

MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

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

Permit Number: 072020-004 Project Number: 2020-03-037
Installation Number: 031-0068

Parent Company: Midwest Sterilization Corporation

Parent Company Address: 1204 Lenco Avenue, Jackson, MO 63756

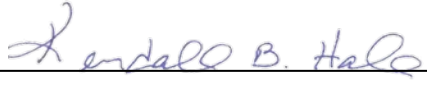
Installation Name: Midwest Sterilization Corporation

Installation Address: 1204 Lenco Avenue, Jackson, MO 63756

Location Information: Cape Girardeau County, S14, T35N, R7E

Application for Authority to Construct was made for:
Installation of a new sterilization chamber. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

-
- Standard Conditions (on reverse) are applicable to this permit.
- Standard Conditions (on reverse) and Special Conditions are applicable to this permit.



Director or Designee
Department of Natural Resources

July 14, 2020
Effective Date

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Enforcement and Compliance Section of the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Enforcement and Compliance Section of the Department's Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available within 30 days of actual startup. Also, you must notify the Department's regional office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

A copy of the permit application and this permit and permit review shall be kept at the installation address and shall be made available to Department's personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 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 choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant source(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit using the contact information below.

Contact Information:
Missouri Department of Natural Resources
Air Pollution Control Program
P.O. Box 176
Jefferson City, MO 65102-0176
(573) 751-4817

The regional office information can be found at the following website:
<http://dnr.mo.gov/regions/>

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted to the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (3)(E). "Conditions required by permitting authority."

Midwest Sterilization Corporation
Cape Girardeau County, S14, T35N, R7E

1. **Superseding Condition**
The conditions of this permit supersede all special conditions found in the previously issued construction permit no. 062019-001 issued by the Air Pollution Control Program.
2. **Ethylene Oxide Usage Limitations**
 - A. Midwest Sterilization Corporation shall not use more than 912,610.0 pounds of ethylene oxide combined in all fourteen (14) of its sterilization chambers in any consecutive 12-month period.
 - B. Attachment A or equivalent forms, such as electronic forms, shall be used to demonstrate compliance with Special Condition 2.A.
3. **Control Device Requirement – Wet Scrubber (CD-01)**
 - A. Midwest Sterilization Corporation shall control ethylene oxide emissions from the vacuum pump vents of all sterilization chambers using a wet scrubber (CD-01).
 - B. The wet scrubber shall be operated and maintained in accordance with the manufacturer's specifications, a copy of which shall be kept onsite.
 - C. The operating pressure drop and the liquid flow rate of the scrubber shall be maintained within the manufacturer's recommended operating conditions (40-120 gpm for liquid flow rate, 10-17 inches of water gauge ("wg) for pressure drop).
 - D. Midwest Sterilization Corporation shall install gauges to measure the scrubber liquid flow rate and pressure drop. The operating liquid flow rate and the operating pressure drop shall be recorded at least once every day while the scrubber is in operation to show compliance with Special Condition 3.C.
 - E. The concentration of glycol in the wet scrubber liquor shall not exceed 49.8% by weight, which was established during the September 15, 2004 stack test. Midwest Sterilization Corporation shall sample the wet scrubber liquor once each week to verify that the concentration of glycol is

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

no greater than 49.8% by weight. Sampling shall be performed using method approved by the Missouri Air Pollution Control Program.

- F. If the glycol concentration for any sample tested in compliance with Special Condition 3.E. is greater than 49.8% by weight, Midwest Sterilization shall implement corrective actions within eight (8) hours to return the concentration to less than or equal to 49.8%. If corrective actions fail to return the concentration to less than or equal to 49.8%, Midwest Sterilization Corporation shall submit a request to the Missouri Air Pollution Control Program to take into account the new information.
- G. Midwest Sterilization Corporation shall maintain an operating and maintenance log for the wet scrubber which shall include the following:
 - 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
 - 2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.
- 4. Control Device Requirement – Wet Scrubber (CD-03)
 - A. Midwest Sterilization Corporation shall control ethylene oxide emissions from the back vents of all sterilization chambers (EP-08) and the ethylene oxide emissions from the sterilization chamber (vacuum pump) scrubbers (CD-01) using a wet scrubber.
 - B. The wet scrubber shall be operated and maintained in accordance with the manufacturer's specifications, a copy of which shall be kept onsite.
 - C. The operating pressure drop and the liquid flow rate of the scrubber shall be maintained within the manufacturer's recommended operating conditions (520-665 gpm for liquid flow rate, 10-17" wg for pressure drop).
 - D. Midwest Sterilization Corporation shall install gauges to measure the scrubber pressure drop and the liquid flow rate. The operating pressure drop and the liquid flow rate shall be recorded once every day while the scrubber is in operation to show compliance with Special Condition 4.C.
 - E. The concentration of glycol in the wet scrubber liquor shall not exceed 49.8% by weight. Midwest Sterilization Corporation shall sample the wet scrubber liquor once each week to verify that the concentration of glycol is no greater than 49.8% by weight. Sampling shall be performed using method approved by the Missouri Air Pollution Control program.
 - F. If the glycol concentration for any sample tested in compliance with Special Condition 4.E. is greater than 49.8% by weight, Midwest Sterilization shall implement corrective actions within eight (8) hours to

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

return the concentration to less than or equal to 49.8%. If corrective actions fail to return the concentration to less than or equal to 49.8%, Midwest Sterilization Corporation shall submit a request to the Missouri Air Pollution Control Program to take into account the new information.

- G. Midwest Sterilization Corporation shall maintain an operating and maintenance log for the wet scrubber which shall include the following:
 - 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
 - 2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

- 5. Control Device Requirements – Safe Cell II (CD-02)
 - A. Midwest Sterilization Corporation shall control the ethylene oxide emissions from all of the aeration chambers using a Safe Cell II control device.

 - B. The medium (consisting of beads) for the Safe Cell II control device shall be made of appropriate materials for operating conditions expected to occur. Replacement beads shall be kept onsite.

 - C. Midwest Sterilization shall operate and maintain the Safe Cell II control device in accordance with the documents MSC-WI-3.001 (Safe Cell II Bead Replacement Schedule), MSC-WI-0016 (Aeration Room Emission Monitoring QA Program), MSC-WI-0017 (Direct Pump Integrated Procedure QA Program), developed by the installation and approved by the EPA. This may include any subsequent updates to these documents. A copy of these documents and their updates shall be kept onsite.

 - D. The Safe Cell II control device shall be operated and maintained in accordance with the manufacturer’s specifications, a copy of which shall be kept onsite.

 - E. Midwest Sterilization Corporation shall maintain an operating and maintenance log for the Safe Cell II control device which shall include the following:
 - 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
 - 2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

- 6. Record Keeping and Reporting Requirements
 - A. Midwest Sterilization Corporation shall maintain all records required by this permit for not less than five years and shall make them available

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

immediately to any Missouri Department of Natural Resources' personnel upon request. These records shall include SDS for all materials used.

- B. Midwest Sterilization Corporation shall report to the Air Pollution Control Program's Compliance/Enforcement Section, by mail at P.O. Box 176, Jefferson City, MO 65102 or by e-mail at AirComplianceReporting@dnr.mo.gov, no later than 10 days after the end of the month during which any record required by this permit shows an exceedance of a limitation imposed by this permit.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW

Project Number: 2020-03-037
Installation ID Number: 031-0068
Permit Number: 072020-004

Installation Address:

Midwest Sterilization Corporation
1204 Lenco Avenue
Jackson, MO 63756

Parent Company:

Midwest Sterilization Corporation
1204 Lenco Avenue
Jackson, MO 63756

Cape Girardeau County, S14, T35N, R7E

REVIEW SUMMARY

- Midwest Sterilization Corporation has applied for authority to install a new ethylene oxide sterilization chamber (no. 14).
- The application was deemed complete on March 31, 2020.
- HAP emissions are expected from the proposed equipment. The HAP of concern from this process is ethylene oxide.
- None of the New Source Performance Standards (NSPS) apply to the installation.
- None of the NESHAPs apply to this installation.
- The Maximum Achievable Control Technology (MACT) Standard, 40 CFR Part 63, Subpart O, *Ethylene Oxide Emissions Standards for Sterilization Facilities*, applies to the sterilization chamber vents and the aeration room vents. Subpart O does not have any requirements for the back vents.
- Wet scrubbers are being used to control the ethylene oxide emissions from the sterilization chamber vacuum pump vents and the sterilization chamber exhaust vent (back vent). A Safe Cell II control system is being used to control ethylene oxide emissions from the aeration rooms.
- This installation is not on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation's major source level is 250 tons per year and fugitive emissions are not counted toward major source applicability.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of all pollutants are below de minimis levels.

- The installation is located in Cape Girardeau County, an attainment/unclassifiable area for all criteria air pollutants.
- Ambient air quality modeling was not performed for this installation as a part of this project review. The EPA has completed the Risk and Technology Review for 40 CFR Part 63, Subpart O, *Ethylene Oxide Emissions Standards for Sterilization Facilities*. Therefore, even though the ethylene oxide potential emissions are greater than its respective SMAL, ambient air impact analysis is not required.
- Emissions testing is not required for the equipment as a part of this permit. Testing may be required as part of other state, federal or applicable rules.
- No operating permit is required for this installation.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Midwest Sterilization Corporation is an existing installation in Jackson, MO that sterilizes disposable medical devices. The largest portion of the business is sterilization of plastic medical supplies. The sterilization process uses ethylene oxide, which is converted to liquid ethylene glycol after wet scrubbing. The facility currently operates thirteen (13) sterilization chambers and 21 aeration rooms.

The sterilization process begins with the loading of palletized, non-sterile products into a designated preconditioning room where they are held under elevated temperature and humidity levels for a prescribed amount of time in preparation for sterilization. After the preconditioning step, the load is transferred using forklifts to a sterilization chamber. While in the chamber, vacuum pumps are used to execute a number of evacuations reduce the concentration of oxygen inside. Nitrogen, steam, and subsequently, a known amount of ethylene oxide are then introduced into the chamber under a vacuum and circulated in and around the product for a specified period of time. The chamber temperature is maintained at about 125 °F by hot water jackets that wrap the chamber.

After sterilization, vacuum pumps are used to remove the ethylene oxide from the chamber and route it to two wet scrubbers connected in series (CD-01 and CD-03). A number of flush cycles are required during the evacuation process to reduce the ethylene oxide to a level that allows for safe chamber unloading. The wet scrubber control system (CD-01 and CD-03) is subject to 40 CFR Part 63, Subpart O.

When the sterilization chamber door is opened for unloading, a vent on the opposite end of the chamber (back vent, EP-08) automatically activates an exhaust fan that pulls fresh warehouse air through the chamber during the entire unloading process. Back vent emissions do not have any requirements under 40 CFR Part 63, Subpart O. However, the installation has voluntarily added a wet scrubber (CD-03) to control emissions from the back vents. The sterilized product is moved from the chamber to a heated aeration room. During a typical 24-72 hour period of time, the aeration process

removes residual ethylene oxide from the product. The aeration room emissions are directed through a Safe Cell II emission control system (CD-02) that consists of a series of DR 490 units filled with dry reactant, The Safe Cell II system is subject to 40 CFR Part 63, Subpart O. When aeration is complete, the sterilized product is stored in the sterile area of the warehouse before shipping.

The following table lists the equipment onsite and the specification for the sterilization chamber currently at the installation.

Table 1: Pre-Project Installation-Wide Equipment List

Emission Point	Description	Control Device
EP1	13 Sterilization Chambers Vacuum Vent	Wet Scrubbers(CD-01, CD-03)
EP8	13 Sterilization Chambers Back Vent	Wet Scrubber (CD-03)
EP4	3 Natural Gas Fired Boilers (2 units at 3.347 MMBtu/hr, 1 unit at 8.369 MMBtu/hr)	None
EP5	5 Ethylene Glycol Storage Tanks (2 units at 12,000 gallon capacity, 2 units at 4,000 gallon capacity, 1 unit at 1,000 gallon capacity)	None
EP6	Chat Haul Road	None
EP7	21 Aeration Rooms	Safe Cell II (CD-2)
EP9	3 Ethylene Glycol Storage Tanks (2 units at 20,303 gallons, 1 unit at 6,500 gallons)	None

Table 2: Sterilization Chamber Specifications

Chamber No. ¹	Installation Date	Ethylene Oxide Usage (lb/cycle)	Average Cycle Duration (hr/cycle)	Chamber Capacity (ft ³)
1	1990	70	12	1,000
2	1990	70	12	1,000
3	1990	70	12	1,000
4	1991	70	12	1,000
5	1991	70	12	1,000
6	1992	70	12	1,000
7	1995	142	20	2,000
8	1998	142	20	2,000
9	2000	199	16	4,423
10	2001	199	16	4,423
11	2014	199	16	4,423
12	2018	70	12	1,000
13	2019	70	12	1,185

¹Chambers listed in Table 2 are labeled different than in previous permits. Permit No. 022016-014 authorized the construction of chamber 12 and 13, which were never installed. Permit No. 022016-014 authorized the construction of Chamber 14, which was installed and is currently listed as Chamber 12. Permit 122018-008 authorized the construction of Chamber 13, which was installed in 2019.

The following NSR permits have been issued to Midwest Sterilization Corporation from the Air Pollution Control Program.

Table 3: NSR Permit History

Permit Number	Description
0780-006	Permitting sterilization chambers. Superseded by subsequent permits.
0187-003	Changing location. Superseded by subsequent permits.
0389-011	Installation of new sterilization chambers. Superseded by subsequent permits.
0490-002	Installation of new sterilization chambers. Superseded by subsequent permits.122013-007
1094-005	Addition of new sterilization chambers. Superseded by subsequent permits.
062000-011	Addition of new sterilization chambers, aeration rooms, and ethylene oxide abatement system. Superseded by subsequent permits.
062003-023	Installation of one sterilization chamber and three aeration rooms. Superseded by subsequent permits.
062003-023A	Removing language. Superseded by subsequent permits.
052004-009	New process configuration for MACT compliance. Superseded by subsequent permits.
052004-009A	Removing and replacing special conditions. Added emissions limit. Superseded by subsequent permits.
122013-007	Addition of sterilization chamber. Superseded by subsequent permits.
022016-014	Installation of new sterilization chamber. Superseded by subsequent permits.
022016-014A	Correct wet scrubber special condition wording. Superseded by subsequent permits.
022016-014B	Installation of new sterilization chamber. Considered part of the same project as Permit No. 022016-014 ad 022016-014A. Superseded by Permit No. 062019-001.
062019-001	Installation of new scrubber system and three glycol storage tanks. Superseded by this permitting action.

PROJECT DESCRIPTION

The installation proposes to install a new ethylene oxide sterilization chamber (No. 14). The size of the chamber is 1,185 cubic feet and has the potential of using an average of 60 pounds of ethylene oxide per cycle. The new chamber has an average cycle duration of 10 hours. Therefore, it can process a maximum of 876 cycles per year. The new sterilization chamber will increase the amount of product being sterilized. Therefore, there will be an increase in the amount being processed by the aeration rooms and the haul roads.

The ethylene oxide emissions from the new chamber will be controlled by the existing control devices. Vacuum pumps will be used to remove ethylene oxide from the chamber and route it to the existing wet scrubber emission control system (CD-01 and CD-03) at the end of the cycle. While the chamber is being unloaded, a vent on the opposite end of the chamber (back vent) automatically activates an exhaust fan that pulls fresh warehouse air through the chamber. The emissions from the back vent will be controlled by the existing wet scrubber (CD-03). MACT Subpart O does not require

control for the back vent. However, the installation voluntarily installed the wet scrubber to control back vent emissions.

EMISSIONS/CONTROLS EVALUATION

Emissions from the project includes ethylene oxide emissions the from new sterilization chamber, the ethylene oxide emissions from some of the aeration rooms due to the parts processed in the new sterilization chamber, fugitive ethylene oxide emissions from transfer of the sterilized equipment, and the particulate emissions from increased haul road usage.

New Sterilization Chamber (No. 14)

The potential emissions of ethylene oxide from the new chamber include emissions exhausted to the wet scrubber as well as the emissions from the back vents. Emissions from the wet scrubber were calculated from mass balances using the amount of ethylene oxide entering the wet scrubber system and applying a 99.0% control efficiency for the wet scrubber system. The system employs two wet scrubbers in series (CD-01 followed by CD-03). Testing was performed in 2004 to determine the wet scrubber efficiency and the results showed an efficiency of 99.73%. This value was never used for previous permit reviews because it was only based on one test. At the time of the 2004 stack test, CD-01 was the only control device for the vacuum vent.

In 2019, the installation performed testing on the series of wet scrubbers including both CD-01 and CD-03. Results show that CD-01 has control efficiency of 99.17% while the combined CD-01/CD-03 system has control efficiency of 99.999%. For this permit review, it was decided not to use 99.999% control for the system. This efficiency is based on only one test. Also, under the advisement of the Missouri Air Pollution Control Program's Compliance/Enforcement Unit, the installation plans to conduct another round of tests in the future on the same control devices. A value of 99.0% control efficiency for the CD-01/CD-03 system was used in case future testing shows a lower value than 99.999%. The 99.0% control efficiency for the wet scrubber system should yield conservative results.

For ethylene oxide emissions from the back vents, previous permits issued to the installation used the emission factor of 0.008 pounds of ethylene oxide emitted per pound of ethylene oxide charged for the back vent. This limit was set in Permit 052004-009B to ensure that the ambient impact of ethylene oxide did not exceed the Risk Assessment Levels (RAL). This limit was superseded in Permit No. 122018-008. However, this emission factor was confirmed through a stack test performed in 2005, so the ethylene oxide emissions from the back vents were still calculated using this emission factor. A scrubber efficiency of 99% was used to calculate the controlled emissions. Stack testing performed in 2019 shows a scrubber efficiency of 99.5%. However, this is based on only one test and future testing may show efficiency lower than 99.5%. Therefore, a more conservative value of 99% was used instead. The scrubber for the back vent is not required by MACT Subpart O. In order to take into

account the control efficiency, this permit requires the use of the back vent scrubber via permit condition.

The Aeration Chambers

For the aeration chambers, it is very difficult to determine which chamber will be affected by the addition of the new sterilization chamber. It is not known which aeration chamber will accept parts from the new sterilization chamber. Therefore, it was assumed that all of the aeration chambers will be affected.

For existing units, the potential emissions increase from a project is calculated using the post-project potential emissions minus the pre-project potential emissions. However, this is not possible for this project due to the calculation method used for the aeration chambers. The aeration chambers are vented through the Safe Cell II system. Emissions are calculated using the exhaust maximum flow rate of 40,000 cfm and a concentration of 1 ppm. In MACT Subpart O, the aeration room vents are required to have either 99% control or 1 ppm ethylene oxide concentration, whichever is less stringent. According to the installation, the 1 ppm concentration is less stringent. Using this method, the emissions increase cannot be calculated. Therefore, for this project, the emissions increase from the aeration chamber is assumed to be the potential emissions from all of the chambers.

Haul Roads

PM_{2.5}, PM₁₀, and PM emissions from the haul roads were calculated using emission factors from equations in AP-42, Chapter 13.2.2, *Unpaved Roads*, (11/2006). The haul road emissions increase only accounts for the increase in road traffic due to the new sterilization chamber. According to the installation, the weight transported from the haul road increased from 36,210 tons per year to 42,048 tons per year. Therefore, the emissions only account for the increase of 5,838 tons per year.

Fugitive Emissions

After sterilization, fugitive emissions of ethylene oxide will be emitted from the devices as they are moved around the plant. Fugitive emissions were calculated from mass balances. It was assumed that 5% of the ethylene oxide used will not be captured by the vacuum pump scrubber. The emissions from the back vents were subtracted from the 5% not captured by the vacuum pump scrubber to obtain the total amount of ethylene oxide leaving the chamber on the sterilized devices. The total fugitive emissions from material transport were then calculated by assuming that 1% of the total amount of ethylene oxide leaving the chamber are emitted. The remainder were assumed to be emitted through the aeration rooms. The 1% emission rate is considered a reasonable estimate because the distance between the sterilization chamber and the aeration rooms are not long and the sterilized materials are expected to be heated in the aeration room for 24-72 hours so most of the ethylene oxide leaving the sterilization chamber will be emitted from the aeration rooms.

Ethylene Glycol Storage Tanks

Ethylene glycol is considered both VOC and HAP. Emissions from the ethylene glycol storage tanks were calculated using an excel spreadsheet developed by the Missouri Air Pollution Control Program that combines the equations in AP-42, Chapter 7.1, *Organic Liquid Storage Tanks*, 3/2020 and the data from EPA program TANKS 4.09D. TANKS 4.09D does not include information on ethylene glycol, so ethanol was used to estimate emissions. This method should be conservative as ethanol has a much higher vapor pressure than ethylene glycol.

It cannot be determined how much of the ethylene glycols are from just the new sterilization chamber. Therefore, it was assumed that all of the ethylene glycol emissions from the storage tanks are part of this project.

Emissions of ethylene oxide from this project are greater than the screening model action level (SMAL) of 0.1 tons per year. The facility is subject to MACT Subpart O and the Risk and Technology Review (RTR) has already been completed for this MACT. Therefore, modeling is not required as part of this permit review.

The following table provides the emissions summary for this project. Particulate, SO_x, NO_x, CO and GHG existing potential emissions were taken from previous issued Permit No. 062019-001. VOC and HAPs existing potential emissions were recalculated during the review of this project as well because the fugitive emissions were not accounted for in the previous permits and some calculation methods have been updated. The new installation potential emissions were calculated by adding the existing potential emissions, the emissions from the new sterilization chamber, the emissions from the increased hauling, and the emissions from the storage tanks.

Table 4: Emissions Summary (tpy)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions (2019 EIQ)	Potential Emissions of the Project	New Installation Potential Emissions
PM	25.0	2.69	N/D	0.35	3.04
PM ₁₀	15.0	1.12	0.79	0.10	1.21
PM _{2.5}	10.0	0.55	0.20	0.01	0.56
SO _x	40.0	0.04	0.01	N/A	0.04
NO _x	40.0	6.47	1.74	N/A	6.47
VOC	40.0	6.05	2.26	1.35	¹ 6.48
CO	100.0	5.43	1.46	N/A	5.43
GHG (CO ₂ e)	N/A	7,808	N/D	N/A	7,808
GHG (mass)	N/A	7,762	N/D	N/A	7,762
Ethylene Oxide	10.0/0.1 ²	5.70	N/D	1.19	¹ 5.97
Ethylene Glycol	10.0	N/D	N/D	0.12	0.12
Total HAPs	25.0	5.82	N/D	1.31	¹ 6.20

N/A = Not Applicable; N/D = Not Determined

Note 1: For VOC, ethylene oxide, and total HAPs, the new installation potential emissions is not the sum of the existing potential emissions and the potential emissions of the project. Both of these calculations include all of the aeration rooms.

Note 2: 0.1 is the screening model action level for ethylene oxide.

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of all pollutants are below de minimis levels.

APPLICABLE REQUIREMENTS

Midwest Sterilization Corporation shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved. For a complete list of applicable requirements for your installation, please consult your operating permit.

GENERAL REQUIREMENTS

- *Operating Permits*, 10 CSR 10-6.065
- *Start-Up, Shutdown, and Malfunction Conditions*, 10 CSR 10-6.050
- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
 - Per 10 CSR 10-6.110(4)(B)2.B(II) and (4)(B)2.C(II) a full EIQ is required for the first full calendar year the equipment (or modifications) approved by this permit are in operation.
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-6.165

SPECIFIC REQUIREMENTS

- *MACT Regulations*, 10 CSR 10-6.075
 - *Ethylene Oxide Emissions Standards for Sterilization Facilities*, 40 CFR Part 63, Subpart O

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, it is recommended that this permit be granted with special conditions.

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated March 17, 2020, received March 27, 2020, designating Midwest Sterilization Corporation as the owner and operator of the installation.

Attachment A – Ethylene Oxide Usage Compliance Worksheet

Midwest Sterilization Corporation
 Cape Girardeau County, S14, T35N, R7E
 Project Number: 2020-03-037
 Installation ID Number: 031-0068
 Permit Number: 072020-004

This sheet covers the period from _____ to _____.
(month, year) (month, year)

Date (Month, Year)	Monthly Ethylene Oxide Usage (lb/Month)	¹ Rolling 12-Month Total Ethylene Oxide Usage (lb/year)

Note 1: Calculated by adding this month’s ethylene oxide usage (lb/month) to the ethylene oxide usage of the previous eleven (11) months. A total not exceeding 912,610.0 pounds in any consecutive 12-months indicates compliance.

APPENDIX A

Abbreviations and Acronyms

% percent	Mgal 1,000 gallons
°F degrees Fahrenheit	MW megawatt
acfm actual cubic feet per minute	MHDR maximum hourly design rate
BACT Best Available Control Technology	MMBtu Million British thermal units
BMPs Best Management Practices	MMCF million cubic feet
Btu British thermal unit	MSDS Material Safety Data Sheet
CAM Compliance Assurance Monitoring	NAAQS National Ambient Air Quality Standards
CAS Chemical Abstracts Service	NESHAPs National Emissions Standards for Hazardous Air Pollutants
CEMS Continuous Emission Monitor System	NO_xnitrogen oxides
CFR Code of Federal Regulations	NSPS New Source Performance Standards
CO carbon monoxide	NSR New Source Review
CO₂ carbon dioxide	PMparticulate matter
CO₂e carbon dioxide equivalent	PM_{2.5}particulate matter less than 2.5 microns in aerodynamic diameter
COMS Continuous Opacity Monitoring System	PM₁₀particulate matter less than 10 microns in aerodynamic diameter
CSR Code of State Regulations	ppmparts per million
dscf dry standard cubic feet	PSD Prevention of Significant Deterioration
EIQ Emission Inventory Questionnaire	PTEpotential to emit
EP Emission Point	RACT Reasonable Available Control Technology
EPA Environmental Protection Agency	RAL Risk Assessment Level
EU Emission Unit	SCC Source Classification Code
fps feet per second	scfm standard cubic feet per minute
ft feet	SDS Safety Data Sheet
GACT Generally Available Control Technology	SIC Standard Industrial Classification
GHG Greenhouse Gas	SIP State Implementation Plan
gpm gallons per minute	SMAL Screening Model Action Levels
gr grains	SO_xsulfur oxides
GWP Global Warming Potential	SO₂sulfur dioxide
HAP Hazardous Air Pollutant	SSM Startup, Shutdown & Malfunction
hr hour	tph tons per hour
hp horsepower	tpy tons per year
lb pound	VMT vehicle miles traveled
lbs/hr pounds per hour	VOC Volatile Organic Compound
MACT Maximum Achievable Control Technology	
µg/m³ micrograms per cubic meter	
m/s meters per second	

Air Pollution Control Program

Table of Hazardous Air Pollutants and Screening Model Action Levels

Chemical	CAS #	SMAL tons/yr	Group ID	VOC	PM	Chemical	CAS #	SMAL tons/yr	Group ID	VOC	PM
ACETALDEHYDE	75-07-0	9		Y	N	CHLOROMETHYL METHYL ETHER	107-30-2	0.1		Y	N
ACETAMIDE	60-35-5	1		Y	N	CHLOROPRENE	126-99-8	1		Y	N
ACETONITRILE	75-05-8	4		Y	N	CHROMIUM (VI) COMPOUNDS		0.002	L	N	Y
ACETOPHENONE	98-86-2	1		Y	N	CHROMIUM COMPOUNDS		5	L	N	Y
ACETYLAMINOFLUORINE, [2-]	53-96-3	0.005	V	Y	Y	CHRYSENE	218-01-9	0.01	V	Y	N
ACROLEIN	107-02-8	0.04		Y	N	COBALT COMPOUNDS		0.1	M	N	Y
ACRYLAMIDE	79-06-1	0.02		Y	N	COKE OVEN EMISSIONS	8007-45-2	0.03	N	Y	N
ACRYLIC ACID	79-10-7	0.6		Y	N	CRESOL, [META-]	108-39-4	1	B	Y	N
ACRYLONITRILE	107-13-1	0.3		Y	N	CRESOL, [ORTHO-]	95-48-7	1	B	Y	N
ALLYL CHLORIDE	107-05-1	1		Y	N	CRESOL, [PARA-]	106-44-5	1	B	Y	N
AMINOBIHENYL, [4-]	92-67-1	1	V	Y	N	CRESOLS (MIXED ISOMERS)	1319-77-3	1	B	Y	N
ANILINE	62-53-3	1		Y	N	CUMENE	98-82-8	10		Y	N
ANISIDINE, [ORTHO-]	90-04-0	1		Y	N	CYANIDE COMPOUNDS		0.1	O	Y	N
ANTHRACENE	120-12-7	0.01	V	Y	N	DDE	72-55-9	0.01	V	Y	Y
ANTIMONY COMPOUNDS		5	H	N	Y	DI(2-ETHYLHEXYL) PHTHALATE, (DEHP)	117-81-7	5		Y	N
ANTIMONY PENTAFLUORIDE	7783-70-2	0.1	H	N	Y	DIAMINOTOLUENE, [2,4-]	95-80-7	0.02		Y	N
ANTIMONY POTASSIUM TARTRATE	28300-74-5	1	H	N	Y	DIAZOMETHANE	334-88-3	1		Y	N
ANTIMONY TRIOXIDE	1309-64-4	1	H	N	Y	DIBENZ(A,H)ANTHRACENE	53-70-3	0.01	V	Y	N
ANTIMONY TRISULFIDE	1345-04-6	0.1	H	N	Y	DIOXINS/FURANS		6E-07	D,V	Y	N
ARSENIC COMPOUNDS		0.005	I	N	Y	DIBENZOFURAN	132-64-9	5	V	Y	N
ASBESTOS	1332-21-4	0	A	N	Y	DIBROMO-3-CHLOROPROPANE, [1,2-]	96-12-8	0.01		Y	N
BENZ(A)ANTHRACENE	56-55-3	0.01	V	Y	N	DIBROMOETHANE, [1,2-]	106-93-4	0.1		Y	N
BENZENE	71-43-2	2		Y	N	DIBUTYL PHTHALATE	84-74-2	10		Y	Y
BENZIDINE	92-87-5	0.0003	V	Y	N	DICHLOROENZENE, [1,4-]	106-46-7	3		Y	N
BENZO(A)PYRENE	50-32-8	0.01	V	Y	N	DICHLOROENZENE, [3,3-]	91-94-1	0.2	V	Y	Y
BENZO(B)FLUORANTHENE	205-99-2	0.01	V	Y	N	DICHLOROETHANE, [1,1-]	75-34-3	1		Y	N
BENZO(K)FLUORANTHENE	207-08-9	0.01	V	Y	N	DICHLOROETHANE, [1,2-]	107-06-2	0.8		Y	N
BENZOTRICHLORIDE	98-07-7	0.006		Y	N	DICHLOROETHYLENE, [1,1-]	75-35-4	0.4		Y	N
BENZYL CHLORIDE	100-44-7	0.1		Y	N	DICHLOROMETHANE	75-09-2	10		N	N
BERYLLIUM COMPOUNDS		0.008	J	N	Y	DICHLOROPHENOXY ACETIC ACID, [2,4-]	94-75-7	10	C	Y	Y
BERYLLIUM SALTS		2E-05	J	N	Y	DICHLOROPROPANE, [1,2-]	78-87-5	1		Y	N
BIPHENYL, [1,1-]	92-52-4	10	V	Y	N	DICHLOROPROPENE, [1,3-]	542-75-6	1		Y	N
BIS(CHLOROETHYL)ETHER	111-44-4	0.06		Y	N	DICHLORVOS	62-73-7	0.2		Y	N
BIS(CHLOROMETHYL)ETHER	542-88-1	0.0003		Y	N	DIETHANOLAMINE	111-42-2	5		Y	N
BROMOFORM	75-25-2	10		Y	N	DIETHYL SULFATE	64-67-5	1		Y	N
BROMOMETHANE	74-83-9	10		Y	N	DIETHYLENE GLYCOL MONOBUTYL ETHER	112-34-5	5	P	Y	N
BUTADIENE, [1,3-]	106-99-0	0.07		Y	N	DIMETHOXYBENZIDINE, [3,3-]	119-90-4	0.1	V	Y	Y
BUTOXYETHANOL ACETATE, [2-]	112-07-2	5	P	Y	N	DIMETHYL BENZIDINE, [3,3-]	119-93-7	0.008	V	Y	Y
BUTYLENE OXIDE, [1,2-]	106-88-7	1		Y	N	DIMETHYL CARBAMOYL CHLORIDE	79-44-7	0.02		Y	N
CADMIUM COMPOUNDS		0.01	K	N	Y	DIMETHYL FORMAMIDE	68-12-2	1		Y	N
CALCIUM CYANAMIDE	156-62-7	10		Y	Y	DIMETHYL HYDRAZINE, [1,1-]	57-14-7	0.008		Y	N
CAPROLACTAM (Delisted)	105-60-2					DIMETHYL PHTHALATE	131-11-3	10		Y	N
CAPTAN	133-06-2	10		Y	Y	DIMETHYL SULFATE	77-78-1	0.1		Y	N
CARBARYL	63-25-2	10	V	Y	Y	DIMETHYLAMINOAZOBENZENE, [4-]	60-11-7	1		Y	N
CARBON DISULFIDE	75-15-0	1		Y	N	DIMETHYLANILINE, [N-N-]	121-69-7	1		Y	N
CARBON TETRACHLORIDE	56-23-5	1		Y	N	DINITRO-O-CRESOL, [4,6-] (Note 6)	534-52-1	0.1	E	Y	Y
CARBONYL SULFIDE	463-58-1	5		Y	N	DINITROPHENOL, [2,4-]	51-28-5	1		Y	N
CATECHOL	120-80-9	5		Y	N	DINITROTOLUENE, [2,4-]	121-14-2	0.02		Y	N
CHLORAMBEN	133-90-4	1		Y	Y	DIOXANE, [1,4-]	123-91-1	6		Y	N
CHLORDANE	57-74-9	0.01		Y	Y	DIPHENYLHYDRAZINE, [1,2-]	122-66-7	0.09	V	Y	Y
CHLORINE	7782-50-5	0.1		N	N	DIPHENYLMETHANE DIISOCYANATE, [4,4-]	101-68-8	0.1	V	Y	N
CHLOROACETIC ACID	79-11-8	0.1		Y	N	EPOCHLOROHYDRIN	106-89-8	2		Y	N
CHLOROACETOPHENONE, [2-]	532-27-4	0.06		Y	N	ETHOXYETHANOL, [2-]	110-80-5	10	P	Y	N
CHLOROBENZENE	108-90-7	10		Y	N	ETHOXYETHYL ACETATE, [2-]	111-15-9	5	P	Y	N
CHLOROBENZILATE	510-15-6	0.4	V	Y	Y	ETHYL ACRYLATE	140-88-5	1		Y	N
CHLOROFORM	67-66-3	0.9		Y	N	ETHYL BENZENE	100-41-4	10		Y	N

Air Pollution Control Program
Table of Hazardous Air Pollutants and Screening Model Action Levels

ETHYL CHLORIDE	75-00-3	10		Y	N	NITROBENZENE	98-95-3	1		Y	N
ETHYLENE GLYCOL	107-21-1	10		Y	N	NITROBIPHENYL, [4-]	92-93-3	1	V	Y	N
ETHYLENE GLYCOL MONOBUTYL ETHER (Delisted)	111-76-2					NITROPHENOL, [4-]	100-02-7	5		Y	N
ETHYLENE GLYCOL MONOHEXYL ETHER	112-25-4	5	P	Y	N	NITROPROPANE, [2-]	79-46-9	1		Y	N
ETHYLENE IMINE [AZIRIDINE]	151-56-4	0.003		Y	N	NITROSODIMETHYLAMINE, [N-]	62-75-9	0.001		Y	N
ETHYLENE OXIDE	75-21-8	0.1		Y	N	NITROSOMORPHOLINE, [N-]	59-89-2	1		Y	N
ETHYLENE THIOUREA	96-45-7	0.6		Y	Y	NITROSO-N-METHYLUREA, [N-]	684-93-5	0.0002		Y	N
FORMALDEHYDE	50-00-0	2		Y	N	OCTACHLORONAPHTHALENE	2234-13-1	0.01	V	Y	N
GLYCOL ETHER (ETHYLENE GLYCOL ETHERS)		5	P	Y	N	PARATHION	56-38-2	0.1		Y	Y
GLYCOL ETHER (DIETHYLENE GLYCOL ETHERS)		5	P	Y	N	PCB [POLYCHLORINATED BIPHENYLS]	1336-36-3	0.009	X	Y	Y
HEPTACHLOR	76-44-8	0.02		Y	N	PENTACHLORONITROBENZENE	82-68-8	0.3		Y	N
HEXACHLORO BENZENE	118-74-1	0.01		Y	N	PENTACHLOROPHENOL	87-86-5	0.7		Y	N
HEXACHLOROBUTADIENE	87-68-3	0.9		Y	N	PHENOL	108-95-2	0.1		Y	N
HEXACHLOROCYCLOHEXANE, [ALPHA-]	319-84-6	0.01	F	Y	N	PHENYLENEDIAMINE, [PARA-]	106-50-3	10		Y	N
HEXACHLOROCYCLOHEXANE, [BETA-]	319-85-7	0.01	F	Y	N	PHOSGENE	75-44-5	0.1		Y	N
HEXACHLOROCYCLOHEXANE, [DELTA-]	319-86-8	0.01	F	Y	N	PHOSPHINE	7803-51-2	5		N	N
HEXACHLOROCYCLOHEXANE, [TECHNICAL]	608-73-1	0.01	F	Y	N	PHOSPHOROUS (YELLOW OR WHITE)	7723-14-0	0.1		N	N
HEXACHLOROCYCLOPENTADIENE	77-47-4	0.1		Y	N	PHTHALIC ANHYDRIDE	85-44-9	5		Y	N
HEXACHLOROETHANE	67-72-1	5		Y	N	POLYCYLIC ORGANIC MATTER		0.01	V	Y	N
HEXAMETHYLENE,-1,6-DIISOCYANATE	822-06-0	0.02		Y	N	PROPANE SULTONE, [1,3-]	1120-71-4	0.03		Y	Y
HEXAMETHYLPHOSPHORAMIDE	680-31-9	0.01		Y	N	PROPIOLACTONE, [BETA-]	57-57-8	0.1		Y	N
HEXANE, [N-]	110-54-3	10		Y	N	PROPIONALDEHYDE	123-38-6	5		Y	N
HYDRAZINE	302-01-2	0.004		N	N	PROPOXUR [BAYGON]	114-26-1	10		Y	Y
HYDROGEN CHLORIDE	7647-01-0	10		N	N	PROPYLENE OXIDE	75-56-9	5		Y	N
HYDROGEN FLUORIDE	7664-39-3	0.1		N	N	PROPYLENEIMINE, [1,2-]	75-55-8	0.003		Y	N
HYDROQUINONE	123-31-9	1		Y	N	QUINOLINE	91-22-5	0.006		Y	N
INDENO(1,2,3CD)PYRENE	193-39-5	0.01	V	Y	N	QUINONE	106-51-4	5		Y	N
ISOPHORONE	78-59-1	10		Y	N	RADIONUCLIDES		Note 1	Y	N	Y
LEAD COMPOUNDS		0.01	Q	N	Y	SELENIUM COMPOUNDS		0.1	W	N	Y
LINDANE [GAMMA-HEXACHLOROCYCLOHEXANE]	58-89-9	0.01	F	Y	N	STYRENE	100-42-5	1		Y	N
MALEIC ANHYDRIDE	108-31-6	1		Y	N	STYRENE OXIDE	96-09-3	1		Y	N
MANGANESE COMPOUNDS		0.8	R	N	Y	TETRACHLORODIBENZO-P-DIOXIN,[2,3,7,8]	1746-01-6	6E-07	D,V	Y	Y
MERCURY COMPOUNDS		0.01	S	N	N	TETRACHLOROETHANE, [1,1,2,2-]	79-34-5	0.3		Y	N
METHANOL	67-56-1	10		Y	N	TETRACHLOROETHYLENE	127-18-4	10		N	N
METHOXYCHLOR	72-43-5	10	V	Y	Y	TITANIUM TETRACHLORIDE	7550-45-0	0.1		N	N
METHOXYETHANOL, [2-]	109-86-4	10	P	Y	N	TOLUENE	108-88-3	10		Y	N
METHYL CHLORIDE	74-87-3	10		Y	N	TOLUENE DIISOCYANATE, [2,4-]	584-84-9	0.1		Y	N
METHYL ETHYL KETONE (Delisted)	78-93-3					TOLUIDINE, [ORTHO-]	95-53-4	4		Y	N
METHYL HYDRAZINE	60-34-4	0.06		Y	N	TOXAPHENE	8001-35-2	0.01		Y	N
METHYL IODIDE	74-88-4	1		Y	N	TRICHLOROBENZENE, [1,2,4-]	120-82-1	10		Y	N
METHYL ISOBUTYL KETONE	108-10-1	10		Y	N	TRICHLOROETHANE, [1,1,1-]	71-55-6	10		N	N
METHYL ISOCYANATE	624-83-9	0.1		Y	N	TRICHLOROETHANE, [1,1,2-]	79-00-5	1		Y	N
METHYL METHACRYLATE	80-62-6	10		Y	N	TRICHLOROETHYLENE	79-01-6	10		Y	N
METHYL TERT-BUTYL ETHER	1634-04-4	10		Y	N	TRICHLOROPHENOL, [2,4,5-]	95-95-4	1		Y	N
METHYL CYCLOPENTADIENYL MANGANESE	12108-13-3	0.1	R	N	Y	TRICHLOROPHENOL, [2,4,6-]	88-06-2	6		Y	N
METHYLENE BIS(2-CHLOROANILINE), [4,4-]	101-14-4	0.2	V	Y	Y	TRIETHYLAMINE	121-44-8	10		Y	N
METHYLENEDIANILINE, [4,4-]	101-77-9	1	V	Y	N	TRIFLURALIN	1582-09-8	9		Y	Y
METHYLNAPHTHALENE, [2-]	91-57-6	0.01	V	Y	N	TRIMETHYLPENTANE, [2,2,4-]	540-84-1	5		Y	N
MINERAL FIBERS		0	T	N	Y	URETHANE [ETHYL CARBAMATE]	51-79-6	0.8		Y	N
NAPHTHALENE	91-20-3	10	V	Y	N	VINYL ACETATE	108-05-4	1		Y	N
NAPHTHYLAMINE, [ALPHA-]	134-32-7	0.01	V	Y	N	VINYL BROMIDE	593-60-2	0.6		Y	N
NAPHTHYLAMINE, [BETA-]	91-59-8	0.01	V	Y	N	VINYL CHLORIDE	75-01-4	0.2		Y	N
NICKEL CARBONYL	13463-39-3	0.1	U	N	Y	XYLENE, [META-]	108-38-3	10	G	Y	N
NICKEL COMPOUNDS		1	U	N	Y	XYLENES (MIXED ISOMERS)	1330-20-7	10	G	Y	N
NICKEL REFINERY DUST		0.08	U	N	Y						
NICKEL SUBSULFIDE	12035-72-2	0.04	U	N	Y						

Air Pollution Control Program

Table of Hazardous Air Pollutants and Screening Model Action Levels

Legend	
Group ID	
A	Asbestos
B	Cresols/Cresylic Acid (isomers and mixtures)
C	2,4 - D, Salts and Esters
D	Dibenzofurans, Dibenzodioxins
E	4, 6 Dinitro-o-cresol, and Salts
F	Lindane (all isomers)
G	Xylenes (all isomers and mixtures)
H	Antimony Compounds
I	Arsenic Compounds
J	Beryllium Compounds
K	Cadmium Compounds
L	Chromium Compounds
M	Cobalt Compounds
N	Coke Oven Emissions
O	Cyanide Compounds
P	Glycol Ethers
Q	Lead Compounds (except elemental Lead)
R	Manganese Compounds
S	Mercury Compounds
T	Fine Mineral Fibers
U	Nickel Compounds
V	Polycyclic Organic Matter
W	Selenium Compounds
X	Polychlorinated Biphenyls (Aroclors)
Y	Radionuclides
Notes	The SMAL for radionuclides is defined as the effective dose equivalent to 0.3 millirems per year for 7 years exposure associated with a cancer risk of 1 in 1 million



Missouri Department of dnr.mo.gov

NATURAL RESOURCES

Michael L. Parson, Governor

Carol S. Comer, Director

July 14, 2020

Katie Biri
QA/RA Manager
Midwest Sterilization Corporation
P.O. Box 411
Jackson, MO 63755

RE: New Source Review Permit - Project Number: 2020-03-037

Dear Katie Biri:

Enclosed with this letter is your permit to construct. Please study it carefully and refer to Appendix A for a list of common abbreviations and acronyms used in the permit. Also, note the special conditions, if any, on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files. Operation in accordance with these conditions, your new source review permit application and your amended operating permit is necessary for continued compliance. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

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 the following website: <http://dnr.mo.gov/regions/>. The online CAV request can be found at <http://dnr.mo.gov/cav/compliance.htm>.

If you were adversely affected by this permit decision, you may be entitled to pursue an appeal before the administrative hearing commission pursuant to Sections 621.250 and 643.075.6 RSMo. To appeal, you must file a petition with the administrative hearing commission 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 administrative hearing commission, whose contact information is: Administrative Hearing Commission, United States Post Office Building, 131 West High Street, Third Floor, P.O. Box 1557, Jefferson City, Missouri 65102, phone: 573-751-2422, fax: 573-751-5018, website: www.oa.mo.gov/ahc.



Katie Biri
Page Two

If you have any questions regarding this permit, please do not hesitate to contact chia-wei young, at the Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

A handwritten signature in blue ink, appearing to read 'S Heckenkamp', is written over the typed name.

Susan Heckenkamp
New Source Review Unit Chief

SH:cya

Enclosures

c: Southeast Regional Office
PAMS File: 2020-03-037

Permit Number: 072020-004