



Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

DEPARTMENT OF NATURAL RESOURCES

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APR 07 2015

Mr. Dick Champion
Rock Creek Treatment Plant - Sewage Sludge Incinerator
P.O. Box 1019
Independence, MO 64051

Re: Rock Creek Treatment Plant - Sewage Sludge Incinerator, 095-0150
Permit Number: OP2015-003

Dear Mr. Champion:

Enclosed with this letter is your Part 70 operating permit. Please review this document carefully. Operation of your installation in accordance with the rules and regulations cited in this document is necessary for continued compliance. It is very important that you read and understand the requirements contained in your permit.

You may appeal this permit to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.078.16 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you have any questions or need additional information regarding this permit, please contact the Air Pollution Control Program (APCP) at (573) 751-4817, or you may write to the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

AIR POLLUTION CONTROL PROGRAM



Michael J. Stansfield, P.E.
Operating Permit Unit Chief

MJS:MJSK

Enclosures

c: Robert Cheever, US EPA Region VII
Kansas City Regional Office
PAMS File: 2014-03-021





PART 70 PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth herein.

Operating Permit Number: OP2015-003
Expiration Date: APR 07 2020
Installation ID: 095-0150
Project Number: 2014-03-021

Installation Name and Address

Rock Creek Treatment Plant - Sewage
Sludge Incinerator
P.O. Box 1019
Independence, MO 64051
Jackson County

Parent Company's Name and Address

City of Independence
P.O. Box 1019
Independence, MO 64051

Installation Description:

This installation is a wastewater treatment plant in Independence, MO. The existing fluid-bed sewage sludge incinerator at this facility is subject to 40 CFR Part 60 Subpart Mmmm which requires that the unit obtain a Part 70 operating permit. The remaining units at the plant have opted to retain a Basic operating permit. This unit is also subject to 40 CFR Part 60 Subpart O and 40 CFR Part 61 Subparts C and E.

for Michael Stansfield
Prepared by
Jill Wade
Operating Permit Unit

Kyra L. Moore
Director or Designee
Department of Natural Resources

APR 07 2015

Effective Date

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I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

This installation is a wastewater treatment plant in Independence, MO. The existing fluid-bed sewage sludge incinerator at this facility is subject to 40 CFR Part 60 Subpart M which requires that the unit obtain a Part 70 operating permit. The remaining units at the plant have opted to retain a Basic operating permit. This unit is also subject to 40 CFR Part 60 Subpart O and 40 CFR Part 61 Subparts C and E.

The following table lists actual emissions reported for the previous five years for the entire facility:

Reported Air Pollutant Emissions, tons per year					
Pollutants	2013	2012	2011	2010	2009
Particulate Matter ≤ Ten Microns (PM ₁₀)	0.47	0.28	0.30	0.31	0.31
Particulate Matter ≤ 2.5 Microns (PM _{2.5})	0.38	0.23	0.24	0.25	0.25
Sulfur Oxides (SO _x)	0.02	0.01	0.01	0.01	0.01
Nitrogen Oxides (NO _x)	0.11	0.07	0.07	0.07	0.07
Volatile Organic Compounds(VOC)	11.90	9.32	11.98	13.86	13.86
Carbon Monoxide (CO)	0.06	0.05	0.26	0.27	0.27
Hazardous Air Pollutants (HAPs)	0.38	0.23	0.24	0.25	0.25
Ammonia (NH ₃)	0.20	0.16	0.21	0.25	0.25

EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation that emits air pollutants and that are identified as having unit-specific emission limitations.

<u>Emission Unit #</u>	<u>Description of Emission Unit</u>
EU-1	Fluidized Bed Sludge Incinerator
EU-1A	Bottom Ash System

II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

None.

III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

<p>PERMIT CONDITION 001 10 CSR 10-6.070 New Source Performance Regulations 10 CSR 10-6.191 Sewage Sludge Incinerators 40 CFR Part 60 Subpart M, Emission Guidelines and Compliance Times for Existing Sewage Sludge Incineration Units</p>
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EU-1 Sewage Sludge Incinerator	
Emission Unit	Description
EU-1	Fluidized Bed Sewage Sludge Incinerator; MHDR = 1.60 dry tons sludge; Constructed in 1978; Manufacturer: Dorr-Oliver; Model Number: N2296; Control Device: Venturi Scrubber and Impingement Plate Scrubber
EU-1A	Bottom Ash System: Ash pumps, ash belt press, ash lagoons

Operational Limitations:

- 1) The permittee shall achieve final compliance with Subpart M by March 21, 2016. [§60.5035(a)(1)]
- 2) The Sewage Sludge Incinerator (SSI) Unit cannot be operated unless a fully trained and qualified SSI unit operator is accessible, either at the facility or can be at the facility within 1 hour. The trained and qualified SSI unit operator may operate the SSI unit directly or be the direct supervisor of one or more other plant personnel who operate the unit. [§60.5130(a)]
- 3) The facility shall follow the guidelines in §§60.5130, 60.5135, 60.5150, 60.5155 and 60.5160 describing operator training and qualification requirements and documentation.

Emission Limitations and Standards:

The permittee must meet the emission limitations and standards specified in Table 2 of 40 CFR Part 60 Subpart M. The emission limits and standards apply at all times the unit is operating and during periods of malfunction. The emission limits and standards apply to emissions from a bypass stack or vent while sewage sludge is in the combustion chamber. [§60.5165]

Table 2 to Subpart MMMM of Part 60—Model Rule—Emission Limits and Standards for Existing Fluidized Bed Sewage Sludge Incineration Units

For the air pollutant	You must meet this emission limit^a	Using these averaging methods and minimum sampling volumes or durations	And determining compliance using this method
Particulate matter	18 milligrams per dry standard cubic meter	3-run average (collect a minimum volume of 1 dry standard cubic meters sample per run)	Performance test (Method 5 at 40 CFR part 60, appendix A-3; Method 26A or Method 29 at 40 CFR part 60, appendix A-8).
Hydrogen chloride	0.51 parts per million by dry volume	3-run average (Collect a minimum volume of 1 dry standard cubic meters per run)	Performance test (Method 26A at 40 CFR part 60, appendix A-8).
Carbon monoxide	64 parts per million by dry volume	3-run average (collect sample for a minimum duration of one hour per run)	Performance test (Method 10, 10A, or 10B at 40 CFR part 60, appendix A-4).
Dioxins/furans (total mass basis); or Dioxins/furans (toxic equivalency basis) ^b	1.2 nanograms per dry standard cubic meter (total mass basis); or 0.10 nanograms per dry standard cubic meter (toxic equivalency basis)	3-run average (collect a minimum volume of 1 dry standard cubic meters per run)	Performance test (Method 23 at 40 CFR part 60, appendix A-7).
Mercury	0.037 milligrams per dry standard cubic meter	3-run average (For Method 29 and ASTM D6784-02 (Reapproved 2008) ^c , collect a minimum volume of 1 dry standard cubic meters per run. For Method 30B, collect a minimum sample as specified in Method 30B at 40 CFR part 60, appendix A-8)	Performance test (Method 29 at 40 CFR part 60, appendix A-8; Method 30B at 40 CFR part 60, appendix A-8; or ASTM D6784-02 (Reapproved 2008). ^c
Oxides of nitrogen	150 parts per million by dry volume	3-run average (Collect sample for a minimum duration of one hour per run)	Performance test (Method 7 or 7E at 40 CFR part 60, appendix A-4).
Sulfur dioxide	15 parts per million by dry volume	3-run average (For Method 6, collect a minimum volume of 60 liters per run. For Method 6C, collect sample for a minimum duration of one hour per run)	Performance test (Method 6 or 6C at 40 CFR part 40, appendix A-4; or ANSI/ASME PTC-19.10-1981. ^c

Cadmium	0.0016 milligrams per dry standard cubic meter	3-run average (collect a minimum volume of 1 dry standard cubic meters per run)	Performance test (Method 29 at 40 CFR part 60, appendix A-8). Use GFAAS or ICP/MS for the analytical finish.
Lead	0.0074 milligrams per dry standard cubic meter	3-run average (collect a minimum volume of 1 dry standard cubic meters sample per run)	Performance test (Method 29 at 40 CFR part 60, appendix A-8). Use GFAAS or ICP/MS for the analytical finish.
Fugitive emissions from ash handling	Visible emissions of combustion ash from an ash conveying system (including conveyor transfer points) for no more than 5 percent of the hourly observation period	Three 1-hour observation periods	Visible emission test (Method 22 of appendix A-7 of this part).

^a All emission limits are measured at 7% oxygen, dry basis at standard conditions

^b The permittee has the option to comply with either the dioxin/furan emission limit on a total mass basis or the dioxin/furan emission limit on a toxic equivalency basis

^c Incorporated by reference, see §60.17

Operating limits and requirements:

1) The operating parameters for which the permittee shall establish operating limits for a wet scrubber are listed in Table 4 of 40 CFR Part 60 Subpart Mmmm:

Table 4 to Subpart Mmmm of Part 60—Model Rule—Operating Parameters for Existing Sewage Sludge Incineration Units^a

For these operating parameters	You must establish these operating limits	And monitor using these minimum frequencies		
		Data measurement	Data recording ^b	Data averaging period for compliance
All sewage sludge incineration units				
Combustion chamber operating temperature (not required if afterburner temperature is monitored)	Minimum combustion chamber operating temperature or afterburner temperature	Continuous	Every 15 minutes	12-hour block.
Fugitive emissions from ash handling	Site-specific operating requirements	Not applicable	No applicable	Not applicable.

Scrubber				
Pressure drop across each wet scrubber	Minimum pressure drop	Continuous	Every 15 minutes	12-hour block.
Scrubber liquid flow rate	Minimum flow rate	Continuous	Every 15 minutes	12-hour block.
Scrubber liquid pH	Minimum pH	Continuous	Every 15 minutes	3-hour block.

a As specified in §60.5190, the permittee may use a continuous emissions monitoring system or continuous automated sampling system in lieu of establishing certain operating limits.

b This recording time refers to the minimum frequency that the continuous monitor or other measuring device initially records data. For all data recorded every 15 minutes, the permittee must calculate hourly arithmetic averages. For all parameters, use hourly averages to calculate the 12-hour or 3-hour block average specified in this table for demonstrating compliance. The permittee must maintain records of 1-hour averages.

- 2) The permittee must meet a sit-specific operating limit for minimum operating temperature of the combustion chamber that is established according to §60.5190. [§60.5170(a)]
- 3) If using a wet scrubber, the permittee must meet the sit-specific operating limits that are established according to §60.5190 for each operating parameter associated with the control device. [§60.5170(b)]
- 4) The permittee must meet the operating requirements in the site-specific fugitive emission monitoring plan, submitted as specified in §60.5200(d) to ensure that the ash handling system will meet the emission standard for fugitive emissions from ash handling. [§60.5170(d)]
- 5) The permittee must monitor the feed rate and moisture content of the sewage sludge fed to the sewage sludge incinerator, as specified below: [§60.5170(f)(1)-(2)]
 - a) Continuously monitor the sewage sludge feed rate and calculate a daily average for all hours of operation during each 24-hour period.
 - b) Take at least one grab sample per day of the sewage sludge fed to the sewage sludge incinerator. If more than one sample is taken in a day, calculate the daily average for the grab samples.

Demonstrating Compliance:

- 1) The permittee shall demonstrate initial compliance using the performance test required in §60.8. The initial performance test must be conducted using the test methods, averaging methods, and minimum sampling volumes or durations specified in Table 2 to 40 CFR Part 60 Subpart M and according to the testing, monitoring, and calibration requirements specified in §60.5220(a). [§60.5185(a)]
- 2) The permittee must conduct an air pollution control device inspection according to §60.5220(c) by the final compliance date and all necessary repairs to the control device must be completed with 10 operating days following the inspection. [§60.5195(a) and (b)]
- 3) The permittee must conduct annual inspections of each air pollution control device no later than 12 months following the previous inspection and all necessary repairs must be completed within 10 operating days following the inspection. [§60.5215(a) and (b)]
- 4) The permittee shall develop and submit, at least 60 days prior to the compliance date, a site specific monitoring plan for the ash handling system specifying procedures to ensure compliance with the fugitive emission limit specified in Table 2 of this subpart. [§60.5200(d) and (g)]

- 5) To demonstrate continuous compliance with the emission limitations, the permittee shall conduct a performance test for each pollutant on an annual basis (between 11 and 13 calendar months following the previous performance test. [§60.5205(a)]
 - a) The permittee may conduct a repeat performance test at any time to establish new values for the operating limits to apply from that point forward. The Director may request a performance test at any time. [§60.5205(a)(1)]
 - b) The permittee must repeat the performance test within 60 days of a process change, as defined in §60.5250. [§60.5205(a)(2)]
- 6) The permittee can conduct performance tests less often if the performance tests for the pollutant for a least 2 consecutive years show that the emission are at or below 75% of the emission limit and there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions. The permittee must conduct a performance test during the third year and no more than 37 month after the previous performance test. [§60.5205(a)(3)(i)]
- 7) To demonstrate compliance with the dioxin/furans toxic equivalency emission limit, the permittee must determine dioxin/furans toxic equivalency as follows:
 - a) Measure the concentration of each dioxin/furan tetra- through octochlorinated-isomer emitted using Method 23 at 40 CFR Part 60, appendix A-7;
 - b) For each dioxin/furan (tetra- through octochlorinated) isomer measured multiply the isomer concentration by its corresponding toxic equivalency factor specified in Table 5 of Subpart Mmmm;
 - c) Sum the products calculated to obtain the total concentration of dioxin/furans emitted in terms of toxic equivalency.

Performance Testing Requirements:

The permittee shall comply with all applicable performance testing requirements in §60.5220.

Recordkeeping:

The permittee must maintain the following records for a period of at least 5 years. All records must be available on site in either paper copy or computer readable format that can be printed upon request:

- 1) Calendar date of each record;
- 2) Copies of the final control plan and any additional notifications, reported under §60.5235;
- 3) Documentation of the operator training procedures and the following records:
 - a) Summary of applicable standards under this subpart;
 - b) Procedures for receiving, handling, and feeding sewage sludge;
 - c) Incinerator startup, shutdown, and malfunction preventative and corrective procedures;
 - d) Procedures for maintaining proper combustion air supply levels;
 - e) Procedures for operating the incinerator and associated air pollution control systems;
 - f) Monitoring procedures for demonstrating compliance with the incinerator operating limits;
 - g) Reporting and recordkeeping procedures
 - h) Procedures for handling ash;
 - i) A list of all materials burned during the performance test, if in addition to sewage sludge;
 - j) For each qualified operator or other plant personnel who may operate the unit according to the provisions of §60.5155(a), the phone and/or pager number at which they can be reached during operating hours;
- 4) Records showing the names of SSI unit operators and other plant personnel who may operate the unit according to the provisions of §60,5155(a) as follows: [§60.5230(c)(2)(i)-(ii)]

- a) Records showing the names of SSI unit operators and other plant personnel who have completed review of the documentation of the operating training procedures, including the date of the initial review and all subsequent annual reviews;
- b) Records showing the names of the SSI operators who have completed the operator training requirements, met the criteria for qualification under §60.5140, and maintained or renewed their qualification. Records must include documentation of training, including the dates of their initial qualification and all subsequent renewals of such qualifications.
- 5) Records showing the periods when no qualified operators were accessible for more than 8 hours, but less than 2 weeks, as required in §60.5155(a). [§60.5230(c)(3)]
- 6) Records showing the period when no qualified operators were accessible for two weeks or more along with copies of reports submitted as required in §60.5155(b). [§60.5230(c)(4)]
- 7) Records of the results of initial and annual air pollution control device inspections, including any required maintenance and any repairs not completed within 10 days of an inspection or the time frame established by the Director. [§60.5230(d)]
- 8) The results of the initial, annual and any subsequent performance tests conducted to determine compliance with the emission limits and standards and/or to establish operating limits, as applicable. [§60.5230(e)(1)]
- 9) Retain a copy of the complete performance test report, including calculations. [§60.5230(e)(2)]
- 10) Keep a record of the hourly dry sludge feed rate measured during performance test runs. [§60.5230(e)(3)]
- 11) Keep any necessary records to demonstrate that the performance test was conducted under conditions representative of normal operations, including a record of the moisture content measured for each grab sample taken of the sewage sludge burned during the performance test. [§60.5230(e)(4)]
- 12) Records of any deviation reports. [§60.5230(h)]
- 13) Equipment specifications and related operation and maintenance requirements received from vendors for the incinerator, emission controls, and monitoring equipment. [§60.5230(i)]
- 14) Records of inspections, calibration, and validation checks of any monitoring devices. [§60.5230(j)]
- 15) Records indication use of the bypass stack, including dates, times, and durations. [§60.5230(m)]
- 16) If a malfunction occurs, keep a record of the information submitted in you annual report. [§60.5230(n)]

Reporting:

The permittee must submit the following reports: [§60.5235]

- 1) If compliance is achieved more than 1 year following the effective date of state plan approval, the permittee must submit the following reports, as applicable: [§60.5235(a)(1)-(3)]
 - a) A final control plan as specified in §§60.5085(a) and 60.5110.
 - b) The notification of achievement of increments of progress must be submitted no later than 10 business days after the compliance date for the increment as specified in §§60.5095 and 60.5100.
 - c) If there was a failure to meet an increment of progress, the permittee must submit a notification to the Director postmarked within 10 business days after the date for that increment, as specified in §60.5105.
- 2) The permittee must submit the following information no later than 60 days following the initial performance test: [§60.5235(b)(1)-(10)]
 - a) Company name, physical address, and mailing address.
 - b) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

- c) Date of report.
 - d) The complete test report for the initial performance test results obtained by using the test methods specified in Table 2 or 3 to this subpart MMMM.
 - e) The values for the site-specific operating limits established pursuant to §§60.5170 and 60.5175 and the calculations and methods, as applicable, used to establish each operating limit.
 - f) The results of the initial air pollution control device inspection required in §60.5195, including a description of repairs.
 - g) The site-specific monitoring plan required under §60.5200, at least 60 days before your initial performance evaluation of your continuous monitoring system.
 - h) The site-specific monitoring plan for your ash handling system required under §60.5200, at least 60 days before your initial performance test to demonstrate compliance with your fugitive ash emission limit.
- 3) The permittee must submit an annual compliance report that includes the items listed below. The permittee must submit the first annual compliance report no later than 12 months following the submission of the initial compliance report. Subsequent annual compliance reports shall be submitted no more than 12 months following the previous annual compliance report. (1) Company name, physical address, and mailing address.
- a) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
 - b) Date of report and beginning and ending dates of the reporting period.
 - c) If a performance test was conducted during the reporting period, the results of that performance test.
 - i. If operating limits were established during the performance test, include the value for each operating limit and, as applicable, the method used to establish each operating limit, including calculations.
 - ii. If activated carbon is used during the performance test, include the type of activated carbon used.
 - d) If there are no deviations during the reporting period from any emission limit, emission standard, or operating limit, a statement that there were no deviations from the emission limits, emission standard, or operating limits.
 - e) If the permittee elects to conduct performance tests less frequently as allowed in §60.5205(a)(3) and therefore a performance test was not conducted during the reporting period, the permittee must include the dates of the last two performance tests, a comparison of the emission level you achieved in the last two performance tests to the 75 percent emission limit threshold specified in §60.5205(a)(3), and a statement as to whether there have been any process changes and whether the process change resulted in an increase in emissions.
 - f) Documentation of periods when all qualified sewage sludge incineration unit operators were unavailable for more than 8 hours, but less than 2 weeks.
 - g) Results of annual air pollution control device inspections recorded under §60.5230(d) for the reporting period, including a description of repairs.
 - h) If there were no operator training deviations, a statement that there were no such deviations during the reporting period.
 - i) If no revisions were made to the site-specific monitoring plan during the reporting period, a statement that no revisions were made to your site-specific monitoring plan during the reporting period. If revisions were made to the site-specific monitoring plan during the reporting period, a copy of the revised plan.

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- j) If a malfunction occurred during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction that occurred during the reporting period and that caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §60.11(d), including actions taken to correct a malfunction.
- 4) The permittee must submit a deviation report if:
 - a) Any recorded operating parameter level, based on the averaging time specified in Table 4 to subpart MMMM, is above the maximum operating limit or below the minimum operating limit established under this subpart.
 - b) There are visible emissions of combustion ash from an ash conveying system for more than 5 percent of the hourly observation period.
 - c) A performance test was conducted that deviated from any emission limit in Table 2 or 3 to subpart MMMM.
 - d) A malfunction occurred that caused or may have caused any applicable emission limit to be exceeded.
 - 5) The deviation report must be submitted by August 1 of that year for data collected during the first half of the calendar year (January 1 to June 30), and by February 1 of the following year for data you collected during the second half of the calendar year (July 1 to December 31).
 - 6) For each deviation where a continuous monitoring system is not used to comply with the associated emission limit or operating limit, report the following items:
 - a) Company name, physical address, and mailing address.
 - b) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
 - c) (The total operating time of each affected source during the reporting period.
 - d) The calendar dates and times your unit deviated from the emission limits, emission standards, or operating limits requirements.
 - e) The averaged and recorded data for those dates.
 - f) Duration and cause of each deviation from the following:
 - i. Emission limits, emission standards, operating limits, and your corrective actions.
 - ii. Bypass events and your corrective actions.
 - g) A copy of any performance test report that showed a deviation from the emission limits or standards.
 - h) A brief description of any malfunction reported in paragraph (d)(1)(vii) of this section, including a description of actions taken during the malfunction to minimize emissions in accordance with §60.11(d) and to correct the malfunction.
 - 7) If all qualified operators are not accessible for 2 weeks or more, the permittee must take the two actions below:
 - a) Submit a notification of the deviation within 10 days that includes the following three items:
 - i. A statement of what caused the deviation.
 - ii. A description of actions taken to ensure that a qualified operator is accessible.
 - iii. The date when you anticipate that a qualified operator will be available.
 - b) Submit a status report to the Director every 4 weeks that includes the three items below:
 - i. A description of actions taken to ensure that a qualified operator is accessible.
 - ii. The date when you anticipate that a qualified operator will be accessible.
 - iii. Request for approval from the Director to continue operation of the SSI unit.

- 8) If your unit was shut down by the Director, under the provisions of §60.5155(b)(2)(i), due to a failure to provide an accessible qualified operator, you must notify the Director within five days of meeting §60.5155(b)(2)(ii) that you are resuming operation.
- 9) If a force majeure is about to occur, occurs, or has occurred for which you intend to assert a claim of force majeure:
 - a) The permittee must notify the Director, in writing as soon as practicable following the date it was first known, or through due diligence, should have been known that the event may cause or caused a delay in conducting a performance test beyond the regulatory deadline, but the notification must occur before the performance test deadline unless the initial force majeure or a subsequent force majeure event delays the notice, and in such cases, the notification must occur as soon as practicable.
 - b) The permittee must provide to the Director a written description of the force majeure event and a rationale for attributing the delay in conducting the performance test beyond the regulatory deadline to the force majeure; describe the measures taken or to be taken to minimize the delay; and identify a date by which you propose to conduct the performance test.
- 10) The permittee must notify the Director at least 30 days prior to any performance test conducted to comply with the provisions of this subpart, to afford the Director the opportunity to have an observer present.
- 11) As specified in §60.5220(a)(8), the permittee must notify the Director at least 7 days prior to the date of a rescheduled performance test for which notification was previously made in paragraph (g)(2) of this section.
- 12) Submit initial, annual, and deviation reports electronically or in paper format, postmarked on or before the submittal due dates.
- 13) As of January 1, 2012 and within 60 days after the date of completing each performance test, as defined in §63.2, conducted to demonstrate compliance with this subpart, the permittee must submit relative accuracy test audit (i.e., reference method) data and performance test (i.e., compliance test) data, except opacity data, electronically to EPA's Central Data Exchange (CDX) by using the Electronic Reporting Tool (ERT) (see http://www.epa.gov/ttn/chief/ert/ert_tool.html/) or other compatible electronic spreadsheet. Only data collected using test methods compatible with ERT are subject to this requirement to be submitted electronically into EPA's WebFIRE database.
- 14) If the Director agrees, changes to the semiannual or annual reporting dates may be made. See §60.19(c) for procedures to seek approval to change your reporting date.
- 15) Reports of any deviations from monitoring, record keeping and reporting requirements of this permit condition shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

PERMIT CONDITION 002

10 CSR 10-6.070 New Source Performance Regulations
40 CFR Part 60 Subpart O, Standards of Performance for Sewage Treatment Plants

EU-1 Sewage Sludge Incinerator

Emission Unit	Description
EU-1	Fluidized Bed Sewage Sludge Incinerator; MHDR = 1.60 dry tons sludge; Constructed in 1978; Manufacturer: Dorr-Oliver; Model Number: N2296; Control Device: Venturi Scrubber and Impingement Plate Scrubber

Emission Limitations:

On and after the date on which the performance test required to be conducted by §60.8 is completed, the permittee shall not discharge or cause the discharge into the atmosphere of Particulate Matter at a rate in excess of 0.65 g/kg dry sludge input (1.30 lb/ton dry sludge input) and any gases which exhibit 20% opacity or greater. [§60.152(a)(1)-(2)]

Monitoring:

- 1) Install, calibrate, maintain, and operate a flow measuring device which can be used to determine either the mass or volume of sludge charged to the incinerator. The flow measuring device shall be certified by the manufacturer to have an accuracy of ± 5 percent over its operating range. Except as provided in condition 9) of this section, the flow measuring device shall be operated continuously and data recorded during all periods of operation of the incinerator. [§60.153(a)(1)]
- 2) Provide access to the sludge charged so that a well-mixed representative grab sample of the sludge can be obtained. [§60.153(a)(2)]
- 3) Install, calibrate, maintain, and operate a weighing device for determining the mass of any municipal solid waste charged to the incinerator when sewage sludge and municipal solid waste are incinerated together. The weighing device shall have an accuracy of ± 5 percent over its operating range. [§60.153(a)(3)]
- 4) For incinerators equipped with a wet scrubbing device the permittee shall install, calibrate, maintain and operate a monitoring device that continuously measures and records the pressure drop of the gas flow through the wet scrubbing device. Where a combination of wet scrubbers is used in series, the pressure drop of the gas flow through the combined system shall be continuously monitored. The device used to monitor scrubber pressure drop shall be certified by the manufacturer to be accurate within ± 250 pascals (± 1 inch water gauge) and shall be calibrated on an annual basis in accordance with the manufacturer's instructions. [§60.153(b)(1)]
- 5) The permittee shall install, calibrate, maintain and operate a monitoring device that continuously measures and records the oxygen content of the incinerator exhaust gas. The oxygen monitor shall be located upstream of any rabble shaft cooling air inlet into the incinerator exhaust gas stream, fan, ambient air recirculation damper, or any other source of dilution air. The oxygen monitoring device shall be certified by the manufacturer to have a relative accuracy of ± 5 percent over its operating range and shall be calibrated according to method(s) prescribed by the manufacturer at least once each 24-hour operating period. [§60.153(b)(2)]
- 6) The permittee shall install, calibrate, maintain and operate temperature measuring devices in the bed and outlet of fluidized bed incinerators. Each temperature measuring device shall be certified by the manufacturer to have an accuracy of ± 5 percent over its operating range. Except as provided in condition 9) of this section, the temperature monitoring devices shall be operated continuously and data recorded during all periods of operation of the incinerator. [§60.153(b)(3)]
- 7) The permittee shall install, calibrate, maintain and operate a device for measuring the fuel flow to the incinerator. The flow measuring device shall be certified by the manufacturer to have an accuracy of ± 5 percent over its operating range. Except as provided in condition 9) of the section, the fuel flow measuring device shall be operated continuously and data recorded during all periods of operation of the incinerator. [§60.153(b)(4)]
- 8) The permittee shall, except as provided in condition 8), collect and analyze a grab sample of the sludge fed to the incinerator once per day. The dry sludge content and the volatile solids content of the sample shall be determined in accordance with the method specified under §60.154(b)(5), except that the determination of volatile solids, step (3)(b) of the method, may not be deleted. [§60.153(b)(5)]

- 9) If the particulate matter emission rate measured during the performance test required under §60.154(d) is less than or equal to 0.38 g/kg of dry sludge input (0.75 lb/ton), the permittee shall be required to comply with the above requirements [conditions 1) through 8)] during all periods of the incinerator following the performance test except that: [§60.153(d)(1)-(3)]
- Continuous operation of the monitoring devices and data recorder shall not be required under this subpart;
 - Daily sampling and analysis of sludge feed shall not be required under this subpart; and
 - Record keeping in condition 1) shall not be required by this subpart

Performance Testing Required:

The permittee shall perform the required performance testing using the procedures described in §60.154.

Recordkeeping/Reporting:

- The permittee shall retain the following information and make it available for inspection for a minimum of 5 years: [§60.154(c)(1)-(3)]
 - For incinerators equipped with a wet scrubbing device, a record of the measured pressure drop of the gas flow through the wet scrubbing device;
 - A record of the measured oxygen content of the incinerator exhaust gas; and
 - A record of the rate of sludge charged to the incinerator, the measured temperatures of the incinerator, the fuel flow to the incinerator and the total solids and volatile solids content of the sludge charge to the incinerator.
- The permittee shall submit the semi-annually a report in writing which contains the following information: [§60.155(a)]
 - A record of average scrubber pressure drop measurements for each period of 15 minutes duration or more during which the pressure drop of the scrubber was less than, by a percentage specified below, the average scrubber pressure drop measured during the most recent performance test. The percent reduction in scrubber pressure drop for which a report is required shall be determined as follows: [§60.155(a)(1)-(2)]
 - For incinerators that achieved an average particulate matter emission rate of 0.38 kg/Mg (0.75 lb/ton) dry sludge input or less during the most recent performance test, a scrubber pressure drop reduction of more than 30 percent from the average scrubber pressure drop recorded during the most recent performance test shall be reported.
 - For incinerators that achieved an average particulate matter emission rate of greater than 0.38 kg/Mg (0.75 lb/ton) dry sludge input during the most recent performance test, a percent reduction in pressure drop greater than that calculated according to the following equation shall be reported:

$$P = -111E + 72.15$$

Where,

P=Percent reduction in pressure drop, and

E=Average particulate matter emissions (kg/megagram)

- A record of average oxygen content in the incinerator exhaust gas for each period of 1-hour duration or more that the oxygen content of the incinerator exhaust gas exceeds the average oxygen content measured during the most recent performance test by more than 3 percent.

- 3) If the particulate matter emission rate measured during the performance test required under §60.154(d) exceeds 0.38 g/kg of dry sludge input (0.75 lb/ton of dry sludge input) the permittee shall include in the report for each calendar day that a decrease in scrubber pressure drop or increase in oxygen content of exhaust gas is reported a record of the following: [§60.155(b)(1)-(6)]
- a) Scrubber pressure drop averaged over each 1-hour incinerator operating period;
 - b) Oxygen content in the incinerator exhaust averaged over each 1-hour incinerator operating period;
 - c) Temperatures of every hearth in multiple hearth incinerators; of the bed and outlet of fluidized bed incinerators; and of the drying, combustion, and cooling zones of electric incinerators averaged over each 1-hour incinerator operating period;
 - d) Rate of sludge charged to the incinerator averaged over each 1-hour incinerator operating period;
 - e) Incinerator fuel use averaged over each 8-hour incinerator operating period; and
 - f) Moisture and volatile solids content of the daily grab sample of sludge charged to the incinerator.

PERMIT CONDITION 003 10 CSR 10-6.080 Emission Standards for Hazardous Air Pollutants 40 CFR Part 61 Subpart E, National Emission Standard for Mercury
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EU-1 Sewage Sludge Incinerator	
Emission Unit	Description
EU-1	Fluidized Bed Sewage Sludge Incinerator; MHDR = 1.60 dry tons sludge; Constructed in 1978; Manufacturer: Dorr-Oliver; Model Number: N2296; Control Device: Venturi Scrubber and Impingement Plate Scrubber

Emission Limitation:

The permittee shall not emit greater than 3.2 kg (7.1 lb) of mercury over a 24-hour period. [§61.52(b)]

Monitoring/Recordkeeping/Reporting:

None.

IV. Core Permit Requirements

The installation shall comply with each of the following regulations or codes. Consult the appropriate sections in the Code of Federal Regulations (CFR), the Code of State Regulations (CSR), and local ordinances for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued. The following is only an excerpt from the regulation or code, and is provided for summary purposes only.

10 CSR 10-6.045 Open Burning Requirements

- (1) General Provisions. The open burning of tires, petroleum-based products, asbestos containing materials, and trade waste is prohibited, except as allowed below. Nothing in this rule may be construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.
- (2) Refer to the regulation for a complete list of allowances. The following is an exception to the allowances:
 - a) Yard waste, with the following exception:
 - Kansas City metropolitan area. The open burning of trees, tree leaves, brush or any other type of vegetation shall require an open burning permit;
- (3) Certain types of materials may be open burned provided an open burning permit is obtained from the director. The permit will specify the conditions and provisions of all open burning. The permit may be revoked if the owner or operator fails to comply with the conditions or any provisions of the permit.
- (4) Rock Creek Treatment Plant - Sewage Sludge Incinerator may be issued an annually renewable open burning permit for open burning provided that an air curtain destructor or incinerator is utilized and only tree trunks, tree limbs, vegetation or untreated wood waste are burned. Open burning shall occur at least two hundred (200) yards from the nearest occupied structure unless the owner or operator of the occupied structure provides a written waiver of this requirement. Any waiver shall accompany the open burning permit application. The permit may be revoked if Rock Creek Treatment Plant - Sewage Sludge Incinerator fails to comply with the provisions or any condition of the open burning permit.
 - a) In a nonattainment area, as defined in 10 CSR 10-6.020, paragraph (2)(N)5., the director shall not issue a permit under this section unless the owner or operator can demonstrate to the satisfaction of the director that the emissions from the open burning of the specified material would be less than the emissions from any other waste management or disposal method.
- (5) Reporting and Record Keeping. New Source Performance Standard (NSPS) 40 CFR Part 60 Subpart CCCC establishes certain requirements for air curtain destructors or incinerators that burn wood trade waste. These requirements are established in 40 CFR 60.2245-60.2260. The provisions of 40 CFR part 60 Subpart CCCC promulgated as of September 22, 2005 shall apply and are hereby incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401. To comply with NSPS 40 CFR 60.2245-60.2260, sources must conduct an annual Method 9 test. A copy of the annual Method 9 test results shall be submitted to the director.
- (6) Test Methods. The visible emissions from air pollution sources shall be evaluated as specified by 40 CFR part 60, Appendix A-Test Methods, Method 9-Visual Determination of the Opacity of Emissions from Stationary Sources. The provisions of 40 CFR part 60, Appendix A, Method 9 promulgated as of December 23, 1971 is incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401.

10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions

- 1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days, in writing, the following information:
 - a) Name and location of installation;
 - b) Name and telephone number of person responsible for the installation;
 - c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
 - d) Identity of the equipment causing the excess emissions;
 - e) Time and duration of the period of excess emissions;
 - f) Cause of the excess emissions;
 - g) Air pollutants involved;
 - h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
 - i) Measures taken to mitigate the extent and duration of the excess emissions; and
 - j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
- 2) The permittee shall submit the paragraph 1 information list to the director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
- 3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under section 643.080 or 643.151, RSMo.
- 4) Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
- 5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

10 CSR 10-6.060 Construction Permits Required

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

10 CSR 10-6.065 Operating Permits

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than eighteen months. [10 CSR 10-6.065(6)(B)1.A(V)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065(6)(C)1.C(II)] The permittee shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request. [10 CSR 10-6.065(6)(C)3.B]

10 CSR 10-6.110 Submission of Emission Data, Emission Fees and Process Information

- 1) The permittee shall submit full emissions report either electronically via MoEIS, which requires Form 1.0 signed by an authorized company representative, or on Emission Inventory Questionnaire (EIQ) paper forms on the frequency specified in this rule and in accordance with the requirements outlined in this rule. Alternate methods of reporting the emissions, such as spreadsheet file, can be submitted for approval by the director.
- 2) The permittee may be required by the director to file additional reports.
- 3) Public Availability of Emission Data and Process Information. Any information obtained pursuant to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.
- 4) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079.
- 5) The fees shall be payable to the Department of Natural Resources and shall be accompanied by the emissions report.
- 6) The permittee shall complete required reports on state supplied EIQ forms or electronically via MoEIS. Alternate methods of reporting the emissions can be submitted for approval by the director. The reports shall be submitted to the director by April 1 after the end of each reporting year. If the full emissions report is filed electronically via MoEIS, this due date is extended to May 1.
- 7) The reporting period shall end on December 31 of each calendar year. Each report shall contain the required information for each emission unit for the twelve (12)-month period immediately preceding the end of the reporting period.
- 8) The permittee shall collect, record and maintain the information necessary to complete the required forms during each year of operation of the installation.

10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential

This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

10 CSR 10-6.150 Circumvention

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

10 CSR 10-6.170

Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin

Emission Limitation:

- 1) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director.
- 2) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.
- 3) Should it be determined that noncompliance has occurred, the director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
 - a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
 - b) Paving or frequent cleaning of roads, driveways and parking lots;
 - c) Application of dust-free surfaces;
 - d) Application of water; and
 - e) Planting and maintenance of vegetative ground cover.

Monitoring:

The permittee shall conduct inspections of its facilities sufficient to determine compliance with this regulation. If the permittee discovers a violation, the permittee shall undertake corrective action to eliminate the violation.

The permittee shall maintain the following monitoring schedule:

- 1) The permittee shall conduct weekly observations for a minimum of eight (8) consecutive weeks after permit issuance.
- 2) Should no violation of this regulation be observed during this period then-
 - a) The permittee may observe once every two (2) weeks for a period of eight (8) weeks.
 - b) If a violation is noted, monitoring reverts to weekly.
 - c) Should no violation of this regulation be observed during this period then-
 - i) The permittee may observe once per month.
 - ii) If a violation is noted, monitoring reverts to weekly.
- 3) If the permittee reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner to the initial monitoring frequency.

Recordkeeping:

The permittee shall document all readings on Attachment A, or its equivalent, noting the following:

- 1) Whether air emissions (except water vapor) remain visible in the ambient air beyond the property line of origin.
- 2) Whether the visible emissions were normal for the installation.
- 3) Whether equipment malfunctions contributed to an exceedance.
- 4) Any violations and any corrective actions undertaken to correct the violation.

10 CSR 10-6.180 Measurement of Emissions of Air Contaminants

- 1) The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The director may specify testing methods to be used in accordance with good professional practice. The director may observe the testing. All tests shall be performed by qualified personnel.
- 2) The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.
- 3) The director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone

- 1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
 - b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
 - c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
 - d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
- 2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
 - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
 - b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
 - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
 - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
 - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
 - f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- 3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
- 4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air

conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.

- 5) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR part 82*

10 CSR 10-6.280 Compliance Monitoring Usage

- 1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
 - a) Monitoring methods outlined in 40 CFR Part 64;
 - b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
 - c) Any other monitoring methods approved by the director.
- 2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:
 - a) Monitoring methods outlined in 40 CFR Part 64;
 - b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
 - c) Compliance test methods specified in the rule cited as the authority for the emission limitations.
- 3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
 - a) Applicable monitoring or testing methods, cited in:
 - i) 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
 - ii) 10 CSR 10-6.040, "Reference Methods";
 - iii) 10 CSR 10-6.070, "New Source Performance Standards";
 - iv) 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
 - b) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.

V. General Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued,

10 CSR 10-6.065(6)(C)1.B Permit Duration

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.

10 CSR 10-6.065(6)(C)1.C General Record Keeping and Reporting Requirements

- 1) Record Keeping
 - a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
 - b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
- 2) Reporting
 - a) All reports shall be submitted to the Air Pollution Control Program, Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
 - b) The permittee shall submit a report of all required monitoring by:
 - i) October 1st for monitoring which covers the January through June time period, and
 - ii) April 1st for monitoring which covers the July through December time period.
 - iii) Exception. Monitoring requirements which require reporting more frequently than semi annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
 - c) Each report shall identify any deviations from emission limitations, monitoring, record keeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances.
 - d) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
 - i) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7.A of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.
 - ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.

- iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semiannual report shall be reported on the schedule specified in this permit, and no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.
- e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.
- f) The permittee may request confidential treatment of information submitted in any report of deviation.

10 CSR 10-6.065(6)(C)1.D Risk Management Plan Under Section 112(r)

The permittee shall comply with the requirements of 40 CFR Part 68, Accidental Release Prevention Requirements. If the permittee has more than a threshold quantity of a regulated substance in process, as determined by 40 CFR Section 68.115, the permittee shall submit a Risk Management Plan in accordance with 40 CFR Part 68 no later than the latest of the following dates:

- 1) June 21, 1999;
- 2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or
- 3) The date on which a regulated substance is first present above a threshold quantity in a process.

10 CSR 10-6.065(6)(C)1.F Severability Clause

In the event of a successful challenge to any part of this permit, all uncontested permit conditions shall continue to be in force. All terms and conditions of this permit remain in effect pending any administrative or judicial challenge to any portion of the permit. If any provision of this permit is invalidated, the permittee shall comply with all other provisions of the permit.

10 CSR 10-6.065(6)(C)1.G General Requirements

- 1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
- 2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit
- 3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- 4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
- 5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The

permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(6)(C)1.

10 CSR 10-6.065(6)(C)1.H Incentive Programs Not Requiring Permit Revisions

No permit revision will be required for any installation changes made under any approved economic incentive, marketable permit, emissions trading, or other similar programs or processes provided for in this permit.

10 CSR 10-6.065(6)(C)1.I Reasonably Anticipated Operating Scenarios

When Zimpro equipment is down due to maintenance or operational problems, the incinerator may burn sewage sludge dewatered by polymer conditioning and belt filter press. Additional auxiliary fuel (No. 2 fuel oil) is used for moisture evaporation of non-Zimpro sludge to operate the incinerator within design parameters. Based on a trial burn conducted September 7-8, 1999, an additional 42 gallons of oil per dry ton of non-Zimpro sludge incinerated is used. Applicable requirements for both scenarios are the same. Recordkeeping of scrubber pressure and exhaust gas oxygen content is used to demonstrate that the incinerator is operating as designed.

10 CSR 10-6.065(6)(C)3 Compliance Requirements

- 1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
- 2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
 - a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
 - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
- 3) All progress reports required under an applicable schedule of compliance shall be submitted semiannually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
 - a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
 - b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
- 4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, as well as the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and Part 64

exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:

- a) The identification of each term or condition of the permit that is the basis of the certification;
- b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
- c) Whether compliance was continuous or intermittent;
- d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
- e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

10 CSR 10-6.065(6)(C)6 Permit Shield

- 1) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
 - a) The applicable requirements are included and specifically identified in this permit, or
 - b) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.
- 2) Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:
 - a) The provisions of section 303 of the Act or section 643.090, RSMo concerning emergency orders,
 - b) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,
 - c) The applicable requirements of the acid rain program,
 - d) The authority of the Environmental Protection Agency and the Air Pollution Control Program of the Missouri Department of Natural Resources to obtain information, or
 - e) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

10 CSR 10-6.065(6)(C)7 Emergency Provisions

- 1) An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7.A shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
 - a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
 - b) That the installation was being operated properly,
 - c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
 - d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- 2) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

10 CSR 10-6.065(6)(C)8 Operational Flexibility

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, at least seven days in advance of these changes, except as allowed for emergency or upset conditions.

Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

- 1) Section 502(b)(10) changes. Changes that, under section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), record keeping, reporting or compliance requirements of the permit.
 - a) Before making a change under this provision, The permittee shall provide advance written notice to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and the ACP shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the ACP as above at least seven days before the change is to be made. If less than seven days notice is provided because of a need to respond more quickly to these unanticipated conditions, the permittee shall provide notice to the EPA and the ACP as soon as possible after learning of the need to make the change.
 - b) The permit shield shall not apply to these changes.

10 CSR 10-6.065(6)(C)9 Off-Permit Changes

- 1) Except as noted below, the permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:
 - a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is subject to any requirements under Title IV of the Act or is a Title I modification;
 - b) The permittee must provide written notice of the change to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, no later than the next annual emissions report. This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(6)(B)3. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.

- c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and
- d) The permit shield shall not apply to these changes.

10 CSR 10-6.020(2)(R)39 Responsible Official

The application utilized in the preparation of this permit was signed by Dick Champion, Director, Water Pollution Control. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

10 CSR 10-6.065(6)(E)6 Reopening-Permit for Cause

This permit may be reopened for cause if:

- 1) The Missouri Department of Natural Resources (MDNR) receives notice from the Environmental Protection Agency (EPA) that a petition for disapproval of a permit pursuant to 40 CFR § 70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,
- 2) MDNR or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
- 3) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
 - a) The permit has a remaining term of less than three years;
 - b) The effective date of the requirement is later than the date on which the permit is due to expire;or
 - c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
- 4) The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements), become applicable to that source, provided that, upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit; or
- 5) MDNR or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

10 CSR 10-6.065(6)(E)1.C Statement of Basis

This permit is accompanied by a statement setting forth the legal and factual basis for the permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

VI. Attachments

Attachments follow.

STATEMENT OF BASIS

Permit Reference Documents

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

- 1) Part 70 Operating Permit Application, received March 10, 2014;
- 2) 2013 Emissions Inventory Questionnaire, received March 5, 2014; and
- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition.

Applicable Requirements Included in the Operating Permit but Not in the Application or Previous Operating Permits

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

10 CSR 10-6.400, *Restriction of Emission of Particulate Matter From Industrial Processes*

The permittee included this regulation in the operating permit as applicable to Emission Unit EU-1 Sewage Sludge Incinerator. This unit is subject to 40 CFR Part 60 Subpart O, which includes a particulate matter emission limitation, therefore this rule is not applicable and was not included in the operating permit.

Other Air Regulations Determined Not to Apply to the Operating Permit

The Air Pollution Control Program (APCP) has determined the following requirements to not be applicable to this installation at this time for the reasons stated.

10 CSR 10-6.100, *Alternate Emission Limits*

This rule is not applicable because the installation is in an ozone attainment area.

10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*

The permittee included this regulation in the operating permit application as applicable to Emission Units EU-01 Sewage Sludge Incinerator and EU0-1A Bottom Ash System. EU-01 is subject to 40 CFR Part 60 Subpart O, which includes an opacity limit of 20%, therefore 10 CSR 10-6.220 was not applied to this unit within the operating permit. EU-01A is subject 40 CFR Part 60 Subpart Mmmm which also includes a 5% opacity limit for this emission unit which is more stringent than the state rule limit of 20%. Further Subpart Mmmm includes testing requirements to ensure compliance, therefore the state rule was not included in the operating permit.

Construction Permit History

No construction permits have been issued to this facility.

New Source Performance Standards (NSPS) Applicability

40 CFR Part 60 Subpart Mmmm, *Emission Guidelines and Compliance Times for Existing Sewage Sludge Incineration Units*

This subpart applies to the EU-01 Sewage Sludge Incinerator and EU-01A Bottom Ash System. The state rule 10 CSR 10-6.191, Sewage Sludge Incinerators incorporates by reference the federal regulatory requirements of Subpart MMMM. The applicable emission limitations, compliance demonstration, performance testing, monitoring, recordkeeping and reporting requirements for this subpart are included in the operating permit under Permit Condition 001.

40 CFR Part 60 Subpart O, Standards of Performance for Sewage Treatment Plants

This subpart is applicable to EU-01 Sewage Sludge Incinerator and is included in the operating permit under Permit Condition 002. The required performance testing for this subpart was completed June 29, 1993 and the average PM emission rate was 0.336 lb/ton dry sludge input which is well below the emission limit of 1.30 lb/ton. Opacity was measured at 0%, which is in compliance with the 20% opacity limit in the subpart.

Maximum Achievable Control Technology (MACT) Applicability

None.

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

In the permit application and according to APCP records, there was no indication that any Missouri Air Conservation Law, Asbestos Abatement, 643.225 through 643.250; 10 CSR 10-6.080, Emission Standards for Hazardous Air Pollutants, Subpart M, National Standards for Asbestos; and 10 CSR 10-6.250, Asbestos Abatement Projects - Certification, Accreditation, and Business Exemption Requirements apply to this installation. The installation is subject to these regulations if they undertake any projects that deal with or involve any asbestos containing materials. None of the installation's operating projects underway at the time of this review deal with or involve asbestos containing material. Therefore, the above regulations were not cited in the operating permit. If the installation should undertake any construction or demolition projects in the future that deal with or involve any asbestos containing materials, the installation must follow all of the applicable requirements of the above rules related to that specific project.

40 CFR Part 61 Subpart C, National Emission Standard for Beryllium

The applicant included this subpart as an applicable regulation for EU-01 Sewage Sludge Incinerator and the facility has assumed applicability and in the past performed stack testing to verify compliance with the emission limit of 10 grams (0.022 lb) of beryllium over a 24-hour period. The performance testing was completed June 29, 1993 using Method 29 and Beryllium was not detected in any quantity in air emissions or the sludge. Upon careful review of the applicability and definitions section of this subpart it was determined that this subpart has been applied to this unit in error, and in fact this unit is not subject to subpart C.

§61.30(a) Applicability states that the subpart is applicable to "...incinerators...which process...beryllium-containing waste."

Further, §61.30(g) Definitions defines "Beryllium-containing waste" as "...material contaminated with beryllium and/or beryllium compounds used or generated during any process or operation performed by a source subject to this subpart."

According to the definition, the sludge being treated by the incinerator does not meet the definition of "Beryllium containing waste" because neither the treatment plant nor the incinerator generated the

beryllium during any process or operation performed at the source. Therefore, this subpart does not apply to the EU-01 Sewage Sludge Incinerator.

40 CFR Part 61 Subpart E, *National Emission Standard for Mercury*

This subpart applies to EU-01 Sewage Sludge Incinerator and the requirements of this subpart are included in the operating permit under Permit Condition 003. The subpart applies an emission limit of 3.2 kg(7.1 lb) of mercury over a 24-hour period. Stack sampling is required to demonstrate compliance with this limit. The performance testing was completed June 29, 1993 using Methods 29 and 105. The average mercury emission rate using Method 129 was 0.0029467 lb/hr. Maximum emissions for 24 hour operation would be 32 g/24 hours which is below the mercury limit. Using Method 105, sludge mercury analyses, average sludge mercury content was 1.29 mg/kg (1.29µg/g) on a dry solids basis. 18,049 lbs (8187 kg) of dry sludge were incinerated during 6.84 hours during the day of the testing. If the incinerator were operated 24 hrs/day under performance test operating conditions, maximum mercury emission would be 27 g/24 hours which is also below the emission limit. Because the testing requirements have been completed, they were not included in the operating permit, nor are there any additional record keeping or reporting requirements required by this subpart or included in the operating permit.

Compliance Assurance Monitoring (CAM) Applicability

40 CFR Part 64, *Compliance Assurance Monitoring (CAM)*

The CAM rule applies to each pollutant specific emission unit that:

- Is subject to an emission limitation or standard, and
- Uses a control device to achieve compliance, and
- Has pre-control emissions that exceed or are equivalent to the major source threshold.

40 CFR Part 64 is not applicable because none of the pollutant-specific emission units uses a control device to achieve compliance with a relevant standard.

Updated Potential to Emit for the Installation

Pollutant	Potential to Emit (tons/yr) ¹
CO	5.40
HAP	4.48
NO _x	14.89
PM ₁₀	3.92
PM _{2.5}	3.26
SO _x	31.6
VOC	36.6

¹Each emission unit was evaluated at 8,760 hours of annual operation. Emissions data was taken from the 2013 EIQ. The table includes the potential to emit for the entire facility; however this Part 70 Operating permit is only applicable to the Sewage Sludge Incinerator and Ash Handling operations at this facility which is required by 40 CFR Part 60 Subpart M. M. M. M.

Other Regulatory Determinations

10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds*

This regulation does not apply to EU-01 according to 10 CSR 10-6.260 (1)(A)1 which states that emission sources subject to an applicable sulfur compound emission limit under 10 CSR 1-6.070 are exempt from the rule. EU-01 is subject to 40 CFR Part 60 Subpart M. M. M. M., *Emission Guidelines and*

Compliance Times for Existing Sewage Sludge Incineration Units which includes a sulfur dioxide limit of 15 ppmv. This limit is included in the operating permit under Permit Condition 001.

Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis

Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons:

1. The specific pollutant regulated by that rule is not emitted by the installation;
2. The installation is not in the source category regulated by that rule;
3. The installation is not in the county or specific area that is regulated under the authority of that rule;
4. The installation does not contain the type of emission unit which is regulated by that rule;
5. The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the APCP's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the APCP a schedule for achieving compliance for that regulation(s).

Response to Public Comments

The draft Part 70 Operating Permit for Rock Creek Treatment Plant (095-0150) was placed on public notice as of October 3, 2014 for a 30-day comment period. The public notice was published on the Department of Natural Resources' Air Pollution Control Program's web page at: <http://www.dnr.mo.gov/env/apcp/PermitPublicNotices.htm>. On October 4, 2014 the Air Pollution Control Program received comments from Leslye Werner, EPA Region 7. On October 27, Dick Champion, Director- Water Pollution Control for the City of Independence submitted comments as well. The comments are addressed below in the order in which they appear within the letter(s). Some comments have been summarized, abbreviated, or paraphrased for clarity and brevity.

Comments received from Leslye Werner, EPA Region 7:

Comment #1: Permit Condition 001 incorporates the applicable requirements from 40 CFR Part 60, Subpart M. These requirements establish emission limitations and standards for several air pollutants including particulate matter (PM), mercury and sulfur dioxide (SO₂) for emission unit EU-1. Also included in this draft operating permit are Permit Conditions 002, 004 and 005 which establish emission limitations for particulate matter, mercury and sulfur dioxide, respectively. Therefore there are more than one set of emission limitations and standards that apply to emission unit EU-1.

So in an effort to eliminate redundant emission limitations, EPA strongly encourages the permittee and permitting authority to "streamline" the multiple applicable requirements. This approach allows multiple emission limits to be "streamlined" into the most stringent limit while minimizing the permittee's requirements.

Response to Comment #1: Permit Condition 001 establishes a PM limit of 18 mg/dscm. Permit Condition 002 establishes a PM limit of 0.65 g/kg dry sludge input. While both conditions establish PM limits, the limits are in different units and one is measured at the output of the stack while the other is related to the amount of sludge input into the unit. It would be difficult if not impossible to condense these two limits into one; therefore both should remain in the operation permit. Likewise, Permit Condition 001 establishes a mercury limit of 0.037 mg/dscm and Permit Condition 003 establishes a mercury limit of 3.2 kg (7.1 lb) per 24-hour period. One limit is measured at the output of the stack while one is based on a 24-hour period. Because the operation of the incinerator can possibly change within each 24-hour period it would be very difficult to condense these two mercury limits into one; therefore both limits should remain in the operating permit. Permit Condition 001 also establishes a 15 ppmv SO₂ limit for EU-01 and Permit Condition 005 establishes a 500 ppmv SO₂ limit (from 10 CSR 10-6.260). According to 10 CSR 10-6.260 (1)(A)1, units that are subject to an applicable sulfur compound emission limit under 10 CSR 10-6.070 are exempt from this rule. Therefore the sulfur dioxide limit from 10 CSR 10-6.260 should not have been included so Permit Condition 005 has been removed from the operation permit.

Comment #2: Reporting requirement #15 in Permit Condition 001 stipulates that reports of any deviation from monitoring, record keeping, and reporting are to be submitted semi-annually in the semi-annual monitoring report and annual compliance certification as required by 10 CSR 10-6.065(C)1.C(III); which is fully described in Section V of the operating permit. However, Reporting requirement #5 directs the permittee to submit deviation reports by August 1 of that year for data collected during the first half of the calendar year and by February 1 of the following year for data collected during the second half of the calendar year. These two reporting requirements appear to be duplicative and contradictory and EPA recommends MDNR resolve this apparent discrepancy.

Response to Comment #2: Reporting requirement #5 of Permit Condition 001 lists the information to be reported by August 1 and February 1 in order to demonstrate compliance with Subpart MMMM for EU-01. The semiannual monitoring reports and annual compliance certification referenced in Reporting Requirement #15 are required to verify compliance with the operating permit for the entire installation. Therefore although they may be duplicative for EU-01, both reports are necessary and required by federal and state regulations and both requirements must remain in the operating permit.

Comment #3: Permit Condition 003 establishes an emission limitation for beryllium over a 24-hour period. However, the permit condition indicates that there is no monitoring, record keeping or reporting requirements to verify compliance with the emission limit. The Statement of Basis specifies that stack sampling completed June 29, 1993 adequately demonstrated compliance, therefore stack sampling requirements, additional record keeping and reporting are not required. However, 10 CSR 10-6.065(6)(C)1.C(I)(b) states that where applicable requirements do not require periodic testing, then periodic monitoring sufficient to yield reliable data for the relevant time period that are representative of the installation's compliance with the permit shall be added to the operating permit. EPA is concerned that a 20+ year old stack test may not be representative of the current Rock Creek Sewage Sludge Incinerator operation. Therefore, EPA recommends MDNR include periodic monitoring for beryllium in Permit Condition 003. EPA would suggest that beryllium monitoring could be included with the periodic monitoring required by Permit Condition 001 (Demonstrating Compliance Step 5). Also, EPA recommends that MDNR include appropriate record keeping and reporting associated with the periodic monitoring.

Response to Comment #3: The test results from the initial stack test had Beryllium below detection limits in the sludge. I contacted the facility and spoke with Karla Pierce, Environmental Compliance Manager for the City of Independence, MO on October 22, 2014 and she informed me that the city does not have any industrial sources of Beryllium, therefore retesting for Beryllium at this time is considered unnecessary. Should a new industrial source of Beryllium occur in the City of Independence, retesting may be required for this unit.

Comment #4: Section V. General Permit Requirements, in the draft operating permit includes an applicable requirement 10 CSR 10-6.065(6)(C)1.I for Reasonably Anticipated Operating Scenarios. The draft operating permit has "none" as an entry under this requirement. However, the Part 70 operating permit renewal application includes Form OP-D04: Alternate Operating Scenario. On Form OP-D04, Rock Creek Treatment Plant describes an alternate operating scenario which EPA recommends MDNR include in the operating permit.

Response to Comment #4: The Alternate Operating Scenario as described in the operating permit application has been added to the operating permit General Permit Requirements 10 CSR 10-6.065(6)(C)1.I Reasonably Anticipated Operating Scenarios.

Comments received from Dick Champion, City of Independence, MO:

Comment #1: The final Control Plan for this emission unit has not yet been submitted due to delays in returning the Zimpro wet air oxidation sludge conditioning process to service. We have not yet completed emissions testing with Zimpro online to determine compliance requirements. Testing may indicate that additional air pollution control devices are needed. Therefore, the permit may need to include operating limits and requirements for additional air pollution control equipment.

Response to Comment #1: If the City of Independence should need to update requirements within the operating permit for the Rock Creek Treatment Plant Sewage Sludge Incinerator in the future, an application for permit modification may be submitted at any time.

Comment #2: When the Air Pollution Control Program issues the Part 70 permit, we requested that the Rock Creek Treatment Plant Basic Operating Permit be modified to remove the Part 70 emission units.

Response to Comment #2: The Basic Operating permit for Rock Creek Treatment Plant (project 2012-03-081) expires on October 28, 2017. Project 2014-11-011 has been created for the modification of this operating permit to remove emission units covered by the Part 70 operating permit.

Comment #3: The table of reported air pollutant emissions in the installation description lists actual emission reported for the entire Rock Creek Treatment Plant. Actual emissions for Emission Point 1 would be more representative of Rock Creek Treatment Plant SSI emissions than using actual emissions for the entire facility. VOC and ammonia emissions listed in the table are primarily fugitive emissions from wastewater treatment tanks, not SSI emissions.

Response to Comment #3: The table of actual emissions under the Installation Description (as well as the table of potential emissions in the Statement of Basis) are intended for informational purposes to describe the installation. Although only the SSI unit is required to obtain a Part 70 operating permit, this unit is a part of the overall installation – The Rock Creek Treatment Plant, and therefore the table(s) lists the emissions from all units at the plant.

Comment #4: As stated in Permit Condition 001, Operational Limitations 1), final compliance with Subpart M MMM must be achieved by March 21, 2016. The March 21, 2016 compliance date also applies to Operational Limitations 2) and 3) regarding SSI operator training and qualification and to Emission Limitations and Standards, Operating Limits and Requirements, Demonstrating Compliance, Performance Testing Requirements, Recordkeeping and Reporting Requirements which are part of Subpart M MMM. The Rock Creek Treatment Plant incinerator operator is fully trained and qualified to operate the SSI, but a training/qualification has not been submitted for state approval pursuant to Subpart M MMM.

Comment #4: The permittee has until March 21, 2016 to develop and submit the operator training procedures to the program for approval.

Comment #5: The Statement of Basis Updated Potential to Emit for the Installation includes potential to emit for the entire facility; however, the Part 70 Operating permit is only applicable to the SSI and Ash Handling operations. Potential to emit for Emission Point 1 would be more representative of Rock Creek Treatment Plant SSI emissions than using potential emissions for the entire facility. VOC and ammonia emissions are primarily fugitive emissions from wastewater treatment tanks, not SSI emissions.

Response to Comment #5: See response to Comment #3.

Comment #6: Uncontrolled emissions should not be used to determine potential to emit for the SSI. Due to the design and construction of the SSI, it cannot be operated without the scrubbers. The SSI is designed with an interlock system to prevent operation of the incinerator without sufficient water flow to the scrubbers and there is no bypass of the scrubbers. For these reasons the Rock Creek Treatment Plant has been classified by the Air Pollution Control Program as a Basic State Installation.

Response to Comment #6: The statement that the potential emissions were calculated using 8,760 hours of uncontrolled hours of operation was an error. The potential to emit table in the Statement of Basis does take into consideration the use of the scrubber so far as it was reported in the 2013 Emissions Inventory Questionnaire (EIQ).