



## 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:** OP2017-016

**Expiration Date:** FEB 23 2022

**Installation ID:** 165-0001

**Project Number:** 2015-04-084

**Installation Name and Address**

Buildex Incorporated  
22105 Highway #371  
Dearborn, MO 64439  
Platte County

**Parent Company's Name and Address**

The Mackie Clemens Fuel Company  
P.O. Box 77  
Ottawa KS, 66067

**Installation Description:**

Buildex, Inc. operates a lightweight aggregate facility in Platte County. The facility mines shale from an onsite mine face and processed into clinker. The facility is a major source of Volatile Organic Compounds (VOCs) and Nitrogen Oxides (NO<sub>x</sub>) emissions.

Prepared by  
David Buttig  
Operating Permit Unit

Director of Designee  
Department of Natural Resources

**FEB 23 2017**

Effective Date

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## I. Installation Equipment Listing

### 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.

Emission Unit #	Description of Emission Unit
EP-04	Rotary Kiln with Wet Scrubber; constructed 1968
FE-01	Conveyor System – Conveying Crushing Area and Shale Screening (EP-01 to EP-02)
FE-02	Conveyor System – Conveying Between Shale Screening and Shale Storage (EP-02 to EP-03)
FE-03	Conveyor System – Conveying Between Shale Storage and Kiln (EP-03 to EP-04)
FE-04	Conveyor System – Conveying Between Kiln and Clinker Storage (EP-04 to EP-06)
FE-05	Conveyor System – Conveying Between Clinker Storage and Clinker Crusher (EP-06 to EP-07)
FE-06	Conveyor System – Conveying Between Clinker Crusher and Clinker Screening (EP-07 to EP-08)
FE-07	Conveyor System – Conveying Between Clinker Screening and Enclosed Storage (EP-08 to EP-09)
FE-08	Quarry to Feeder/Breaker
FE-09	Conveying of Mined Shale from Feeder/Breaker to Processing Operations

### EMISSION UNITS WITHOUT LIMITATIONS

The following list provides a description of the equipment that does not have unit specific limitations at the time of permit issuance.

Emission Unit #	Description of Emission Unit
EP-01	Primary Shale Crusher Area ; constructed 1976 – Moved across the road in 2014
EP-02	Enclosed Shale Screening; constructed 1968
EP-03	Enclosed Shale Storage
EP-05	Expanded Shale Clinker Cooler with Multiclone; constructed 1968
EP-06	Clinker Storage with Water Spray
EP-07	Enclosed Primary Clinker Crusher with Water Spray; constructed 1986
EP-08	Enclosed Clinker Screening; Constructed 1968
EP-09	Enclosed Finished Product Storage
EP-10	Saturation Stockpile with Water Spray
EP-11	Product Loading with Water Spray
EP-12	Distillate Fuel #2 Tanks
EP-13	Haul Roads

## **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 on the date of permit issuance. The plant wide conditions apply to all emission units at this installation. All emission units are listed in Section I under Emission Units with Limitations and Emission Units without Limitations.

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 on the date of permit issuance.

<b>PERMIT CONDITION 1</b>		
40 CFR Part 60, Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants		
Emission Unit	Description	Manufacturer/Model #
FE-01	Conveyor System – Conveying Between EP-01 and EP-02: November 14, 2015	N/A
FE-02	Conveyor System – Conveying Between EP-02 and EP-03: November 14, 2015	N/A
FE-03	Conveyor System – Conveying Between EP-03 and EP-04: November 14, 2015	N/A
FE-04	Conveyor System – Conveying Between EP-04 and EP-06: November 14, 2015	N/A
FE-05	Conveyor System – Conveying Between EP-06 and EP-07: November 14, 2015	N/A
FE-06	Conveyor System – Conveying Between EP-07 and EP-08: November 14, 2015	N/A
FE-07	Conveyor System – Conveying Between EP-08 and EP-09: November 14, 2015	N/A
FE-08	Quarry to Feeder/Breaker: November 14, 2015	N/A
FE-09	Conveying of Mined Shale to Processing Operations	N/A

**Emission Limitations:**

- 1) The permittee shall limit the fugitive emissions from FE-01 through FE-09 to 7% opacity. [Table #3]

**Monitoring of Emission Units Constructed On or After April 22, 2008:**

- 1) The permittee shall perform monthly inspections to check that water is flowing to discharge spray nozzles in the water suppression system.
  - a) Corrective action must be initiated within 24 hours and complete corrective action as expeditiously as practical if the water is not flowing properly during an inspection of the water spray nozzles. [§60.674(b)]
- 2) If the emission unit is not controlled by water carryover from upstream water spray, the permittee shall perform a fugitive emissions performance test five years after the previous test.
- 3) If a control device other than water spray is used during a monthly inspection (for example, water from recent rainfall), the permittee shall specify the control mechanism used instead of the water sprays in the log. [§60.674(b)(2)]

**Recordkeeping/Reporting:**

- 1) For performance tests involving only Method 9 (40 CFR Part 60 Appendix A-4) testing, the permittee may reduce the 30-day advance notification of performance test in §60.7(a)(6) and 60.8(d) to a 7-day advance notification. [§60.675(g)]
- 2) The permittee shall record each periodic inspection required for emission units constructed after April 22, 2008.
- 3) The permittee shall keep all logs onsite for a minimum of 60 months and make these logs available to the Department of Natural Resources personnel upon request. [§60.676(b)]
- 4) The permittee shall report any deviations of this permit condition to the Air Pollution Control Program, Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than the semi-annual monitoring report and annual compliance certification, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

<b>PERMIT CONDITION 2</b>		
10 CSR 10-6.060 Construction Permits Required		
Construction Permit 0994-016, Issued August 08, 1994		
Emission Unit	Description	Manufacturer/Model #
EP-04	Rotary Kiln with Wet Scrubber: Constructed in 1968; MHDR = 44.9 MMBtu/hr	FL Smith/11' x 175' Rotary Kiln

**Emission Limitations:**

- 1) The permittee shall be limited to burning natural gas. [Special Condition 1]
- 2) The permittee shall not consume more than 410 million cubic feet of natural gas in any consecutive 12-month period. [Special Condition 2]

**Recordkeeping:**

- 1) The permittee shall keep records that list the monthly natural gas consumption of the facility using Attachment E, or equivalent tracking sheet created by the permittee. These records shall include, at a minimum, the previous 60 months of records. [Special Condition 4]
- 2) The permittee shall make these records immediately available to Department of Natural Resources' personnel upon verbal request. [Special Condition 4]

**Reporting:**

- 1) The permittee shall report any deviations of this permit condition to the Air Pollution Control Program, Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than the semi-annual monitoring report and annual compliance certification, as required by 10 CSR 10-6.065(6)(C)1.C.(III).
- 2) The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after the end of the month, if the 12-month cumulative total records indicate that the source exceeded the limitation of 410 million cubic feet of natural gas consumption. [Special Condition 5]

## IV. Core Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR), 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 on the date of permit issuance. The following are only excerpts from the regulation or code, and are 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) 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.

### **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) 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 to the director in writing at least ten days prior to any maintenance, start-up or shutdown activity 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, notice shall be given as soon as practicable prior to the activity.
- 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. The permittee shall retain the most current operating permit issued to this installation on-site. The permittee shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request.

#### **10 CSR 10-6.080 Emission Standards for Hazardous Air Pollutants and 40 CFR Part 61 Subpart M National Emission Standard for Asbestos**

The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos.

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

- 1) The permittee shall submit a 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) 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.
- 3) The permittee shall submit a full EIQ for the 2017 and 2020 reporting years. In the interim years the installation may submit a Reduced Reporting Form; however, if the installation's emissions increase or decrease by more than five tons when compared to their last submitted full EIQ, the installation shall submit a full EIQ rather than a Reduced Reporting Form.
- 4) In addition to the EIQ submittal schedule outlined above, any permit issued under 10 CSR 10-6.060 section (5) or (6) triggers a requirement that a full EIQ be submitted in the first full calendar year after the permitted equipment initially operates.

#### **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 10-6.165 Restriction of Emission of Odors**

**This is a State Only permit requirement.**

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour.

**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 B, 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 equipment malfunctions contributed to an exceedance.
- 3) 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.

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

**Emission Limitation:**

The permittee shall not cause or permit to be discharged into the atmosphere from any source not exempted under 10 CSR 10-6.220 any visible emissions in excess of the limits specified by this rule. This permit will contain the opacity limits identified (10, 20 or 40 percent) for the specific emission units.

**Monitoring:**

- 1) The permittee shall conduct opacity readings on each emission unit using the procedures contained in USEPA Test Method 22. The permittee is only required to take readings when the emission unit is operating and when the weather conditions allow. If the permittee observes no visible or other significant emissions using these procedures, then no further observations are required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
- 2) The permittee must maintain the following monitoring schedule:
  - a) The permittee shall conduct weekly observations for a minimum of eight (8) consecutive weeks after permit issuance.
  - b) Should the permittee observe no violations of this regulation during this period then-
    - i) The permittee may observe once every two (2) weeks for a period of eight (8) weeks.
    - ii) If a violation is noted, monitoring reverts to weekly.
    - iii) Should no violation of this regulation be observed during this period then-
      - (1) The permittee may observe once per month.
      - (2) If a violation is noted, monitoring reverts to weekly.

- 3) If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

**Recordkeeping:**

The permittee shall maintain records of all observation results using Attachment A (or its equivalent), noting:

- 1) Whether any air emissions (except for water vapor) were visible from the emission units;
- 2) All emission units from which visible emissions occurred;
- 3) Whether the visible emissions were normal for the process;
- 4) The permittee shall maintain records of any equipment malfunctions, which may contribute to visible emissions; and,
- 5) The permittee shall maintain records of all USEPA Method 9 opacity tests performed.

**10 CSR 10-6.250 Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements**

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the department to monitor training provided to employees.

**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 at an installation:
  - 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”;
  - 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.

**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 40 CFR §82.106.
  - b) The placement of the required warning statement must comply with the requirements of 40 CFR §82.108.
  - c) The form of the label bearing the required warning statement must comply with the requirements of 40 CFR §82.110.
  - d) No person may modify, remove, or interfere with the required warning statement except as described in 40 CFR §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 of 40 CFR Part 82:
  - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices described in 40 CFR §82.156.
  - b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment described in 40 CFR §82.158.
  - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR §82.161.
  - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with the record keeping requirements of 40 CFR §82.166. ("MVAC-like" appliance as defined at 40 CFR §82.152).
  - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR §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 40 CFR §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 contained 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.*

## 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,

<b>10 CSR 10-6.065, §(5)(C)1 and §(6)(C)1.B Permit Duration</b> <b>10 CSR 10-6.065, §(5)(E)2.C Extension of Expired Permits</b>
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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. If a timely and complete application for a permit renewal is submitted, but the Air Pollution Control Program fails to take final action to issue or deny the renewal permit before the end of the term of this permit, this permit shall not expire until the renewal permit is issued or denied.

<b>10 CSR 10-6.065, §(5)(C)1 and §(6)(C)1.C General Record Keeping and Reporting Requirements</b>
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- 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, Compliance and Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
  - b) The permittee shall submit a report of all required monitoring by:
    - i) April 1st for monitoring which covers the January through December time period.
    - ii) Exception. Monitoring requirements which require reporting more frequently than 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.
  - d) Submit supplemental reports as required or as needed. 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 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 annual 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 §(5)(C)1 and §(6)(C)1.D Risk Management Plan Under Section 112(r)**

If the installation is required to develop and register a risk management plan pursuant to Section 112(R) of the Act, the permittee will verify that it has complied with the requirement to register the plan.

**10 CSR 10-6.065(5)(C)1.A 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 under this rule.
- 6) Failure to comply with the limitations and conditions that qualify the installation for an Intermediate permit make the installation subject to the provisions of 10 CSR 10-6.065(6) and enforcement action for operating without a valid part 70 operating permit.

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

None

**10 CSR 10-6.065, §(5)(B)4; §(5)(C)1, §(6)(C)3.B; and §(6)(C)3.D; and §(5)(C)3 and §(6)(C)3.E.(I) – (III) and (V) – (VI) 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 the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and exceedances 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, §(5)(C)1 and §(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(5)(C)5 Off-Permit Changes**

- 1) Except as noted below, the permittee may make any change in its permitted installation's operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. 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 a Title I modification; Please Note: Changes at the installation which affect the emission limitation(s) classifying the installation as an intermediate source (add additional equipment to the record keeping requirements, increase the emissions above major source level) do not qualify for off-permit changes.
  - b) The permittee must provide contemporaneous written notice of the change to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219. 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; and
  - 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.

#### **10 CSR 10-6.020(2)(R)34 Responsible Official**

The application utilized in the preparation of this permit was signed by Dennis G. Woolman, President. 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 §(5)(E)4 and §(6)(E)6.A(III)(a)-(c) Reopening-Permit for Cause**

This permit may be reopened for cause if:

- 1) The Missouri Department of Natural Resources (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,
- 2) 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,
- 3) MDNR or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

**10 CSR 10-6.065 §(5)(E)1.A and §(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.





**Attachment C**

Method 9 Opacity Emissions Observations								
Company					Observer			
Location					Observer Certification Date			
Date					Emission Unit			
Time					Control Device			
Hour	Minute	Seconds				Steam Plume (check if applicable)		Comments
		0	15	30	45	Attached	Detached	
	0							
	1							
	2							
	3							
	4							
	5							
	6							
	7							
	8							
	9							
	10							
	11							
	12							
	13							
	14							
	15							
	16							
	17							
	18							
SUMMARY OF AVERAGE OPACITY								
Set Number	Time				Opacity			
	Start	End		Sum	Average			

Readings ranged from \_\_\_\_\_ to \_\_\_\_\_ % opacity.

Was the emission unit in compliance at the time of evaluation? \_\_\_\_\_  
 YES NO Signature of Observer





## STATEMENT OF BASIS

### INSTALLATION DESCRIPTION

Buildex, Inc. operates a lightweight aggregate facility in Platte County. The SIC code is 3295 and NAICS is 212324.

The facility mines shale from an onsite mine face and transports the shale to the crusher area where it is unloaded into the crusher hopper and crushed. The shale is then conveyed across the road to be screened and stored in the shale storage building before it is conveyed into the rotary kiln system. The processed clinker is then conveyed from the clinker cooler to the clinker storage pile. The clinker is then conveyed to the clinker crusher and screening. From screening, the clinker is stored in piles until it is loaded for shipment offsite. The facility is a major source of Volatile Organic Compounds (VOCs) and Nitrogen Oxides (NO<sub>x</sub>) emissions.

All equipment at the facility is powered by city power. There are no electrical generating units or emergency generators located at the facility.

Buildex Incorporated is not a named source and therefore fugitive emissions do not count towards major source applicability.

### Updated Potential to Emit for the Installation

Pollutant	Potential to Emit (tons/yr) <sup>1</sup>
CO	77.53
CO <sub>2</sub> e	23,010
HAP	0.39
NO <sub>x</sub>	249.66
PM <sub>10</sub>	62.47
PM <sub>2.5</sub>	41.64
SO <sub>x</sub>	30.22
VOC	102.50

<sup>1</sup>Each emission unit was evaluated at 8,760 hours of uncontrolled annual operation unless otherwise noted.

<sup>2</sup>Natural Gas usage has been limited to 410 MMft<sup>3</sup> for these PTE calculations.

Reported Air Pollutant Emissions, tons per year					
Pollutants	2015	2014	2013	2012	2011
Particulate Matter ≤ Ten Microns (PM <sub>10</sub> )	25.67	55.80	55.80	55.80	55.80
Particulate Matter ≤ 2.5 Microns (PM <sub>2.5</sub> )	7.96	0.68	0.68	0.68	0.68
Sulfur Oxides (SO <sub>x</sub> )	5.31	0.11	0.11	0.11	0.11
Nitrogen Oxides (NO <sub>x</sub> )	219.72	26.81	26.81	26.81	26.81

<b>Reported Air Pollutant Emissions, tons per year</b>					
Pollutants	2015	2014	2013	2012	2011
Volatile Organic Compounds(VOC)	90.20	0.54	0.54	0.54	0.54
Carbon Monoxide (CO)	--	6.70	6.70	6.70	6.70

### **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 April 24, 2015;
- 2) Construction Permit 1180-007, Issued November 01, 1980;
- 3) Construction Permit 0994-016, Issued August 09, 1994;
- 4) No Permit Required Letter, Issued July 31, 2014;
- 5) 2014 Emissions Inventory Questionnaire, received March 27, 2015; and
- 6) 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.

None.

### **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.

### **Construction Permit History**

Construction Permit #1180-007, Issued November 01, 1980

Construction Permit #1180-007 allowed the conversion of the existing natural gas rotary kiln to a rotary kiln that burned a mixture of coal and natural gas. The facility was limited to 230 days of operation in order to limit the sulfur dioxide emissions to 100 tons.

Construction Permit #0994-016, Issued August 09, 1994

Construction Permit #0994-016 removed the capability of combusting coal for the rotary kiln. This allowed the facility to increase production days from 230 to 365. A 410 million cubic feet limit on natural gas was included with this construction permit.

No Permit Required Letter, Issued July 31, 2014

No permit was required for Buildex to relocate their mining operation and build a conveyor to transport material from the new mining face to the processing facility.

**New Source Performance Standards (NSPS) Applicability**

40 CFR Part 60 Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants has been applied to the conveyors (FE-01 through FE-09 and the conveyors associated with EP-08). This standard is included in this operating permit as Permit Condition 1.

The Enclosed Clinker Crusher has met the requirements and by NSPS OOO, no further testing is required.

EP-01, EP-02, EP-04, EP-05, and EP-08 are exempt from NSPS OOO because they were constructed prior to August 31, 1983.

40 CFR Part 60 Subpart UUU Calciners and Dryers in Mineral Industries

EP-04 (Rotary Kiln) is exempt from this rule because it was constructed prior to April 23, 1986.

**Maximum Achievable Control Technology (MACT) Applicability**

None

**National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability**

None

**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.

**Other Regulatory Determinations**

None

**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

Two comments were received from Mark Smith, EPA Region VII's Air Permitting and Compliance Branch Chief. The comments are addressed in the order in which they appear within the letter(s).

### Comment 1:

The *Emission Limitation* in Plant wide **Permit Condition PW001** incorporates requirements specified in Permit to Construct 0994-016, issued August 8, 1994. It states "If the presence of PM10 (particulate matter less than ten microns) in the ambient air is detected in quantity and duration that directly or approximately causes or contributes to injury to human, plant, or animal life or health, or to property, or that unreasonably interferes with the enjoyment of life or use or property, or is a violation of a state rule, the permittee shall immediately undertake a program that will correct the problem (taken from the Missouri Air Conservation Law, Chapter 643 RsMO). [Special Condition 3]"

However, there is nothing in Permit Condition PW001 that indicates how the permittee is to monitor and maintain their ambient impact to prevent injury to human, plant, or animal life or health, or to property, or that unreasonably interferes with the enjoyment of life or use or property. Therefore, this emission limitation is not enforceable from a practical matter and EPA recommends MDNR utilize the authority provided in 10 CSR 10-6.065(5)(C)I, and require periodic monitoring and record keeping to verify compliance with the ambient air quality standard. Also, EPA does not enforce against the NAAQS and therefore EPA recommends MDNR show Permit Condition PW001 as a "State Only" permit condition.

### Response to Comment:

Permit Condition PW001 has been removed from the operating permit because the permit condition is no longer necessary. Buildex has not had any NOV's or NOE's for violations of the condition.

### Comment 2:

*Emission Limitations* 1) a); 2) a); and 3) a) **Permit Condition 1** all require the permittee to meet the fugitive emission limits and compliance requirements within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup as required under §60.11. It appears to the EPA that the emission units for which these requirements apply were installed in 1968 and 1986 and therefore it is questionable whether these requirements are still applicable. EPA recommends MDNR reconsider whether or not emission limitations 1) a); 2) a); and 3) a) are still applicable requirements.

### Response to Comment:

Permit Condition 1 has been updated to remove initial requirements and to only include the requirements that are necessary after the initial reporting.



Eric R. Greitens, Governor • Carol S. Comer, Acting Director

## DEPARTMENT OF NATURAL RESOURCES

dnr.mo.gov

**FEB 23 2017**

Mr. Dennis G. Woolman  
Buildex Incorporated  
22105 Highway #371  
Dearborn, MO 64439

Re: Buildex Incorporated, 165-0001  
Permit Number: OP2017-016

Dear Mr. Woolman:

Enclosed with this letter is your intermediate 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.

This permit may include requirements with which you may not be familiar. If you would like the department to meet with you to discuss how to understand and satisfy the requirements contained in this permit, an appointment referred to as a Compliance Assistance Visit (CAV) can be set up with you. To request a CAV, please contact your local regional office or fill out an online request. The regional office contact information can be found at <http://dnr.mo.gov/regions/>. The online CAV request can be found at <http://dnr.mo.gov/cav/compliance.htm>.

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 (30) days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If you send your appeal by registered or certified mail, we will deem it filed on the date you mailed it. If you send your appeal by a method other than registered or certified mail, we will deem it filed on the date the AHC receives it.

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:dbj

Enclosures

c: PAMS File: 2015-04-084



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