DRAFT/PROPOSED

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

MEMORANDUM **June 25, 2021**

TO: Phillip Fielder, P.E., Chief Engineer

THROUGH: Rick Groshong, Sr. Environmental Manager, Compliance and Enforcement

THROUGH: Eric L. Milligan, P.E., Engineering Manager, Engineering Section

THROUGH: Joseph K. Wills, P.E., Engineering Section

FROM: Anne Smith, P.E., New Source Permits Section

SUBJECT: Evaluation of Permit Application No. **2018-0707-O**
Service King Manufacturing, Inc.
Service King MFG (SIC 3533/NAICS 333132)
Facility ID: 10383
Section 29, Township 15N, Range 6E, Lincoln County, Oklahoma
Latitude 35.75102ºN, Longitude 96.68106ºW
Address: 2100 W Highway 66, Stroud, OK 74079

INTRODUCTION

Service King Manufacturing, Inc. (Service King) has requested an individual minor source operating permit for their oil field equipment manufacturing facility in Lincoln County, Oklahoma. The facility is currently operating under Permit No. 2012-1568-TV issued November 26, 2013. Initially, Service King requested a major source Title V operating permit renewal on May 31, 2018. On September 29, 2020, Service King submitted the request for the conversion to a synthetic-minor source permit.

The facility commenced operation in May of 2006, and operated without an Air Quality permit until issuance of Permit No. 2012-1568-TV on November 26, 2013. The facility is currently classified as a major source based on potential emissions of toluene, a HAP, above 10 TPY. Since the compliance date passed before the facility achieved "synthetic minor" status for HAPs, the facility became subject to NESHAP Subpart MMMM. Further, since the facility was subject to a major-source Maximum Achievable Control Technology (MACT), by previous EPA policy, it was also subject to Title V permitting requirements.

Effective January 2018, EPA withdrew the "once in, always in" policy for major source MACTs. The facility may cease to be subject to NESHAP Subpart MMMM, and in ceasing to be subject to a major source MACT, can also cease to be subject to Title V permitting requirements. This permitting action will make the facility an "area" source of HAPs and a "synthetic minor" source, no longer subject to Title V permitting. However, because the facility is taking a limit to avoid otherwise-applicable requirements, the transition must be processed using Tier II procedures.

PROCESS DESCRIPTION

Service King MFG manufactures equipment for the oil field industry including well service, work over, and mobile drill rigs used in the United States and worldwide. The facility includes a machine shop and weld shop (rolling chassis, off line and derricks). The derricks are assembled at the facility (hydraulic plumbing, electrical wiring, and rig assembly).

All raw material (metal) is cut to size with plasma tables. The cut parts are blasted (sand or steel shot) and then primed. These pieces are welded or bolted onto the drilling rig. Once the rig has been assembled, it is driven on our road for testing and is then driven to the paint area. At the paint area it is power-washed underneath and then painted. The cleaning solvent used is captured and sent off-site for recycling.

EQUIPMENT

Emission Point	Description	Rating/Size	Construction Date
Priming and Painting Operations			
2-1	Paint prime booth # 1	--	August 2011
2-2	Paint prime booth # 2	--	August 2011
2-3	Paint prime booth # 3	--	August 2011
2-4	Paint prime booth # 4	--	August 2011
2-5	Paint prime booth # 5	--	August 2011
2-6	Paint prime booth # 6	--	August 2011
2-7	Paint prime booth # 7	--	August 2011
2-8	Paint prime booth # 8	--	August 2011
2-9	Painting area in Derrick Shop	--	2007
Paint Booth Fuel-Burning Equipment			
3-1	Heater for paint building	2.0-MMBTUH	August 2011
3-9	Climate control heater for paint/prime booth in Derrick Shop	1.0-MMBTUH	2007
Paint Gun Cleaning			
4-1	Paint gun cleaning using lacquer thinner (paint building)	--	August 2011
4-9	Paint gun cleaning using lacquer thinner (paint booth in Derrick Shop)	--	2007
Shotblasting Booth			
5-1	Shotblasting	--	July 2012
SandBlasting Booth			
6-1	Sandblasting	--	2006
Fabrication and Assembly			
7-1	Plasma cutting table	--	January 2011
7-2	Plasma cutting table	--	June 2012
7-3	Fabrication operations (including grinding and machining)	--	2006
7-4	Welding operations	--	2006

Emission Point	Description	Rating/Size	Construction Date
Unleaded Gasoline Storage			
8-1	Unleaded gasoline storage	300-gallons	2006
Diesel Fuel Storage			
9-1	Diesel fuel storage	2,000-gallons	2006

EMISSIONS

Unless otherwise stated, emissions are based on actual usage and operating data from the calendar year (CY) 2020 annual emissions inventory data, except the particulate emission control efficiencies were decreased to be conservative.

Priming and Painting Operations & Paint Gun Cleaning

Paint, primer, and solvent emissions were based on mass balances and the VOC/HAP content from the material safety data sheets. Emissions inventories for CY 2020 were for VOC and HAP emissions from painting operations and paint gun cleaning, yielding 5.921 TPY of VOC and 0.704 TPY combined HAPs. Hourly emissions were derived from annual emissions divided by the typical annual hours of operation, 1,560 hours per year. PM emissions from painting and priming assume 50% transfer efficiency and no fall out, an annual usage of 2,598.87 gal/year with up to 2.3 lb/gal solids, and 98% control efficiency of the dry filters. The annual usage was based on the 2020 emissions inventory data. The solids content utilized was based on the manufacturer safety data sheets (MSDS).

Operation	Pollutant	Emissions	
		lb/hr	TPY
Priming and Painting Operations and Paint Gun Cleaning	VOC	7.59	5.92
	PM (1)	0.036	0.028
	Ethylbenzene	0.123	0.096
	Toluene	0.364	0.284
	Xylene	0.415	0.324
	Total HAPs	0.902	0.704

(1)- PM emissions = PM_{10} emissions = $PM_{2.5}$ emissions to be conservative.

Paint Booth Fuel-Burning Equipment

Natural gas combustion emissions factors for the heaters were taken from AP-42 (7/98), Section 1.4 and annual hours of operation of 316 hours and 500 hours for 3-1 and 3-9, respectively. The annual hours of operation were based on the 2020 emissions inventory data.

Emission Point	Heat Capacity (MMBTUH)	Pollutant	Emission Factor (lb/MMBTU)	Emissions	
				lb/hr	TPY
3-1	2.0	NOx	0.10	0.19	0.03
		CO	0.084	0.19	0.03
		VOC	0.0053	0.06	<0.01
		PM (1)	0.0076	0.06	<0.01

Emission Point	Heat Capacity (MMBTUH)	Pollutant	Emission Factor (lb/MMBTU)	Emissions	
				lb/hr	TPY
3-9	1.0	NOx	0.10	0.12	0.03
		CO	0.084	0.08	0.02
		VOC	0.0053	0.04	<0.01
		PM (1)	0.0076	0.04	<0.01

(1)- PM emissions = PM_{10} emissions = $PM_{2.5}$ emissions to be conservative.

Shotblasting Booth

Emissions of PM_{10} and $PM_{2.5}$ from shotblasting were based on the AP-42 (9/97), Section 13.2.6, 600 annual hours of operation, and the abrasive rate shown in the following table. The annual hours of operation and abrasive rate were both from CY 2019 emissions inventory data. No shot blasting was performed in CY 2020. According to AP-42, emission factors for shot blasting are about 10% of those for sandblasting, for both PM_{10} and $PM_{2.5}$. Shotblasting is performed within an enclosed booth equipped with a cartridge filter system, with a 99.9% control efficiency, based on manufacturer's data.

Emission Point	Operation	Abrasive Rate (Mlb/yr)	Pollutant	Emission Factor (lb/Mlb)	Control Efficiency (%)	Emissions	
						lb/hr	TPY
5-1	Shotblasting	32,200	$PM_{2.5}$	0.13	99.9	<0.01	<0.01
			PM_{10}	1.3	99.9	0.07	0.02

Sandblasting Booth

Emissions of PM_{10} and $PM_{2.5}$ from sandblasting were based on the AP-42 (9/97), Section 13.2.6 emission factors, 2,080 annual hours of operation, and the abrasive rate shown in the following table. The annual hours of operation and abrasive rate were both from CY 2020 emissions inventory data. Sandblasting is conducted in a 3-sided enclosure that was constructed in 2019. If sandblasting is conducted on materials containing metallic hazardous air pollutants, the following additional precautions are taken. For parts less than 8 ft in any dimension, parts are surrounded by curtain enclosure and routed to a dust collection system equipped with a fabric filter with 98% control efficiency. To be conservative, the emissions below do not take controls into account.

Emission Point	Operation	Abrasive Rate (Mlb/yr)	Pollutant	Emission Factor (lb/Mlb)	Control Efficiency (%)	Emissions	
						lb/hr	TPY
6-1	Sandblasting	1,228.45	$PM_{2.5}$	1.3	-	0.77	0.80
			PM_{10}	13	-	7.68	7.98

Fabrication and Assembly

Welding emission factors were based on the AP-42 (1/95), Table 12.19-1 emission factors, 1,560 annual hours of operation, and the welding electrode usage rate from CY 2020 emissions inventory data. Submerged arc welding (SMAW) electrodes are used an assumed 41.3% of the time, whereas flux cored arc welding (FCAW) are assume 58.7% of the time. Weighted welding emission factors

are shown below. There are not readily available emission factors for the grinding and machining operations; emissions are assumed to be negligible from these operations.

Emission Point	Usage (Mlb/yr)	Pollutant	Emission Factor (lb/10^3 lb electrode)	Emissions	
				lb/hr	TPY
7-4	110.345	$PM_{2.5}/PM_{10}$ (1)	40.8	2.88	2.25
		Chromium	1.05	0.07	0.06
		Manganese	9.6	0.68	0.53
		Lead	0.1	<0.01	<0.01
		Nickel	0.7	0.05	0.04

(1)- AP-42 does not provide an emission factor for $PM_{2.5}$. Therefore, $PM_{2.5}$ emissions are assumed to be equal to PM_{10} emissions to be conservative.

Emission factors from plasma cutting were based on "Emission of Fume, Nitrogen Oxides and Noise in Plasma Cutting of Stainless and Mild Steel" by Broman B. et al, The Swedish Institute of Production Engineering Research, ITW Document 1E-174-93, March 1994, assuming dry, mild steel. Emissions assume 1,560 hours of operation per year based on CY 2020 emissions inventory. Plasma cutting operations utilize a fabric filter to control PM emissions with a 53% control efficiency, based on manufacturer's data for particle size 1-3 microns.

Emission Point	Pollutant	Emission Factor (lb/hr)	Control Efficiency (%)	Emissions	
				lb/hr	TPY
7-1	PM (1)	3.042	53	1.43	1.12
	NO_X	1.017	-	1.02	0.79
7-2	PM (1)	3.042	53	1.43	1.12
	NO_X	1.017	-	1.02	0.79

(1)- PM emissions = PM_{10} emissions = $PM_{2.5}$ emissions to be conservative.

Unleaded Gasoline Storage

VOC emissions from unleaded gasoline storage were calculated using AP-42 (06/20), Section 7.1 and the annual throughput from CY 2020 emissions inventory.

Emission Point	Contents	Annual Throughput (Gallons)	VOC Emissions (TPY)
8-1	Unleaded gasoline	820	0.04

Diesel Fuel Storage

VOC emissions from diesel fuel storage were calculated using AP-42 (06/20), Section 7.1 the annual throughput from CY 2020 emissions inventory.

Emission Point	Contents	Annual Throughput (Gallons)	VOC Emissions (TPY)
9-1	Diesel	750	0.001

FACILITY-WIDE EMISSIONS

Description [1]	NOx		CO		$PM_{2.5}$		PM_{10}		VOC	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
Priming and Painting Operations & Paint Gun Cleaning [2]	--	--	--	--	0.04	0.03	0.04	0.03	7.59	5.92
Paint Booth Fuel-Burning Equipment [2]	0.31	0.06	0.27	0.05	0.10	0.02	0.10	0.02	0.10	0.02
Shotblasting Booth	--	--	--	--	<0.01	<0.01	0.07	0.02	--	--
Sandblasting Booth	--	--	--	--	0.77	0.80	7.68	7.98	--	--
Fabrication & Assembly (Cutting) [2]	3.06	2.37	--	--	2.86	2.24	2.86	2.24	--	--
Fabrication & Assembly (Welding) [2]	--	--	--	--	2.88	2.25	2.88	2.25	--	--
Unleaded Gasoline Storage	--	--	--	--	--	--	--	--	--	0.04
Diesel Fuel Storage	--	--	--	--	--	--	--	--	--	<0.01
Totals	**3.37**	**2.43**	**0.27**	**0.05**	**6.66**	**5.35**	**13.63**	**12.54**	**7.69**	**5.99**

[1]- Facility-wide emissions are based on actual usage data from annual emissions inventory data from CY 2020, except the particulate emission control efficiencies were decreased to be conservative.

[2]- PM_{10} emissions = $PM_{2.5}$ emissions to be conservative.

FACILITY-WIDE HAP EMISSIONS

Pollutant	CAS #	HAP Emissions
		TPY
Ethylbenzene	100414	0.10
Toluene	108883	0.28
Xylene	1330207	0.32
Chromium	7440473	0.06
Manganese	7439965	0.53
Lead	7439921	<0.01
Nickle	7440020	0.04
Total HAPs		**1.34**

Since emissions of all criteria pollutants are less than 100 TPY, potential emissions of any single HAP are less than 10 TPY, and potential emissions of total HAP are less than 25 TPY, the facility is not a major source and is eligible for coverage under the GP-OGF.

SIGNIFICANT DISCHARGE POINTS

Emission Point	Description	Height (feet)	Diameter (feet)	Temperature (°F)	Flow (ACFM)
3-9	Climate control heater for paint/prime booth in Derrick Shop	18	0.5	120	304
3-1	Heater for paint building	12	1.7	90	26,541
2-1	Paint prime booth # 1	9	2.5	113	16,000
2-2	Paint prime booth # 2	9	2.5	113	16,000
2-3	Paint prime booth # 3	9	2.5	113	16,000

Emission Point	Description	Height (feet)	Diameter (feet)	Temperature (ºF)	Flow (ACFM)
2-4	Paint prime booth # 4	9	2.5	113	16,000
2-5	Paint prime booth # 5	9	2.5	113	16,000
2-6	Paint prime booth # 6	9	2.5	113	16,000
2-7	Paint prime booth # 7	9	2.5	113	16,000
2-8	Paint prime booth # 8	9	2.5	113	16,000
2-9	Painting area in Derrick Shop	9	2.5	113	16,000
7-1	Plasma cutting table	10	1.67	70	12,000
7-2	Plasma cutting table	10	1.67	70	12,000

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. 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 have been submitted and fees paid for the past years.

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 HAP will not exceed 10 TPY for any one 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 han 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 new and existing fuel-burning equipment, with emission limits based on maximum design heat input rating. OAC 252:100, Appendix C specifies a PM emission limitation of 0.60 lb/MMBTU for all equipment at this facility with a heat input rating of 10 MMBTUH or less. Table 1.4-2 of AP-42 (7/98) lists the total PM emissions for natural gas-fired heaters to be 7.6 lb/MMft^3 or about 0.0075 lb/MMBTU. This permit requires the use of natural gas for all fuel-burning equipment to ensure compliance with Subchapter 19.

Emission Point	Description	Maximum Heat Input (MMBTUH)	Emissions (lb/MMBTU)	
			Appendix C	Potential
3-1	Heater for paint building	2.0	0.6	<0.01
3-9	Climate control heater for paint/prime booth in Derrick Shop	1.0	0.6	<0.01

Section 19-12 limits emissions of PM from industrial processes and direct-fired fuel-burning equipment based on their process weight rates. For process weight rates less than 30 TPH, the allowable emission rate E for process weight rate P (in TPH) is determined from $E = 4.10\ P^{0.67}$ as defined in OAC 252:100 Appendix G. The facility will have a 10 TPH process weight rate (based on the derrick weight of 20,000 lbs). Appendix G allows an emission rate of 19.2 lbs/hr for this process rate. The facility-wide controlled PM emissions are 13.63 lb/hr (including emissions from combustion). The expected facility-wide PM emission rate is in compliance with Subchapter 19.

OAC 252:100-25 (Visible Emissions and Particulates) [Applicable]
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. The permit will require maintenance of air pollution controls on the paint booths and sandblasting to ensure compliance with this rule.

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. The paint booths are controlled with dry filters to minimize emissions of fugitive dust. The sandblasting booth utilizes a 3-sided enclosure and the shotblasting booth utilizes a complete enclosure to help minimize emissions of fugitive dust. The sandblasting booth and shotblasting booth both utilize a fabric filter as well. All discharges from the plasma cutting operations shall be processed by a fabric filter to help minimize emissions of fugitive dust.

OAC 252:100-31 (Sulfur Compounds) [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 $\mu g/m^3$. Fuel-burning equipment fired with pipeline natural gas will not have the potential to exceed the H_2S ambient air concentration limit.
Part 5 limits sulfur dioxide emissions from new petroleum or natural gas process equipment (constructed after July 1, 1972). For gaseous fuels the limit is 0.2 lb/MMBTU heat input averaged over 3 hours. The permit requires the use of pipeline natural gas as defined in Part 72 having 0.5 grains TRS/100 SCF or less to ensure compliance with Subchapter 31.

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 0.2 lb of NOx per MMBTU, three-hour average. The paint booth heaters have a total capacity below the 50 MMBTUH de minimis level.

OAC 252:100-35 (Carbon Monoxide) [Not Applicable]
This facility has none of the affected sources: gray iron cupola, blast furnace, basic oxygen furnace, petroleum catalytic reforming unit, or petroleum catalytic cracking unit.

OAC 252:100-37 (Volatile Organic Compounds) [Part 7 Applicable]
Part 3 requires VOC storage tanks constructed after December 28, 1974, with a size 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. The diesel fuel storage tank contains organic liquids with vapor pressures which are below the 1.5 psia threshold. The 300 gallon unleaded gasoline storage tank is smaller than 400 gallons.
Part 5 limits the VOC content of coating of parts and products. The primers to be used will be limited to 4.8 lb/gal VOC. The paints to be used have a maximum VOC content of 6.0 lb/gal, which is in compliance with the most stringent limitations, excluding primers, epoxies, and maintenance finishes, of this part for paints. Part 5 also requires all emissions of VOC from the cleanup of any article, machine, or equipment used in applying coatings to be included when determining compliance with the above-stated solvent limitations and emission limits. Based on the MSDS's submitted in the permit application, which are also kept on-site, all coatings comply with the solvent limitations including solvents used to clean any article, machine, or equipment used in applying coatings.

Owners or operators of sources that emit less than 100 pounds of VOC per 24-hour day are exempt from the requirements of this section. At this time, the facility emits less than 100 pounds of VOC per 24-hr day and is exempt from the requirements of this section. The facility is required to keep records to maintain the exemption status.
Part 7 requires fuel-burning equipment to be cleaned, operated, and maintained so as to minimize VOC emissions. Based on manufacturer's data and good engineering practice, the equipment must not overloaded and temperature and available air must be sufficient to provide essentially complete combustion. The permit will require compliance.

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 anywhere in the state, 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.

FEDERAL REGULATIONS

NSPS, 40 CFR Part 60 [Not Applicable]
Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units regulates steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 100 MMBTUH or less, but greater than or equal to 10 MMBTUH. The heaters located at the facility has a capacity lower than the minimum threshold, and therefore, the subpart is not applicable.

Subpart Kb, Volatile Organic Liquids Storage Vessels. This subpart affects volatile organic materials storage tanks with a capacity above 19,813 gallons which commenced construction, reconstruction, or modification after July 23, 1984. The several tanks are smaller than the 19,813-gallon de minimis level.

NESHAP, 40 CFR Part 61 [Not Applicable]
There are no emissions of any of the regulated pollutants: arsenic, asbestos, beryllium, benzene, coke oven emissions, mercury, radionuclides or vinyl chloride except for benzene.

NESHAP, 40 CFR Part 63 [Subpart CCCCCC & XXXXXX Applicable]

Subpart T, Halogenated Solvent Cleaning. This subpart apply to each individual batch vapor, in-line vapor, in-line cold, and batch 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. This facility does not use solvents containing these halogenated HAP solvents.

Subpart MMMM, Surface Coating of Miscellaneous Metal Parts and Products. This subpart establishes standards for miscellaneous metals parts and products surface coating facilities for major sources of HAP. The facility is not a major source of HAP emissions; therefore, the facility is not subject to this subpart.

Subpart CCCCCC, Gasoline Dispensing Facilities. This subpart establishes emission limitations and management practices for HAP emitted from the loading of gasoline storage tanks at gasoline dispensing facilities (GDF) located at an area source. GDF means any stationary facility which dispenses gasoline into the fuel tank of a motor vehicle. The affected source includes each gasoline cargo tank during the delivery of product to a GDF and also includes each storage tank. This facility is considered a GDF with a monthly throughput of no more than 10,000 gallons of gasoline. The dispensing of gasoline from a fixed gasoline storage tank at a GDF into a portable gasoline tank for the on-site delivery and subsequent dispensing of the gasoline into the fuel tank of a motor vehicle or other gasoline-fueled engine or equipment used within the area source is only subject to §63.11116, which requires follow housekeeping measures to minimize the release of gasoline vapors to the atmosphere. The 300 gallon unleaded gasoline storage tank is subject to this subpart. The permit incorporates all applicable requirements.

Subpart HHHHHH, Paint Stripping and Miscellaneous Surface Coating Operations. This subpart affects area sources involved in:

(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; or
(3) Spray application of coatings containing compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd), collectively referred to as the target HAP, to any part or product made of metal or plastic, or combinations of metal and plastic that are not motor vehicles or mobile equipment.

This subpart does not apply to any surface coating or paint stripping activities that are covered under another area source NESHAP. Because Subpart XXXXXX specifically defines which operations are applicable and this facility falls within one of those source categories (oil and gas field machinery manufacturing), this facility is not subject to Subpart HHHHHH.

Subpart JJJJJJ, Area Sources: Industrial, Commercial, and Institutional Boilers. Gas-fired heaters are not subject to Subpart JJJJJJ.

Subpart XXXXXX, Area Source Standards for Nine Metal Fabrication and Finishing Source Categories. This subpart affects area sources that are primarily engaged in one of the nine source

categories listed in this subpart that use materials that contain or have the potential to emit metal fabrication or finishing metal HAP (MFHAP), and performing dry abrasive blasting, machining, dry grinding and polishing, spray painting, or welding. MFHAP means any material that contains cadmium, chromium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal), and contains manganese in amounts greater than or equal to 1.0 percent by weight (as the metal), as shown in formulation data provided by the manufacturer or supplier, such as the Material Safety Data Sheet for the material. The nine source categories described in Table 1 of this subpart are listed below with their potential SIC/NAICS Codes:

	EPA Source Category	**SIC Description**	**SIC Code**	**NAICS Code**	**NAICS Description**
1	Electrical & Electronic Equipment Finishing Ops	Motors & Generators Mfg.	3621	335312	Motor & Generator Mfg.
		Electrical Machinery, Equipment, & Supplies, NEC	3699	335999	All Other Misc. Electrical Equipment & Component Mfg.
2	Fabricated Metal Products, NEC	Fabricated Metal Products, NEC	3499	332117	Powder Metallurgy Part Mfg.
		Fabricated Metal Products, NEC	3499	332999	All Other Miscellaneous Fabricated Metal Product Mfg.
3	Fabricated Plate Work (Boiler Shops)	Fabricated Plate Work & Boiler Shops	3443	332313	Plate Work Mfg.
				332410	Power Boiler & Heat Exchanger Mfg.
				332420	Metal Tank (Heavy Gauge) Mfg.
4	Fabricated Structural Metal Mfg.	Fabricated Structural Metal Fabrication	3441	332312	Fabricated Structural Metal Mfg.
5	Heating Equipment, except Electric	Heating Equipment, except electric	3433	333414	Heating Equipment (except Warm Air Furnaces) Mfg.
6	Industrial Machinery & Equipment: Finishing Ops	Construction Machinery Manufacturing	3531	333120	Construction Machinery Mfg.
		Oil & Gas Field Machinery Equipment Mfg.	3533	333132	Oil & Gas Field Machinery and Equipment Mfg.
		Pumps & Pumping Equipment Mfg.	3561	333911	Pump & Pumping Equipment Mfg.
7	Iron & Steel Forging	Iron and Steel Forging	3462	332111	Iron & Steel Forging
8	Primary Metals Products Mfg.	Primary Metals Products Mfg.	3399	332618	Other Fabricated Wire Product Mfg.
9	Valves & Pipe Fittings, NEC	Valves & Pipe Fittings, NEC	3494	332919	Other Metal Valve & Pipe Fitting Mfg.

Applicability is determined by the type of work performed by the facility compared to the source category description in the preambles to the proposed and final rules. The SIC/NAICS codes that are provided in the preamble are not intended to be exhaustive but rather to provide a guide for determining facilities that are likely to be effected. If the facility SIC/NACIS code combination is not identified in the SIC/NAICS table provided as a guide, that facility may likely not be covered by this subpart.

The Industrial Machinery and Equipment Finishing Operations category includes oil and gas field machinery manufacturing (NAICS 333132). The oil and gas field machinery manufacturing industry sector of this source category includes establishments primarily engaged in manufacturing

machinery and equipment for use in oil and gas fields or for drilling water wells, including portable drilling rigs. Primarily engaged means the manufacturing, fabricating, or forging of one or more products listed in the source category description, where this production represents at least 50 percent of the production at a facility, and where production quantities are established by the volume, linear foot, square foot, or other value suited to the specific industry. Facilities must document and retain their rationale for the determination that their facility is not "primarily engaged" pursuant to § 63.10(b)(3) of the General Provisions. Based on the facility description this facility is primarily engaged in oil and gas field machinery manufacturing and is subject to this subpart. The permit incorporates all applicable requirements.

COMPLIANCE

Tier Classification and Public Review

This application has been determined to be a Tier II based on the request for a synthetic minor operating permit for a Part 70 source that did not having enforceable limitations from an underlying construction permit processed under Tier II procedures.

The permittee 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 has a current lease or easement which is given to accomplish the permitted purpose and that the landowner has been notified. Information on all permit actions is available for review by the public on the Air Quality section of the DEQ web page at: https://www.deq.ok.gov.

Public Review

The applicant published the "Notice of Filing a Tier II Application" in the *Stroud American* on May 9, 2019, a weekly newspaper of general circulation in Lincoln County. The notice said that the application was available for public review at the Stroud Public Library or at the AQD main office. A draft of this permit will also be made available for public review for a period of thirty days as will be stated in another published announcement in the *Stroud American*.

The applicant will be required to publish a "Notice of Tier II Draft Permit." On publication of this notice, the 30-day public review period will start. The draft permit will also be available for public review on the Air Quality section of the DEQ web page at: https://www.deq.ok.gov.

EPA Review

The draft permit will also be submitted to EPA for a 45-day concurrent review.

State Review

The facility is not located within 50 miles of the border of the state of Oklahoma and any other state.

Fee Paid

As part of AQD policy, facilities operating as a potential major source that propose to be permitted as a synthetic minor source are required to submit Title V fees. A fee of $7,500 for a major source operating permit renewal application was received June 12, 2018.

Inspection
The facility was inspected on June 18, 2019, by Jenn McCutcheon and Chris Hoehne of the DEQ Enforcement Section. Damien Gonzales was present for the inspection to represent Service King. It was confirmed that the facility existed as described in the permit application.

SUMMARY

The facility was constructed and is operating as described in the permit application. Ambient air quality standards are not threatened at this site. There are no active Air Quality compliance or enforcement issues that would prevent issuance of the permit. Issuance of the operating permit is recommended, contingent on public and EPA review.

PERMIT TO OPERATE
AIR POLLUTION CONTROL FACILITY
SPECIFIC CONDITIONS

Service King Manufacturing, Inc. **Permit No. 2018-0707-O**
Service King MFG **Facility ID 10383**

The permittee is authorized to operate in conformity with the specifications submitted to the Air Quality Division on May 31, 2018, and supplemental materials. The Evaluation Memorandum dated June 25, 2021, explains the derivation of applicable permit requirements and estimates of emissions; however, it does not contain operating limitations or permit requirements. Continuing operations under this permit constitutes acceptance of, and consent to, the conditions contained herein:

1. Applicable Emissions Limitations for the facility, based on 12-month rolling totals for annual limitations:

Facility-Wide Emissions Limitations

NO_X (TPY)	CO (TPY)	SO_2 (TPY)	$PM_{2.5}$ (TPY)	PM_{10} (TPY)	VOC (TPY)	Each HAP (TPY)	Total HAP (TPY)
99.9	99.9	99.9	99.9	99.9	99.9	9.9	24.9

Compliance with the facility-wide emissions limitations shall be based on monthly calculations of emissions for each emissions unit and a 12-month rolling summation of emissions for the emission units at the facility. The following table lists all equipment located at the facility.

Facility-Wide Equipment List

EUG	Description	Rating/Size	Construction Date
Priming and Painting Operations			
2	Paint prime booths	--	August 2011
	Painting area in Derrick Shop	--	2007
Paint Booth Fuel-Burning Equipment			
3	Heater for paint building	2.0-MMBTUH	August 2011
	Climate control heater for paint/prime booth in Derrick Shop	1.0-MMBTUH	2007
Paint Gun Cleaning			
4	Paint gun cleaning using lacquer thinner (paint building)	--	August 2011
	Paint gun cleaning using lacquer thinner (paint booth in Derrick Shop)	--	2007
Shotblasting Booth			
5	Shotblasting	--	July 2012
SandBlasting Booth			
6	Sandblasting	--	2006
Fabrication and Assembly			
7	Plasma cutting tables	--	2011, 2012

EUG	Description	Rating/Size	Construction Date
7	Fabrication operations (including grinding and machining)	--	2006
	Welding operations	--	2006
Unleaded Gasoline Storage			
8	Unleaded gasoline storage	300-gallons	2006
Diesel Fuel Storage			
9	Diesel fuel storage	2,000-gallons	2006

a. EUG 2 & 4 – Priming and Painting Operations & Paint Gun Cleaning

i. Emissions from the Priming and Painting Operations and Paint Gun Cleaning shall be limited by, and will contribute to, the facility-wide emissions limitations on VOC, $PM_{2.5}$, PM_{10}, and HAP emissions as specified in Specific Condition No. 1. Compliance with emissions limitations shall be demonstrated as a 12-month rolling total using the following methods:

1. PM emissions shall be calculated for each coating using manufacturer documentation of solids content, the transfer efficiency of the application method, and the control efficiency of PM emissions controls. Default values of 50% transfer efficiency and 98% control for dry filters may be used.
2. VOC and HAP emissions for each coating shall be calculated using manufacturer documentation of VOC concentrations, HAP concentrations, and monthly usages.
3. VOC and HAP emissions from clean-up solvents may be determined as the difference between the amounts used minus the amounts recovered for disposal, on a monthly basis.

ii. Paint spraying equipment shall be cleaned with VOCs being drained into a closed container.

iii. Particulate emissions from paint booth overspray shall be controlled by dry filters with efficiency of at least 98%. The filters or alternative device with the same or better control efficiency shall be maintained and operated in accordance with manufacturer's specifications. The permittee shall develop and implement a plan to assure painting filter installation and replacement adequately controls painting PM emissions.

iv. Coating materials as applied shall not exceed the following VOC emissions, lb VOC per gallon of coating excluding the volume of water and any exempt organic compounds, unless exempt in accordance with 252:100-37-25(c). VOC emissions from the cleanup of any article, machine, or equipment used in applying coatings shall be included when determining compliance with emission limits of OAC 252:100-37-25(a). Compliance with the lb of VOC per gallon of coating limits shall be demonstrated monthly for all coatings used.

1. Alkyd primers: 4.8.
2. Vinyls: 6.0.

3. NC lacquers: 6.4.
4. Acrylics: 6.0.
5. Epoxies: 4.8.
6. Maintenance finishes: 4.8.
7. Custom product finishes: 6.5.

v. If the facility emits less than 100 pounds of VOC in any 24- hour day, it is exempt from the requirements, of OAC 252:100-37-25(a). Daily records of all material usage (e.g., coatings, solvents, and thinners) and associated VOC emissions calculated in accordance with Specific Condition 1.a. shall be kept to demonstrate that VOC emissions are less than 100 lb/day.

b. EUG 3 – Paint Booth Fuel-Burning Equipment

i. Emissions from the Paint Booth Fuel-Burning Equipment shall be limited by, and will contribute to, the facility-wide emissions limitations on NO_X, CO, $PM_{2.5}$, PM_{10}, VOC, and HAP emissions as specified in Specific Condition No. 1. Compliance with emissions limitations shall be demonstrated as a 12-month rolling total using the following method:

1. NO_X, CO, $PM_{2.5}$, PM_{10}, VOC, and HAP emissions shall be based on existing equipment items and calculated as the rated heat input times the AP-42 (7/98), Section 1.4 emission factors.

c. EUG 5 – Shotblasting Booth

i. Emissions from the Shotblasting Booth shall be limited by, and will contribute to, the facility-wide emissions limitations on $PM_{2.5}$ and PM_{10} emissions as specified in Specific Condition No. 1. Compliance with emissions limitations shall be demonstrated as a 12-month rolling total using the following method:

1. $PM_{2.5}$ and PM_{10} emissions shall be based on existing equipment items and calculated as the abrasive blasting rate and hours operated times 10% of the AP-42 (9/97), Section 13.2.6 sandblasting emission factors.

ii. All shotblasting operations shall be conducted in a complete enclosure to contain discharge of fugitive dust.

iii. All discharges shall be processed by a fabric filter or equivalent (99.9% or more efficiency) PM emissions control device prior to discharge to the atmosphere. The PM control device shall be maintained per manufacturer specifications.

d. EUG 6 – Sandblasting Booth

i. Emissions from the Sandblasting Booth shall be limited by, and will contribute to, the facility-wide emissions limitations on $PM_{2.5}$ and PM_{10} emissions as specified in

Specific Condition No. 1. Compliance with emissions limitations shall be demonstrated as a 12-month rolling total using the following method:

1. $PM_{2.5}$ and PM_{10} emissions shall be based on existing equipment items and calculated as the abrasive blasting rate and hours operated times the AP-42 (9/97), Section 13.2.6 sandblasting emission factors.

ii. All sandblasting operations shall be conducted in a 3-sided enclosure to contain discharge of fugitive dust.

iii. All discharges during the sandblasting of parts less than 8 ft in any dimension shall be contained by curtain enclosure and routed through a fabric filter or equivalent (98% or more efficiency) PM emissions control device prior to discharge to the atmosphere. The PM control device shall be maintained per manufacturer specifications.

e. EUG 7 – Fabrication and Assembly

i. Emissions from Fabrication and Assembly shall be limited by, and will contribute to, the facility-wide emissions limitations on $PM_{2.5}$, PM_{10}, and HAP emissions as specified in Specific Condition No. 1. Compliance with emissions limitations shall be demonstrated as a 12-month rolling total using the following method:

1. $PM_{2.5}$, PM_{10}, and HAP emissions shall be based on existing equipment items and calculated using the welding electrode usage times the appropriate AP-42 (1/95), Table 12.19-1 emission factors.

ii. All discharges from the plasma cutting operations shall be processed by a fabric filter or equivalent PM emissions control device (53% or more efficiency) prior to discharge to the atmosphere. The PM control device shall be maintained per manufacturer specifications.

f. EUG 8 – Unleaded Gasoline Storage

i. Emissions from Unleaded Gasoline Storage shall be limited by, and will contribute to, the facility-wide emissions limitations on VOC and HAP emissions as specified in Specific Condition No. 1. Compliance with emissions limitations shall be demonstrated as a 12-month rolling total using the following method:

1. VOC and HAP emissions shall be based on existing equipment items and calculated using the tank throughputs and AP-42 (06/20), Section 7.1.

g. EUG 9 – Diesel Fuel Storage

i. Emissions from Diesel Fuel Storage shall be limited by, and will contribute to, the facility-wide emissions limitations on VOC and HAP emissions as specified in Specific

Condition No. 1. Compliance with emissions limitations shall be demonstrated as a 12-month rolling total using the following method:

1. VOC and HAP emissions shall be based on existing equipment items and calculated using the tank throughputs and AP-42 (06/20), Section 7.1.

2. The permittee shall be authorized to operate the facility continuously (24 hours per day, every day of the year).

3. The fuel-burning equipment shall be fired with pipeline natural gas as defined in 40 CFR Part 72 having 0.5 grains/100 SCF or less of sulfur. Compliance can be shown by the following methods: for pipeline natural gas, a current gas company bill; for other gaseous fuel, a current lab analysis, stain-tube analysis, gas contract, tariff sheet, or other approved methods. Compliance shall be demonstrated at least once annually.

4. The facility is subject to 40 CFR Part 63, Subpart CCCCCC, Gasoline Dispensing Facilities. The permittee shall comply with all applicable requirements, including but not limited to the following:

What This Subpart Covers
a. §63.11110, What is the purpose of this subpart?
b. §63.11111, Am I subject to the requirements in this subpart?
c. §63.11112, What parts of my affected source does this subpart cover?
d. §63.11113, When do I have to comply with this subpart?

Emission Limitations and Management Practices
e. §63.11115, What are my general duties to minimize emissions?
f. §63.11116, Requirements for facilities with monthly throughput of less than 10,000 gallons of gasoline.
g. §63.11117, Requirements for facilities with monthly throughput of 10,000 gallons of gasoline or more.
h. §63.11118, Requirements for facilities with monthly throughput of 100,000 gallons of gasoline or more.

Testing and Monitoring Requirements
i. §63.11120, What testing and monitoring requirements must I meet?

Notification, Records, and Reports
j. §63.11124, What notifications must I submit and when?
k. §63.11125, What are my recordkeeping requirements?
l. §63.11126, What are my reporting requirements?

Other Requirements and Information
m. §63.11130, What parts of the General Provisions apply to me?
n. §63.11131, Who implements and enforces this subpart?
o. §63.11132, What definitions apply to this subpart?

5. The facility is subject to 40 CFR Part 63, Subpart XXXXXX, Area Source Standards for Nine Metal Fabrication and Finishing Source Categories. The permittee shall comply with all applicable requirements, including but not limited to, the following:

Applicability and Compliance Dates
a. §63.11514, Am I subject to this subpart?
b. §63.11515, What are my compliance dates?
Standards and Compliance Requirements
c. §63.11516, What are my standards and management practices?
d. §63.11517, What are my monitoring requirements?
e. §63.11519, What are my notification, recordkeeping, and reporting requirements?
Other Requirements and Information
f. §63.11521, Who implements and enforces this subpart?
g. §63.11522, What definitions apply to this subpart?
h. §63.11523, What General Provisions apply to this subpart?
i. Appendix, Table 2 to Subpart XXXXXX of Part 63, Applicability of General Provisions to Metal Fabrication Area Sources.

6. The following records shall be maintained on-site. All such records shall be made available to regulatory personnel upon request. These records shall be maintained for a period of at least five years after the time they are made.

a. Emission calculations from all permitted operations showing compliance with the emission limits in Specific Condition No. 1 (monthly and 12-month rolling totals).
b. A safety data sheet (SDS) or other vendor documentation of the VOC, PM, and HAP content and chemical composition of each product.
c. Amount of collected cleaning solvent or wastes for disposal (monthly and 12-month rolling total).
d. Emission calculations showing compliance with the lb of VOC per gallon of coating limits of OAC 252:100-37-25(a) (monthly) or daily material usage records and emission calculations demonstrating that the facility is exempt from the limits of OAC 252:100-37-25(a) (monthly calculations of daily emissions) in accordance with OAC 252:100-37-25(c).
e. Usage of abrasive blasting materials (monthly and 12-month rolling totals).
f. For the fuel(s) burned, the appropriate document(s) as described in Specific Condition No. 3.
g. Usage of welding electrode and solder (monthly and annual totals).
h. Contents and throughputs of storage tanks (monthly and annual totals).
i. Records as required by 40 CFR Part 63, Subparts CCCCCC and XXXXXX.
j. Facility plans and work practices for maintaining painting operation filters.

7. Upon issuance, Permit No. 2018-0707-O replaces and supersedes Permit No. 2012-1568-TV, which will be cancelled.

8. No later than 30 days after the issuance of the synthetic minor operating permit, the permittee shall submit to Air Quality Division of DEQ, with a copy to the US EPA, Region 6, a certification of compliance with the terms and conditions of the Part 70 operating permit for the time period between the most recent certification of compliance and the issuance date of the synthetic minor permit.

SCOTT A. THOMPSON
Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

KEVIN STITT
Governor

Service King Manufacturing, Inc.
Attn: Mr. Damien Gonzales
P.O. Box 158
Stroud, OK 74079

SUBJECT: Permit Application No. **2018-0707-O**
Service King MFG (Facility ID 10383)
Section 29, Township 15N, Range 6E
Stroud, Lincoln County, Oklahoma

Dear Mr. Gonzales:

Air Quality has completed initial review of the permit application for the referenced facility and completed a draft permit for public review. This application has been determined to be a Tier II application. In accordance with 27A O.S. 2-14-302 and OAC 252:4-7-13(c) the enclosed draft permit is ready for public review. The requirements for public review of the draft permit include the following steps, which you must accomplish:

1. Publish at least one legal notice (one day) in at least one newspaper of general circulation within the county where the facility is located. (Instructions enclosed)
2. Provide for public review (for a period of 30 days following the date of the newspaper announcement) a copy of the application and draft permit at a convenient location (preferentially at a public location) within the county of the facility.
3. Send AQD a written affidavit of publication for the notices from Item #1 above together with any additional comments or requested changes which you may have on the draft permit.

The permit review time is hereby tolled pending the receipt of the affidavit of publication. Please submit the requested information as soon as possible. You should be aware that failure to submit an adequate response within 180 days may result in the withdrawal of your application and forfeiture of your application fees. Thank you for your cooperation. If you have any questions, please refer to the permit number above and contact me or Anne Smith, the permit writer, at (405) 702-4100.

Sincerely,

Phillip Fielder

Phillip Fielder, P.E.
Chief Engineer
AIR QUALITY DIVISION

Enclosures

DRAFT/PROPOSED

SCOTT A. THOMPSON
Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

KEVIN STITT
Governor

Service King Manufacturing, Inc.
Attn: Mr. Damien Gonzales
P.O. Box 158
Stroud, OK 74079

SUBJECT: Permit Application No. **2018-0707-O**
Service King MFG (Facility ID 10383)
Section 29, Township 15N, Range 6E
Stroud, Lincoln County, Oklahoma

Dear Mr. Gonzales:

Enclosed is the permit authorizing operation 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 Anne.Smith@deq.ok.gov or (405) 702-4191.

Sincerely,

Phillip Fielder, P.E.
Chief Engineer
AIR QUALITY DIVISION

Enclosures

DRAFT/PROPOSED

PERMIT

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

Permit No. 2018-0707-O

Service King Manufacturing, Inc.

having complied with the requirements of the law, is hereby granted permission to operate the Service King MFG located in Section 29, Township 15N, Range 6E, Lincoln County, Oklahoma, subject to Standard Conditions dated February 13, 2020, and Specific Conditions both attached.

Division Director
Air Quality Division

Issuance Date

NOTICE OF DRAFT PERMIT
TIER II or TIER III AIR QUALITY PERMIT APPLICATION

APPLICANT RESPONSIBILITIES

Permit applicants are required to give public notice that a **Tier II** or **Tier III** draft permit has been prepared by DEQ. The notice must be published in one newspaper local to the site or facility. Upon publication, a signed affidavit of publication must be obtained from the newspaper and sent to AQD. Note that if a public meeting is requested by either the applicant or the public, this must be arranged through the Customer Services Division of the DEQ.

REQUIRED CONTENT (27A O.S. § 2-14-302 and OAC 252:4-7-13(c))

1. A statement that a Tier II or Tier III draft permit has been prepared by DEQ;
2. Name and address of the applicant;
3. Name, address, driving directions, legal description and county of the site or facility;
4. The type of permit or permit action being sought;
5. A description of activities to be regulated, including an estimate of emissions from the facility;
6. Location(s) where the application and draft permit may be reviewed;
7. Name, address, and telephone number of the applicant and DEQ contacts;
8. Any additional information required by DEQ rules or deemed relevant by applicant;
9. A 30-day opportunity to request a formal public meeting on the draft permit.

SAMPLE NOTICE on page 2.

SAMPLE NOTICE *(Italicized print is to be filled in by the applicant.)***:**

DEQ NOTICE OF TIER *...II or III...* **DRAFT PERMIT**

A Tier *...II or III...* **application for an air quality** *...type of permit or permit action being sought [e.g., Construction Permit for a Major Facility]...* **has been filed with the Oklahoma Department of Environmental Quality (DEQ) by applicant,** *...name and address.*

The applicant requests approval to *...brief description of purpose of application...* **at the** *...site/facility name ... ...[proposed to be]...* **located at** *...physical address (if any), driving directions, and legal description including county.....*

In response to the application, DEQ has prepared a draft permit [modification] (Permit Number: *...xx-xxx-x...***), which may be reviewed at the Air Quality Division's main office (see address below). The draft permit is also available for review in the Air Quality Section of DEQ's Web Page: http://www.deq.ok.gov**

This draft permit would authorize the facility to emit the following regulated pollutants (list each pollutant and amounts in tons per year (TPY)).

This public notice shall include notice to the public that this permit is subject to Environmental Protection Agency (EPA) review, EPA objection, and petition to EPA, as provided by 40 CFR § 70.8; that the requirements of the construction permit will be incorporated into the Title V permit through the administrative amendment process; that the public will not receive another opportunity to provide comments when the requirements are incorporated into the Title V permit; and that EPA review, EPA objection, and petitions to EPA will not be available to the public when requirements from the construction permit are incorporated into the Title V permit.

The public comment period ends 30 days after the date of publication of this notice. Any person may submit written comments concerning the draft permit to the Air Quality Division contact listed below. [Modifications only, add: **Only those issues relevant to the proposed modification(s) are open for comment.**] **A public meeting on the draft permit [modification] may also be requested in writing at the same address. Note that all public meetings are to be arranged and conducted by DEQ/CSD staff.**

For additional information, contact *...names, addresses and telephone numbers of contact persons for the applicant,* **or contact DEQ at: Chief Engineer, Permits Section, Air Quality Division, 707 N. Robinson, Suite 4100, P.O. Box 1677, Oklahoma City, OK, 73101-1677, (405) 702-4100.**

Department of Environmental Quality (DEQ)
Air Quality Division (AQD)
Acronym List
4-15-20

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
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
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 (MMBtu/hr)
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
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

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]