DRAFT PERMIT

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

MEMORANDUM **October 26, 2022**

TO: Lee Warden, P.E., Permits and Engineering Group Manager

THROUGH: Richard Kienlen, P.E., Manager, New Source Permits Section

THROUGH: Ryan Buntyn, P. E., New Source Permits Section

FROM: David S. Schutz, P. E., New Source Permit Section

SUBJECT: Evaluation of Permit Application No. **2022-0332-C**
Wedlake Fabricating, Inc.
Emergency Generator Enclosure Manufacturing Plant
(SIC 3621/NAICS 335312)
Facility ID: 22958
Latitude 36.18588°N, Longitude 95.79595°W
Physical Address: 2121 North 161st East Avenue, Tulsa, Tulsa County, OK

INTRODUCTION

Wedlake Fabricating, Inc. has submitted an application for a construction permit for an emergency generator enclosure manufacturing operation. The manufacturing operations will include:

- priming and painting booths,
- plasma cutting tables, and
- welding.

Coatings will be applied in two booths, 60’ by 30’ by 26’ in height. Discharges from the booths will be processed by dry filters rated at 99.6% efficiency for PM control. A process rate of 0.01 TPH was stated. PTE was shown as 9.1 TPY VOC and 20.25 TPY PM.

OAC 252:100-39-46 specifies standards for coating operations in Tulsa County. Facilities with less than 10 TPY VOC emissions are exempted from the standards. Therefore, a facility-wide limit of 9.9 TPY will be established. In addition, OAC 252:100-37-25 specifies standards for VOC content of coatings from operations whose VOC emissions exceed 100 lb/day. The limitation of 9.9 TPY is equivalent to 54 lb/day, keeping the facility below the thresholds at which the limitations would apply.

PROCESS DESCRIPTION

The facility manufactures enclosures for large diesel backup generators. The manufacturing process involves plasma cutting, welding, and handheld grinding before the enclosures are placed in paint booths for coating.

EMISSIONS

Air emissions at this facility are generated as a result of spraying primer and paint coatings. Particulate emissions are generated from the spray coating process, abrasive blasting, and a small amount of particulate emissions is generated from welding done on the structures. The plasma cutting will generate NOx and PM emissions.

- Coating Emissions

Coating Material	Density lb/gal	VOC wt. %	HAP wt.%	Usage gal/yr	Solids wt. %	Transfer Effic.	PM Control Effic.
101 Thinner	7.43	92.55	7.5	496	7.45	25	99.6
923 Thinner	6.84	95	0	16	5	25	99.6
370 Pearl Gray Resin	15.69	14.6	13.35	288	85.4	25	99.6
450H Black Resin	10.26	18.8	0.5	288	11	25	99.6
450H Cure	8.6	89	0	182	11	25	99.6
450H High Hiding Yellow	9.51	18.7	0.5	112	81.3	25	99.6
450H NTB Resin	9.76	22.1	0.55	1094	77.9	25	99.6
450H White Resin	13.1	15.1	0.55	94	84.9	25	99.6
866M Accelerator	8.18	97	0	24	3	25	99.6
Lock-Cote 29-46 2020 SDS	11.2	58.5	53.5	152	41.5	25	99.6
Lock-Cote 29-86-2020 SDS	10.85	58.5	53	1008	41.5	25	99.6
Lock-Cote 8314 High Heat Black Enamel	8.84	64.65	23	94	35.35	25	99.6
Lock-Cote 9213 White Rust Inhibitive Primer	10.1	47.65	23	78	52.35	25	99.6
Lock-Cote Sure Grip Black SDS	13.81	17.5	0	48	82.5	25	99.6
Lock-Cote Sure Grip White SDS	14.09	17.5	0	14	82.5	25	99.6
Thinner 21-06 / 65	7.26	96	96	76	4	25	99.6

For worst case emissions estimation purposes, the usage of paints will be 4,064 gallons per year. A worst-case estimate of solids content of 13.3 lb/gallon will be assumed. This solids content will be coupled with an assumed 25% transfer efficiency of airless spray guns and a control efficiency from dry filters of 99.6%.

Since VOC emissions are limited by a plant-wide cap of 9.9 TPY, estimation of VOC emissions is not necessary.

Coating PM Emissions

Operation	Hourly Paint Usage, Gallons	Annual Paint Usage, Gallons	Solids Content, lb/gal	Transfer Efficiency, %	Filter Efficiency, %	PM Emissions	
						lb/hr	TPY
Painting	1.0	4,064	13.3	25	99.6	0.08	0.08

- Welding Emissions

Welding emission factors were taken from AP-42 (1/95), Table 12.19-1.

Welding PM Emissions

Welding Operation	Welding Type	Annual Electrode Usage, lb/year	Emission Factor, lb/1,000 lb	PM Emissions	
				lb/hr	TPY
WELD-1	GMAW	37,440	5.2	0.02	0.10
WELD-2	FCAW	42,720	12.2	0.06	0.26
TOTALS				**0.08**	**0.36**

- Grinding Emissions

Grinding emission factors were taken from AP-42 (1/95), Table 11.24-2, with a maximum anticipated material throughput of 20,148,000 lb/year (10,074 TPY).

Grinding PM Emissions

Hourly Throughput, Tons	Annual Throughput, Tons	Emission Factor, lb/ton	PM Emissions	
			lb/hr	TPY
1.15	10,074	0.31	0.36	1.56

- Plasma Cutting

Plasma cutting emissions were based on "Emissions of Fume, Nitrogen Oxides, and Noise in Plasma Cutting of Stainless and Mild Steel" (cited in AP-42, Chapter 12).

Plasma Cutting NOx and PM Emissions

Pollutant	Emission Factor	Control Efficiency	Emissions	
			lb/hr	TPY
PM_{10}	0.25 g/min	90%	0.30	1.33
NOx	4.95 lliters/min	--	1.34	5.89

SUMMARY OF CRITERIA POLLUTANT EMISSIONS BY OPERATION

Emission Unit	PM_{10}		NOx		VOC	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
Welding	0.08	0.36	--	--	--	--
Coating	0.08	0.08	--	--	2.72	9.90
Grinding	0.36	1.56	--	--	--	--
Plasma Cutting	0.30	1.33	1.34	5.89	--	--
Total	**0.82**	**3.33**	**1.34**	**5.89**	**2.72**	**9.90**

Hazardous Air Pollutants (HAPs)

The facility will be limited to below the 10/25 TPY thresholds and is considered an "area" source of HAPs.

FEDERAL REGULATIONS

NSPS, 40 CFR Part 60 [Not Applicable]
There are no subparts that apply to this process. The following NSPS subparts affect surface coating operations. None of these applies to this facility.

Subpart EE: metal furniture
Subpart MM: automobiles and light-duty trucks (in assembly plant)
Subpart QQ: graphic arts (rotogravure)
Subpart RR: pressure-sensitive tape and labels
Subpart SS: large appliances
Subpart TT: metal coil
Subpart WW: beverage cans
Subpart FFF: flexible vinyl and urethane

NESHAP, 40 CFR Part 61 [Not Applicable]
There are no emissions of any of the regulated pollutants: arsenic, asbestos, benzene, beryllium, coke oven emissions, mercury, radionuclides, or vinyl chloride except for trace amounts of benzene. Benzene standards in 40 CFR Part 61 Subpart J affect process streams with 10% or more by weight benzene. There are only trace amounts of benzene in any stream at this facility.

NESHAP, 40 CFR Part 63 [Not Applicable]
Subpart T, National Emission Standards for Halogenated Solvent Cleaning. This subpart affects each batch or in-line vapor or cold solvent cleaning machine that uses any solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, or chloroform, or any combination of these halogenated HAP solvents, in a total concentration greater than 5 percent by weight, as a cleaning and/or drying agent. There are no halogenated solvent cleaning operations at this facility.

Subpart MMMM, "Surface Coating of Miscellaneous Metal Parts and Products." This subpart affects facilities that locate at major source of HAPs. This facility is not a major source as defined in 40 CFR Part 63 (10 tons per year or more of any one hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants). Therefore, this facility is not subject to Subpart MMMM.

Subpart HHHHHH, Paint Stripping and Miscellaneous Surface Coating Operations. This subpart affects area sources involved in any of the following activities:

1) Paint stripping operations that involve the use of chemical strippers that contain methylene chloride (MeCl), in paint removal processes;
2) Autobody refinishing operations that encompass motor vehicle and mobile equipment spray-applied surface coating operations; and
3) Spray application of coatings containing target HAP (compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd)), to any part or product made of metal or plastic, or combinations of metal and plastic that are not motor vehicles or mobile equipment.

The paint booths are the only coating operation utilizing spray application, and none of the coatings used in this operation contain target HAPs. Therefore, this subpart is not applicable.

Subpart WWWWWW, Area Source Standards for Plating and Polishing Operations. This subpart affects plating and polishing area sources that are engaged in one or more of the following processes:

1) Electroplating other than chromium electroplating (i.e., non-chromium electroplating);
2) Electroless or non-electrolytic plating;
3) Other non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; and thermal spraying;
4) Dry mechanical polishing of finished metals and formed products after plating;
5) Electroforming; and/or
6) Electropolishing.

None of these activities are conducted at the facility.

Subpart XXXXXX, Area Source Standards for Nine Metal Fabrication and Finishing Source Categories. This facility is an Industrial Machinery and Equipment Finishing Operations because it is primarily engaged in manufacturing generator enclosures (NAICS 332311). This activity is not one of the affected source categories under this subpart.

OKLAHOMA AIR POLLUTION CONTROL RULES

OAC 252:100-1 (General Provisions) [Applicable]
Subchapter 1 includes definitions but there are no regulatory requirements.

OAC 252:100-2 (Incorporation by Reference) [Applicable]
This subchapter incorporates by reference applicable provisions of Title 40 of the Code of Federal Regulations listed in OAC 252:100, Appendix Q. These requirements are addressed in the "Federal Regulations" section.

OAC 252:100-3 (Air Quality Standards and Increments) [Applicable]
Subchapter 3 enumerates the primary and secondary ambient air quality standards and the significant deterioration increments. At this time, all of Oklahoma is in "attainment" of these standards.

OAC 252:100-5 (Registration, Emissions Inventory and Annual Operating Fees) [Applicable]
Subchapter 5 requires sources of air contaminants to register with Air Quality, file emission inventories annually, and pay annual operating fees based upon total annual emissions of regulated pollutants. Emission inventories were submitted and fees paid for previous years as required.

OAC 252:100-7 (Permits for Minor Facilities) [Applicable]
Subchapter 7 sets forth the permit application fees and the basic substantive requirements of permits for minor facilities. Since criteria pollutant emissions are less than 100 TPY for each pollutant, and emissions of Hazardous Air Pollutants (HAP) will not exceed 10 TPY for any individual HAP or 25 TPY for any aggregate of HAP, the facility is defined as a minor source. As such, BACT is not required.

OAC 252:100-9 (Excess Emissions Reporting Requirements) [Applicable]
Except as provided in OAC 252:100-9-7(a)(1), the owner or operator of a source of excess emissions shall notify the Director as soon as possible but no later than 4:30 p.m. the following working day of the first occurrence of excess emissions in each excess emission event. No later than thirty (30) calendar days after the start of any excess emission event, the owner or operator of an air contaminant source from which excess emissions have occurred shall submit a report for each excess emission event describing the extent of the event and the actions taken by the owner or operator of the facility in response to this event. Request for mitigation, as described in OAC 252:100-9-8, shall be included in the excess emission event report. Additional reporting may be required in the case of ongoing emission events and in the case of excess emissions reporting required by 40 CFR Parts 60, 61, or 63.

OAC 252:100-13 (Open Burning) [Applicable]
Open burning of refuse and other combustible material is prohibited except as authorized in the specific examples and under the conditions listed in this subchapter.

OAC 252:100-19 (Particulate Matter (PM)) [Applicable]
Section 19-4 regulates emissions of PM from the combustion of fuel in any new and existing fuel-burning unit, with emission limits based on maximum design heat input rating. Fuel-burning unit is defined in OAC 252:100-19 as any internal combustion engine or gas turbine, or other combustion device used to convert the combustion of fuel into usable energy. There is no fuel-burning equipment planned for this facility.

Section 19-12 limits particulate emissions from emission points in an industrial process based on process weight rate, as specified in Appendix G. Based on a total process weight rate of 1.15 TPH, the allowable particulate limitation for this rate is limited to 4.50 lbs/hr.

Operation	Appendix G Emission Limit (lbs/hr)	Potential Emission Rate (lbs/hr)
Painting	4.50	0.04
Welding	4.50	0.04
Grinding	4.50	0.36
Plasma Cutting	4.50	0.30

OAC 252:100-25 (Visible Emissions and Particulates) [Applicable]
No discharge of greater than 20% opacity is allowed except for short-term occurrences that consist of not more than one six-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity. When burning natural gas, there is very little possibility of exceeding these standards. The coating operations utilize a booth control system with particulate matter filter media. The abrasive blasting operation is enclosed and vented to filters. The permit will require maintenance of control devices to ensure the opacity standard is met.

OAC 252:100-29 (Fugitive Dust) [Applicable]
No person shall cause or permit the discharge of any visible fugitive dust emissions beyond the property line on which the emissions originated in such a manner as to damage or to interfere with the use of adjacent properties, or cause air quality standards to be exceeded, or to interfere with the maintenance of air quality standards. Under normal operating conditions, this facility has negligible potential to violate this requirement; therefore, it is not necessary to require specific precautions to be taken.

OAC 252:100-31 (Sulfur Compounds) [Not Applicable]
Part 2 limits the ambient air concentration of hydrogen sulfide (H_2S) emissions from any facility to 0.2 ppmv (24-hour average) at standard conditions which is equivalent to 283 $\mu g/m^3$. There is no fuel-burning equipment planned for this facility.

OAC 252:100-33 (Nitrogen Oxides) [Not Applicable]
This subchapter limits new gas-fired fuel-burning equipment with rated heat input greater than or equal to 50 MMBTUH to emissions of 0.20 lbs of NO_X per MMBTU, three-hour average. There are no equipment items that exceed the 50 MMBTUH threshold.

OAC 252:100-35 (Carbon Monoxide) [Not Applicable]
This subchapter affects gray iron cupolas, blast furnaces, basic oxygen furnaces, petroleum catalytic cracking units, and petroleum catalytic reforming units. There are no affected sources.

OAC 252:100-37 (Volatile Organic Compounds) [Parts 5 Applicable]
Part 3 requires storage tanks constructed after December 28, 1974, with a capacity of 400 gallons or more and storing a VOC with a vapor pressure greater than 1.5 psia to be equipped with a

permanent submerged fill pipe or with an organic vapor recovery system. There are no organic liquids storage tanks planned for this facility.
Part 5 limits the VOC content of coatings used in coating lines and operations. No owner or operator of any coating line or coating operation with VOC emissions shall use coatings that as applied contain VOCs in excess of the amounts listed below. Limits are expressed in pounds of VOC per gallon of coating, excluding the volume of any water and exempt organic compounds.

(1) Alkyd primer - 4.8 lb VOC per gallon
(2) Vinyls - 6.0 lb VOC per gallon
(3) NC lacquers - 6.4 lb VOC per gallon
(4) Acrylics - 6.0 lb VOC per gallon
(5) Epoxies - 4.8 lb VOC per gallon
(6) Maintenance finishes - 4.8 lb VOC per gallon
(7) Custom products finish - 6.5 lb VOC per gallon

Owners or operators of sources that emit less than 100 pounds of VOC per 24-hour day are exempt from the requirements of this Part.

OAC 252:100-39 (VOC in Nonattainment & Former Nonattainment Areas) [Part 7 Applicable]
This subchapter imposes additional conditions beyond those of Subchapter 37 on emissions of organic materials from new and existing facilities in Tulsa and Oklahoma Counties. This facility is located in Tulsa County.
Part 7, Section 39-46, Coating of parts and products, applies only to industries located in Tulsa County which manufacture and/or coat metal parts and products, such as large farm machinery, small farm machinery, small appliances, commercial machinery, industrial machinery and fabricated metal products. Facilities with a potential to emit 10 tons/year or less of VOC from coating operations are exempt from this section. If more than one limit listed in the table is applicable to a specific coating, then the least stringent limitation shall be applied. Limits are expressed in pounds of VOC per gallon of coating, excluding the volume of any water and exempt organic compounds.

(1) Air or Forced Air Dry – 3.5 lb VOC per gallon
(2) Clear Coat – 4.3 lb VOC per gallon
(3) Extreme Performance – 3.0 lb VOC per gallon
(4) Powder – 0.4 lb VOC per gallon
(5) Other - 3.0 lb VOC per gallon

OAC 252:100-42 (Toxic Air Contaminants (TAC)) [Applicable]
This subchapter regulates TAC that are emitted into the ambient air in areas of concern (AOC). Any work practice, material substitution, or control equipment required by the Department prior to June 11, 2004, to control a TAC, shall be retained, unless a modification is approved by the Director. Since no AOC has been designated there are no specific requirements for this facility at this time.

OAC 252:100-43 (Testing, Monitoring, and Recordkeeping) [Applicable]
This subchapter provides general requirements for testing, monitoring and recordkeeping and applies to any testing, monitoring or recordkeeping activity conducted at any stationary source. To determine compliance with emissions limitations or standards, the Air Quality Director may require the owner or operator of any source in the state of Oklahoma to install, maintain and operate monitoring equipment or to conduct tests, including stack tests, of the air contaminant source. All required testing must be conducted by methods approved by the Air Quality Director and under the direction of qualified personnel. A notice-of-intent to test and a testing protocol shall be submitted to Air Quality at least 30 days prior to any EPA Reference Method stack tests. Emissions and other data required to demonstrate compliance with any federal or state emission limit or standard, or any requirement set forth in a valid permit shall be recorded, maintained, and submitted as required by this subchapter, an applicable rule, or permit requirement. Data from any required testing or monitoring not conducted in accordance with the provisions of this subchapter shall be considered invalid. Nothing shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

COMPLIANCE

Tier Classification

This application has been determined to be a **Tier I** based on being a construction permit application for a new minor source. The draft permit will undergo public notice on the DEQ's web site as required in OAC 252:4-7-13(g). The public, tribal governments, and the EPA will have 30 days to comment on the draft permit. Permits available for public review and comment are found at this location: https://www.deq.ok.gov/permits-for-public-review/.

Landowner Affidavit

The applicant has submitted an affidavit that they are not seeking a permit for land use or for any operation upon land owned by others without their knowledge. The affidavit certifies that the applicant owns the real property.

Environmental Justice Review

All people should be protected from the impacts of environmental pollution regardless of race, national origin, or income. DEQ is committed to ensuring such protection through the development, implementation, and consistent enforcement of environmental laws and regulations.

Pending any public review indicated in this Section, AQD has determined that no communities with environmental justice concerns are impacted by the issuance of this permit. This determination is based on this permit qualifying as a minor source under OAC 252:100-7.

Fee Paid

Permit fee of $2,000 was paid for the construction permit.

SUMMARY

The facility has demonstrated the ability to comply with the requirements of the several air pollution control rules and regulations. Ambient air quality standards are not threatened at this site. There are no active Air Quality compliance or enforcement issues that would affect the issuance of this permit. Issuance of the construction permit is recommended, contingent on public review.

DRAFT PERMIT

PERMIT TO CONSTRUCT
AIR POLLUTION CONTROL FACILITY
SPECIFIC CONDITIONS

Wedlake Fabricating, Inc. **Permit No. 2022-0332-C**
Generator Enclosure Manufacturing Facility
2121 North 161st East Avenue, Tulsa, Tulsa County, OK

The permittee is authorized to construct in conformity with the specifications submitted to Air Quality in previous applications and incorporated into this permit, and the request for modification received on May 24, 2022. The Evaluation Memorandum, dated October 26, 2022, explains the derivation of applicable permit requirements and estimates of emissions; however, it does not contain operating limitations or permit requirements. Commencing construction or continuing operations under this permit constitutes acceptance of, and consent to, the conditions contained herein.

1. Points of emissions and emissions limitations:

Emission Unit	PM_{10}, TPY	NOx, TPY	VOC, TPY
Welding	0.36	--	--
Coating	0.08	--	9.90
Grinding	1.56	--	--
Plasma Cutting	1.33	5.89	--

A. Emissions from the use of coatings, thinners, and cleaning fluids shall not exceed 9.9 tons of volatile organic compound (VOC); 9.9 tons of individual hazardous air pollutant (HAP) or of all HAP emissions combined. Compliance with the annual limits shall be demonstrated on a monthly basis by maintaining a daily log documenting material usage and resulting emissions based on 100% evaporation of all VOC components in the materials.
B. Welding electrode usage shall not exceed 80,000 lbs/year (12-month rolling totals). Monthly records of welding electrode usage shall be kept.

2. If VOC emissions exceed the exemption levels, materials used shall comply with the VOC standards for coatings required by OAC 252:100-37-25 and OAC 252:100-39-46.

3. Emissions Controls – Coating Booths and Plasma Cutting:

a. All spray booths or spray rooms must be fitted with a type of filter technology that is demonstrated to achieve at least 99.6 percent capture of particulate matter. Owners and operators may use published filter efficiency data provided by filter vendors to demonstrate compliance with this requirement and are not required to perform this measurement.
b. The capture system and the housing for the filters shall be constructed and maintained such that no bypass of unfiltered emissions occurs. The paint booths operation shall be

operated with the doors closed, with discharge rates through the exhaust stacks adequate to recover and discharge the emissions generated from affected areas.

c. Plasma Table No. 3 shall be vented to a PM filter with an efficiency of at least 90% for control of total PM. The filters shall be maintained and monitored per manufacturer specifications.

4. Upon issuance of an operating permit, the facility is authorized to operate 24 hours per day, 7 days per week, 8,760 hours per year.

5. The permittee shall keep records of facility operations as listed. These records shall be maintained on-site for a period of at least five years following the dates of recording and shall be made available to regulatory personnel upon request during normal business hours.

   a. Raw material usage including quantity of primers, paints/coatings, cleaning fluids/solvents, thinners, and other VOC materials used (monthly, and 12-month rolling totals).
   b. Records of the VOC emissions showing that facility VOC emissions are below the exemption levels listed in 252:100-37-25 and 39-46(d).
   c. Welding material usages (monthly and 12-month rolling totals).
   d. A current MSDS for each material which documents the volatile organic solvent content and solids content expressed in pounds of VOC or solids per gallon of coating less water and exempt solvents, percentage of water by weight, solids percent by weight, solvent density and percentage of exempt solvents by weight (if any) of each VOC material, and the Hazardous Air Pollutant (HAP) content.

6. This permittee shall apply for a permit to operate within 180 days following commencement of operations.

Wedlake Fabricating, Inc.
Attn.: Mr. Bo Wedlake
2121 North 161st East Avenue
Tulsa, OK 74116

SUBJECT: **Permit No. 2022-0332-C**
Emergency Generator Enclosure Manufacturing Plant (FAC ID 22958)
Tulsa, Tulsa County, Oklahoma

Dear Mr. Wedlake:

Enclosed is the permit authorizing construction of the referenced facility. Please note that this permit is issued subject to standard and specific conditions that are attached. These conditions must be carefully followed since they define the limits of the permit and will be confirmed by periodic inspections.

Also note that you are required to annually submit an emissions inventory for this facility. An emissions inventory must be completed through DEQ's electronic reporting system by April 1st of every year. Any questions concerning the submittal process should be referred to the Emissions Inventory Staff at (405) 702-4100.

Thank you for your cooperation in this matter. If we may be of further service, please contact the permit writer at david.schutz@deq.ok.gov, or at (405) 702-4198.

Sincerely,

DRAFT

Lee Warden, P.E.
Permits and Engineering Section Manager
AIR QUALITY DIVISION

Enclosure

Department of Environmental Quality (DEQ)
Air Quality Division (AQD)
Acronym List
9-10-21

ACFM	Actual Cubic Feet per Minute
AD	Applicability Determination
AFRC	Air-to-Fuel Ratio Controller
API	American Petroleum Institute
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
BAE	Baseline Actual Emissions
BBL	Barrel(s)
BHP	Brake Horsepower (bhp)
BTU	British thermal unit (Btu)
C&E	Compliance and Enforcement
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CAS	Chemical Abstract Service
CAAA	Clean Air Act Amendments
CC	Catalytic Converter
CCR	Continuous Catalyst Regeneration
CD	Consent Decree
CEM	Continuous Emission Monitor
CFC	Chlorofluorocarbon
CFR	Code of Federal Regulations
CI	Compression Ignition
CNG	Compressed Natural Gas
CO	Carbon Monoxide or Consent Order
COA	Capable of Accommodating
COM	Continuous Opacity Monitor
D	Day
DEF	Diesel Exhaust Fluid
DG	Demand Growth
DSCF	Dry Standard (At Standard Conditions) Cubic Foot (Feet)
EGU	Electric Generating Unit
EI	Emissions Inventory
EPA	Environmental Protection Agency
ESP	Electrostatic Precipitator
EUG	Emissions Unit Group
EUSGU	Electric Utility Steam Generating Unit
FCE	Full Compliance Evaluation
FCCU	Fluid Catalytic Cracking Unit
FEL	Federally Enforceable Limit(s)
FESOP	Federally Enforceable State Operating Permit
FIP	Federal Implementation Plan
FR	Federal Register
GACT	Generally Achievable Control Technology
GAL	Gallon (gal)
GDF	Gasoline Dispensing Facility
GEP	Good Engineering Practice
GHG	Greenhouse Gases
GR	Grain(s) (gr)
H_2CO	Formaldehyde
H_2S	Hydrogen Sulfide
HAP	Hazardous Air Pollutants
HC	Hydrocarbon
HCFC	Hydrochlorofluorocarbon
HFR	Horizontal Fixed Roof
HON	Hazardous Organic NESHAP
HP	Horsepower (hp)
HR	Hour (hr)
I&M	Inspection and Maintenance
IBR	Incorporation by Reference
ICE	Internal Combustion Engine
LAER	Lowest Achievable Emission Rate
LB	Pound(s) [Mass] (lb, lbs, lbm)
LB/HR	Pound(s) per Hour (lb/hr)
LDAR	Leak Detection and Repair
LNG	Liquefied Natural Gas
LT	Long Ton(s) (metric)
M	Thousand (Roman Numeral)
MAAC	Maximum Acceptable Ambient Concentration
MACT	Maximum Achievable Control Technology
MM	Prefix used for Million (Thousand-Thousand)
MMBTU	Million British Thermal Units (MMBtu)
MMBTUH	Million British Thermal Units per Hour (MMBTUH)
MMSCF	Million Standard Cubic Feet (MMscf)
MMSCFD	Million Standard Cubic Feet per Day
MSDS	Material Safety Data Sheet
MWC	Municipal Waste Combustor
MWe	Megawatt Electrical
NA	Nonattainment
NAAQS	National Ambient Air Quality Standards
NAICS	North American Industry Classification System
NESHAP	National Emission Standards for Hazardous Air Pollutants
NH_3	Ammonia
NMHC	Non-methane Hydrocarbon
NGL	Natural Gas Liquids
NO_2	Nitrogen Dioxide

NOx	Nitrogen Oxides
NOI	Notice of Intent
NSCR	Non-Selective Catalytic Reduction
NSPS	New Source Performance Standards
NSR	New Source Review
O_3	Ozone
O&G	Oil and Gas
O&M	Operation and Maintenance
O&NG	Oil and Natural Gas
OAC	Oklahoma Administrative Code
OC	Oxidation Catalyst
PAH	Polycyclic Aromatic Hydrocarbons
PAE	Projected Actual Emissions
PAL	Plant-wide Applicability Limit
Pb	Lead
PBR	Permit by Rule
PCB	Polychlorinated Biphenyls
PCE	Partial Compliance Evaluation
PEA	Portable Emissions Analyzer
PFAS	Per- and Polyfluoroalkyl Substance
PM	Particulate Matter
$PM_{2.5}$	Particulate Matter with an Aerodynamic Diameter <= 2.5 Micrometers
PM_{10}	Particulate Matter with an Aerodynamic Diameter <= 10 Micrometers
POM	Particulate Organic Matter or Polycyclic Organic Matter
ppb	Parts per Billion
ppm	Parts per Million
ppmv	Parts per Million Volume
ppmvd	Parts per Million Dry Volume
PSD	Prevention of Significant Deterioration
psi	Pounds per Square Inch
psia	Pounds per Square Inch Absolute
psig	Pounds per Square Inch Gage
RACT	Reasonably Available Control Technology
RATA	Relative Accuracy Test Audit
RAP	Regulated Air Pollutant or Reclaimed Asphalt Pavement
RFG	Refinery Fuel Gas
RICE	Reciprocating Internal Combustion Engine
RO	Responsible Official
ROAT	Regional Office at Tulsa
RVP	Reid Vapor Pressure
SCC	Source Classification Code
SCF	Standard Cubic Foot
SCFD	Standard Cubic Feet per Day
SCFM	Standard Cubic Feet per Minute
SCR	Selective Catalytic Reduction
SER	Significant Emission Rate
SI	Spark Ignition
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SNCR	Selective Non-Catalytic Reduction
SO_2	Sulfur Dioxide
SOx	Sulfur Oxides
SOP	Standard Operating Procedure
SRU	Sulfur Recovery Unit
T	Tons
TAC	Toxic Air Contaminant
TEG	Triethylene Glycol
THC	Total Hydrocarbons
TPY	Tons per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulates
TV	Title V of the Federal Clean Air Act
$\mu g/m^3$	Micrograms per Cubic Meter
US EPA	U. S. Environmental Protection Agency
VFR	Vertical Fixed Roof
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound
VOL	Volatile Organic Liquid
VRT	Vapor Recovery Tower
VRU	Vapor Recovery Unit
YR	Year
2SLB	2-Stroke Lean Burn
4SLB	4-Stroke Lean Burn
4SRB	4-Stroke Rich Burn

PERMIT

AIR QUALITY DIVISION
STATE OF OKLAHOMA
DEPARTMENT OF ENVIRONMENTAL QUALITY
707 N. ROBINSON STREET, SUITE 4100
P.O. BOX 1677
OKLAHOMA CITY, OKLAHOMA 73101-1677

Permit No. 2022-0332-C

Wedlake Fabricating, Inc.,

having complied with the requirements of the law, is hereby granted permission to construct an emergency generator enclosure manufacturing plant at 2121 North 161st East Avenue, Tulsa, Tulsa County, Oklahoma, subject to standard conditions dated February 13, 2020, and specific conditions, both attached.

In the absence of construction commencement, this permit shall expire 18 months from the issuance date, except as authorized under Section B of the Standard Conditions.

DRAFT

Lee Warden, P.E.
Permits and Engineering Group Manager

Date Issued

MINOR SOURCE PERMIT TO OPERATE/CONSTRUCT
AIR POLLUTION CONTROL FACILITY
STANDARD CONDITIONS
(February 13, 2020)

A. The issuing Authority for the permit is the Air Quality Division (AQD) of the Oklahoma Department of Environmental Quality (DEQ) in accordance with and under the authority of the Oklahoma Clean Air Act. The permit does not relieve the holder of the obligation to comply with other applicable federal, state, or local statutes, regulations, rules, or ordinances. This specifically includes compliance with the rules of the other Divisions of DEQ: Land Protection Division and Water Quality Division.

B. A duly issued construction permit or authorization to construct or modify will terminate and become null and void (unless extended as provided in OAC 252:100-7-15(g)) if the construction is not commenced within 18 months after the date the permit or authorization was issued, or if work is suspended for more than 18 months after it is commenced. [OAC 252:100-7-15(f)]

C. The recipient of a construction permit shall apply for a permit to operate (or modified operating permit) within 180 days following the first day of operation. [OAC 252:100-7-18(a)]

D. Unless specified otherwise, the term of an operating permit shall be unlimited.

E. Notification to the Air Quality Division of DEQ of the sale or transfer of ownership of this facility is required and shall be made in writing by the transferor within 30 days after such date. A new permit is not required. [OAC 252:100-7-2(f)]

F. The following limitations apply to the facility unless covered in the Specific Conditions:

1. No person shall cause or permit the discharge of emissions such that National Ambient Air Quality Standards (NAAQS) are exceeded on land outside the permitted facility. [OAC 252:100-3]
2. All facilities that emit air contaminants are required to file an emission inventory and pay annual operating fees based on the inventory. Instructions are available on the Air Quality section of the DEQ web page. *www.deq.ok.gov* [OAC 252:100-5]
3. Deviations that result in emissions exceeding those allowed in this permit shall be reported consistent with the requirements of OAC 252:100-9, Excess Emission Reporting Requirements. [OAC 252:100-9]
4. Open burning of refuse and other combustible material is prohibited except as authorized in the specific examples and under the conditions listed in the Open Burning subchapter. [OAC 252:100-13]
5. No particulate emissions from new fuel-burning equipment with a rated heat input of 10 MMBTUH or less shall exceed 0.6 lbs/MMBTU. [OAC 252:100-19]
6. No discharge of greater than 20% opacity is allowed except for short-term occurrences which consist of not more than one six-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity. [OAC 252:100-25]

7. No visible fugitive dust emissions shall be discharged beyond the property line on which the emissions originate in such a manner as to damage or to interfere with the use of adjacent properties, or cause air quality standards to be exceeded, or interfere with the maintenance of air quality standards. [OAC 252:100-29]
8. No sulfur oxide emissions from new gas-fired fuel-burning equipment shall exceed 0.2 lbs/MMBTU. No existing source shall exceed the listed ambient air standards for sulfur dioxide. [OAC 252:100-31]
9. Volatile Organic Compound (VOC) storage tanks built after December 28, 1974, and with a capacity of 400 gallons or more storing a liquid with a vapor pressure of 1.5 psia or greater under actual conditions shall be equipped with a permanent submerged fill pipe or with an organic material vapor-recovery system. [OAC 252:100-37-15(b)]
10. All fuel-burning equipment shall at all times be properly operated and maintained in a manner that will minimize emissions of VOCs. [OAC 252:100-37-36]

G. Any owner or operator subject to provisions of NSPS shall provide written notification as follows: [40 CFR 60.7 (a)]

1. A notification of the date construction (or reconstruction as defined under §60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.
2. A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in §60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.
3. A notification of the actual date of initial start-up of an affected facility postmarked within 15 days after such date.
4. If a continuous emission monitoring system is included in the construction, a notification of the date upon which the test demonstrating the system performance will commence, along with a pretest plan, postmarked no less than 30 days prior to such a date.

H. Any owner or operator subject to provisions of NSPS shall maintain records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of an affected facility or any malfunction of the air pollution control equipment. [40 CFR 60.7 (b)]

I. Any owner or operator subject to the provisions of NSPS shall maintain a file of all measurements and other information required by this subpart recorded in a permanent file suitable for inspection. This file shall be retained for at least five years following the date of such measurements, maintenance, and records. [40 CFR 60.7 (f)]

J. Any owner or operator subject to the provisions of NSPS shall conduct performance test(s) and furnish to AQD a written report of the results of such test(s). Test(s) shall be conducted within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial start-up. [40 CFR 60.8]

Scott A. Thompson
Executive Director

OKLAHOMA Environmental Quality

Kevin Stitt
Governor

October 26, 2022

Cherokee Nation
Attn: Chuck Hoskins, Jr. Principal Chief
P.O. Box 948
Tahlequah, OK 74465

Re: Permit Application No. **2022-0332-C**
Wedlake Fabricating, Inc.
Emergency Generator Enclosure Manufacturing Plant
(SIC 3621/NAICS 335312)
Facility ID: 22958
Physical Address: 2121 North 161st East Avenue, Tulsa, Tulsa County, OK
Date Received: May 24, 2022

Dear Mr. Hoskins:

The Oklahoma Department of Environmental Quality (ODEQ), Air Quality Division (AQD), has received the Tier II/Tier III application referenced above. A Tier II/III application requires the facility provide a 30-day public comment period on the draft Tier II/III permit and a 20-day public comment period on a proposed Tier III permit at a public location within the county of the facility. The process requires the facility to notify the public by newspaper notice in a newspaper in the county of the proposed project. Since the proposed project falls within your Tribal jurisdiction, AQD is providing this direct notice. This letter notification is in addition to the newspaper notice.

Copies of draft permits and comment opportunities are also provided to the public on the ODEQ website at the following location:

https://www.deq.ok.gov/air-quality-division/air-permits/public-participation-issued-permits/

If you prefer a copy of the draft and/or proposed permit, or direct notification by letter for any remaining public comment opportunities, if applicable, on the referenced permit action, please notify me by e-mail at phillip.fielder@deq.ok.gov, or by letter at:

Department of Environmental Quality, Air Quality Division
Attn: Phillip Fielder, Chief Engineer
707 N Robinson
Oklahoma City, OK, 73102

Thank you for your cooperation. If you have any questions, I can also be contacted at (405) 702-4185.

Sincerely,

Lee Warden, P.E.
Permits and Engineering Section Manager
AIR QUALITY DIVISION

Scott A. Thompson
Executive Director

OKLAHOMA Environmental Quality

Kevin Stitt
Governor

October 26, 2022

Muscogee Creek Nation
Attn: David Hill, Principal Chief
P.O. Box 580
Okmulgee, OK 74447

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AIR QUALITY DIVISION