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OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

MEMORANDUM **May 18, 2022**

TO: Phillip Fielder, Chief Engineer

THROUGH: Rick Groshong, Compliance and Enforcement Group Manager

THROUGH: Phil Martin, P.E., Engineering Manager, Existing Source Permit Section

THROUGH: Iftekhar Hossain, P.E., New Source Permits Section

FROM: David Schutz, P.E., New Source Permits Section

SUBJECT: Evaluation of Permit Application No. **2020-0216-TVR3**
IC of Oklahoma, LLC
Tulsa Bus Manufacturing Plant (FAC ID 4291)
SIC 3711 / NAICS 336120
2322 North Mingo Road, Tulsa, Oklahoma
Latitude 36.18902°N, Longitude 95.86800°W

SECTION I. INTRODUCTION

IC of Oklahoma (ICOL or applicant) has submitted an application for renewal of the Part 70 operating permit for its Tulsa Bus Manufacturing Plant. The facility is currently operating under Permit No. 2014-1170-TVR2 (M-2), issued April 8, 2019. The facility is a minor source for Prevention of Significant Deterioration (PSD) and a major source of Hazardous Air Pollutants (HAPs).

SECTION II. PROCESS DESCRIPTION

The plant operates (4) 10-hour days per week and (1) 10-hour additional day per month, 52 weeks per year, for a total of 2,200 hours per year.

A substantial amount of the parts to make each bus are furnished by various original equipment manufacturers, including engines, transmissions, bus frames, rear axles, tires, wheels, steel coils, steel tubing, engine radiators, dash instruments, etc. The company considers their facility to contain fifteen (15) distinct manufacturing operations of the sixteen (16) that are listed below.

1. Manufacture of some bus body parts.
2. Reserved {electrocoating of parts has been discontinued}.
3. Paint the chassis and underbody.
4. Parts assembled to form the bus, including running gear and engine.
5. Pre-painting body cleaning.
6. Spot paint prime.
7. Interior paint.

8. Spot paint prime/interior paint cure.
9. Exterior-finish paints (excluding bus roof, hood and cowl).
10. Exterior paint cure.
11. Roof paint.
12. Stripe paint.
13. Stripe paint cure.
14. Hood and Cowling paint.
15. Hood and Cowling cure.
16. Miscellaneous operations, which involve adhesives, dyes, sealers, wipe down, etc.

Two assembly lines are involved in the manufacturing process. One line assembles the bus body while the other line assembles the chassis. The body and chassis are mated near the end of the entire process.

Assembled bus bodies are wiped down in a body-cleaning booth. The bus bodies are then indexed and transported on a conveyance system through a series of spray booths that comprise the main body paint line (generally yellow exterior, yellow and/or white roof, white/beige/green/blue/gray interior and black stripe/rub-rail/lettering). Coating cure ovens and follow-up coolers are associated with most of the coating phases. Some of the spray booths are separated from the associated cure ovens by flash tunnels. Following the main body paint line, the undersides of the bodies are coated with a protective coating. After exterior coating, the bus interior upholstery, seating subassembly, and windows are installed.

Touch-up paint is applied to the bus chassis subassemblies (which are received fully painted from a supplier) on an as-needed basis in spray booths along and near the chassis assembly line. The hood and cowl subassemblies are painted in a separate hood and cowl spray booth. The following operations take place as the unit proceeds along the chassis assembly line: frame squaring, drive shaft installation, steering subassembly installation, fuel tank installation, engine mount, exhaust system installation, brake system installation, cowl (firewall) mount, battery installation, initial fueling, tire mount, fluid filling and hood mount.

On November 27, 2006, the facility obtained Permit No. 2000-012-C (M-4), projecting an increase in production, authorizing installation of an RTO to control VOC emissions from painting so that facility emissions would not exceed emissions limitations. As of this date, that projected activity increase has not yet been realized and the RTO has not yet been used for VOC emissions control.

Following the chassis assembly line, the chassis is roll tested and then mated with the bus body from the body assembly line. Touch-up paint is applied to the assembled buses for final repair and finishing. Spot repair coating of areas, such as where tie-downs were used, is undertaken in the spot repair underbody booth. The assembled buses are then leak tested prior to engine tune/test and rollout.

Stacks venting facility emissions to atmosphere from various activities are identified in the following table. Four (4) spray booths are routed to the stacks 36 and 37, and each of these spray booths are routed to both stacks. Two (2) operating scenarios are identified by the applicant. Scenario 1 is the primary operating scenario; has a production throughput limitation of 1,000 buses; and emissions from all four spray booths are uncontrolled and are routed through Stack 37

(RTO bypass) when RTO is not operating. Scenario 2 is the alternate operating scenario; has a production limitation of 1,500 buses; and emissions from all four spray booths are controlled by RTO and routed through Stack 36 (RTO operating). Stack 36 is only active when the RTO is in operation to control emissions necessary to avoid PSD during any periods of increased production rates. The other operations, i.e., welding, application of adhesives, sealers, dyes, etc., are done inside the main building and vented through the building exhausts.

Table 1: STACK DATA

POINT	POINT/ STACK ID	STACK TEMP, °F	FLOW RATE, ACFM	STACK DIAMETER, Inches	HEIGHT, Feet
EUG-2 COATING					
Interior Spraying Booth	36, 37**	70	17,500	34	72
Interior Spraying Booth	36, 37**	70	17,500	34	72
Exterior Auto Spraying	36, 37**	70	3,000	15	77
Exterior Manual Paint Booth	6A	70	20,000	36	82
Exterior Manual Paint Booth	6B	70	20,000	36	80
Exterior Flash Tunnel	6C	70	3,000	15	79
Body Clean	38	70	20,000	36	72
Prime Spray Booth	36, 37**	70	20,000	36	72
Prime Spray Booth	36, 37**	70	20,000	36	72
Roof Paint Spray Booth	9A	70	5,500	18	72
Roof Paint Spray Booth	9B	70	5,500	18	72
Roof Paint Spray Booth	10A	70	11,500	28	72
Roof Paint Spray Booth	10B	70	11,500	28	72
Black Stripe Paint Spray Booth	36, 37**	70	3,000	15	70
Black Stripe Flash Tunnel	12A	70	3,000	15	70
Hood/Cowl Paint Spray Booth	14	70	2,000	15	66
Hood/Cowl Flash Tunnel	14A	70	3,000	15	66
Chassis Paint Spray Booth	22	70	18,000	36	72
Underbody Paint Spray Booth No. 1	23A	70	20,000	36	82
Underbody Paint Spray Booth No. 1	23B	70	20,000	36	80
Underbody Paint Spray Booth No. 2	31A	70	20,000	36	82
Underbody Paint Spray Booth No. 2	31B	70	20,000	36	80
Spot Underbody Paint Booth	27A	70	N/A	N/A	15
Spot Underbody Paint Booth	27B	70	N/A	N/A	15
Touch-Up Paint Booth No. 1	24A	70	25,000	42	84
Touch-Up Paint Booth No. 1	24B	70	25,000	42	82
Touch-Up Paint Booth No. 1	24C	70	25,000	42	84
Touch-Up Paint Booth No. 1	24D	70	25,000	42	81
Touch-Up Paint Booth No. 2	25A	70	25,000	42	82
Touch-Up Paint Booth No. 2	25B	70	25,000	42	81
Touch-Up Paint Booth No. 2	25C	70	25,000	42	83

POINT	POINT/ STACK ID	STACK TEMP, °F	FLOW RATE, ACFM	STACK DIAMETER, Inches	HEIGHT, Feet
Touch-Up Paint Booth No. 2	25D	70	25,000	42	83
Touch-Up Paint Booth No. 3	30A	70	20,000	36	72
Touch-Up Paint Booth No. 3	30B	70	20,000	36	72
Touch-Up Paint Booth No. 3	30C	70	20,000	36	72
Touch-Up Paint Booth No. 3	30D	70	20,000	36	72
Touch-Up Paint Booth No. 4	32	70	11,200	30	73
Touch-Up Paint Booth No. 5	33A	70	20,000	36	72
Touch-Up Paint Booth No. 5	33B	70	20,000	36	72
Touch-Up Paint Booth No. 5	33C	70	20,000	36	72
Touch-Up Paint Booth No. 5	33D	70	20,000	36	72
Touch-Up Paint Booth No. 6	34A	70	20,000	36	72
Touch-Up Paint Booth No. 6	34B	70	20,000	36	72
Touch-Up Paint Booth No. 6	34C	70	20,000	36	72
Touch-Up Paint Booth No. 6	34D	70	20,000	36	72
Thermal Oxidizer (RTO)	36	N/A	14,000	40	70
Thermal Oxidizer (RTO) Bypass	37	70	20,000	36	72
EUG-4 Insignificant Sources					
Interior Cure Oven	2	300	4,000	18	77
Exterior Cure Oven	7	300	3,000	15	79
Black Stripe Cure Oven	13	300	3,000	15	78
Hood/Cowl Cure Oven	15	300	3,500	18	68
Non-Process Emissions	3*	120	10,000	28	79
Non-Process Emissions	8*	120	10,000	28	78
Non-Process Emissions	16*	120	10,000	28	67
Non-Process Emissions	21*	120	13,000	32	78

*** These stacks are used to exhaust heated air or non-process emissions, e.g., heaters, coolers, etc.**
**** Stack 36 (Point ID 36) is active only when the RTO is in operation. Stack 37 (Point ID 37) is the RTO Bypass, when RTO is not being operated.**

SECTION III. PERMIT HISTORY

Permits	Date Issued	Description
2014-1170-TVR2 (M-2)	4/8/2019	Minor modification: install emergency generator
2014-1170-TVR2 (M-1)	4/25/2016	Minor modification: install emergency generator
2014-1170-TVR2	11/12/2015	Second renewal of TV operating permit
2008-118-TVR	12/16/2009	First renewal of TV operating permit
2000-012-C (M-4)	11/27/2006	Install RTO and increase production
2000-012-AD (M-3)	6/12/2006	Applicability Determination: confirm proposed changes do not require permitting
2000-012-TV (M-2)	4/11/2006	Minor modification: add touch-up Paint Booth 4
2000-012-AD (M-1)	5/26/2005	Applicability Determination: add touch-up Paint Booth 4
2000-012-TV	10/14/2003	Initial TV operating permit

Permits	Date Issued	Description
2000-012-C	10/10/2000	Initial major source construction permit

SECTION IV. REQUESTED CHANGES

There was one change requested from existing permit conditions: mention of a 5,000 gallon gasoline tank as an "insignificant activity."

SECTION V. EQUIPMENT

This section groups emission units (EUs) that share similar characteristics into emission unit groups (EUGs).

EUG 1 Facility-Wide

This EUG is established to cover all rules or regulations that apply to the facility as a whole.

EUG 2 Coating

Some equipment items have a stack that exhausts only the named process while others can exhaust fugitive emissions from neighboring processes. Thus, a single stack may be named in conjunction with more than one EU.

Table 2: EUG 2 – Coating Point Data

Point	Point / Stack ID#	Point Description	Const. Date
Body Cleaning	38	Body Cleaning Booth	March 2001
Interior Spraying	36 or 37	Interior Spray Booth	2006
	36 or 37	Prime Spray Booth	2006
Exterior Auto Spraying	36 or 37	Exterior Auto Spray Booth	2006
	6C	Flash Tunnel	March 2001
Exterior Manual Spraying	6A, 6B	Exterior Manual Spray Booth	March 2001
	6C	Flash Tunnel	
Roof Spraying	9A, 9B, 10A, 10B	Roof Spray Booth	April 2002
Black Stripe Spraying	36 or 37	Black Stripe Spray Booth	2006
	12A	Flash Tunnel	March 2001
	13	Stripe Cure Oven Stack	
Hood and Cowl Spraying	14	Hood & Cowl Spray Booth	March 2001
	14A	Flash Tunnel	
Chassis Spraying	22	Chassis Spray Booth	March 2001
Underbody Spraying	23A, 23B, 31A, 31B	Underbody Spray Booth	April 2002
Touch-Up Spraying	24A, 24B, 24C, 24D, 25A, 25B, 25C, 25D, 30A, 30B, 30C, 30D	Miscellaneous Spray Booths & Stacks	April 2002
	32		June 2005
	33A, 33B, 33C, 33D, 34A,34B, 34C, 34D	Touch-up Booths #5 & #6	2006
Spot Underbody Spraying	27A, 27B	Horizontal Discharge	March 2001
Plant Fugitives	2, 7, 13, 14A, 15, 22, 23A, 23B, 24A, 24B, 24C, 24D, 25A, 25B, 25C, 25D, 30A, 30B, 30C, 30D 31A, 31B	Stacks that exhaust building air	March 2001
RTO	36 or 37	RTO & Bypass Stack	2006

EUG 3 Significant Ovens and Make-Up Units

This EUG was identified in the original Part 70 permit and memorandum as containing combustion sources that were not insignificant activities. All of the combustion units in the facility are below the 5 MMBTUH threshold, that exempts them from maintaining records to demonstrate their status. This EUG will be held open, although currently empty, in the event that a future combustion unit exceeds the 5 TPY limit.

EUG 4 Insignificant Sources

The facility identifies various pieces of equipment as fitting the insignificant definition. These include welding, paint booth ovens, wash heaters, comfort heaters, storage tanks, parts washers, and a pyrolysis oven. The following table lists all of the combustion units, with an asterisk noting those that require a demonstration to show that they remain below the 5 TPY limit. Welding also requires such a demonstration.

Table 3: Insignificant Sources

Point / Stack ID#	Coating Ovens	Rating (MMBTUH)
2	Interior cure oven	4.5
7	Exterior cure oven	2.2
13	Black stripe cure oven	3.0
15	Hood & cowl cure oven	3.3
4A & 4B, 6A, 6B & 6C*	Make up unit #1	6.5
9A & 9B, 10A & 10B*	Make up unit #2	6.5
General plant heat and others less than or equal to 5 MMBTUH each		
Fugitive	All units	39.0
Total		**65.0**

***Sources which require a demonstration of < 5-TPY emissions for an insignificant activity.**

The 5,000-gallon gasoline tank has a maximum expected annual throughput of 220,000 gallons. Using the methods of AP-42 (6/20), Section 7.1, VOC emissions are calculated at 1.06 TPY, which is below 5 TPY.

Although the pyrolysis oven burns natural gas, it is not considered to be a combustion device. At a heat input rating of 0.72 MMBTUH for primary stage and afterburner combined, NO_X and CO emissions are less than 0.1 lb/hr for each pollutant. Testing of an identical unit in similar use showed particulate emissions of 0.0016 gr/dscf, or 0.003 lb/hr. All criteria pollutant emissions have PTE below 1 TPY, and the limited use of this unit for burning paint accumulations off various pieces of equipment further reduces actual emission levels.

Cleaning booth ventilation consists of linear flow, where ventilation air from the plant interior is drawn in the entrance and exhausted to the plant exterior. There are three types of spray booth ventilation. The first is linear flow, where ventilation air from the plant interior is drawn in the entrance and exhausted to atmosphere. The second is down/side draft, where ventilation air from the atmosphere is provided via a booth roof plenum and exhausted back to atmosphere through filter rows on the walls just above the floor. The third is down draft, where ventilation air from the atmosphere or in combination with recirculation from the booth is provided via a booth roof plenum and exhausted to the atmosphere through a grating in the floor. The four spray booths that flow to the RTO are fitted with recirculation equipment. The ultimate aim of recirculation is to

increase the concentration of VOC in the air stream to the RTO, making the oxidizer more efficient to operate. The RTO will not commence operations, accepting flow from the four booths, until a projected increase in production occurs which would result in VOC emissions approaching facility limits. The facility refers to this mode of operation as "bypass," but until the production increase occurs and the RTO commences full function, the "bypass" mode is equivalent to current operation. Specific conditions #9 and #15 governing the RTO, will require that the bypass operation not occur during RTO operation.

All spray booths are equipped with blanket fiberglass and/or pleated filters for the control of PM emissions. Spray application types consist of air atomized cup guns for small volume prime and touchup, reciprocator-mounted electrostatic spray guns that move in a single two-dimensional plane, electrostatic hand spray guns, robot-mounted electrostatic spray guns that follow a three-dimensional surface, and High Volume/Low Pressure (HVLP) hand spray guns for application of the non-VOC undercoating material. Flash tunnels follow spray booths prior to cure oven entry. The cure ovens are direct-fired convection or a combination of radiant and direct-fired convection. Residual VOC emissions from the spray booths that evolve in the flash tunnels and in the cure ovens are exhausted to the atmosphere via the associated stacks.

All combustion devices (ovens and heaters) are fired with pipeline quality natural gas.
Coatings, adhesives, dyes, sealers, and solvents are received in purchase units varying from small tubes to totes. No storage tanks are required for coating-related raw materials.

EUG 5 ZZZZ Engines (Existing RICE)
EUG 5 is vacant at this time. The facility currently has no engines that meet the definition of "existing RICE" under NESHAP Subpart ZZZZ.

EUG 6 JJJJ Engines (New SI ICE)
EUG 6 includes spark ignition internal combustion engines (SI ICE) which meet the definition of "new RICE" under NESHAP Subpart ZZZZ and are subject to NSPS Subpart JJJJ.

The facility has two (2) emergency generators that are powered by natural gas-fired engines. The emergency generator (genset) which provides emergency backup power for computer systems during power failure is driven by an 82-hp engine. The emergency generator which provides emergency lighting is driven by a 228-hp engine. Certificates of Conformity have been issued by EPA to Generac Power Systems, Inc. for these engines.

Table 4: Stationary Engines

EU-ID	Point ID	Description (HP, Make/Model, etc.)	Manufacture Date	Install Date
Emergency Generator Engine	39	228-hp emergency engine, natural gas-fired 2,042-scfh @ 100% load Generac Power Systems, EPA Certified	2018	12/2018
Emergency Generator Engine	40	82-hp emergency engine, natural gas-fired 5.4L Ford 756-scfh @ 100% load Generac Power Systems, EPA Certified	2015	8/2015

SECTION VI. EMISSIONS

The facility is a major source for VOC under Part 70. The original permit was designed to assure that emissions would remain below 250 tons per year of any criteria pollutant, the major stationary source threshold for PSD. Unless noted otherwise, emissions are based on 8,760 hr/yr.

Significant emissions of VOC arise from the application of paint, adhesives, sealants, dyes, and the use of solvents. Relatively minor sources of VOC include combustion products from drying ovens and stored materials, such as ethylene glycol (antifreeze) and diesel.

EUG 2

The facility emissions of regulated VOCs were segregated into two categories for the original Part 70 permit memorandum discussion. The division is between HAP (hazardous air pollutants) and all other VOC. As mentioned in the Introduction (Section I) of this memorandum, this permit was designed to assure that the facility would not exceed the PSD major stationary source threshold of 250 TPY for any regulated pollutant and that the facility would be in compliance with the requirements of NESHAP MACT standards MMMM and PPPP. This permit continues to meet those requirements.

Yield analysis involved collecting data from each of various emitting activities, dividing the totals by the number of buses manufactured, and then extrapolating to a maximum, while holding that maximum under the PSD 250 TPY threshold. This limit was based on the number of buses manufactured, (880 buses per month and 10,560 buses per year based on 2008 production). This permit relies on a maximum monthly total of 1,000 buses manufactured per month and the appropriate monthly product usage, with the exception of combustion emissions, which represent a small fraction of facility-wide VOC emissions. This analysis covers some 85 individual products that contribute to overall emissions. The analysis includes all adhesives and coatings, including those used for touch-up and sprayed from handheld cans. A production rate of 1,500 buses per month is used as a worst case scenario, which is based on the use of the RTO unit. The following tables summarize the current VOC analysis.

Emission Inventory for 2013 indicates 134-tons VOC and 17-tons VHAP of which is 14-tons Toluene. The table below compares uncontrolled VOC emissions at current and projected production levels (without RTO control) and controlled VOC emissions at the projected production level.

Table 5: EUG 2 Paint VOC Emissions (PTE TPY)

Painting 4 Bypass - Booths	Throughput (production level)	(Uncontrolled and at current production)	VOC (uncontrolled and at projected production increase)	VOC (controlled and at projected production inc.)
		Stack 37	Stack 37	Stack 36
External Spray		38.16	57.24*	57.24*
Internal Spray		17.60	26.39	26.39
Prime Spray		14.28	21.42	21.42
Black Stripe Spray		15.37	23.05	23.05

Painting 4 Bypass - Booths	Throughput (production level)	(Uncontrolled and at current production)	VOC (uncontrolled and at projected production increase)	VOC (controlled and at projected production inc.)
		Stack 37	Stack 37	Stack 36
Total – Bypass Load		**85.41**	**128.1**	**128.1**
All Other Paint		68.43	102.7	102.7
Total Paint VOC		**153.8**	**230.8**	**230.8**
Bypass Mode	12K bus/yr	153.8		
Bypass Mode	18K bus/yr		230.8	
RTO Mode	18K bus/yr			117.8
Totals		**153.8**	**230.8**	**117.8**

* None of the (4) booths which feed the Bypass Stack / RTO exceed 100-TPY in VOC emissions at a maximum production rate of 18,000 buses per year. However, the combined emissions of the (4) booths feeding the RTO control device do exceed 100-TPY at the increased throughput.

Table 6: EUG 2 Total VOC Emissions

Product Type	VOC content (ppg)	usage / bus (gal)	VOC / bus (lbs)	Max, usage (gal/yr)	VOC PTE current (TPY)	VOC PTE w/increase Bypass (TPY)	VOC PTE w/increase RTO (TPY)
Paint Total	3.50	7.32	25.62	131,760	153.8	230.8	117.8
Adhesive	1.50	1.20	1.80	21,600	10.80	16.20	16.20
Sealant	1.25	4.00	5.00	72,000	30.00	45.00	45.00
Undercoating	-0-	12.2	-0-	219,600	-0-	-0-	-0-
Dye	0.50	0.04	0.02	720	0.05	0.07	0.07
Solvent	3.75	2.0	7.50	36,000	45.00	67.50	67.50
Waste Paint Disposal	3.50			(2,000) (3,000)	(3.50)	(5.25)	(5.25)
Sub-Totals	1000 buses/mo		39.94		**236.7***		
RTO					-0-	-0-	4.52
Totals	1500 buses/mo		39.94			**354.8****	**246.3*****

* Emissions were estimated based on maximum monthly rate of 1000 buses.

** Emissions estimate including 150% increase in operation without using the RTO.

*** This estimate includes the expected destruction of VOC's from the (4) spray booths which feed the RTO. This is based on 90% capture efficiency and 98% destruction efficiency of the RTO. Paint VOC = [(230.8-128.1) + 128.1 x (1-0.90) + 128.1 x (0. 90) x (1-0.98)] = 117.8 TPY

The RTO will greatly decrease emissions of VOC from the four booths whose exhausts are rerouted to the RTO. However, the unit will not be used until production of busses is high enough that the RTO is needed to keep VOC emissions below the current permit limits. A performance test will be required to determine the destruction efficiency of the RTO, to be applied against the mass balance assumptions made about VOC emitted from the four booths. The test shall determine destructive efficiency of the unit at representative operating conditions. Sufficient production

records shall be maintained that capture efficiency may also be determined. If capture efficiency cannot be determined, a value of 90%, slightly less than the level verified at the International Truck facility in Springfield, Ohio, will be used for emission inventory and monthly emission calculations. The calculated capture / destruction efficiency data will be used to determine an emission factor to be applied to the RTO, in order to estimate emissions for annual inventory purposes and permit compliance.

Combustion emissions from the RTO will normally be from approximately 1.5 MMBTUH average boost, with a maximum capacity of 5 MMBTUH of natural gas assist. A larger unit of this sort was tested at a facility in New Jersey, with emissions of 16 ppm of NO_X and 50 ppm of CO. Assuming a maximum of 14,000 cfm yields CO emissions of $50 \div 10^6$ (ppm) × 14,000 scfm ÷ 387 scf/mole × 28 lbs/lb-mole × 60 min/hr = 3.04 lbs/hr, or 13.32 TPY. Similar calculations performed for NO_X at 46 lbs/lb-mole, yield 1.60 lbs/hr or 7.01 TPY. Emission factors for PM and SO_2 are taken from Tables 1.4-1 and 2 of AP-42 (7/98). Natural gas, at a maximum input of 1.5 MMBTUH, is assumed to have heat content of 1,020 BTU/CF. The organic vapor load is expected to be approximately 51.6 lb/hr and is assumed to be toluene, with heat content of 4,484 BTU/CF. These assumptions suggest that the organic vapor load amounts to 0.95 MMBTUH. Converting these heat inputs to MMSCFH, and using the AP-42 factor for PM, this produces yields of 0.042 lb/hr or 0.19 TPY. The organic load is assumed to have little or no sulfur content, so the AP-42 factor for SO_2 emissions is applied to the 1.5 MMBTUH natural gas input only, yielding less than 0.01 lbs/hr and less than 0.01 TPY.

The destructive efficiency of the RTO is conservatively assumed at 98%, yielding 51.6 lbs/hr × (1 – 98%) = 1.02 lbs/hr or 4.52 TPY. The facility wishes to keep the same emission limit for VOC and will continue to perform monthly and 12-month rolling calculations of actual emissions. For comparison purposes only, testing performed on a similar facility in Springfield, Ohio showed capture efficiency slightly higher than 90% and destruction efficiency of 97.8%.

Facility-wide emissions of particulate matter (PM) were dismissed in the Memorandum discussion associated with the original Part 70 permit because their calculations indicated a total of only 5.91 TPY of PM from all plant operations. Calculation of PM emissions from these sources uses the same underlying projections, assigns an efficiency of 99% to all filter systems, and determines overspray factors estimated by the facility as shown in the following table. If we apply the 50% production increase used in the preceding calculations, and assume that all product usages will increase by the same factor, PM emissions would increase to 5.91 TPY × 150% = 8.87 TPY. Such an increase does not exceed any thresholds for further analysis with regard to total expected PM_{10} emissions.

Table 7: EUG 2 PM_{10} Emissions*

Activity	Transfer efficiency	Product	Gallons per year	Emissions (TPY)
Spot prime, exterior manual spray, interior spray, chassis spray, underbody spray	45%	Adhesive	21,600	0.10
Exterior autospray, roof spray, black stripe spray, hood & cowl spray	70%	Paint	131,760	1.75
Touch-up spray, plant fugitives	40%	Undercoat	219,600	4.06
Total				5.91

Total with RTO enabled			**8.87**

*PM_{10} is assumed to be equivalent to $PM_{2.5}$

EUG 4

All combustion sources are combined and treated as a single unit, with total heat rate of 65.0 MMBTUH. This analysis uses emission factors from Tables 1.4-1 & 1.4-2 of AP-42 (7/98) and the facility's stated heat content of 1,000 BTU/CF. Results follow.

Table 8: Combustion Source Emissions

Pollutant	Factor (Lbs/MMCF)	Emissions	
		lb/hr	TPY
NO_X	100	6.50	29.47
CO	84	5.46	23.91
PM_{10}*	7.6	0.49	2.16
VOC	5.5	0.36	1.57
SO_2	0.6	0.04	0.17

***PM_{10} is assumed to be equivalent to $PM_{2.5}$**

Welding emissions were calculated using emission factors developed for the EPA by IT Corporation of Cincinnati, OH, in Development of Environmental Release Estimates for Welding Operations. The facility projected potential use of 19,008 pounds per month of Awser 7035 Level Wind Welding Wire with electrode E70S-3, having an emission factor of 0.73 lbs/100 lbs of rod. Combined with 10,900 pounds per month of Lincoln FW-35 E6011 electrode with an emission factor of 3.84 lbs/100 lbs of rod, total emissions are 3.34 TPY of PM_{10}.

Tanks operated by the facility include a 10,000 gallon ethylene glycol tank for antifreeze, a 10,000 gallon diesel tank, and a 5,000 gallon gasoline tank. The facility projected annual turnovers of each tank, using the same logic as stated in previous discussions with a 10% safety factor, and used Tanks 4.0 to calculate emissions. The following table shows all of these points.

Table 9: Tank Emissions

Capacity (gallons)	Contents	Throughput (gal/year)	Emissions	
			Lbs/year	TPY
10,000	EG	139,392	0.40	
10,000	Diesel	348,480	9.55	
5,000	Gasoline*	-0-	0.00	
Totals			10	**0.01**

*Tank slated for removal.

Three parts washers use cold cleaners, for which an emission factor of 0.33 tons/unit/yr is taken from Table 4.6-2 of AP-42 (4/81). An additional reduction is taken, using 55% as the conservatively low end of range B in the table row identified as "Total emission reduction" of Table 4.6-3 from the same source. These figures result in total VOC emissions of 3 units × 0.33 tons/unit/yr × (1 - 0.55) = 0.45 TPY.

EUG 5

EUG 5 is vacant at this time.

EUG 6

Emissions from emergency generator engines are shown below and are based on load rating and 500-hr/yr operation. CO, VOC and NO_X are based on Certificates of Conformity (NSPS Subpart JJJJ Table 1). For the 82-hp engine (Point 40), CO is 387 g/hp-hr (519 g/kWh), VOC is assumed equal to zero, and NO_X is assumed to be equal to 10 g/hp-hr (13.4 g/kWh), i.e., VOC plus NO_X is 10 g/hp-hr. For the 228-hp engine (Point 39), CO is 4 g/hp-hr (5.4 g/kWh), VOC is 1 g/hp-hr (1.3 g/kWh), and NO_X is 2 g/hp-hr (2.7 g/kWh). PM, SO_2 and H_2CO (formaldehyde) are negligible from the emergency engines and not discussed further yet were based on factors from AP-42 (7/00), Table 3.2-3, natural gas heat value of 1,020 Btu/scf assumed, and fuel consumption at 100% load from manufacturer's data.

Table 9-2: EUG 6 Emissions

Point	Description	NO_X		CO		VOC	
		(lb/hr)	(TPY)	(lb/hr)	(TPY)	(lb/hr)	(TPY)
39	228-hp genset engine	1.005	0.251	2.011	0.503	0.503	0.126
40	82-hp genset engine	1.808	0.452	69.96	17.49	0*	0*
EUG 6 Totals		--	**0.70**	--	**18.0**	--	**0.13**

*VOC is assumed to be zero

Facility-wide emission totals are shown in the following two tables.

Table 9A: Facility Wide Potential To Emit (Operating Scenario 1)

Emission Unit Group	Source	Emissions (TPY)*				
		NO_X	CO	PM_{10}**	VOC	SO_2
EUG 2	Coating (1,500 buses)	--	--	8.87	241.8	--
	RTO (operating)	7.0	13.3	0.19	4.52	0.01
EUG 4	Combustion	39.8	33.4	3.02	2.19	0.24
	Welding	--	--	4.51	--	--
	Tanks	--	--	--	0.01	--
	Washers	--	--	--	0.45	--
EUG 6	JJJJ Engine (new SI ICE)	0.70	18.0	--	0.13	--
TOTALS		**47.5**	**64.7**	**16.6**	**249.1**	**0.26**
Previous Permit No. 2014-1170-TVR2 (M-1)		48.6	64.5	16.7	249.1	0.34
Net Change		-0.9	+0.2	-0.1	0	-0.08

*Based on 1,500 buses per month and RTO Mode of operation (Scenario 1).

**PM_{10} is assumed to be equivalent to $PM_{2.5}$

Table 9B: Facility Wide Emissions (Operating Scenario 2)

Emission Unit Group	Source	Emissions (TPY)*				
		NO_X	CO	PM_{10}	VOC	SO_2
EUG 2	Coating (1,000 buses)			5.91	236.7	
	RTO (bypassed)	-0-	-0-	-0-	-0-	-0-
EUG 4	Combustion	39.8	33.4	3.02	2.19	0.24
	Welding			3.34		
	Tanks				0.01	
	Washers				0.45	
EUG 6	JJJJ Engine	0.70	18.0	--	0.13	--

Emission Unit Group	Source	Emissions (TPY)*				
		NO_X	CO	PM_{10}	VOC	SO_2
TOTALS		**40.5**	**51.4**	**12.3**	**239.5**	**0.25**
Previous Permit No. 2014-1170-TVR2 (M-1)		41.6	51.2	12.4	239.5	0.34
Net Change		-0.9	+0.2	-0.1	0	-0.08

*Based on 1,000 buses per month and Bypass Mode of operation. (Scenario 2)

Hazardous Air Pollutants (HAPs)

HAP emissions from the facility are based on AP-42 (8/97), Table 11.3-6 and are listed in the following table. Since the projected aggregate of all HAP emissions shown in the following table exceeds 25 TPY, and since the emissions of two individual HAPs are expected to exceed 10 TPY each, this facility is a major source as defined in 40 CFR 63.2.

Table 10: Summary of HAP Emissions

HAP Chemical Name	CAS #	Emissions (tons/yr)
Formaldehyde	50-00-0	0.001
Ethyl Benzene	100-41-4	1.09
Phenyl Isocyanate	101-68-8	0.0001
Methyl Isobutyl Ketone	108-10-1	**24.19**
Toluene	108-88-3	**19.46**
n-Hexane	110-54-3	2.10
Butyl Cellosolve Acetate	112-07-2	2.06
Butyl Carbitol	112-34-5	0.10
Xylene	1330-20-7	6.14
Chrome Antimony Titanate Rutile	68186-90-3	0.09
Total		**55.2**

SECTION VII. INSIGNIFICANT ACTIVITIES

Any activity to which a state or federal requirement is applicable is not insignificant, even if it is included on this list.

1. * Space heaters, boilers, process heaters, and emergency flares less than or equal to 5 MMBTUH heat input (commercial natural gas). Several of the heaters in EUG-4 are in this category, while the rest of those heaters have PTE below 5 TPY.
2. * Emissions from fuel storage/dispensing equipment operated solely for facility owned vehicles if fuel throughput is not more than 2,175 gallons/day, averaged over a 30-day period. The 5,000 gallon gasoline tank is in this category.
3. Emissions from storage tanks constructed with a capacity of less than 39,894 which store VOC with a vapor pressure less than 1.5 psia at maximum storage temperature.
4. Exhaust systems for chemical, paint, and/or solvent storage rooms or cabinets, including hazardous waste satellite (accumulation) areas.
5. Hand wiping and spraying of solvents from containers with less than 1 liter capacity used for spot cleaning and/or degreasing in ozone attainment areas.
6. * All welding activities.

7. *Activities having the potential to emit no more than 5 TPY of any criteria pollutant.

* Appropriate records of hours, quantity, or capacity must be kept on the activity to verify its significance.

SECTION VIII. 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]
The purpose of this Subchapter is to incorporate 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 252:100-8 (Permits for Part 70 Sources) [Applicable]
Part 5 includes the general administrative requirements for Part 70 permits. Any planned changes in the operation of the facility that result in emissions not authorized in the permit and that exceed the "Insignificant Activities" or "Trivial Activities" thresholds require prior notification to AQD and may require a permit modification. Insignificant activities refer to those individual emission units either listed in Appendix I or whose actual calendar year emissions do not exceed the following limits.

- 5 TPY of any one criteria pollutant
- 2 TPY of any one hazardous air pollutant (HAP) or 5 TPY of multiple HAPs or 20% of any threshold less than 10 TPY for a HAP that the EPA may establish by rule

Emission limitations and operational requirements necessary to assure compliance with all applicable requirements for all sources are taken from the construction permit application, or developed from the applicable requirement.

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 fuel-burning equipment. Particulate emission limits are based on maximum design heat input rating. Appendix C specifies a PM emission limitation of 0.60 lbs/MMBTU for all equipment at this facility with a heat input rating of 10 MMBTUH or less. All fuel-burning equipment at this facility is rated at less than 10 MMBTUH.
Each natural gas combustion process heat unit in EUG 4 is subject, and Section 1.4-2 of AP-42 (7/98) lists PM emissions to be 7.6 lbs/MMSCF which is approximately 0.0076 lbs/MMBTU and is in compliance.
Each natural gas-fired emergency generator engine in EUG 6 is subject, and AP-42 (7/00), Table 3.2-3 lists PM emissions at approximately 0.02 lbs/MMBTU which is in compliance.
Section 19-12 specifies limitations on PM emissions based on process weight rate. The total coating PM emissions are 5.91 TPY and 8.87 TPY for Scenario 1 and 2, respectively, which, based on 2,200 hours per year operations, are equivalent to 5.37 lb/hr and 8.06 lb/hr. A 40-ft school bus weighs approximately 12.5 tons. Subchapter 19 limits PM to 22.3 lb/hr for a process weight rate of 12.5 TPH. For Scenario 1, 5.37 lb/hr total of three processes is in compliance with Subchapter 19. For Scenario 2, the limit remains 22.3 lb/hr compared to expected PM emissions of 8.06 lb/hr. For the welding operations, the expected PM emission rate is 3.05 lb/hr, compared to the limitation of 22.3 lb/hr.

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. Based on experience with other operations of this type, the potential for violating the standards is negligible.

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 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. Under normal operating conditions, this facility will not cause a problem in this area; therefore it is not necessary to require specific precautions to be taken.

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 $\mu g/m^3$. Based on modeling conducted for the general permit for oil and gas facilities, the ambient impacts of H_2S

from facilities combusting natural gas with a maximum H_2S content of 162 ppmv will be in compliance with the H_2S ambient air concentration limit.
Part 5 limits sulfur dioxide emissions from new fuel-burning equipment (constructed after July 1, 1972). For gaseous fuel, the limit is 0.2 lb/MMBTU heat input averaged over 3 hours. For fuel gas having a gross calorific value of 1,000 Btu/scf, this limit corresponds to fuel sulfur content of approximately 1.203 ppmv. The natural gas-fired equipment in EUG 4 is subject, and AP-42 (3/98), Table 1.4-2 lists SO_2 emissions to be 0.6 lbs/MMft^3 which is approximately 0.0006 lbs/MMBTU and is in compliance. Each natural gas-fired emergency generator engine in EUG 6 is subject, and AP-42 (7/00), Table 3.2-3 lists SO_2 emissions to be approximately 0.0006 lb/MMBTU, which is in compliance. The permit requires the use of gaseous fuel with 0.05%$_{WT}$ or less sulfur content 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 0.20 lbs of NO_X per MMBTU, three-hour average. Also, this subchapter limits new liquid-fired fuel-burning equipment with rated heat input greater than or equal to 50 MMBTUH to emissions of 0.30 lbs of NO_X per MMBTU, three-hour average. None of the listed equipment items exceed the 50-MMBTUH threshold.

OAC 252:100-35 (Carbon Monoxide) [Not Applicable]
None of the following affected processes are located at this facility: gray iron cupola, blast furnace, basic oxygen furnace, petroleum catalytic cracking unit, or petroleum catalytic reforming unit.

OAC 252:100-37 (Volatile Organic Compounds) [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. This facility has three storage tanks, one 10,000-gallon ethylene glycol, one 10,000-gallon diesel, and one 5,000gallon gasoline tank. The ethylene glycol tank does not emit VOCs. The diesel tank is exempt per OAC 252:100-37-4(a), as the vapor pressure under actual storage conditions is less than 1.5 psia. The gasoline storage tank is equipped with a permanent submerged fill pipe and is in compliance with Part 3.
Part 5 limits the VOC content of coating used in coating lines or operations, with 4.8 lbs VOC/gallon of coating being the most stringent limit. All coatings used at the facility, as applied, have VOC contents less than the limit.
Part 7 requires fuel-burning equipment to be operated and maintained so as to minimize VOC emissions. Temperature and available air must be sufficient to provide essentially complete combustion. The natural gas-fired engines that drive the emergency generators are designed to provide essentially complete combustion of organic materials.

OAC 252:100-39 (VOC in Nonattainment and Former Nonattainment Areas) [Applicable]
Subsection 42 (a) covers the three cold cleaning units, noting standards for construction and operation of such equipment. Paragraph 1 outlines equipment standards, including doors or covers, closed drainage, and conspicuous labeling. Paragraph 2 describes operating requirements, namely, appropriate draining procedures and times, keeping the unit covered when not in use, proper storage and disposal of waste solvent, and stipulates that spraying of VOC can only be in a solid stream.

Paragraph 3 outlines requirements for controls if the solvent's vapor pressure exceeds 0.6 psia at 100°F or if the VOC is heated to 248°F. Paragraph 4 lists compliance and recordkeeping criteria. Section 46 limits the VOC content of coatings of metal parts and products. All of the coatings to be used at the facility are either air-dry, forced air-dry, or extreme performance, therefore a limit of 3.5 lbs VOC/gallon of coating is applicable. All coatings used at the facility, as applied, have VOC contents less than the limit.

OAC 252:100-42 (Toxic Air Contaminants (TAC)) [Applicable]
This subchapter regulates toxic air contaminants (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 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 not be considered valid. 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. The permit requires initial testing of the RTO and subsequent testing if the facility operates in the scenario using the RTO for more than 1,000 hours in any 5-year block period.

The following Oklahoma Air Pollution Control Rules are not applicable to this facility.

OAC 252:100-7	Minor Sources	not type of facility
OAC 252:100-11	Alternative Emissions Reduction	not requested
OAC 252:100-15	Mobile Sources	not in source category
OAC 252:100-17	Incinerators	not type of emission unit
OAC 252:100-23	Cotton Gins	not type of emission unit
OAC 252:100-24	Feed & Grain Facility	not in source category
OAC 252:100-47	Landfills	not in source category

SECTION IX. FEDERAL REGULATIONS

PSD, 40 CFR Part 52 [Not Applicable]
PSD does not apply. Final total emissions are less than the threshold of 250 TPY of any single regulated pollutant and the facility is not one of the listed stationary sources with an emission threshold of 100 TPY.

NSPS, 40 CFR Part 60 [Subpart JJJJ Applicable]
Subparts K, Ka, Kb, VOL Storage Vessels. The gasoline, diesel, and ethylene glycol storage tanks each have a capacity less than the applicability threshold of any of these subparts, and are therefore not affected facilities.
Subpart MM. Automobile and Light Duty Truck Surface Coating Operations. For the purposes of Subpart MM, *Automobile* means a motor vehicle capable of carrying no more than 12 passengers. *Light-duty truck* means any motor vehicle rated at 3,850 kilograms gross vehicle weight or less, designed mainly to transport property. This facility does not manufacture or coat either sort of vehicle.
Subpart JJJJ, Stationary Spark Ignition Combustion Engines (SI ICE) promulgates emission standards for all new SI engines ordered after June 12, 2006, and all SI engines modified or reconstructed after June 12, 2006, regardless of size. The engines in EUG 6 (Points 39 and 40) are affected by this subpart. Each natural gas-fired emergency generator engine is subject to emissions standards in Table 1 of this subpart. Certificates of Conformity have been issued by the EPA for these emergency engines, and performance testing is not required. All applicable requirements have been incorporated into the permit.

NESHAP, 40 CFR Part 61 [Not Applicable]
There are no emissions of any of the pollutants subject to 40 CFR Part 61 (asbestos, benzene, beryllium, coke oven emissions, inorganic arsenic, mercury, radionuclides, and vinyl chloride).

NESHAP, 40 CFR Part 63 [Subparts MMMM and ZZZZ Applicable]
Subpart MMMM, (Surface Coating of Miscellaneous Metal Parts and Products) affects surface coating of metal components of products or of the products themselves at facilities that use 250 gallons or more of HAP-containing products used to coat metal surfaces and that are major sources per 40 CFR 63.2. Surface coating is the application of a coating to a substrate using such methods as spray or dipping, among others. Related activities, such as surface preparation, cleaning, mixing, etc., may be included as part of the operation. Activities at the facility covered by this permit are typical of the activities identified in this subpart.
The plant commenced operations early in 2002 and applied for an operating permit on April 15, 2002. MACT Subpart MMMM was proposed on August 13, 2002, and the final MACT standard was issued on January 2, 2004. According to 40 CFR 63.3882(c), a new source is one that commenced construction after August 13, 2002, so this facility is an existing source for purposes of requirements under Subpart MMMM. Since the projected aggregate of all HAP emissions shown in the following table exceeds 25 TPY, and since the emissions of two individual HAPs are expected to exceed 10 TPY each, this facility is a major source as defined in 40 CFR 63.2.

Summary of HAP Emissions

HAP Chemical Name	CAS #	Emissions (tons/yr)
Formaldehyde	50-00-0	0.001
Ethyl Benzene	100-41-4	1.09
Phenyl Isocyanate	101-68-8	0.0001
Methyl Isobutyl Ketone	108-10-1	**24.19**
Toluene	108-88-3	**19.46**
n-Hexane	110-54-3	2.10
Butyl Cellosolve Acetate	112-07-2	2.06
Butyl Carbitol	112-34-5	0.10
Xylene	1330-20-7	6.14
Chrome Antimony Titanate Rutile	68186-90-3	0.09
Total		**55.2**

This facility meets the definition of "general use subcategory," as found in §63.3881(a)(2), which is a category defined by excluding the more specific subcategories identified in §63.3881(a)(3, 4, 5, & 6). An organic HAP emission limitation of 2.6 pounds per gallon (ppg) of coating solids is imposed on general use operations, per §63.3890(b)(1). Three compliance options to meet the limitation are described in §63.3891. The "compliant material option" described in §63.3891(a), requires that coatings comply with the 2.6 ppg standard discussed above, and that each thinner and/or other additive and cleaning material used contain no organic HAP. Details about demonstrating compliance with this option are contained in §§63.3940, 3941, and 3942. These sections describe the period to be covered, the manner in which testing shall be performed, and the manner in which calculations shall be performed. Among other points, the materials may be shown to be compliant individually, in operational groups, or facility-wide. The "emission rate without add-on controls option" is described in §63.3891(b). Requirements are similar to those of the first option, except that all calculations are performed after use of the various materials and reflect the actual fractions of each portion of the calculation. Compliance demonstration requirements in §§63.3950, 3951, and 3952, are similar to the previous option in describing the period to be covered, the data to be gathered, and the calculation methods to be used. This option may be used for any operational group or group of such groups or facility-wide. The "emission rate with add-on controls option" is described in §3891(c). Compliance demonstration requirements for this option are more extensive than either of the first two options, including operating limits described in §63.3892, work practice standards described in §63.3893, and detailed compliance requirements in §§63.3960 – 3968.

The three compliance options described in the preceding paragraph may be used at the same time for various operations or groups of operations within the facility. One method may even be substituted for another for any given operation; however, it is required that the switch be documented and reported in the next semi-annual compliance report, per §63.3930(c). The facility is and expects to remain in compliance with the provisions outlined here.

Subpart ZZZZ, Reciprocating Internal Combustion Engines (RICE). This subpart affects new and existing RICE at major and area sources of HAP emissions. The equipment listed in EUG 5 is affected by this subpart. The natural gas-fired engines (Points 39 and 40) that drive the emergency generators meet the definition of "new emergency engines" under this subpart, and they satisfy the requirements of this subpart by complying with NSPS Subpart JJJJ. All applicable requirements have been incorporated into the permit.

Subpart DDDDD, (Boilers and Process Heaters) [Not Applicable]

This subpart affects Industrial, Commercial, and Institutional Boilers and Process Heaters located at major sources. This facility does not have any boilers.

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

- Paint stripping operations that involve the use of chemical strippers that contain methylene chloride (MeCl), in paint removal processes;
- Autobody refinishing operations that encompass motor vehicle and mobile equipment spray-applied surface coating operations; and
- Spray application of coatings containing 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.

This facility does not perform paint stripping utilizing MeCl, nor does it utlilize the metallic compounds listed above. Thus the facility is not subject to these requirements.

Subpart XXXXXX, (Standards for Nine Metal Fabrication and Finishing Source Categories) The provisions of this subpart apply to each new and existing affected source that use materials that contain or have the potential to emit metal fabrication HAP (MFHAP), defined to be materials that contain cadmium, chromium, lead, or nickel in amounts greater than or equal to 0.1% by weight (of the metal), and materials that contain manganese in amounts greater than or equal to 1.0% by weight (of the metal), as shown in formulation data provided by the manufacturer or supplier, such as the Material Safety Data Sheet for the material. This facility does not use any material that contains the above MFHAP quantities. Therefore, the facility is not subject to this subpart.

CAM, 40 CFR Part 64 [Applicable]

This part applies to any pollutant-specific emission unit at a major source that is required to obtain an operating permit, for any application for an initial operating permit submitted after April 18, 1998, that addresses "large emissions units," or any application that addresses "large emissions units" as a significant modification to an operating permit, or for any application for renewal of an operating permit, if it meets all of the following criteria.

- It is subject to an emission limit or standard for an applicable regulated air pollutant
- It uses a control device to achieve compliance with the applicable emission limit or standard
- It has potential emissions, prior to the control device, of the applicable regulated air pollutant of 100 TPY or 10/25 TPY of a HAP

The RTO is a control device designed to control emissions from the four spray booths so that they do not reach major source levels, separately or in combination, under production conditions (see Table-4). CAM was accepted for Permit No. 2014-1170-TVR2 (M-2) as monitoring of RTO operating temperatures and verification of not using the bypass stacks.

Chemical Accident Prevention Provisions, 40 CFR Part 68 [Not Applicable]
This facility will not process or store more than the threshold quantity of any regulated substance (Section 112r of the Clean Air Act 1990 Amendments). More information on this federal program is available on the web page: *www.epa.gov/rmp*.

Stratospheric Ozone Protection, 40 CFR Part 82 [A and F Applicable]
These standards require phase out of Class I & II substances, reductions of emissions of Class I & II substances to the lowest achievable level in all use sectors, and banning use of nonessential products containing ozone-depleting substances (Subparts A & C); control servicing of motor vehicle air conditioners (Subpart B); require Federal agencies to adopt procurement regulations which meet phase out requirements and which maximize the substitution of safe alternatives to Class I and Class II substances (Subpart D); require warning labels on products made with or containing Class I or II substances (Subpart E); maximize the use of recycling and recovery upon disposal (Subpart F); require producers to identify substitutes for ozone-depleting compounds under the Significant New Alternatives Program (Subpart G); and reduce the emissions of halons (Subpart H).
Subpart A identifies ozone-depleting substances and divides them into two classes. Class I controlled substances are divided into seven groups; the chemicals typically used by the manufacturing industry include carbon tetrachloride (Class I, Group IV) and methyl chloroform (Class I, Group V). A complete phase-out of production of Class I substances is required by January 1, 2000 (January 1, 2002, for methyl chloroform). Class II chemicals, which are hydrochlorofluorocarbons (HCFCs), are generally seen as interim substitutes for Class I CFCs. Class II substances consist of 33 HCFCs. A complete phase-out of Class II substances, scheduled in phases starting by 2002, is required by January 1, 2030.
Subpart F requires that any persons servicing, maintaining, or repairing appliances except for motor vehicle air conditioners; persons disposing of appliances, including motor vehicle air conditioners; refrigerant reclaimers, appliance owners, and manufacturers of appliances and recycling and recovery equipment comply with the standards for recycling and emissions reduction.

This facility does not produce, consume, recycle, import, or export any controlled substances or controlled products as defined in this part, nor does this facility perform service on motor (fleet) vehicles which involves ozone-depleting substances. Therefore, as currently operated, this facility is not subject to these requirements. This subpart is applicable to the extent that the facility has air-conditioning units. The air conditioning units are serviced by contractors that must comply with Part 82.

SECTION X. COMPLIANCE

The Specific Conditions of this permit contain various testing, monitoring, recordkeeping, and reporting requirements in order to document on-going compliance with emission limits. The specific method used to document compliance was based on the type of emission unit, the type of process equipment, the specific pollutants emitted, and the amount of permitted emissions taking into account other regulatory requirements that an emission unit may be subject to.

In addition to the permitting requirements, the following periodic inspections were conducted since issuance of the last Title V renewal permit.

Inspection Type	Date	Summary/Results
Full Inspection	11/18/2020	No violations determined
Full Inspection	10/18/2018	No violations determined
Full Inspection	2/22/2017	No violations determined

There have been no other enforcement actions since issuance of the last Title V renewal permit.

SECTION XI. TIER CLASSIFICATION, PUBLIC AND EPA REVIEW

This application has been determined to be **Tier II** based on the request for renewal of a Part 70 operating permit.

The applicant published the "Notice of Filing a Tier II Application" in *The Tulsa World*, a daily newspaper in Tulsa County, on July 16, 2020. The notice stated that the application was available for public review at the DEQ Regional Office at Tulsa and at the AQD office in Oklahoma City. A notice of availability of the draft permit will also be published in *The Tulsa World Times* and on the Air Quality section of the DEQ web page at *https://www.deq.ok.gov*.

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

Tribal Nations will be notified of the draft permit.

The proposed permit will be sent to EPA for a 45-day review period.

If the Administrator does not object in writing during the 45-day EPA review period, any person that meets the requirements of OAC 252:100-8-8 may petition the Administrator within 60 days after the expiration of the Administrator's 45-day review period to make such objection. Any such petition shall be based only on objections to the permit that the petitioner raised with reasonable specificity during the public comment period provided for in 27A O.S. § 2-14-302.A.2., unless the petitioner demonstrates that it was impracticable to raise such objections within such period, or unless the grounds for such objection arose after such period. If the Administrator objects to the permit as a result of a petition filed under OAC 252:100-8-8, the DEQ shall not issue the permit until EPA's objection has been resolved, except that a petition for review does not stay the effectiveness of a permit or its requirements if the permit was issued after the end of the 45-day review period and prior to an EPA objection. If the DEQ has issued a permit prior to receipt of an EPA objection under OAC 252:100-8-8, the DEQ will modify, terminate, or revoke such permit,

and shall do so consistent with the procedures in 40 CFR §§ 70.7(g)(4) or (5)(i) and (ii) except in unusual circumstances. If the DEQ revokes the permit, it may thereafter issue only a revised permit that satisfies EPA's objection. In any case, the source will not be in violation of the requirement to have submitted a timely and complete application.

Information on all permit actions is available for review by the public in the Air Quality section of the DEQ Web page: www.deq.ok.gov.

Fees Paid
Part 70 source permit renewal fee of $7,500.

SECTION XII. SUMMARY

This facility was constructed as described in the application. There is an active Air Quality compliance or enforcement issue. Issuance of the operating permit is recommended, contingent on public and EPA review.

DRAFT

PERMIT TO OPERATE
AIR POLLUTION CONTROL FACILITY
SPECIFIC CONDITIONS

IC of Oklahoma, LLC **Permit No. 2020-0216-TVR3**
Bus Manufacturing Facility

The permittee is authorized to operate in conformity with the specifications submitted to Air Quality on April 29, 2020. The Evaluation Memorandum dated May 18, 2022, 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. Points of emissions.

EUG 1 Facility Wide
This EUG is established to cover all rules or regulations that apply to the facility as a whole.

EUG 2 Coating
This EUG includes electrocoat dip coating, body cleaning, interior spraying, prime spraying, exterior auto spraying, exterior manual spraying, roof spraying, black stripe spraying, hood and cowl spraying, chassis spraying, underbody spraying, touch-up spraying, spot underbody spraying, plant fugitives, and the RTO. Electrocoating of parts has been discontinued.

EUG 3 Significant Ovens and Make-Up Units
This EUG was established to cover all fuel-burning units whose size or emissions exceeded the Insignificant Activity criteria. There are no such units currently, but the EUG is maintained to hold possible future additions.

EUG 4 Insignificant Sources
This EUG includes welding, paint booth ovens, wash heaters, comfort heaters, three storage tanks, three parts washers, and a pyrolysis oven.

EUG 6 JJJJ Engines
This EUG includes engines that are SI ICE that are subject to NSPS Subpart JJJJ.

2. **Emission limitations for each EUG (Both Operating Scenarios).** [OAC 252:100-8-6(a)]

Source	Emissions (TPY)				
	NO_X	**CO**	**PM_{10}**	**VOC**	**SO_2**
EUG 2 – coating	--	--	8.87	241.8	--
EUG 2 – RTO	7.0	13.3	0.19	4.52	0.01
EUG 6 – Engines	0.70	18.0	--	0.13	--

a. Compliance with the **EUG 2** limit of 241.8 TPY of VOC coating emissions shall be demonstrated using monthly calculations of VOC emissions, based on material balance. The material balance of VOC for those spray booths when exhausting to the RTO shall be further reduced by the capture and destructive efficiencies of the RTO as determined from SC #9. Each month's calculated amount will be used in a 12-month rolling VOC emission total. The calculation of monthly and 12-month rolling total VOC emissions shall be performed by the end of each month following the month in which the emissions were generated.

b. When any monthly calculation of VOC emissions exceeds 20 tons, the facility shall notify the ODEQ within 5 working days from the last day of that month. The notification shall include a copy of the monthly VOC emission calculations and a specific plan of action the facility will take to ensure that VOC emissions will not exceed 241.8 tons in any following 12-month period.

c. Compliance with the **EUG 2**limitations on emissions of combustion products NO_X, CO, and SO_2 shall be demonstrated by consumption of no more than 798,000 MMBTU of natural gas per year.

d. Compliance with **EUG 6** limitations on emissions for emergency generators shall be demonstrated by a non-resettable hour meter and recordkeeping of engine maintenance and system testing.

EU-ID	Point ID	Description (HP, Make/Model, etc.)	NO_X (lb/hr)	CO (lb/hr)
Emergency Generator Engine	39	228-hp emergency engine, natural gas-fired Engine Family JGNXB08.92O3 Generac Power Systems, EPA Certified	1.01	2.01
Emergency Generator Engine	40	82-hp emergency engine, natural gas-fired Engine Family FGNXB05.4NN Generac Power Systems, EPA Certified	1.80	69.96

3. Fuel-burning equipment shall be fueled with commercial-grade natural gas with no more than 0.05% total sulfur content by weight. Compliance can be shown by the following methods: for gaseous fuel, a current gas company bill, lab analysis, stain-tube analysis, gas contract, tariff sheet, or other approved methods; for fuel oil, supplier's latest delivery ticket(s). Compliance shall be demonstrated at least once per calendar year. [OAC 252:100-31]

4. The permittee shall be authorized to operate the facility continuously, (24 hours per day, every day of the year). [OAC 252:100-8-6(a)]

5. All coatings shall meet the VOC standards of OAC 252:100-37-25 and the standards of OAC 252:100-39-46. The most stringent of these standards is found in §39-46(d), which states that air or forced air dry and extreme performance coatings are limited to 3.5 pounds of VOC per gallon of coating, as applied. Clean-up materials may be excluded from this calculation provided that the VOC-containing materials are maintained in a closed container when not in use; closed containers are used for the disposal of cloth or paper or other materials used for surface preparation or clean-up; the spray equipment is disassembled and cleaned in a VOC vat and the vat is closed when not

in use, or the VOC-containing materials used for the clean-up of spray equipment are sprayed directly into closed containers. [OAC 252:100-37-25 & 39-46]

6. Cold metal degreasers (parts washers) shall have a cover or door that can easily be operated with one hand, have an internal drain board that allows lid closure or an external drainage facility if an internal drain is impractical, and shall have a permanently attached conspicuous label summarizing the operating requirements of OAC 252:100-39-42(a)(2). Work practice requirements include draining all parts for at least 15 seconds or until dripping ceases, closing the cover when not handling parts, storing waste VOC in covered containers, not disposing of waste VOC in a manner that more than 20% by weight can evaporate to atmosphere, and using a solid stream rather than an atomized spray when VOC is sprayed. [OAC 252:100-39-42(a)]

7. The facility is subject to 40 CFR 63 Subpart MMMM, a MACT standard for coating of miscellaneous metal parts and products. The original permit treated this under 112(g) and used the then-proposed MACT to establish a presumptive standard. The compliance demonstration for this existing source is January 2, 2007. The MACT offers three compliance options, any one of which or combination of which may be used at a facility. The standard limits HAP emissions by setting limits on the amount of organic HAP per gallon of solids for the coating operations over a rolling 12-month period. The facility has chosen to use the first two following methods, and may use the third method if appropriate performance testing is completed.

[40 CFR Part 63, Subpart MMMM]

a. The compliant material option requires that the organic HAP content of each individual coating not exceed emissions of 2.6 lbs HAP per gallon solid, and that all thinners and cleaning materials used with the coating contain no organic HAP. This option is predictive, in the sense that it pre-certifies coatings.

b. The emission rate without add-on controls option requires that monthly records demonstrate that the actual use of materials in any given coating operation or group of operations not exceed emissions of 2.6 lbs of organic HAP per gallon solid for all the surface coating operations over the 12-month rolling period. Monthly and rolling total HAP emission calculations for operations in EUG 2 shall be performed by the end of each month following the month in which the emissions were generated.

c. The emission rate with add-on controls option requires that monthly records demonstrate that the actual use of materials in any given coating operation or group of operations not exceed emissions of 2.6 lbs of organic HAP per gallon solid for all the surface coating operations over the 12-month rolling period. This calculation includes the emission reductions accomplished by the capture and control systems. To use this option, all systems must meet the operating limits required by 40 CFR 63.3892. Monthly and rolling total HAP emission calculations for operations in EUG 2 shall be performed by the end of each month following the month in which the emissions were generated.

d. The permittee shall comply with all applicable requirements and standards of 40 CFR Part 63 NESHAP Subpart MMMM, “Surface Coating of Miscellaneous Metal Parts and Products”. Compliance with 40 Part 63 NESHAP Subpart MMMM shall demonstrate compliance with the requirements of Subpart PPPP. [40 CFR Part 63 Subpart MMMM]

1. § 63.3880: What is the purpose of this subpart?
2. § 63.3881: Am I subject to this subpart?
3. § 63.3882: What parts of my plant does this subpart cover?
4. § 63.3883: When do I have to comply with this subpart?
5. § 63.3890: What emissions limits must I meet?
6. § 63.3891: What are my options for meeting the emissions limits?
7. § 63.3892: What operating limits must I meet?
8. § 63.3893: What work practice standards must I meet?
9. § 63.3900: What are my general requirements for complying with this subpart?
10. § 63.3901: What parts of the General Provisions apply to me?
11. § 63.3910: What notifications must I submit?
12. § 63.3920: What reports must I submit?
13. § 63.3930: What records must I keep?
14. § 63.3931: In what form and for how long must I keep my records?
15. § 63.3940: By what date must I conduct the initial compliance demonstration?
16. § 63.3941: How do I demonstrate initial compliance with the emissions limitations?
17. § 63.3942: How do I demonstrate continuous compliance with the emissions limitations?
18. § 63.3950: By what date must I conduct the initial compliance demonstration?
19. § 63.3951: How do I demonstrate continuous compliance with the emissions limitations?
20. § 63.3952: How do I demonstrate continuous compliance with the emissions limitations?
21. § 63.3960: By what date must I conduct performance tests and other initial compliance demonstrations?
22. § 63.3961: How do I demonstrate continuous compliance?
23. § 63.3962: (Reserved)
24. § 63.3963: How do I demonstrate continuous compliance with the emissions limitations?
25. § 63.3964: What are the general requirements for performance tests?
26. § 63.3965: How do I determine the emission capture system efficiency?
27. § 63.3966: How do I determine the add-on control device emission destruction or removal efficiency?
28. § 63.3967: How do I establish the emission capture system and add-on control device operating limits during the performance test?
29. § 63.3968: What are the requirements for continuous parameter monitoring system installation, operation, and maintenance?
30. § 63.3980: Who implements and enforces this subpart?
31. § 63.3981: What definitions apply to this subpart?

8. A performance test of the regenerative thermal oxidizer (RTO) shall be performed within 60 days of initial operation if the facility operates the RTO to achieve compliance with a permit limit. The test shall determine destructive efficiency of the unit at representative operating conditions. Sufficient production records shall be maintained that capture efficiency may also be determined. If capture efficiency cannot be determined, a value of 90%, slightly less than the level verified at the International Truck facility in Springfield, Ohio, will be used for emission inventory and monthly emission calculations. A protocol for the test, describing reference methods to be used, data to be collected, and proposed calculations, shall be provided to the DEQ at least 30 days

before the scheduled test date. Results of this test may be used for annual emission inventory and monthly emission calculations for the four spray booths that flow to the RTO. The capture and destruction efficiencies results of any subsequent tests shall be used in subsequent emissions inventory and monthly emission calculations consistent with the preceding sentences in this permit condition. If the facility wishes to demonstrate compliance with the standards of 40 CFR 63.3890 by using the add-on controls option of §63.3891(c), the performance test shall establish the parameters described in Table 1 of MACT MMMM, using the criteria of §63.3967(a) and §63.3968(a), (b), and (c). A summary of the results of any testing shall be provided to the ODEQ within 60 days of the test. [OAC 252:100-43]

9. Liquid and/or hazardous wastes from the facility, including varnishes, paints, and paint thinners, shall be disposed of in accordance with the requirements of the Oklahoma Solid Waste Management Act, the Oklahoma Hazardous Waste Management Act, and the federal Resource Conservation and Recovery Act, and rules and regulations promulgated therein. If credit is taken in the SC #2 & SC #7 emission calculations/records for a reduction in emissions due to the disposal of coating-related wastes, the waste/disposed of liquids shall be analyzed, and the results shall be recorded and shall show the VOC and HAP content. [OAC 252:100-43]

10. Insignificant Activities [OAC 252:8-6(a)(3)(b)]
Records sufficient to show that the following activities remain insignificant shall be maintained. Amounts of welding material used is sufficient for that category, and a calculation demonstrating that emissions are less than 5 TPY for the three combustion units marked with an asterisk is sufficient for that category. A change in method of operation or material used could alter the status of the other two categories, but no specific records are required to be maintained.

a. Four parts washers
b. Welding
c. Storage tanks (10,000 gal. diesel, 10,000 gal. antifreeze, and 5,000 gal. gasoline)
d. Combustion units; either less than 5 MMBTUH each, or with emissions less than 5 TPY.

Insignificant Combustion Activities

EU ID#	Description	Rating (MMBTUH)
Coating Ovens		
2	Interior cure oven	4.5
7	Exterior cure oven	2.2
13	Black stripe cure oven	3.0
15	Hood & cowl cure oven	3.3
Other		
4A&B, 6A&B&C*	Make up unit #1	6.5
9A&B, 10A&B&C*	Make up unit #2	6.5
General plant heat and others less than or equal to 5 MMBTUH each		
	All units	39.0

11. All records necessary to demonstrate compliance with permit conditions shall be maintained on-site or at a readily accessible location and shall be available during normal business hours. Records shall be retained for at least five years after their date of creation. Such records shall include, but are not necessarily limited to the following. [OAC 252:100-43]

a. The permittee shall maintain a current manufacturer's Material Safety Data Sheet or equivalent showing the chemical composition of all products that contain VOC and/or organic HAP. The VOC content of any coating as applied and as received shall be determined using manufacturer's formulation data unless otherwise specified by NSPS or EPA protocol. Upon a written request from Air Quality, compliance with the emission limitations shall be determined at the permittee's expense using Reference Method 24 as specified in 40 CFR Part 60, Appendix A. Note: the one-hour bake option is required. The data shall include the density of the material and the weight percent of each constituent.
b. Sufficient records to show that insignificant activities (SC #10) remain insignificant.
c. Data and calculations demonstrating compliance with the 12-month rolling VOC limit described in SC #2a, the monthly VOC limit of SC #2b, and the annual fuel consumption limit of SC #2c.
d. Records sufficient to demonstrate compliance with the VOC pound per gallon limit of Subchapter 39, per SC#5.
e. Records sufficient to demonstrate compliance with the organic HAP per gallon of solids limit of MACT Subpart MMMM, per SC#7.
f. Records of VOC disposal sufficient to satisfy the requirements of SC#10.
g. Records of performance testing required by SC#8.
h. A copy of the document used to assure compliance as required by SC#3.
i. Records to demonstrate compliance with NESHAP Subpart ZZZZ, per SC#15.
j. Records to demonstrate compliance with NSPS Subpart JJJJ, per SC#16.
k. Records of operating hours (monthly and 12-month rolling totals) of and maintenance for each emergency engine in EUG 6 to demonstrate compliance with SC#1 and SC#2d.
l. Records as required by 40 CFR Part 64 for the RTO.
m. Records of hours of operation of the RTO (monthly and 5-year averages).

12. No later than 30 days after each anniversary date of the issuance of the original Title V permit October 14, 2003), the permittee shall submit to the Air Quality Division of ODEQ, with a copy to the US EPA, Region 6, certification of compliance with the terms and conditions of this permit.
[OAC 252:100-8-6 (c)(5)(A) & (D)]

13. The Permit Shield (Standard Conditions, Section VI) is extended to the following requirements that have been determined to be inapplicable to this facility.
[OAC 252:100-8-6(d)(2)]

OAC 252:100-7	Minor Sources	not type of facility
OAC 252:100-11	Alternative Emissions Reduction	not requested
OAC 252:100-15	Mobile Sources	not in source category
OAC 252:100-17	Incinerators	not type of emission unit
OAC 252:100-23	Cotton Gins	not type of emission unit
OAC 252:100-24	Feed & Grain Facility	not in source category
OAC 252:100-47	Landfills	not in source category

14. The facility will be subject to 40 CFR 64 Compliance Assurance Monitoring (CAM) upon a production increase that requires RTO control of emissions, such that the emissions from **EUG 2** remain below the limit specified in SC #2. The RTO will control emissions from the Interior Spray, Prime Spray, Exterior Auto Spray, and Black Stripe Spray emission units.
[40 CFR Part 64]

Emission Unit: EUG2 Paint Booths: The 4 booths which feed the RTO / Bypass Point.

	Indicator No. 1
I. Indicator	Combustion chamber outlet temperature
Measurement Approach	The combustion chamber outlet temperature shall be monitored using a thermocouple.
II. Indicator Range	An excursion shall be defined as a temperature reading less than 1,500ºF*. An excursion shall trigger an inspection, corrective action, and reporting in accordance with OAC 252:100-9.
QIP Threshold	No more than six excursions below 1,500 ºF in a contiguous six-month period shall be allowed without development and implementation of a QIP meeting the req. of § 64.8(b) through (e).
III. Performance Criteria A. Data Representativeness	The thermocouple shall be located at the outlet of the TO combustion chamber. The minimum tolerance of the thermocouple shall not exceed ±4 ºF. The minimum recorder sensitivity (minor division) shall not exceed 20 ºF.
B. Verification of Operational Status	Not applicable
C. QA/QC Practices and Criteria	Accuracy of the thermocouple shall be verified by a second, or redundant, thermocouple probe inserted into the outlet of the combustion chamber with a hand held meter that has been calibrated. This validation check shall be performed at least annually. The acceptance criterion is within ±30 ºF.
D. Monitoring Frequency	The temperature shall be measured continuously (once every fifteen seconds) with a minimum data availability of 90%.
Data Collection Procedures	The temperature shall be recorded at least every 15 minutes when operating
Averaging period	3 hours

***Or average combustion temperature of the RTO from most recent performance test.**

15. The permittee shall comply with all applicable requirements of 40 CFR 63 Subpart ZZZZ, a MACT standard for Reciprocating Internal Combustion Engines (RICE), including but not necessarily limited to the following. [40 CFR Part 63 Subpart ZZZZ]

a. What This Subpart Covers
§63.6580, §63.6585, §63.6590, §63.6595
b. Emission and Operating Limitations
§63.6600, §63.6601, §63.6602, §63.6603, §63.6604
c. General Compliance Requirements
§63.6605
d. Testing and Initial Compliance Requirements
§63.6610, §63.6611, §63.6612, §63.6615 , §63.6620, §63.6625, §63.6630
e. Continuous Compliance Requirements
§63.6635, §63.6640
f. Notifications, Reports, and Records
§63.6645, §63.6650, §63.6655, §63.6660
g. Other Requirements and Information
§63.6665, §63.6670, §63.6675

16. The 82-hp and 228-hp emergency generator engines of EUG 6 are subject to 40 CFR 60 Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. The permittee shall comply with all applicable requirements including but not necessarily limited to the following. [40 CFR 60 Subpart JJJJ]

a. What This Subpart Covers
   §60.4230
b. Emission Standards for Owners and Operators
   §60.4233, §60.4234
c. Other Requirements for Owners and Operators
   §60.4235, §60.4236, §60.4237
d. Compliance Requirements for Owners and Operators
   §60.4243
e. Testing Requirements for Owners and Operators
   §60.4244
f. Notification, Reports, and Records for Owners and Operators
   §60.4245
g. General Provisions
   §60.4246
h. Definitions
   §60.4248

17. Performance testing for various pollutants shall be performed as specified following if the facility operates the RTO to achieve compliance with a permit limit. In the event that continuous emissions monitoring (CEMs) equipment is installed on any vent, RATA testing of the CEMs shall demonstrate compliance with this Specific Condition. [OAC 252:100-8-6 (a)(3)(A) and OAC 252:100-43]

A. Performance testing by the permittee shall use the following test methods specified in 40 CFR 60.

   Method 1: Sample and Velocity Traverses for Stationary Sources.
   Method 2: Determination of Stack Gas Velocity and Volumetric Flow Rate.
   Method 3: Gas Analysis for Carbon Dioxide, Excess Air, and Dry Molecular Weight.
   Method 4: Determination of Moisture in Stack Gases.
   Method 25A: Determination of VOC Emissions from Stationary Sources

B. A copy of the test plan shall be provided to AQD at least 30 days prior to each test date.

C. Performance testing shall be conducted on the following schedule:

EU	Point ID	Name/Model	Pollutants Tested	Testing Frequency
RTO	36 / 37	RTO	VOC	If operated more than 1,000 hours in any 5-year block period*

* the five year block period begins upon issuance of this permit

D. Method 25A testing shall be performed at both the inlet and outlet of the RTO to demonstrate control efficiency.

18. This permit supersedes all previous Air Quality operating permits for this facility which are now cancelled.

Connie Odom, Environmental Specialist Lead
IC of Oklahoma, LLC
2322 North Mingo Road
Tulsa, Oklahoma 74116

Re: Operating Permit Number **2020-0216-TVR3**
Tulsa Bus Manufacturing Plant (FAC ID 4291)

Dear Ms. Odom:

Enclosed is the permit authorizing operation of the referenced facility. Please note that this permit is issued subject to certain standard and specific conditions, which 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. If you have any questions, please refer to the permit number above and contact the permit writer at (405) 702-4198.

Sincerely,

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

Enclosures

PART 70 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. 2020-0216-TVR3

IC of Oklahoma, LLC,

having complied with the requirements of the law, is hereby granted permission to operate the bus manufacturing plant located at 2322 North Mingo Road, Tulsa, Oklahoma, subject to standard conditions dated June 21, 2016, and specific conditions, both attached

This permit shall expire five (5) years from the issuance date below, except as authorized under Section VIII of the Standard Conditions.

Director, Air Quality Division **Date**

MAJOR SOURCE AIR QUALITY PERMIT
STANDARD CONDITIONS
(June 21, 2016)

SECTION I. DUTY TO COMPLY

A. This is a permit to operate / construct this specific facility in accordance with the federal Clean Air Act (42 U.S.C. 7401, et al.) and under the authority of the Oklahoma Clean Air Act and the rules promulgated there under. [Oklahoma Clean Air Act, 27A O.S. § 2-5-112]

B. The issuing Authority for the permit is the Air Quality Division (AQD) of the Oklahoma Department of Environmental Quality (DEQ). The permit does not relieve the holder of the obligation to comply with other applicable federal, state, or local statutes, regulations, rules, or ordinances. [Oklahoma Clean Air Act, 27A O.S. § 2-5-112]

C. The permittee shall comply with all conditions of this permit. Any permit noncompliance shall constitute a violation of the Oklahoma Clean Air Act and shall be grounds for enforcement action, permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application. All terms and conditions are enforceable by the DEQ, by the Environmental Protection Agency (EPA), and by citizens under section 304 of the Federal Clean Air Act (excluding state-only requirements). This permit is valid for operations only at the specific location listed.

[40 C.F.R. §70.6(b), OAC 252:100-8-1.3 and OAC 252:100-8-6(a)(7)(A) and (b)(1)]

D. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in assessing penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continuing operations. [OAC 252:100-8-6(a)(7)(B)]

SECTION II. REPORTING OF DEVIATIONS FROM PERMIT TERMS

A. Any exceedance resulting from an emergency and/or posing an imminent and substantial danger to public health, safety, or the environment shall be reported in accordance with Section XIV (Emergencies). [OAC 252:100-8-6(a)(3)(C)(iii)(I) & (II)]

B. 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 252:100-8-6(a)(3)(C)(iv)]

C. Every written report submitted under this section shall be certified as required by Section III (Monitoring, Testing, Recordkeeping & Reporting), Paragraph F.

[OAC 252:100-8-6(a)(3)(C)(iv)]

SECTION III. MONITORING, TESTING, RECORDKEEPING & REPORTING

A. The permittee shall keep records as specified in this permit. These records, including monitoring data and necessary support information, shall be retained on-site or at a nearby field office for a period of at least five years from the date of the monitoring sample, measurement, report, or application, and shall be made available for inspection by regulatory personnel upon request. Support information includes all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Where appropriate, the permit may specify that records may be maintained in computerized form.

[OAC 252:100-8-6 (a)(3)(B)(ii), OAC 252:100-8-6(c)(1), and OAC 252:100-8-6(c)(2)(B)]

B. Records of required monitoring shall include:

(1) the date, place and time of sampling or measurement;
(2) the date or dates analyses were performed;
(3) the company or entity which performed the analyses;
(4) the analytical techniques or methods used;
(5) the results of such analyses; and
(6) the operating conditions existing at the time of sampling or measurement.

[OAC 252:100-8-6(a)(3)(B)(i)]

C. No later than 30 days after each six (6) month period, after the date of the issuance of the original Part 70 operating permit or alternative date as specifically identified in a subsequent Part 70 operating permit, the permittee shall submit to AQD a report of the results of any required monitoring. All instances of deviations from permit requirements since the previous report shall be clearly identified in the report. Submission of these periodic reports will satisfy any reporting requirement of Paragraph E below that is duplicative of the periodic reports, if so noted on the submitted report. [OAC 252:100-8-6(a)(3)(C)(i) and (ii)]

D. If any testing shows emissions in excess of limitations specified in this permit, the owner or operator shall comply with the provisions of Section II (Reporting Of Deviations From Permit Terms) of these standard conditions. [OAC 252:100-8-6(a)(3)(C)(iii)]

E. In addition to any monitoring, recordkeeping or reporting requirement specified in this permit, monitoring and reporting may be required under the provisions of OAC 252:100-43, Testing, Monitoring, and Recordkeeping, or as required by any provision of the Federal Clean Air Act or Oklahoma Clean Air Act. [OAC 252:100-43]

F. Any Annual Certification of Compliance, Semi Annual Monitoring and Deviation Report, Excess Emission Report, and Annual Emission Inventory submitted in accordance with this permit shall be certified by a responsible official. This certification shall be signed by a responsible official, and shall contain the following language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete."

[OAC 252:100-8-5(f), OAC 252:100-8-6(a)(3)(C)(iv), OAC 252:100-8-6(c)(1), OAC 252:100-9-7(e), and OAC 252:100-5-2.1(f)]

G. Any owner or operator subject to the provisions of New Source Performance Standards ("NSPS") under 40 CFR Part 60 or National Emission Standards for Hazardous Air Pollutants ("NESHAPs") under 40 CFR Parts 61 and 63 shall maintain a file of all measurements and other information required by the applicable general provisions and subpart(s). These records shall be maintained in a permanent file suitable for inspection, shall be retained for a period of at least five years as required by Paragraph A of this Section, and shall include records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of an affected facility, any malfunction of the air pollution control equipment; and any periods during which a continuous monitoring system or monitoring device is inoperative.

[40 C.F.R. §§60.7 and 63.10, 40 CFR Parts 61, Subpart A, and OAC 252:100, Appendix Q]

H. The permittee of a facility that is operating subject to a schedule of compliance shall submit to the DEQ a progress report at least semi-annually. The progress reports shall contain dates for achieving the activities, milestones or compliance required in the schedule of compliance and the dates when such activities, milestones or compliance was achieved. The progress reports shall also contain an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted. [OAC 252:100-8-6(c)(4)]

I. All testing must be conducted under the direction of qualified personnel by methods approved by the Division Director. All tests shall be made and the results calculated in accordance with standard test procedures. The use of alternative test procedures must be approved by EPA. When a portable analyzer is used to measure emissions it shall be setup, calibrated, and operated in accordance with the manufacturer's instructions and in accordance with a protocol meeting the requirements of the "AQD Portable Analyzer Guidance" document or an equivalent method approved by Air Quality.

[OAC 252:100-8-6(a)(3)(A)(iv), and OAC 252:100-43]

J. The reporting of total particulate matter emissions as required in Part 7 of OAC 252:100-8 (Permits for Part 70 Sources), OAC 252:100-19 (Control of Emission of Particulate Matter), and OAC 252:100-5 (Emission Inventory), shall be conducted in accordance with applicable testing or calculation procedures, modified to include back-half condensables, for the concentration of particulate matter less than 10 microns in diameter (PM_{10}). NSPS may allow reporting of only particulate matter emissions caught in the filter (obtained using Reference Method 5).

K. The permittee shall submit to the AQD a copy of all reports submitted to the EPA as required by 40 C.F.R. Part 60, 61, and 63, for all equipment constructed or operated under this permit subject to such standards. [OAC 252:100-8-6(c)(1) and OAC 252:100, Appendix Q]

SECTION IV. COMPLIANCE CERTIFICATIONS

A. No later than 30 days after each anniversary date of the issuance of the original Part 70 operating permit or alternative date as specifically identified in a subsequent Part 70 operating permit, the permittee shall submit to the AQD, with a copy to the US EPA, Region 6, a certification of compliance with the terms and conditions of this permit and of any other applicable requirements which have become effective since the issuance of this permit.

[OAC 252:100-8-6(c)(5)(A), and (D)]

B. The compliance certification shall describe the operating permit term or condition that is the basis of the certification; the current compliance status; whether compliance was continuous or intermittent; the methods used for determining compliance, currently and over the reporting period. The compliance certification shall also include such other facts as the permitting authority may require to determine the compliance status of the source. [OAC 252:100-8-6(c)(5)(C)(i)-(v)]

C. The compliance certification shall contain a certification by a responsible official as to the results of the required monitoring. This certification shall be signed by a responsible official, and shall contain the following language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete." [OAC 252:100-8-5(f) and OAC 252:100-8-6(c)(1)]

D. Any facility reporting noncompliance shall submit a schedule of compliance for emissions units or stationary sources that are not in compliance with all applicable requirements. This schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable requirements for which the emissions unit or stationary source is in noncompliance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the emissions unit or stationary source is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based, except that a compliance plan shall not be required for any noncompliance condition which is corrected within 24 hours of discovery.
[OAC 252:100-8-5(e)(8)(B) and OAC 252:100-8-6(c)(3)]

SECTION V. REQUIREMENTS THAT BECOME APPLICABLE DURING THE PERMIT TERM

The permittee shall comply with any additional requirements that become effective during the permit term and that are applicable to the facility. Compliance with all new requirements shall be certified in the next annual certification. [OAC 252:100-8-6(c)(6)]

SECTION VI. PERMIT SHIELD

A. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC 252:100-8) shall be deemed compliance with the applicable requirements identified and included in this permit. [OAC 252:100-8-6(d)(1)]

B. Those requirements that are applicable are listed in the Standard Conditions and the Specific Conditions of this permit. Those requirements that the applicant requested be determined as not applicable are summarized in the Specific Conditions of this permit. [OAC 252:100-8-6(d)(2)]

SECTION VII. ANNUAL EMISSIONS INVENTORY & FEE PAYMENT

The permittee shall file with the AQD an annual emission inventory and shall pay annual fees based on emissions inventories. The methods used to calculate emissions for inventory purposes shall be based on the best available information accepted by AQD.
[OAC 252:100-5-2.1, OAC 252:100-5-2.2, and OAC 252:100-8-6(a)(8)]

SECTION VIII. TERM OF PERMIT

A. Unless specified otherwise, the term of an operating permit shall be five years from the date of issuance. [OAC 252:100-8-6(a)(2)(A)]

B. A source's right to operate shall terminate upon the expiration of its permit unless a timely and complete renewal application has been submitted at least 180 days before the date of expiration. [OAC 252:100-8-7.1(d)(1)]

C. A duly issued construction permit or authorization to construct or modify will terminate and become null and void (unless extended as provided in OAC 252:100-8-1.4(b)) 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 252:100-8-1.4(a)]

D. 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 252:100-8-4(b)(5)]

SECTION IX. SEVERABILITY

The provisions of this permit are severable and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
[OAC 252:100-8-6 (a)(6)]

SECTION X. PROPERTY RIGHTS

A. This permit does not convey any property rights of any sort, or any exclusive privilege.
[OAC 252:100-8-6(a)(7)(D)]

B. This permit shall not be considered in any manner affecting the title of the premises upon which the equipment is located and does not release the permittee from any liability for damage to persons or property caused by or resulting from the maintenance or operation of the equipment for which the permit is issued. [OAC 252:100-8-6(c)(6)]

SECTION XI. DUTY TO PROVIDE INFORMATION

A. The permittee shall furnish to the DEQ, upon receipt of a written request and within sixty (60) days of the request unless the DEQ specifies another time period, any information that the DEQ may request to determine whether cause exists for modifying, reopening, revoking, reissuing,

terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permit.
[OAC 252:100-8-6(a)(7)(E)]

B. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 27A O.S. § 2-5-105(18). Confidential information shall be clearly labeled as such and shall be separable from the main body of the document such as in an attachment.
[OAC 252:100-8-6(a)(7)(E)]

C. Notification to the AQD of the sale or transfer of ownership of this facility is required and shall be made in writing within thirty (30) days after such sale or transfer.
[Oklahoma Clean Air Act, 27A O.S. § 2-5-112(G)]

SECTION XII. REOPENING, MODIFICATION & REVOCATION

A. The permit may be modified, revoked, reopened and reissued, or terminated for cause. Except as provided for minor permit modifications, the filing of a request by the permittee for a permit modification, revocation and reissuance, termination, notification of planned changes, or anticipated noncompliance does not stay any permit condition.
[OAC 252:100-8-6(a)(7)(C) and OAC 252:100-8-7.2(b)]

B. The DEQ will reopen and revise or revoke this permit prior to the expiration date in the following circumstances: [OAC 252:100-8-7.3 and OAC 252:100-8-7.4(a)(2)]

(1) Additional requirements under the Clean Air Act become applicable to a major source category three or more years prior to the expiration date of this permit. No such reopening is required if the effective date of the requirement is later than the expiration date of this permit.
(2) The DEQ or the EPA determines that this permit contains a material mistake or that the permit must be revised or revoked to assure compliance with the applicable requirements.
(3) The DEQ or the EPA determines that inaccurate information was used in establishing the emission standards, limitations, or other conditions of this permit. The DEQ may revoke and not reissue this permit if it determines that the permittee has submitted false or misleading information to the DEQ.
(4) DEQ determines that the permit should be amended under the discretionary reopening provisions of OAC 252:100-8-7.3(b).

C. The permit may be reopened for cause by EPA, pursuant to the provisions of OAC 100-8-7.3(d). [OAC 100-8-7.3(d)]

D. The permittee shall notify AQD before making changes other than those described in Section XVIII (Operational Flexibility), those qualifying for administrative permit amendments, or those defined as an Insignificant Activity (Section XVI) or Trivial Activity (Section XVII). The notification should include any changes which may alter the status of a "grandfathered source," as defined under AQD rules. Such changes may require a permit modification.
[OAC 252:100-8-7.2(b) and OAC 252:100-5-1.1]

E. Activities that will result in air emissions that exceed the trivial/insignificant levels and that are not specifically approved by this permit are prohibited. [OAC 252:100-8-6(c)(6)]

SECTION XIII. INSPECTION & ENTRY

A. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized regulatory officials to perform the following (subject to the permittee's right to seek confidential treatment pursuant to 27A O.S. Supp. 1998, § 2-5-105(17) for confidential information submitted to or obtained by the DEQ under this section):

(1) enter upon the permittee's premises during reasonable/normal working hours where a source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
(2) have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
(3) inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
(4) as authorized by the Oklahoma Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit.

[OAC 252:100-8-6(c)(2)]

SECTION XIV. EMERGENCIES

A. Any exceedance resulting from an emergency shall be reported to AQD promptly but no later than 4:30 p.m. on the next working day after the permittee first becomes aware of the exceedance. This notice shall contain a description of the emergency, the probable cause of the exceedance, any steps taken to mitigate emissions, and corrective actions taken.

[OAC 252:100-8-6 (a)(3)(C)(iii)(I) and (IV)]

B. Any exceedance that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to AQD as soon as is practicable; but under no circumstance shall notification be more than 24 hours after the exceedance. [OAC 252:100-8-6(a)(3)(C)(iii)(II)]

C. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. [OAC 252:100-8-2]

D. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that: [OAC 252:100-8-6 (e)(2)]

(1) an emergency occurred and the permittee can identify the cause or causes of the emergency;

(2) the permitted facility was at the time being properly operated;
(3) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit.

E. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [OAC 252:100-8-6(e)(3)]

F. Every written report or document submitted under this section shall be certified as required by Section III (Monitoring, Testing, Recordkeeping & Reporting), Paragraph F.
[OAC 252:100-8-6(a)(3)(C)(iv)]

SECTION XV. RISK MANAGEMENT PLAN

The permittee, if subject to the provision of Section 112(r) of the Clean Air Act, shall develop and register with the appropriate agency a risk management plan by June 20, 1999, or the applicable effective date. [OAC 252:100-8-6(a)(4)]

SECTION XVI. INSIGNIFICANT ACTIVITIES

Except as otherwise prohibited or limited by this permit, the permittee is hereby authorized to operate individual emissions units that are either on the list in Appendix I to OAC Title 252, Chapter 100, or whose actual calendar year emissions do not exceed any of the limits below. Any activity to which a State or Federal applicable requirement applies is not insignificant even if it meets the criteria below or is included on the insignificant activities list.

(1) 5 tons per year of any one criteria pollutant.
(2) 2 tons per year for any one hazardous air pollutant (HAP) or 5 tons per year for an aggregate of two or more HAP's, or 20 percent of any threshold less than 10 tons per year for single HAP that the EPA may establish by rule.
[OAC 252:100-8-2 and OAC 252:100, Appendix I]

SECTION XVII. TRIVIAL ACTIVITIES

Except as otherwise prohibited or limited by this permit, the permittee is hereby authorized to operate any individual or combination of air emissions units that are considered inconsequential and are on the list in Appendix J. Any activity to which a State or Federal applicable requirement applies is not trivial even if included on the trivial activities list.
[OAC 252:100-8-2 and OAC 252:100, Appendix J]

SECTION XVIII. OPERATIONAL FLEXIBILITY

A. A facility may implement any operating scenario allowed for in its Part 70 permit without the need for any permit revision or any notification to the DEQ (unless specified otherwise in the permit). When an operating scenario is changed, the permittee shall record in a log at the facility the scenario under which it is operating. [OAC 252:100-8-6(a)(10) and (f)(1)]

B. The permittee may make changes within the facility that:

(1) result in no net emissions increases,
(2) are not modifications under any provision of Title I of the federal Clean Air Act, and
(3) do not cause any hourly or annual permitted emission rate of any existing emissions unit to be exceeded;

provided that the facility provides the EPA and the DEQ with written notification as required below in advance of the proposed changes, which shall be a minimum of seven (7) days, or twenty four (24) hours for emergencies as defined in OAC 252:100-8-6 (e). The permittee, the DEQ, and the EPA shall attach each such notice to their copy of the permit. For each such change, the written notification required above shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change. The permit shield provided by this permit does not apply to any change made pursuant to this paragraph. [OAC 252:100-8-6(f)(2)]

SECTION XIX. OTHER APPLICABLE & STATE-ONLY REQUIREMENTS

A. The following applicable requirements and state-only requirements apply to the facility unless elsewhere covered by a more restrictive requirement:

(1) 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]

(2) No particulate emissions from any fuel-burning equipment with a rated heat input of 10 MMBTUH or less shall exceed 0.6 lb/MMBTU. [OAC 252:100-19]

(3) For all emissions units not subject to an opacity limit promulgated under 40 C.F.R., Part 60, NSPS, no discharge of greater than 20% opacity is allowed except for: [OAC 252:100-25]

(a) 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;
(b) Smoke resulting from fires covered by the exceptions outlined in OAC 252:100-13-7;
(c) An emission, where the presence of uncombined water is the only reason for failure to meet the requirements of OAC 252:100-25-3(a); or
(d) Smoke generated due to a malfunction in a facility, when the source of the fuel producing the smoke is not under the direct and immediate control of the facility and the immediate constriction of the fuel flow at the facility would produce a hazard to life and/or property.

(4) 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]

(5) No sulfur oxide emissions from new gas-fired fuel-burning equipment shall exceed 0.2 lb/MMBTU. No existing source shall exceed the listed ambient air standards for sulfur dioxide. [OAC 252:100-31]

(6) 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 a vapor-recovery system. [OAC 252:100-37-15(b)]

(7) 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]

SECTION XX. STRATOSPHERIC OZONE PROTECTION

A. The permittee shall comply with the following standards for production and consumption of ozone-depleting substances: [40 CFR 82, Subpart A]

(1) Persons producing, importing, or placing an order for production or importation of certain class I and class II substances, HCFC-22, or HCFC-141b shall be subject to the requirements of §82.4;
(2) Producers, importers, exporters, purchasers, and persons who transform or destroy certain class I and class II substances, HCFC-22, or HCFC-141b are subject to the recordkeeping requirements at §82.13; and
(3) Class I substances (listed at Appendix A to Subpart A) include certain CFCs, Halons, HBFCs, carbon tetrachloride, trichloroethane (methyl chloroform), and bromomethane (Methyl Bromide). Class II substances (listed at Appendix B to Subpart A) include HCFCs.

B. If the permittee performs a service on motor (fleet) vehicles when this service involves an ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all applicable requirements. Note: The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC-22 refrigerant. [40 CFR 82, Subpart B]

C. The permittee shall comply with the following standards for recycling and emissions reduction except as provided for MVACs in Subpart B: [40 CFR 82, Subpart F]

(1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156;
(2) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158;

(3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161;
(4) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record-keeping requirements pursuant to § 82.166;
(5) Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to § 82.158; and
(6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

SECTION XXI. TITLE V APPROVAL LANGUAGE

A. DEQ wishes to reduce the time and work associated with permit review and, wherever it is not inconsistent with Federal requirements, to provide for incorporation of requirements established through construction permitting into the Source's Title V permit without causing redundant review. Requirements from construction permits may be incorporated into the Title V permit through the administrative amendment process set forth in OAC 252:100-8-7.2(a) only if the following procedures are followed:

(1) The construction permit goes out for a 30-day public notice and comment using the procedures set forth in 40 C.F.R. § 70.7(h)(1). This public notice shall include notice to the public that this permit is subject to EPA review, EPA objection, and petition to EPA, as provided by 40 C.F.R. § 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.
(2) A copy of the construction permit application is sent to EPA, as provided by 40 CFR § 70.8(a)(1).
(3) A copy of the draft construction permit is sent to any affected State, as provided by 40 C.F.R. § 70.8(b).
(4) A copy of the proposed construction permit is sent to EPA for a 45-day review period as provided by 40 C.F.R.§ 70.8(a) and (c).
(5) The DEQ complies with 40 C.F.R. § 70.8(c) upon the written receipt within the 45-day comment period of any EPA objection to the construction permit. The DEQ shall not issue the permit until EPA's objections are resolved to the satisfaction of EPA.
(6) The DEQ complies with 40 C.F.R. § 70.8(d).
(7) A copy of the final construction permit is sent to EPA as provided by 40 CFR § 70.8(a).
(8) The DEQ shall not issue the proposed construction permit until any affected State and EPA have had an opportunity to review the proposed permit, as provided by these permit conditions.
(9) Any requirements of the construction permit may be reopened for cause after incorporation into the Title V permit by the administrative amendment process, by DEQ as provided in OAC 252:100-8-7.3(a), (b), and (c), and by EPA as provided in 40 C.F.R. § 70.7(f) and (g).

(10) The DEQ shall not issue the administrative permit amendment if performance tests fail to demonstrate that the source is operating in substantial compliance with all permit requirements.

B. To the extent that these conditions are not followed, the Title V permit must go through the Title V review process.

SECTION XXII. CREDIBLE EVIDENCE

For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any provision of the Oklahoma implementation plan, 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. [OAC 252:100-43-6]

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
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
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

IC of Oklahoma, LLC.
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2322 North Mingo Road
Tulsa, OK 74116

Permit Number: 2020-0216-TVR2
Permit Writer: David Schutz
Date: May 18, 2022

SUBJECT: IC of Oklahoma, LLC
Tulsa Bus Manufacturing Plant (FAC ID 4291)
2322 North Mingo Road, Tulsa, Oklahoma

Dear Ms. Odom:

Air Quality Division has completed the initial review of your permit application referenced above. This application has been determined to be a **Tier II**. In accordance with 27A O.S. § 2-14-302 and OAC 252:002-31 the enclosed draft permit is now ready for public review. The requirements for public review 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. Submit sample notice and provide date of publication to **AQD 5 days prior to notice publishing;**
3. 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;
4. Send AQD a signed affidavit of publication for the notice(s) from Item #1 above within 20 days of publication of the draft permit. Any additional comments or requested changes you have for the draft permit or the application should be submitted within 30 days of publication.

Thank you for your cooperation. If you have any questions, please refer to the permit number above and contact me or the permit writer at (405) 702-4100.

Sincerely,

Phillip Fielder

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

Enclosures

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. Note that if either the applicant or the public requests a public meeting, this must be arranged by the DEQ.

1. Complete the public notice using the samples provided by AQD below. Please use the version applicable to the requested permit action;
   Version 1 – Traditional NSR process for a construction permit
   Version 2 – Enhanced NSR process for a construction permit
   Version 3 – initial Title V (Part 70 Source) operating permit, Title V operating permit renewal, Significant Modification to a Title V operating permit, and any Title V operating permit modification incorporating a construction permit that followed Traditional NSR process
2. Determine appropriate newspaper local to facility for publishing;
3. Submit sample notice and provide date of publication to AQD 5 days prior to notice publishing;
4. Upon publication, a signed affidavit of publication must be obtained from the newspaper and sent to AQD.

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 (a location in the county where the site/facility is located must be included);
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 new major facility or construction permit for a modification at an existing 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 construction permit [modification] (Permit Number: *…xxxx-xxxx-x…***), which may be reviewed at** *…locations (one must be in the county where the site/facility is located)…* **or at the Air Quality Division's main office (see address below). The draft permit is also available for review under Permits for Public Review on the DEQ 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))***.** [For facility modifications only, either add the phrase**: , which represents** (*identify the emissions change involved in the modification)***.**, or add the sentence: **The modification will not result in a change in emissions.**] [For PSD permits only, add**: The project will consume the following increment levels:** *(list the amount of increment consumption for each pollutant in ug/m^3).*]

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 or as directed through the corresponding online notice. [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 staff.**

Information on all permit actions including draft permits, proposed permits, final issued permits and applicable review timelines are available in the Air Quality section of the DEQ Web page: https://www.deq.ok.gov/.

For additional information, contact *…names, addresses and telephone numbers of contact persons for the applicant,* **or contact DEQ at: Chief Engineer, Air Quality Division, 707 N. Robinson, Suite 4100, P.O. Box 1677, Oklahoma City, OK, 73101-1677.Phone No. (405) 702-4100.**

Scott A. Thompson
Executive Director

OKLAHOMA
Environmental
Quality

Kevin Stitt
Governor

SCOTT A. THOMPSON
Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

KEVIN STITT
Governor

May 18, 2022

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

Re: Permit Application No. **2020-0216-TVR3**
IC of Oklahoma, LLC
Tulsa Bus Manufacturing Plant (FAC ID 4291)
2322 North Mingo Road, Tulsa, Oklahoma
Date Received: June 28, 2020

Dear Mr. Hoskin:

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,

Phillip Fielder

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

May 18, 2022

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

Re: Permit Application No. **2020-0216-TVR3**
IC of Oklahoma, LLC
Tulsa Bus Manufacturing Plant (FAC ID 4291)
2322 North Mingo Road, Tulsa, Oklahoma
Date Received: June 28, 2020

Dear Mr. Hoskin:

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

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Sincerely,

Phillip Fielder

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