

AIR PERMIT

PERMITTEE: SANDERS LEAD COMPANY
FACILITY NAME: SANDERS LEAD COMPANY
LOCATION: TROY, ALABAMA

<u>PERMIT NUMBER</u>	<u>DESCRIPTION OF EQUIPMENT, ARTICLE, OR DEVICE</u>
210-0005-X035	Blast Furnace Canopy Hoods and Building Ventilation (Stacks 11 & 17)

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, Ala. Code §§22-28-1 to 22-28-23, as amended, the Alabama Environmental Management Act, Ala. Code §§22-22A-1 to 22-22A-17, as amended, and rules and regulations adopted there under, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described above.

ISSUANCE DATE: April 12, 2023

Alabama Department of Environmental Management

**SANDERS LEAD COMPANY
TROY, ALABAMA
(PERMIT NO. 210-0005-X035)
PROVISOS**

General Permit Provisos

1. This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules.
2. This permit is not transferable. Upon sale or legal transfer, the new owner or operator must apply for a permit within 30 days.
3. A new permit application must be made for new sources, replacements, alterations or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants.
4. Each point of emission, which requires testing, will be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.
5. In case of shutdown of air pollution control equipment for scheduled maintenance for a period greater than **1 hour**, the intent to shut down shall be reported to the Air Division at least 24 hours prior to the planned shutdown, **unless accompanied by the immediate shutdown of the emission source**.
6. In the event there is a breakdown of equipment in such a manner as to cause increased emission of air contaminants for a period greater than **1 hour**, the person responsible for such equipment shall notify the Air Division within an additional 24 hours and provide a statement giving all pertinent facts, including the duration of the breakdown. The Air Division shall be notified when the breakdown has been corrected.
7. This process, including all air pollution control devices and capture systems for which this permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established.
8. This permit expires and the application is cancelled if construction has not begun within 24 months of the date of issuance of the permit.
9. On completion of construction of the device(s) for which this permit is issued, written notification of the fact is to be submitted to the Chief of the Air Division. The notification shall indicate whether the device(s) was constructed as proposed in the application. The device(s) shall not be operated until authorization to operate is granted by the Chief of the Air Division. Failure to notify the Chief of the Air Division of completion of construction and/or operation without authorization could result in revocation of this permit.

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10. Submittal of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require stack emission testing at any time.
11. Additions and revisions to the conditions of this Permit will be made, if necessary, to ensure that the Department's air pollution control rules and regulations are not violated.
12. Nothing in this permit or conditions thereto shall negate any authority granted to the Air Division pursuant to the Alabama Environmental Management Act or regulations issued thereunder.
13. This permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by Air Division inspectors, measures to abate the odorous emissions shall be taken upon a determination by the Alabama Department of Environmental Management that these measures are technically and economically feasible.
14. The Air Division must be notified in writing at least 10 working days in advance of all emission tests to be conducted and submitted as proof of compliance with the Department's air pollution control rules and regulations.

To avoid problems concerning testing methods and procedures, the following shall be included with the notification letter:

- (a) The date the test crew is expected to arrive, the date and time anticipated of the start of the first run, how many and which sources are to be tested, and the names of the persons and/or testing company that will conduct the tests.
- (b) A complete description of each sampling train to be used, including type of media used in determining gas stream components, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedure requires probe cleaning).
- (c) A description of the process(es) to be tested, including the feed rate, any operating parameter used to control or influence the operations, and the rated capacity.
- (d) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.

A pretest meeting may be held at the request of the source owner or the Department. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.

All test reports must be submitted to the Air Division within 30 days of the actual completion of the test, unless an extension of time is specifically approved by the Air Division.

15. The permittee shall not use as a defense in an enforcement action that maintaining compliance with conditions of this permit would have required halting or reducing the permitted activity.
16. Precautions shall be taken to prevent fugitive dust emanating from plant roads, grounds, stockpiles, screens, dryers, hoppers, ductwork, etc.

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Plant or haul roads and grounds will be maintained in the following manner so that dust will not become airborne. A minimum of one, or a combination, of the following methods shall be utilized to minimize airborne dust from plant or haul roads and grounds:

- (a) by the application of water any time the surface of the road is sufficiently dry to allow the creation of dust emissions by the act of wind or vehicular traffic;
- (b) by reducing the speed of vehicular traffic to a point below that at which dust emissions are created;
- (c) by paving;
- (d) by the application of binders to the road surface at any time the road surface is found to allow the creation of dust emissions;

Should one, or a combination, of the above methods fail to adequately reduce airborne dust from plant or haul roads and grounds, alternative methods shall be employed, either exclusively or in combination with one or all of the above control techniques, so that dust will not become airborne. Alternative methods shall be approved by the Department prior to utilization.

- 17. The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.
- 18. The permittee shall keep this permit under file or on display at all times at the site where the facility for which the permit is issued is located and shall make the permit readily available for inspection by any or all persons who may request to see it.
- 19. The permittee shall submit an annual compliance certification to the Department no later than 60 days following the anniversary of the permittee's Title V permit. The compliance certification shall include the following:
 - (a) The compliance certification shall include the following:
 - a. The identification of each term or condition of this permit that is the basis of the certification;
 - b. The compliance status;
 - c. The method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with Rule 335-3-16-.05(c) (Monitoring and Recordkeeping Requirements);
 - d. Whether compliance has been continuous or intermittent; and
 - e. Such other facts as the Department may require in order to determine the compliance status of the source.
 - (b) The compliance certification shall be submitted to:

Alabama Department of Environmental Management
Air Division
P.O. Box 301463
Montgomery, AL 36130-1463

**Blast Furnace Canopy Hoods and Building Ventilation (Stacks 11 & 17)
Provisos**

Applicability	Regulations
1. This source has enforceable limits in place in order to provide for the attainment of the National Ambient Air Quality Standards.	Rule 335-3-1-.03
2. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.15, " <i>Control of Particulate Emissions from Secondary Lead Smelters.</i> "	Rule 335-3-4-.15
3. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, " <i>Major Source Operating Permits.</i> "	Rule 335-3-16-.03
4. This source is subject to the applicable requirements of 40 CFR Part 63, Subpart X, " <i>National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting.</i> "	40 CFR 63.541(a) Rule 335-3-11-.06(23)
5. This source is subject to the applicable requirements of 40 CFR Part 63, Subpart X, " <i>General Provisions</i> " as listed in Table 1 of subpart X.	Table 1 of Subpart X
6. This source is subject to the applicable requirements of 40 CFR Part 64, " <i>Compliance Assurance Monitoring</i> " for particulate matter.	40 CFR Part 64
Emission Standards	
1. Particulate Matter (PM) emissions from Stacks 11 and 17 shall not exceed a combined mass emission rate of 2.04 lb/hr.	Rule 335-3-1-.03
2. Lead emissions from Stacks 11 and 17 shall not exceed a combined mass emission rate of 0.067 lb/hr.	Rule 335-3-1-.03
3. Lead emissions from Stacks 11 and 17 shall not exceed 0.00043 gr/dscf.	40 CFR 63.543(a)
4. The flow-weighted average concentration of lead emissions all process vents shall not exceed 0.000087 gr/dscf, as demonstrated on a 12-month rolling average basis.	40 CFR 63.543(a)
5. Secondary HEPA filter systems shall be installed downstream of the baghouses associated with Stacks 11 & 17.	40 CFR 63.548(g)
6. The furnace building shall be designed as a total enclosure and maintained at a negative pressure at all times. Fugitive emissions from the smelting area shall be vented to Stacks 11 & 17.	40 CFR 63.544(a)

	Regulations
7. All maintenance activities associated with contaminated equipment shall be conducted within enclosed areas. Transfer points shall be installed at the furnace building's smelting area exits to contain leaded vehicles within the building. Contaminated equipment leaving the enclosure shall be decontaminated prior to exiting the enclosure.	40 CFR 63.544(c)
Compliance and Performance Test Methods and Procedures	
1. Method 9 of 40 CFR Part 60 (latest edition), Appendix A-4 shall be used in the determination of opacity.	Rule 335-3-1-.05
2. Method 5 of 40 CFR Part 60 (latest edition), Appendix A-4 shall be used in the determination of particulate matter (filterable) emissions.	Rule 335-3-1-.05
3. Method 12 or 29 of 40 CFR Part 60 (latest edition), Appendix A-5 shall be used in the determination of lead compound emissions.	40 CFR 63.547(a)(5)
4. Compliance tests for lead emissions from Stacks 11 & 17 shall be conducted according to the schedule specified in 40 CFR 63.543(g). Stacks 11 & 17 shall be tested concurrently.	40 CFR 63.543(g)
Emission Monitoring	
1. This source is subject to the applicable monitoring requirements in 40 CFR 63.548.	40 CFR 63.548
2. Reference the Appendix for the monitoring requirements for 40 CFR Part 64, " <i>Compliance Assurance Monitoring</i> " and for ADEM Admin. Code r. 335-3-16-.05(c).	40 CFR Part 64 Rule 335-3-16-.05(c)(ii)
3. A standard operating procedures (SOP) manual shall be prepared and adhered to as required by 40 CFR 63.548(a). The SOP manual must, at a minimum, include the requirements of 40 CFR 63.548(c) and (d).	40 CFR 63.548(a)-(d)
4. The facility shall monitor and record the pressure drop across the HEPA filter system, daily. If the pressure drop is outside the limit specified by the filter manufacturer, maintenance inspections and/or corrective action are to be initiated according to the requirements in 40 CFR 63.548(g)(1)-(4).	40 CFR 63.548(g)
5. The facility must install, operate and maintain a digital differential pressure monitoring system to continuously monitor the furnace building total enclosure. The negative differential pressure must be maintained to at least 0.007 inches of water column, as measured by monitors installed on one leeward wall, one windward wall, and one additional wall of the building.	40 CFR 63.544(c)(1)-(3)

	Regulations
6. The facility must inspect the furnace building total enclosure at least once per month, repairing any gaps, breaks, separations, leak points, or other possible routes for emissions of lead to the atmosphere within one week of identification unless approval is obtained from the Department before the repair period is exceeded.	40 CFR 63.544(d)
Recordkeeping and Reporting Requirements	
1. The permittee shall maintain a record of all monitoring required by this permit. This shall include all problems observed and corrective action taken. The records shall be maintained in a form suitable for inspection and shall be kept on site for a period of five (5) years.	Rule 335-3-16-.05(c)
2. The facility shall comply with the applicable recordkeeping requirements of 40 CFR 63.10(b) and 40 CFR 63.550(c), including the following records related to this source:	
(a) Each startup or shutdown resulting in an emission exceedance.	40 CFR 63.10(b)(2)(i)
(b) All required maintenance performed on control devices and monitoring equipment, including all maintenance conducted according to the SOP.	40 CFR 63.10(b)(2)(iii) 40 CFR 63.550(c)(3)
(c) The results of all performance tests and associated measurements taken during performance tests.	40 CFR 63.10(b)(2)(viii - ix)
(d) All continuous monitoring system malfunctions.	40 CFR 63.10(b)(2)(vi)
(e) All required measurements by continuous monitoring systems.	40 CFR 63.10(b)(2)(vii)
(f) All continuous monitoring system calibrations and adjustments.	40 CFR 63.10(b)(2)(x - xi)
(g) All control device malfunctions and associated corrective actions.	40 CFR 63.550(c)(11-12)
3. Within 60 days after the date of completing each performance test conducted to show compliance with 40 CFR Part 60, Subpart X, the facility must submit a test report according to the requirements of 40 CFR 63.10(d)(2) and 40 CFR 63.550(e)(14).	
4. The facility shall submit a semiannual 40 CFR Part 63, Subpart X report to the Department meeting the requirements of 40 CFR 63.10(c) and 40 CFR 63.550(d)&(e), including the following related to this source:	40 CFR 63.10(c) 40 CFR 63.550(d)&(e)
(a) A summary of records maintained per the SOP, including notification of any instances where the SOP was not followed.	40 CFR 63.550(e)(6)

	Regulations
(b) A summary of any malfunction occurring during the reporting period.	40 CFR 63.550(e)(11)
(c) The facility-wide, rolling 12-month flow-weighted average concentration of lead emissions in all process vent gases as calculated per 40 CFR 63.543(a).	40 CFR 63.550(e)(1)

Appendix

CAM - PM Compliance Plan for Canopy Hoods and Furnace Building Ventilation Baghouse Stack 11

	Indicator 1	Indicator 2
I. Indicator	HEPA Pressure Drop	Inspection/Maintenance
Measurement Approach	Pressure Drop across the HEPA filter is measured with a Magnehelic Pressure Gauge	Various baghouse system operation and maintenance inspections are conducted within prescribed intervals, per MACT SOP manual.
II. Indicator Range	While the unit is operating, an excursion is defined as a pressure differential below 0.5 inches of H ₂ O and greater than 5.0 inches of H ₂ O. Excursions trigger an inspection, corrective action, and a reporting requirement.	An excursion is defined as failure to perform inspections per MACT SOP manual or failure to take action following report of necessary maintenance.
III. Performance Criteria		
A. Data Representativeness		Per MACT SOP
B. Verification of Operation Status	The magnehelic measures the pressure differential between the inlet and outlet of the HEPA filter system. The gauge has a minimum accuracy of 0.3 inches of H ₂ O.	
C. QA/QC Practices and Criteria	Not Applicable	Not Applicable
D. Monitoring Frequency	Quarterly inspection of the pressure taps located at the HEPA inlet and outlet.	Trained personnel to perform maintenance and inspections.
E. Data Collection Procedures	At least once daily	Per MACT SOP
F. Averaging Period	The pressure drop will be recorded with date and time.	Per MACT SOP
	Instantaneous	Not Applicable

Appendix

Chapter 16 - PM Compliance Plan for Canopy Hoods and Furnace Building Ventilation Baghouse Stack 17

	Indicator 1	Indicator 2
I. Indicator	HEPA Pressure Drop	Inspection/Maintenance
Measurement Approach	Pressure Drop across the HEPA filter is measured with a Magnehelic Pressure Gauge	Various baghouse system operation and maintenance inspections are conducted within prescribed intervals, per MACT SOP manual.
II. Indicator Range	While the unit is operating, an excursion is defined as a pressure differential below outside of the range specified by the manufacturer. Excursions trigger an inspection, corrective action, and a reporting requirement.	An excursion is defined as failure to perform inspections per MACT SOP manual or failure to take action following report of necessary maintenance.
III. Performance Criteria		
A. Data Representativeness	The magnehelic measures the pressure differential between the inlet and outlet of the HEPA filter system. The gauge has a minimum accuracy of 0.3 inches of H ₂ O.	Per MACT SOP
B. Verification of Operation Status	Not Applicable	Not Applicable
C. QA/QC Practices and Criteria	Quarterly inspection of the pressure taps located at the HEPA inlet and outlet.	Trained personnel to perform maintenance and inspections.
D. Monitoring Frequency	At least once daily	Per MACT SOP
E. Data Collection Procedures	The pressure drop will be recorded with date and time.	Per MACT SOP
F. Averaging Period	Instantaneous	Not Applicable