shall record the annual visible emission observations. | Record Review | Y | C | |
| V.Y.5 | Reporting Requirements | §2103.12.k | The permittee shall submit semiannual reports of the visual emission observations to the Department in accordance with General Condition III.15.d above. | Record Review | Y | C | |

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| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/ N | Type C/I | |
| V.Z.1.a | Restrictions | §2103.12.h.6; §63.562(b)(1)(i) | The permittee shall equip each terminal with a vapor collection system that is designed to collect HAP vapors displaced from marine tank vessels during marine tank vessel loading operations and to prevent HAP vapors collected at one loading berth from passing through another loading berth to the atmosphere, except for those commodities exempted under §63.560(d). | Design Parameter | Y | C | |
| V.Z.1.b | Restrictions | §2103.12.h.6; §63.562(b)(1)(ii) | The permittee shall limit marine tank vessel loading operations to those vessels that are equipped with vapor collection equipment that is compatible with the terminal's vapor collection system. | Record Review | Y | C | |
| V.Z.1.c | Restrictions | §2103.12.h.6; §63.562(b)(1)(iii) | The permittee shall limit marine tank vessel loading operations to those vessels that are vapor tight and to those vessels that are connected to the vapor collection system. | Record Review | Y | C | |
| V.Z.1.d | Restrictions | §2103.12.h.6; §63.562(b)(2) | The permittee shall reduce captured HAP emissions from marine tank vessel loading operations by 97 weight-percent, as determined using methods in §63.565 (d) and (l). | Direct Measurement & Record Review | Y | C | |
| V.Z.1.e | Restrictions | §2103.12.h.6; §63.563(a) | The following procedures shall be used to determine compliance with the emissions limits under Condition V.Z.1.a above: | Record Review | Y | C | |
| V.Z.1.e.1 | Restrictions | | Vent stream by-pass requirements for the terminal's vapor collection system. | Record Review | Y | C | |
| V.Z.1.e.1.a | Restrictions | | In accordance with Condition V.Z.1.a above, each valve in the terminal's vapor collection system that would route displaced vapors to the atmosphere, either directly or indirectly, shall be secured closed during marine tank vessel loading operations either by using a car-seal or a lock-and-key type configuration, or the by-pass line from the valve shall be equipped with a flow indicator, except for those valves used for pressure/vacuum relief, analyzers, instrumentation devices, sampling, and venting for maintenance. Marine tank vessel loading operations shall not be performed with open by-pass lines. | Record Review | Y | C | |
| V.Z.1.e.1.b | Restrictions | | Repairs shall be made to valves, car-seals, or closure mechanisms no later than 15 days after a change in the position of the valve or a break in the car-seal or closure mechanism is detected or no later than prior to the next marine tank vessel loading operation, whichever is later. | Record Review | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/ N | Type C/I | |
| V.Z.1.e.2 | Restrictions | | Ship-to-shore compatibility of vapor collection systems. Following the date on which the initial performance test is completed, marine tank vessel loading operations must be performed only if the marine tank vessel's vapor collection equipment is compatible to the terminal's vapor collection system; marine tank vessel loading operations must be performed only when the marine tank vessel's vapor collection equipment is connected to the terminal's vapor collection system, as required in Condition V.Z.1.h above. | Record Review | Y | C | |
| V.Z.1.e.3 | Restrictions | §2103.12.h.6; §63.563(a)(4) | Vapor-tightness requirements of the marine vessel. The permittee shall use the procedures in paragraph V.Z.1.e.3)a), V.Z.1.e.3)b), V.Z.1.e.3)c) or V.Z.e.3)d) below to ensure that marine tank vessels are vapor tight, as required in Condition V.Z.1.b above. | Record Review | Y | C | |
| V.Z.1.e.3.a | Restrictions | §2103.12.h.6; §63.563(a)(4)(i) | Pressure test documentation for determining vapor tightness of the marine vessel. The owner or operator of a marine tank vessel shall provide a copy of the vapor-tightness pressure test documentation described in Condition V.Z.4.c below for each marine tank vessel prior to loading. The date of the test listed in the documentation must be within the preceding 12 months. The permittee must check vapor-tightness pressure test documentation for marine tank vessels loaded at positive pressure. | Record Review | Y | C | |
| V.Z.1.e.3.b | Restrictions | §2103.12.h.6; §63.563(a)(4)(ii) | Leak test documentation for determining vapor tightness of the marine vessel. If no documentation of the vapor tightness pressure test as described in paragraph V.Z.1.e.3)a) above is available, the owner or operator of a marine tank vessel shall provide the leak test documentation described in Condition V.Z.4.c. below for each tank vessel prior to loading. The date of the test listed in the documentation must be within the preceding 12 months, and the test must be conducted in accordance with procedures in §63.565(c)(2). If the marine tank vessel has failed its most recent vapor-tightness leak test at that terminal, the owner or operator of the non-vapor-tight marine tank vessel shall provide documentation that the leaks detected during the previous vapor-tightness test have been repaired and documented with a successful vapor-tightness leak test described in §63.565(c)(2) conducted during loading. | Record Review | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/ N | Type C/I | |
| | | | If the owner or operator of the marine tank vessel can document that repair is technically infeasible without cleaning and gas freeing or dry-docking the vessel, the owner or operator of the affected source may load the marine tank vessel. Following the date on which the initial performance test is completed, the permittee must check the vapor-tightness leak test documentation for marine tank vessels loaded at positive pressure. | | Y | C | |
| V.Z.1.e.3.c | Restrictions | §2103.12.h.6; §63.563(a)(4)(iii) | Leak test performed during loading using Method 21 for determining vapor tightness of the marine vessel. If no documentation of vapor tightness as described in paragraphs V.Z.1.e.3)a) or V.Z.1.e.3)b) above is available, the owner or operator of a marine tank vessel shall perform a leak test of the marine tank vessel during marine tank vessel loading operation using the procedures described in§63.565(c)(2). | Record Review | Y | C | |
| V.Z.1.e.3.c.i | Restrictions | | If no leak is detected, the owner or operator of a marine tank vessel shall complete the documentation described in Condition V.Z.4.c below prior to departure of the vessel. | Record Review | Y | C | |
| V.Z.1.e.3.c. ii | Restrictions | | If a leak is detected, the owner or operator of the marine tank vessel shall document the vapor-tightness failure for the marine tank vessel prior to departure of the vessel. The leaking component shall be repaired prior to the next marine tank vessel loading operation at a controlled terminal unless the repair is technically infeasible without cleaning and gas freeing or dry-docking the vessel. If the owner or operator of the vessel provides documentation that repair of such equipment is technically infeasible without cleaning and gas freeing or dry-docking the vessel, the equipment responsible for the leak will be excluded from future Method 21 tests until repairs are effected. A copy of this documentation shall be maintained by the owner or operator of the affected source. Repair of the equipment responsible for the leak shall occur the next time the vessel is cleaned and gas freed or dry-docked. | Record Review | Y | C | |
| | | | For repairs that are technically feasible without dry-docking the vessel, the permittee shall not load the vessel again unless the marine tank vessel owner or operator can document that the equipment responsible for the leak has been repaired. | | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/ N | Type C/I | |
| V.Z.1.e.3.d | Restrictions | §2103.12.h.6; §63.563(a)(4)(iv) | Negative pressure loading. The permittee shall ensure that a marine tank vessel is loaded with the product tank below atmospheric pressure (i.e., at negative gauge pressure). The pressure shall be measured between the facility's vapor connection and its manual isolation valve, and the measured pressure must be below atmospheric pressure. Following the date on which the initial performance test is completed, marine tank vessel loading operations for non-vapor-tight vessels must be performed below atmospheric pressure (i.e., at negative gauge pressure) in the product tank. | Direct Measurement & Record Review | Y | C | |
| V.Z.1.f | Restrictions | §2102.04.h.6 | VOC emissions from the Light Oil Barge Loading facility (P044) shall not exceed 0.17 lbs/hour and 0.75 tons/year at any time: | Emission Calculation & Record Review | Y | C | |
| V.Z.2 | Testing Requirements | §2103.12.h.1 | The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 above and Article XXI §2108.02. | Record Review | Y | C | |
| V.Z.3.a | Monitoring Requirements | | The permittee shall perform the following procedures for detecting and repairing leaks in the vapor collection systems: | Record Review | Y | C | |
| V.Z.3.a.1 | Monitoring Requirements | §2103.12.h.6; §63.5 (c) | The permittee shall inspect and monitor all ductwork and piping and connections to vapor collection systems and control devices once each calendar year using Method 21. | Record Review | Y | C | |
| V.Z.3.a.2 | Monitoring Requirements | §2103.12.h.6; §63.5 (c) | If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method, all ductwork and piping and connections to vapor collections systems and control devices shall be inspected to the extent necessary to positively identify the potential leak and any potential leaks shall be monitored within 5 days by Method 21. Each detection of a leak shall be recorded, and the leak shall be tagged until repaired. | Record Review | Y | C | |
| V.Z.3.a.3 | Monitoring Requirements | §2103.12.h.6; §63.5 (c) | When a leak is detected, a first effort to repair the vapor collection system and control device shall be made within 15 days or prior to the next marine tank vessel loading operation, whichever is later. | Record Review | Y | C | |

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| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
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| | | | | Method | Y/ N | Type C/I | |
| V.Z.3.b | Monitoring Requirements | §2103.12.h.6; §63.564(d) | The permittee complying with Condition V.Z.1.e.3)d) above that load vessels at less than atmospheric pressure (i.e., negative gauge pressure) shall measure and record the loading pressure. The permittee shall install, calibrate, maintain, and operate a recording pressure measurement device (magnehelic gauge or equivalent device) and an audible and visible alarm system that is activated when the pressure vacuum specified in Condition V.Z.1.e.3)d) above is not attained. The permittee shall place the alarm system so that it can be seen and heard where cargo transfer is controlled. The permittee shall verify the accuracy of the pressure device once each calendar year with a reference pressure monitor (traceable to National Institute of Standards and Technology (NIST) standards or an independent pressure management device dedicated for this purpose). | Record Review | Y | C | |
| V.Z.4.a | Record Keeping Requirements | §2103.12.h.6; §2103.12.f.3; §2103.25.a.1 | The permittee shall maintain in an accessible location on site an engineering report describing in detail the vent system, or vapor collection system, used to vent each vent stream to a control device. This report shall include all valves and vent pipes that could vent the stream to the atmosphere, thereby bypassing the control device, and identify which valves are car-sealed opened and which valves are car-sealed closed. | Record Review | Y | C | |
| V.Z.4.b | Record Keeping Requirements | §2103.12.h.6; §63.567(h) | The permittee shall keep the vapor-tightness documentation required under Condition V.Z.1.e.3) above on file at the source in a permanent form available for inspection. | Record Review | Y | C | |
| V.Z.4.c | Record Keeping Requirements | §2103.12.h.6; §63.567(i) | The permittee shall maintain a documentation file for each marine tank vessel loaded at that source to reflect current test results as determined by the appropriate method in §63.565(c). Updates to this documentation file shall be made at least once per year. The permittee shall include, as a minimum, the following information in this documentation: | Record Review | Y | C | |
| V.Z.4.c.1 | Record Keeping Requirements | | Test title; | Record Review | Y | C | |
| V.Z.4.c.2 | Record Keeping Requirements | | Marine vessel owner and address; | Record Review | Y | C | |
| V.Z.4.c.3 | Record Keeping Requirements | | Marine vessel identification number; | Record Review | Y | C | |
| V.Z.4.c.4 | Record Keeping Requirements | | Loading time, according to V.Z.1.e.3)b) or V.Z.1.e.3)c) above, if appropriate; | Record Review | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/ N | Type C/I | |
| V.Z.4.c.5 | Record Keeping Requirements | | Testing location; | Record Review | Y | C | |
| V.Z.4.c.6 | Record Keeping Requirements | | Date of test; | Record Review | Y | C | |
| V.Z.4.c.7 | Record Keeping Requirements | | Tester name and signature; | Record Review | Y | C | |
| V.Z.4.c.8 | Record Keeping Requirements | | Test results from §63.565(c) as appropriate; | Record Review | Y | C | |
| V.Z.4.c.9 | Record Keeping Requirements | | Documentation provided under V.Z.1.e.3)b) and V.Z.1.e.3)c)ii) above showing that the repair of leaking components attributed to a failure of a vapor-tightness test is technically infeasible without dry-docking the vessel; and | Record Review | Y | C | |
| V.Z.4.c.10 | Record Keeping Requirements | | Documentation that a marine tank vessel failing a pressure test or leak test has been repaired. | Record Review | Y | C | |
| V.Z.4.d | Record Keeping Requirements | §2103.12.h.6; §63.567(k) | When each leak of the vapor collection system is detected and repaired as specified in V.Z.3.a above, the following information required shall be maintained for 5 years: | Record Review | Y | C | |
| V.Z.4.d.1 | Record Keeping Requirements | | Date of inspection; | Record Review | Y | C | |
| V.Z.4.d.2 | Record Keeping Requirements | | Findings (location, nature, and severity of each leak); | Record Review | Y | C | |
| V.Z.4.d.3 | Record Keeping Requirements | | Leak determination method; | Record Review | Y | C | |
| V.Z.4.d.4 | Record Keeping Requirements | | Corrective action (date each leak repaired, reasons for repair interval); and | Record Review | Y | C | |
| V.Z.4.d.5 | Record Keeping Requirements | | Inspector name and signature. | Record Review | Y | C | |
| V.Z.5.a | Reporting Requirements | §2103.12.k | The permittee shall submit semiannual reports in accordance with General Condition III.15.d of the updated documentation file for each marine tank vessel that fails a pressure or leak test as required in Condition V.Z.4.c. The report shall contain the following information: | Record Review | Y | C | |
| V.Z.5.a.1 | Reporting Requirements | | Test title; | Record Review | Y | C | |
| V.Z.5.a.2 | Reporting Requirements | | Marine vessel owner and address; | Record Review | Y | C | |
| V.Z.5.a.3 | Reporting Requirements | | Marine vessel identification number; | Record Review | Y | C | |

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| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/ N | Type C/I | |
| V.Z.5.a.4 | Reporting Requirements | | Loading time, according to V.Z.1.e.3)b) or V.Z.1.e.3)c) above, if appropriate; | Record Review | Y | C | |
| V.Z.5.a.5 | Reporting Requirements | | Testing location; | Record Review | Y | C | |
| V.Z.5.a.6 | Reporting Requirements | | Date of test; | Record Review | Y | C | |
| V.Z.5.a.7 | Reporting Requirements | | Tester name and signature; | Record Review | Y | C | |
| V.Z.5.a.8 | Reporting Requirements | | Test results from §63.565(c) as appropriate; | Record Review | Y | C | |
| V.Z.5.a.9 | Reporting Requirements | | Documentation provided under V.Z.1.e.3)b) and V.Z.1.e.3)c)ii) above showing that the repair of leaking components attributed to a failure of a vapor-tightness test is technically infeasible without dry-docking the vessel; and | Record Review | Y | C | |
| V.Z.5.a.10 | Reporting Requirements | | Documentation that a marine tank vessel failing a pressure test or leak test has been repaired. | Record Review | Y | C | |
| V.Z.5.b | Reporting Requirements | §2103.12.h.6; §63.9(h) | The permittee shall submit to the Administrator and Department, according to General Conditions III.4 and III.12 above, a notification of compliance status, signed by the responsible official who shall certify its accuracy, attesting to whether the marine tank vessel loading operation has complied with the relevant standard in Conditions V.Z.1.a through V.Z.1.e above. The notification shall list: | Record Review | Y | C | |
| V.Z.5.b.1 | Reporting Requirements | | The methods that were used to determine compliance; | Record Review | Y | C | |
| V.Z.5.b.2 | Reporting Requirements | | The results of any performance tests, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted; | Record Review | Y | C | |
| V.Z.5.b.3 | Reporting Requirements | | The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods; | Record Review | Y | C | |
| V.Z.5.b.4 | Reporting Requirements | | The type and quantity of hazardous air pollutants emitted by the source (or surrogate pollutants if specified in the relevant standard), reported in units and averaging times and in accordance with the test methods specified; | Record Review | Y | C | |
| V.Z.5.b.5 | Reporting Requirements | | A description of the air pollution control equipment (or method) for each emission point, including each control device (or method) for each hazardous air pollutant and the control efficiency (percent) for each control device (or method); and | Record Review | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/ N | Type C/I | |
| V.Z.5.b.6 | Reporting Requirements | | A statement by the permittee of the as to whether the Light Oil Barge Loading (P044) has complied with the relevant standard or other requirements I 40 CFR 63, Subpart Y. | Record Review | Y | C | |
| V.Z.6.a | Work Practice Standards | §2103.12.h.6; §63.562(e) | At all times, including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain the light oil loading facility, including associated air pollution control equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Department 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 the source. | Engineering Judgment | Y | C | |
| V.Z.6.b | Work Practice Standards | §2103.12.h.6; §63.562(e)(1) | The Department will determine compliance with design, equipment, work practice, or operational emission standards by evaluating the permittees conformance with operation and maintenance requirements. | Administrative | Y | C | |
| V.Z.6.c | Work Practice Standards | §2103.12.h.6; §63.562(e)(2) | The permittee shall develop and implement a written operation and maintenance plan that describes in detail a program of corrective action for varying (i.e., exceeding baseline parameters) air pollution control equipment and monitoring equipment, based on monitoring requirements in § 63.564, used to comply with these emissions standards. The plan shall also identify all routine or otherwise predictable continuous monitoring system (thermocouples, pressure transducers, continuous emissions monitors (CEMS), etc.) variances. | Record Review | Y | C | |
| V.Z.6.c.1 | Work Practice Standards | | The plan shall specify procedures (preventive maintenance) to be followed to ensure that pollution control equipment and monitoring equipment functions properly and variances of the control equipment and monitoring equipment are minimal. | Record Review | Y | C | |
| V.Z.6.c.2 | Work Practice Standards | | The plan shall identify all operating parameters to be monitored and recorded for the air pollution control device as indicators of proper operation and shall establish the frequency at which the parameters will be monitored. (see § 63.564) | Record Review | Y | C | |

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| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
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| | | | | Method | Y/ N | Type C/I | |
| V.Z.6.c.3 | Work Practice Standards | | The permittee shall incorporate a standardized inspection schedule for each component of the control device used to comply with the emissions standards in § 63.562(b). To satisfy the requirements of this Condition, the permittee may use the inspection schedule recommended by the vendor of the control system or any other technical publication regarding the operation of the control system. | Record Review | Y | C | |
| V.Z.6.c.4 | Work Practice Standards | | The permittee shall develop and implement a continuous monitoring system (CMS) quality control program. The permittee shall develop and submit to the Department for approval upon request a site-specific performance evaluation test plan for the CMS performance evaluation required in §63.8(e) of subpart A of this part. Each quality control program shall include, at a minimum, a written protocol that describes procedures for initial and any subsequent calibration of the CMS; determination and adjustment of the calibration drift of the CMS; preventive maintenance of the CMS, including spare parts inventory; data recording, calculations, and reporting; and accuracy audit procedures, including sampling and analysis methods. The permittee shall maintain records of the procedures that are part of the quality control program developed and implemented for CMS. | Record Review | Y | C | |
| V.Z.6.d | Work Practice Standards | §2103.12.h.6; §63.562(e)(3) | Based on the results of the determination made under Condition V.Z.6.c above, the Department may require the permittee to make changes to the operation and maintenance plan for that source. Revisions may be required if the plan: | Record Review | Y | C | |
| V.Z.6.d.1 | Work Practice Standards | | Does not address a variance of the air pollution control equipment or monitoring equipment that has occurred that increases emissions; | Record Review | Y | C | |
| V.Z.6.d.2 | Work Practice Standards | | Fails to provide for operation during a variance of the air pollution control equipment or the monitoring equipment in a manner consistent with safety and good air pollution control practices; or | Record Review | Y | C | |
| V.Z.6.d.3 | Work Practice Standards | | Does not provide adequate procedures for correcting a variance of the air pollution control equipment or monitoring equipment as soon as reasonable. | Record Review | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/ N | Type C/I | |
| V.Z.6.e | Work Practice Standards | §2103.12.h.6; §63.562(e)(4) | If the operation and maintenance plan fails to address or inadequately addresses a variance event at the time the plan was initially developed, the permittee shall revise the operation and maintenance plan within 45 working days after such an event occurs. The revised plan shall include procedures for operating and maintaining the air pollution control equipment or monitoring equipment during similar variance events and a program for corrective action for such events. | Record Review | Y | C | |
| V.Z.6.f | Work Practice Standards | §2103.12.h.6; §63.562(e)(5) | The operation and maintenance plan shall be developed by the source's compliance date. The permittee shall keep the written operation and maintenance plan on record to be made available for inspection, upon request, by the Department for the life of the source. In addition, if the operation and maintenance plan is revised, the permittee shall keep previous (i.e., superseded) versions of the plan on record to be made available for inspection upon request by the Department for a period of 5 years after each revision to the plan. | Record Review | Y | C | |
| V.Z.6.g | Work Practice Standards | §2103.12.h.6; §63.562(e)(6) | To satisfy the requirements of the operation and maintenance plan, the permittee may use the source's standard operating procedures (SOP) manual, an Occupational Safety and Health Administration (OSHA) plan, or other existing plans provided the alternative plans meet the requirements of this section and are made available for inspection when requested by the Department. | Record Review | Y | C | |

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| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/N | Type C/I | |
| V.AA.1.a | Restrictions | §2103.12.a.2 | Only coke oven gas and natural gas shall be combusted in Boiler B001. | Design Parameter | Y | C | |
| V.AA.1.b | Restrictions | §2105.21.h.4 | The permittee shall not flare, mix or combust coke oven gas, or allow such gas to be flared, mixed, or combusted in Boiler No. 1, unless the concentration of sulfur compounds, measured as hydrogen sulfide, in such gas is less than or equal to 40 grains per hundred dry standard cubic feet of coke oven gas. | Direct Measurement & Record Review | Y | C | |
| V.AA.1.c | Restrictions | §2105.06.b.5; RACT Plan 234 | Emissions of NOX shall not, at any time, exceed 0.54 lb/MMBtu. | Direct Measurement & Record Review | Y | C | |
| V.AA.1.d | Restrictions | §2105.06; RACT Plan 234 | Boiler No. 1 (B001) shall have properly maintained and operated Continuous Monitoring Systems or approved alternatives for continuously monitoring the NOX concentration in the exhaust gas, meeting all the requirements of §2108.03 at all times with the exception of emergency or planned outages, repairs or maintenance. | Record Review | Y | C | |
| V.AA.1.e | Restrictions | §2105.03; RACT Plan 234 | Boiler B001 shall be properly maintained and operated according to good engineering and air pollution control practices at all times. | Engineering Judgement | Y | C | |
| V.AA.1.f | Restrictions | §2104.02.a.4; §2104.02.a.5 | Except for fuel emergencies of limited duration with prior Department approval, the permittee shall not operate, or allow to be operated, Boiler No. 1 in such manner that emissions of particulate matter exceed 0.02 pounds per million BTUs of actual heat input at any time, regardless of the type of fuel used | Emission Calculation & Record Review | Y | C | |
| V.AA.1.g | Restrictions | §2104.01.a | The permittee shall not operate, or allow to be operated, Boiler No. 1 (B001) in such manner that the opacity of visible emissions, excluding uncombined water: | N/A | Y | C | |
| V.AA.1.g.1 | Restrictions | | Equal or exceed an opacity of 20% for a period or periods aggregating more than three (3) minutes in any 60 minute period; or, | Record Review | Y | C | |
| V.AA.1.g.2 | Restrictions | | Equal or exceed an opacity of 60% at any time. | Record Review | Y | C | |
| V.AA.1.h | Restrictions | §2108.01.d; §2104.b.3 | Condition V.A.A.1.g above shall not apply to visible emission resulting solely from the cold start of Boiler B001 if such cold start has been reported as required by §2108.01.d | Record Review | Y | C | |
| V.AA.1.i | Restrictions | RACT Plan 234 | The NOX emission limitations in Condition V.AA.1.c above, shall be determined by a thirty (30) day rolling average and by a twelve (12) month rolling average of CEM data for the lbs/MMBtu and tons/yr emission limitation respectively. | Record Review | Y | C | |
| V.AA.1.j | Restrictions | §2105.06.b.5 §2105.03 | Emission Limitations: Emissions from Boiler B001 shall not exceed the limits listed in Table V-AA-1 at any time | Direct Measurement, Emission Calculation, & Record Review | | | |
| V.AA.1.j | Restrictions | | **POLLUTANT HOURLY LIMIT (lb/hr) ANNUAL LIMIT (ton/yr)** | | | | |
| V.AA.1.j | Restrictions | | Particulate Matter 15.2 66.58 | | Y | C | |
| V.AA.1.j | Restrictions | | PM-10 15.2 66.58 | | Y | C | |
| V.AA.1.j | Restrictions | | NOx 410.4 1740 | | Y | C | |
| V.AA.1.j | Restrictions | | SO2 163.50 716.11 | | Y | C | |
| V.AA.1.j | Restrictions | | A year is defined as any consecutive 12-month period | | Y | C | |
| V.AA.1.j | Restrictions | | County-only enforceable | | | | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/N | Type C/I | |
| V.AA.2.a | Restrictions | §2108.03 | The permittee shall perform Relative Accuracy Test Audits (RATA) of the NOx CEMS as specified in 25 PA Code §§139.101-139.111 | Record Review | Y | C | |
| V.AA.2.b | Testing Requirements | §2103.12.h.1; §2108.02.b, §2108.02.e. | The permittee shall perform emissions tests and evaluations for CO and VOC on Boiler 1 to develop emission factors that can be applied to quantify CO & VOC emissions. Testing for CO and VOC shall be conducted in accordance with approved EPA Methods in Appendix A of 40 CFR Part 60, Article XXI §2108.02, and as approved by the Department. Reports of the stack testing results shall be submitted to the Department within 90 days of the date of the stack test. The evaluation report shall be made available to the Department upon request and upon permit renewal. | Record Review | Y | C | |
| V.AA.2.c | Testing Requirements | §2103.12.h.1 | The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 above and Article XXI §2108.02. | Record Review | Y | C | |
| V.AA.3.a | Monitoring Requirements | §2108.03.b.2; RACT Plan 234 | The permittee shall install, operate, and maintain continuous nitrogen oxides monitoring systems and other monitoring systems to convert data to required reporting units in compliance with 25 PA Code §§139.101-139.111 relating to requirements for continuous in-stack monitoring for stationary sources. | Record Review | Y | C | |
| V.AA.3.b | Monitoring Requirements | §2103.12.i | The volume of coke oven gas and natural gas combusted in Boiler No. 1 and the H2S content of the coke oven gas shall be monitored and recorded on a daily basis (midnight to midnight). | Record Review | Y | C | |
| V.AA.4.a | Record Keeping Requirements | RACT Plan 234 | The permittee shall record all exceedances of the emission limitations for NOX as specified in Condition V.AA.1.c and V.AA.1.i above. | Record Review | Y | C | |
| V.AA.4.b | Record Keeping Requirements | §2103.12.j | The permittee shall maintain records of the daily amounts of coke oven gas and natural gas combusted and the H2S content of the coke oven gas. | Record Review | Y | C | |
| V.AA.5.a | Reporting Requirements | §2103.12.k | The permittee shall submit a semiannual report to the Department in accordance with the requirements of General Condition III.15 above that lists each exceedance of the 30-day rolling average emission limitation for $NO_X$ of 0.54 lb/MMBtu and the 12-month rolling average emission limitation for $NO_X$ of 1,750 tons/yr. The date of each exceedance shall also be listed. | Record Review | Y | C | |
| V.AA.5.b | Reporting Requirements | §2103.12.k | The permittee shall submit semiannual reports to the Department in accordance with General Condition III.15 above of the monthly usage of coke oven gas and natural gas and the monthly average H2S content of the coke oven gas. | Record Review | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/ N | Type C/I | |
| V.AA.6 | Additional Requirements | §2103.12.h.6; §2103.12.f.3; §2103.25.a.1 | 40 CFR 63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters is hereby incorporated by reference. The Department shall reopen the permit to incorporate specific requirements from 40 CFR 63, Subpart DDDDD in accordance with §2103.25.a.1. | Administrative | Y | C | |

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| Title V Citation | Category | Regulation | Requirement | Compliance Method | Y/N | Type C/I | Comments |
|---|---|---|---|---|---|---|---|
| V.BB.1.a | Restrictions | §2103.12.a.2 | Only coke oven gas and natural gas shall be combusted in Boiler No. 2 (B002). | Design Parameter | Y | C | |
| V.BB.1.b | Restrictions | §2105.21.b.4 | The permittee shall not flare, mix or combust coke oven gas, or allow such gas to be flared, mixed, or combusted in Boiler No. 2, unless the concentration of sulfur compounds, measured as hydrogen sulfide, in such gas is less than or equal to 40 grains per hundred dry standard cubic feet of coke oven gas. | Direct Measurement & Record Review | Y | C* | Except as identified in the attached Deviation Report as previously provided to the Department on January 30, 2013. |
| V.BB.1.c | Restrictions | RACT Plan 234; §2105.06.b; and §2103.12.a.2.B | Emissions of NOX shall not, at any time, exceed 0.54 lb/MMBtu. | Direct Measurement & Record Review | Y | C | |
| V.BB.1.d | Restrictions | RACT Plan 234; 25 PA Code §123.51 | Boiler No. 2 (B002) shall have properly maintained and operated Continuous Monitoring Systems or approved alternatives for continuously monitoring the NOX concentration in the exhaust gas, meeting all the requirements of §2108.03 at all times with the exception of emergency or planned outages, repairs or maintenance. | Record Review | Y | C | |
| V.BB.1.e | Restrictions | RACT Plan 234; §2105.03 | Boiler B002 shall be properly maintained and operated according to good engineering and air pollution control practices at all times. | Engineering Judgment | Y | C | |
| V.BB.1.f | Restrictions | §2104.02.a.3 and §2104.02.a.1.C | The permittee shall not operate, or allow to be operated, Boiler No. 2 in such manner that emissions of particulate matter exceed the rate established by the formula in §2104.02.a.3. | Emission Calculation & Record Review | Y | C | |
| V.BB.1.g | Restrictions | §2104.02.a.5 | As an alternative to Condition V.BB.1.f, except for fuel emergencies of limited duration with prior Department approval, the permittee shall not operate, or allow to be operated, Boilers No. 1 and No. 2 in such manner that emissions of particulate matter exceed 0.02 pounds per million BTUs of actual heat input at any time, regardless of the fuel used. | Emission Calculation & Record Review | Y | C | |
| V.BB.1.h | Restrictions | §2104.01.a and §2108.01.d | The permittee shall not operate, or allow to be operated, Boiler No. 2 (B002) in such manner that the opacity of visible emissions, excluding uncombined water: | N/A | Y | C | |
| V.BB.1.h.1 | Restrictions | | Equal or exceed an opacity of 20% for a period or periods aggregating more than three (3) minutes in any 60 minute period; or, | Record Review | Y | C | |
| V.BB.1.h.2 | Restrictions | | Equal or exceed an opacity of 60% at any time. | Record Review | Y | C | |
| V.BB.1.i | Restrictions | §2104.b.3 | Condition V.BB.1.h above shall not apply to visible emissions resulting solely from the cold start of Boiler B001 if such cold start has been reported as required by §2108.01.d. | Record Review | Y | C | |
| V.BB.1.j | Restrictions | RACT Plan 234 | The NOX emission limitations in Conditions V.BB.1.c above, shall be determined by a thirty (30) day rolling average and by a twelve (12) month rolling average of CEM data for the lbs/MMBtu and tons/yr emission limitation respectively. | Record Review | Y | C | |
| V.BB.1.k | Restrictions | §2105.06.b.5; §2105.03 | Emissions Limitations: Emissions from Boiler No. 2 (B002) shall not exceed the limits listed in Table V-FF-1 at any time: | Direct Measurement, Emission Calculation, & Record Review | | | |

| Title V Citation | Category | Regulation | Requirement | Compliance Method | Compliance Y/N | Compliance Type C/I | Comments |
|---|---|---|---|---|---|---|---|
| V.BB.1.k | Restrictions | | POLLUTANT HOURLY LIMIT (lb/hr) ANNUAL LIMIT (ton/yr) | | | | |
| V.BB.1.k | Restrictions | | Particulate Matter 9.62 42.14 | | Y | C | |
| V.BB.1.k | Restrictions | | PM-10 9.62 42.14 | | Y | C | |
| V.BB.1.k | Restrictions | | NOx 259.74 1285 | | Y | C | |
| V.BB.1.k | Restrictions | | $SO_2$ 103.48 453.22 | | Y | C* | Except as identified in the attached Deviation Report as previously provided to the Department on January 30, 2013. |
| V.BB.1.k | Restrictions | | A year is defined as any consecutive 12-month period. | | Y | C | |
| V.BB.1.k | Restrictions | | County-only enforceable. (§2103.22.d.) | | | | |
| V.BB.2.a | Testing Requirements | §2108.03 | The permittee shall perform Relative Accuracy Test Audits (RATA) of the NOX CEMS as specified in 25 PA Code §§139.101-139.111. | Record Review | Y | C | |
| V.BB.2.b | Testing Requirements | §2103.12.h.1;§2108.02.b,§2108.02.e | The permittee shall perform emissions tests and evaluations for CO and VOC on Boiler 2 to develop emission factors that can be applied to quantify CO & VOC emissions. Testing for CO and VOC shall be conducted in accordance with approved EPA Methods in Appendix A of 40 CFR Part 60, Article XXI §2108.02, and as approved by the Department. Reports of the stack testing results shall be submitted to the Department within 90 days of the date of the stack test. The evaluation report shall be made available to the Department upon request and upon permit renewal. | Record Review | Y | C | |
| V.BB.2.c | Testing Requirements | §2103.12.h.1 | The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 above and Article XXI §2108.02. | Record Review | Y | C | |
| V.BB.3.a | Monitoring Requirements | §2103.12.h.6; §2103.12.f.3; §2103.25.a.1 | The permittee shall install, operate, and maintain continuous nitrogen oxides monitoring systems and other monitoring systems to convert data to required reporting units in compliance with 25 PA Code §§139.101 - 139.111 relating to requirements for continuous in-stack monitoring for stationary sources. | Record Review | Y | C | |
| V.BB.3.b | Monitoring Requirements | §2103.12.i | The volume of coke oven gas and natural gas combusted in Boiler No. 2 and the H2S content of the coke oven gas shall be monitored and recorded on a daily basis (midnight to midnight). | Record Review | Y | C | |
| V.BB.4.a | Record Keeping Requirements | RACT Plan 234 | The permittee shall record all exceedances of the emission limitations for NOX as specified in Conditions V.BB.1.c and V.BB.1.j above. | Record Review | Y | C | |
| V.BB.4.b | Record Keeping Requirements | §2103.12.j | The permittee shall maintain records of the daily amounts of coke oven gas and natural gas combusted and the H2S content of the coke oven gas. | Record Review | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/ N | Type C/I | |
| V.BB.5.a | Reporting Requirements | §2103.12.k | The permittee shall submit a semiannual report to the Department in accordance with the requirements of General Condition III.15 above that lists each exceedance of the 30-day rolling average emission limitation for NOX of 0.54 lb/MMBtu and the 12-month rolling average emission limitation for NOX of 1,285 tons/yr. The date of each exceedance shall also be listed. | Record Review | Y | C | |
| V.BB.5.b | Reporting Requirements | §2103.12.k | The permittee shall submit semiannual reports to the Department in accordance with General Condition III.15 above of the monthly usage of coke oven gas and natural gas and the monthly average H2S content of the coke oven gas. | Record Review | Y | C | |
| V.BB.6 | Additional Requirements | §2103.12.h.6; §2103.12 §2103.25.a.1 | 40 CFR 63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters is hereby incorporated by reference. The Department shall reopened the permit to incorporate specific requirement from 40 CFR 63, Subpart DDDDD in accordance with §2013.25.a.1. | Administrative | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/N | Type C/I | |
| V.CC.1.a | Restrictions | §2103.12.a.2 | Only coke oven gas and natural gas shall be combusted in Boilers R1 and R2. | Process Knowledge | Y | C | |
| V.CC.1.b | Restrictions | §2105.21.h.4 | The permittee shall not flare, mix or combust coke oven gas, or allow such gas to be flared, mixed, or combusted in Boilers R1 and R2, unless the concentration of sulfur compounds, measured as hydrogen sulfide, in such gas is less than or equal to 40 grains per hundred dry standard cubic feet of coke oven gas. | Direct Measurement & Record Review | Y | C | Except as identified in the attached Deviation Report as previously provided to the Department on January 30, 2013. |
| V.CC.1.c | Restrictions | RACT Plan 234; §2105.06.b.5 | Emissions of NOX from each Boiler R1 or Boiler R2 shall not, at any time, exceed 0.54 lb/MMBtu. | Direct Measurement & Record Review | Y | C | |
| V.CC.1.d | Restrictions | RACT Plan 234 | Boilers R1 and R2 shall be properly maintained and operated according to good engineering and air pollution control practices at all times. | Engineering Judgement | Y | C | |
| V.CC.1.e | Restrictions | §2104.02.a.4.D | Except for fuel emergencies of limited duration with prior Department approval, the permittee shall not operate, or allow to be operated, Boilers R1 or R2 in such manner that emissions of particulate matter exceed 0.02 pounds per million BTUs of actual heat input at any time, regardless of the type of fuel used. | Emission Calculation & Record Review | Y | C | |
| V.CC.1.f | Restrictions | §2104.01.a and §2108.01.d | The permittee shall not operate, or allow to be operated, Boiler R1 or Boiler R2 in such manner that the opacity of visible emissions, excluding uncombined water: | N/A | | | |
| V.CC.1.f.1 | Restrictions | | Equal or exceed an opacity of 20% for a period or periods aggregating more than three (3) minutes in any 60 minute period; or, | Record Review | Y | C | |
| V.CC.1.f.2 | Restrictions | | Equal or exceed an opacity of 60% at any time. | Record Review | Y | C | |
| V.CC.1.g | Restrictions | §2104.b.3 | Condition V.CC.1.f above shall not apply to visible emissions resulting solely from the cold start of Boiler R1or Boiler R2, if such cold start has been reported as required by §2108.01.d. | Record Review | Y | C | |
| V.CC.1.h | Restrictions | [§2105.06.b; §2105.03] | Emissions Limitations: Emissions from each boiler (Boiler R1 and Boiler R2) shall not exceed the limits listed in Table V-CC-1 at any time: | Direct Measurement, Emission Calculation, & Record Review | | | |
| V.CC.1.h | Restrictions | | **POLLUTANT HOURLY LIMIT (lb/hr) ANNUAL LIMIT (ton/yr)** | | | | |
| V.CC.1.h | Restrictions | | Pm 4.58 20.06 | | Y | C | |
| V.CC.1.h | Restrictions | | PM-10 4.58 20.06 | | Y | C | |
| V.CC.1.h | Restrictions | | NOx 123.66 525 | | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/ N | Type C/I | |
| V.CC.1.h | Restrictions | | SO2 49.26 215.78 | | Y | C* | Except as identified in the attached Deviation Report as previously provided to the Department on January 30, 2013. |
| V.CC.1.h | Restrictions | | A year is defined as any consecutive 12-month period. | | Y | C | |
| V.CC.1.h | Restrictions | | County-only enforceable. (§2103.22.d.) | | | | |
| V.CC.2.a | Testing Requirements | RACT Plan 234 and §2108.02.c | The permittee shall perform emissions testing on Boilers R1 and R2 at least once every two years for NOX. Such testing shall be in accordance with the §2107.05, or other such methods as approved by the Department. | Record Review | Y | C | |
| V.CC.2.b | Testing Requirements | §2103.12.h.1; §2108.02.b, §2108.02.e. | The permittee shall perform emissions tests and evaluations for CO and VOC on Boilers R1 and R2 to develop emission factors that can be applied to quantify CO & VOC emissions. Testing for CO and VOC shall be conducted in accordance with approved EPA Methods in Appendix A of 40 CFR Part 60, Article XXI §2108.02, and as approved by the Department. Reports of the stack testing results shall be submitted to the Department within 90 days of the date of the stack test. The evaluation reports shall be made available to the Department upon request and at permit renewal. | Record Review | Y | C | |
| V.CC.2.c | Testing Requirements | §2103.12.h.1 | The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 above and Article XXI §2108.02. | Record Review | Y | C | |
| V.CC.3.a | Monitoring Requirements | §2103.12.i | The volume of coke oven gas and natural gas combusted in Boilers R1 and R2 and the H2S content of the coke oven gas shall be monitored and recorded on a daily basis (midnight to midnight). | Record Review | Y | C | |
| V.CC.4.a | Monitoring Requirements | RACT Plan 234 and §2103.12.j.1 | The permittee shall record and maintain records of the type and amount of each fuel combusted during each day in Boilers R1 and R2 and the H2S content of the coke oven gas. | Record Review | Y | C | |
| V.CC.5.a | Reporting Requirements | §2103.12.k | The permittee shall submit semiannual reports to the Department in accordance with General Condition III.15 above of the monthly usage of coke oven gas and natural gas in Boilers R1 and R2 and the monthly average H2S content of the coke oven gas. | Record Review | Y | C | |
| V.CC.6.a | Additional Requirements | §2103.12.h.6; §2103.12.f.3; §2103.25.a.1 | 40 CFR 63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters is hereby incorporated by reference. The Department shall reopen the permit to incorporate specific requirements from 40 CFR 63, Subpart DDDDD in accordance with §2103.25.a.1. | Administrative | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/N | Type C/I | |
| V.DD.1.a | Restrictions | | Only coke oven gas and natural gas shall be combusted in Boilers T1 and T2. [§2103.12.a.2] | Process Knowledge | Y | C | |
| V.DD.1.b | Restrictions | | The permittee shall not flare, mix or combust coke oven gas, or allow such gas to be flared, mixed, or combusted in Boilers T1 and T2, unless the concentration of sulfur compounds, measured as hydrogen sulfide, in such gas is less than or equal to 40 grains per hundred dry standard cubic feet of coke oven gas. [§2105.21.h.4] | Direct Measurement & Record Review | Y | C* | Except as identified in the attached Deviation Report as previously provided to the Department on January 30, 2013. |
| V.DD.1.c | Restrictions | | Emissions of NOX from each Boiler T1 or Boiler T2 shall not, at any time, exceed 0.54 lb/MMBtu. [RACT Plan 234; §2105.06.b.5; and §2103.12.a.2.B] | Direct Measurement & Record Review | Y | C | |
| V.DD.1.d | Restrictions | | Boilers T1 and T2 shall be properly maintained and operated according to good engineering and air pollution control practices at all times. [RACT Plan 234] | Engineering Judgement | Y | C | |
| V.DD.1.e | Restrictions | | Except for fuel emergencies of limited duration with prior Department approval, the permittee shall not operate, or allow to be operated, Boilers T1 or T2 in such manner that emissions of particulate matter exceed 0.02 pounds per million BTUs of actual heat input at any time, regardless of the type of fuel used. [§2104.02.a.4.F & G.1] | Emission Calculation & Record Review | Y | C | |
| V.DD.1.f | Restrictions | | When combusting COG and natural gas simultaneously in Boilers T1 and T2, particulate mass emissions shall not exceed the rate determined by the formula in §2104.02.a.3. The allowable emissions for COG and natural gas to be used in the formula are specified in Condition V.DD.1.e above. As an alternative to Condition V.DD.1.e, except for fuel emergencies of limited duration with prior Department approval, the permittee shall not operate, or allow to be operated, Boilers T1 or T2 in such manner that emissions of PM-10 exceed 0.12 pounds per million BTUs of actual heat input at any time, regardless of the fuel used. [ [§2104.02.a.5] | Emission Calculation & Record Review | Y | C | |
| V.DD.1.g | Restrictions | | The permittee shall not operate, or allow to be operated, Boiler T1 or Boiler T2 in such manner that the opacity of visible emissions, excluding uncombined water: [§2104.01.a and §2108.01.d] | N/A | | | |
| V.DD.1.g.1 | Restrictions | | Equal or exceed an opacity of 20% for a period or periods aggregating more than three (3) minutes in any 60 minute period; or, | Record Review | Y | C | |
| V.DD.1.g.2 | Restrictions | | Equal or exceed an opacity of 60% at any time. | Record Review | Y | C | |
| V.DD.1.h | Restrictions | | Condition V.DD.1.g above shall not apply to visible emissions resulting solely from the cold start of Boiler T1 and Boiler T2, if such cold start has been reported as required by §2108.01.d. [§2104.b.3] | Record Review | Y | C | |
| V.DD.1.i | Restrictions | | Emissions from Boiler T1 or Boiler T2 (B007 or B008) shall not exceed the limits listed in Table V-DD-1 at any time: [2105.03] | Direct Measurement, Emission Calculation, & Record Review | | | |
| V.DD.1.i | Restrictions | | **POLLUTANT HOURLY LIMIT (lb/hr) ANNUAL LIMIT (ton/yr)** | | | | |
| V.DD.1.i | Restrictions | | Particulate Matter 3.12 13.67 | | Y | C | |
| V.DD.1.i | Restrictions | | PM-10 3.12 13.67 | | Y | C | |
| V.DD.1.i | Restrictions | | NOx 84.24 358 | | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance Method | Compliance Y/N | Compliance Type C/I | Comments |
|---|---|---|---|---|---|---|---|
| V.DD.1.i | Restrictions | | SO2 33.56 146.99 | | Y | C* | Except as identified in the attached Deviation Report as previously provided to the Department on January 30, 2013. |
| V.DD.1.i | Restrictions | | A year is defined as any consecutive 12-month period. | | | | |
| V.DD.1.i | Restrictions | | County-only enforceable. (§2103.22.d.) | | | | |
| V.DD.2.a | Testing Requirements | | The permittee shall perform emissions testing on Boilers T1 and T2 at least once every two years for NOX. Such testing shall be in accordance with the §2107.05, or other such methods as approved by the Department. [RACT Plan 234 and §2108.02.c] | Record Review | Y | C | |
| V.DD.2.b | Testing Requirements | | The permittee shall perform emissions tests and evaluations for CO and VOC on Boilers T1 and T2 to develop emission factors that can be applied to quantify CO & VOC emissions. Testing for CO and VOC shall be conducted in accordance with approved EPA Methods in Appendix A of 40 CFR Part 60, Article XXI §2108.02, and as approved by the Department. Reports of the stack testing results shall be submitted to the Department within 90 days of the date of the stack test. The evaluation report shall be made available to the Department upon request and at permit renewal. (§2103.12.h.1; §2108.02.b, §2108.02.e.) | Record Review | Y | C | |
| V.DD.2.c | Testing Requirements | | The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 above and Article XXI §2108.02. (§2103.12.h.1) | Record Review | Y | C | |
| V.DD.3 | Monitoring Requirements | | The volume of coke oven gas and natural gas combusted in Boilers T1 and T2 and the H2S content of the coke oven gas shall be monitored and recorded on a daily basis (midnight to midnight). [§2103.12.i] | Record Review | Y | C | |
| V.DD.4 | Record Keeping Requirements | | The permittee shall record and maintain records of the type and amount of each fuel combusted during each day in Boilers T1 and T2 and the H2S content of the coke oven gas. [RACT Plan 234 and §2103.12.j.1] | Record Review | Y | C | |
| V.DD.5 | Reporting Requirements | | The permittee shall submit semiannual reports to the Department in accordance with General Condition III.15 above of the monthly usage of coke oven gas and natural gas in Boilers T1 and T2 and the monthly average H2S content of the coke oven gas. [§2103.12.k] | Record Review | Y | C | |
| V.DD.6 | Workpractice Requirements | | None except as provided elsewhere. | N/A | | | |
| V.DD.7 | Additional Requirements | | 40 CFR 63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters is hereby incorporated by reference. The Department shall reopen the permit to incorporate specific requirements from 40 CFR 63, Subpart DDDDD in accordance with §2103.25.a.1. [§2103.12.h.6; §2103.12.f.3; §2103.25.a.1] | Administrative | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/ N | Type C/I | |
| V.EE.1.a | Restrictions | Installation Permit 0052-I002b, January 20, 2005 and §2102.04.b.6 | The permittee shall not operate or allow to be operated the wastewater tanks and/or anhydrous ammonia loading station unless the emissions are exhausted through an enclosed flare and the flare is properly maintained and operated so that a minimum destruction efficiency of 98% is maintained. | Design Parameter | Y | C | |
| V.EE.1.b | Restrictions | Installation Permit 0052-I002b, January 20, 2005 and §2102.04.b.6 | Flare operating hours shall not exceed 2,920 hours per year for the wastewater surge tanks and 1,400 hours per year for the ammonia loading station. | Record Review | Y | C | |
| V.EE.1.c | Restrictions | Installation Permit 0052-I002b, January 20, 2005 and §2102.04.b.6 | The permittee shall operate and maintain the enclosed flare at a temperature of 1,570 degrees Fahrenheit or higher with a minimum residence time of 0.50 seconds at all times when emissions from the wastewater surge tanks and/or anhydrous ammonia loading operations are exhausted to the flare. | Design Parameter & Record Review | Y | C | |
| V.EE.1.d | Restrictions | Installation Permit 0052-I002b, January 20, 2005 and §2102.04.b.6 | Emissions Limitations: Emissions from Ammonia Flare (B010) shall not exceed the limits listed in Table V-EE-1 at any time: | Direct Measurement, Emission Calculation, & Record Review | | | |
| V.EE.1.d | Restrictions | | **POLLUTANT HOURLY LIMIT (lb/hr) ANNUAL LIMIT (ton/yr)** | | | | |
| V.EE.1.d | Restrictions | | SO2 1 1.5 | | Y | C | |
| V.EE.1.d | Restrictions | | NOx 19.8 19.03 | | Y | C | |
| V.EE.1.d | Restrictions | | CO 0.44 0.95 | | Y | C | |
| V.EE.1.d | Restrictions | | VOC 0.3 0.49 | | Y | C | |
| V.EE.1.d | Restrictions | | Ammonia 20 14 | | Y | C | |
| V.EE.1.d | Restrictions | | A year is defined as any consecutive 12-month period. | | | | |
| V.EE.2 | Testing Requirements | Installation Permit 0052-I002b, January 20, 2005, §2102.04.e and §2108.02 | Emissions testing shall be performed once every 5 years in accordance with the Site Level Condition IV.13 above entitled "Emissions Testing Requirements" to determine the VOC destruction efficiency of the enclosed flare and the mass emission rate of nitrogen oxides, sulfur oxides and ammonia. | Record Review | Y | C | |
| V.EE.3.a | Monitoring Requirements | Installation Permit 0052-I002b, January 20, 2005 and §2103.12.i | The permittee shall monitor and record the operating hours for each operation of the wastewater surge tanks and each loading at the ammonia station. | Record Review | Y | C | |
| V.EE.3.b | Monitoring Requirements | Installation Permit 0052-I002b, January 20, 2005 and §2103.12.i | The permittee shall continuously monitor and record the temperature of the flare with tolerance +/- 10 degrees Fahrenheit when the equipment is in operation. | Record Review | Y | C | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/ N | Type C/I | |
| V.EE.4.a | Record Keeping Requirements | Installation Permit 0052-I002b, January 20, 2005 and §2103.12.j | The results of inspections, episodes of non-compliance with the conditions in Conditions V.EE.1.a through V.EE.1.d above, and corrective actions taken shall be recorded upon occurrence. | Record Review | Y | C | |
| V.EE.4.b | Record Keeping Requirements | Installation Permit 0052-I002b, January 20, 2005 and §2103.12.j | The permittee shall record the monthly propane usage for the flare and the daily hours of operation of the flare. | Record Review | Y | C | |
| V.EE.5.a | Reporting Requirements | Installation Permit 0052-I002b, January 20, 2005 and §2102.04.b.6 | Monthly fuel usage and monthly hours of operation shall be reported to the Department on an annual basis. | Record Review | Y | C | |
| V.EE.5.b | Reporting Requirements | Installation Permit 0052-I002b, January 20, 2005 and §2102.04.b.4 | Reporting instances of non-compliance does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8 above, if appropriate. | Record Review | Y | C | |

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| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/N | Type C/I | |
| V.FF.1.a | Restrictions | §2105.51 | The permittee shall not conduct , or allow to be conducted, abrasive blasting of any surface, structure, or part thereof, which has a total area of 10,000 square feet unless: | Record Review | Y | C | |
| V.FF.1.a.1 | Restrictions | | Such abrasive blasting complies with all applicable requirements in §2105.51; and | Record Review | Y | C | |
| V.FF.1.a.2 | Restrictions | | The permittee of such surface: | N/A | | | |
| V.FF.1.a.2.a | Restrictions | | Which has a total area greater than 10,000 square feet, has properly applied for and been issued, by the Department, either an abrasive blasting project permit or annual permit. | Record Review | Y | C | |
| V.FF.1.a.2.b | Restrictions | | Which Has a total area greater than 1,000 square feet but not more than 10,000 squares feet, has properly submitted a notice to the Department | Record Review | Y | C | |
| V.FF.1.b | Restrictions | §2104.40 | The permittee shall not operate, or allow to be operated, the abrasive blasting of coke oven doors in such manner that emissions from the abrasive blasting operation: | N/A | | | |
| V.FF.1.b.1 | Restrictions | | Have an opacity of 20% or more for a period or periods aggregating more than three (3) minutes in any 60 minute period; or | Record Review | Y | C | |
| V.FF.1.b.2 | Restrictions | | Have an opacity of 60% or more at any time. | Record Review | Y | C | |
| V.FF.2 | Testing Requirements | | None except as provided elsewhere. | N/A | | | |
| V.FF.3 | Monitoring Requirements | | None except as provided elsewhere. | N/A | | | |
| V.FF.4 | Record Keeping Requirements | §2103.12.j | The permittee shall record and maintain records, on a monthly basis, of the square feet of surface area cleaned by abrasive blasting. | Record Review | Y | C | |
| V.FF.5 | Reporting Requirements | | None except as provided elsewhere | N/A | | | |

| Title V Citation | Category | Regulation | Requirement | Compliance | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | | Method | Y/N | Type C/I | |
| V.GG.1 | Restrictions | §2105.15a | The permittee shall not operate, or allow to be operated, any cold cleaning degreaser with a degreaser opening exceeding ten (10) square feet, unless | N/A | | | |
| V.GG.1.A | Restrictions | | There is in operation such degreaser: | N/A | | | |
| V.GG.1.A.a | Restrictions | | A cover to prevent evaporation of solvent during periods of non-use; | Design Parameter | Y | C | |
| V.GG.1.A.b | Restrictions | | Equipment for draining cleaned parts; and | Design Parameter | Y | C | |
| V.GG.1.A.c | Restrictions | | A permanent conspicuous label summarizing the operating requirements set forth in V.GG.1.B below | Design Parameter | Y | C | |
| V.GG.1.B | Restrictions | | Such degreaser is operated at all times in such manner that: | N/A | | | |
| V.GG.1.B.a | Restrictions | | Waste solvents are transferred to another party or disposed of by means insuring that no more than 20% by weight of the solvents evaporate into the open air; | Record Review | Y | C | |
| V.GG.1.B.b | Restrictions | | Waste solvents are stored in covered containers; | Administrative | Y | C | |
| V.GG.1.B.c | Restrictions | | The degreaser cover is closed when parts are not being processed through the degreaser; and, | Administrative | Y | C | |
| V.GG.1.B.d | Restrictions | | Cleaned parts are drained for at least 15 seconds or until dripping ceases | Administrative | Y | C | |
| V.GG.2 | Testing Requirements | | None except as provided elsewhere. | N/A | | | |
| V.GG.3 | Monitoring Requirements | §2102.04.e | None except as provided elsewhere. | N/A | | | |
| V.GG.4 | Record Keeping Requirements | | The permittee shall keep records of solvent usage (type and amount) on a semiannual basis. | Record Review | Y | C | |
| V.GG.5 | Reporting Requirements | | None except as provided elsewhere. | N/A | | | |

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