

**DRAFT**

**OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION**

**MEMORANDUM**

**May 23, 2016**

**TO:** Phillip Fielder, P.E., Permits and Engineering Group Manager

**THROUGH:** Rick Groshong, Environmental Programs Manager

**THROUGH:** Phil Martin, P.E., Existing Source Permits Section Manager

**THROUGH:** Peer Review

**FROM:** Anthony Maxwell, Regional Office at Tulsa (ROAT)

**SUBJECT:** Evaluation of Permit Application No. **2014-2280-TVR**  
Trinity Containers, LLC  
Tulsa Plant 1609 (FAC ID 6426)  
SE/4 NE/4 Sec. 27 – T20N – R14E, Rogers County  
Latitude 36.185°N, Longitude 95.805°W  
15300 Tiger Switch Road, Tulsa, Oklahoma  
Driving directions: From the intersection of East Skelly Drive and North 165<sup>th</sup> East Avenue, east of Tulsa (Exit 238 off I-44), go west 0.2 mile on Skelly, go north 1.75 miles on 161<sup>st</sup> E. Avenue, go west 0.6 mile on Tiger Switch Road to facility entrance on left (south at 36.18810°N, 95.80850°W).

**SECTION I. INTRODUCTION**

Trinity Tank Car, Inc. has been operating the Tulsa Manufacturing Plant 1594 under 2009-013-TV (M-4), issued December 3, 2013. Trinity Containers, LLC (applicant) has acquired the manufacturing plant and has renamed it Tulsa Plant 1609 (facility). The applicant requests a renewal of the operating permit for the facility. No changes are made in method of operation at the facility. The applicant removed a 40-MMBTUH stress relief oven that was previously identified in Emissions Unit Group 3 (EUG 3). The memorandum is updated where appropriate. Permit limits are retained.

**SECTION II. PROCESS DESCRIPTION**

The facility manufactures wind generator support towers and industrial storage tanks from metal plate (SIC 3443). Both of these items have similar manufacturing processes consisting of cutting and rolling sheet steel into cylinder segments, welding the segments together, and applying a finish coating. Wind generator support towers are fabricated into three cylindrical sections or segments that are approximately 80' long each. When bolted together, the tower diameter is 15' at the bottom tapered to 8' at the top, and its height is 240' tall.

### Structural Fabrication

Flat sheets of steel are received at the facility. The sheets are 10' by 40', ranging in thickness from 3/8" to 1". The sheets are cut to necessary dimensions using plasma torches. Sheets are then cleaned using an enclosed shot blasting process, then rolled to form segments of a truncated cone. The segments are welded together using submerged arc welding (SAW). Fittings and other attachments are welded to the interiors of the tower segments using MIG (consumable electrode) welding.

### Coating Processes

The metal surfaces are first cleaned using a pneumatic grit blasting process. The flange rings for bolting the 80' segments together are then coated with a molten zinc spray ("metalizing"). The 80' long tower segments are coated for appearance and corrosion resistance. Items are coated in one of four paint spray booths, and each is equipped with a natural gas-fired heater for curing paint. An undercoat of epoxy and a topcoat of urethane are applied to each section using hand-held airless spray guns with a stated transfer efficiency of 75%.

## SECTION III. EQUIPMENT

There are many small items that are not listed in any of the specific emission unit groups (EUGs), such as welding equipment and plasma torches.

### EUG 1 Facility-wide

This emission unit group is facility-wide. It includes all emission units and is established to discuss the applicability of those rules or compliance demonstrations that may affect all sources within the facility.

### EUG 2 Spray Booths

Each spray booth is indicated in the below table with approximate dimensions. Each booth is equipped with a natural gas-fired paint cure heater and particulate filter. The single largest heat input of the four paint cure heaters is conservatively assumed for each.

| EU ID | Booth Dimensions    | Description             | Paint Cure Heater |
|-------|---------------------|-------------------------|-------------------|
| EP-01 | 32'W × 17'H × 134'L | South Bay Spray Booth 1 | 4.95 MMBTUH       |
| EP-02 | 16'W × 19'H × 128'L | North Bay Spray Booth 2 | 4.95 MMBTUH       |
| EP-03 | 16'W × 19'H × 128'L | Spray Booth 3           | 4.95 MMBTUH       |
| EP-04 | 20'W × 18'H × 144'L | High Bay Spray Booth 4  | 4.95 MMBTUH       |

### EUG 3 (Reserved)

No equipment items are currently identified in this emissions unit group, and it is currently held in reserve for any future equipment items as necessary.

### Insignificant Activities

The facility identified several insignificant activities in their original application, including the following.

- Space heaters, boilers, process heaters, and emergency flares less than or equal to 5

MMBTUH heat input (commercial natural gas). Each of the spray booths (EP-01, EP-02, EP-03, and EP-04) is equipped with a paint cure heater (process heater). Each heater is rated less than 5-MMBTUH and is natural gas-fired. Therefore, each of these paint booth heaters is considered insignificant.

- Hazardous waste and hazardous materials drum staging areas.
- Sanitary sewage collection and treatment facilities other than incinerators and Publicly Owned Treatment Works (POTW). Stacks or vents for sanitary sewer plumbing traps are also included (i.e., lift station).
- Exhaust systems for chemical, paint, and/or solvent storage rooms or cabinets, including hazardous waste satellite (accumulation) areas.
- 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.
- Activities having the potential to emit no more than 5 TPY (actual) of any criteria pollutant. Plasma torch cutting, metalizing, combustion, and abrasive blasting are process sources that fit this definition. The three (3) blast booths are completely enclosed structures with similar dimensions (21' wide × 135' long × 20' high), and each is exhausted to a baghouse (dust collector). Recordkeeping sufficient to demonstrate that each of these sources has actual emissions less than 5 TPY is required.

**SECTION IV. AIR EMISSIONS**

Sources of emissions include surface coating, plasma torch cutting, welding, “metalizing,” combustion, and abrasive blasting. Specific conditions in the permit establish an annual cap of 249-TPY VOC, 99-TPY NO<sub>x</sub>, 25-TPY PM<sub>10</sub>, and limits on HAP.

**Surface Coating**

Coating emissions are based on an annual maximum use of 154,000 gallons of various coating products, including thinners and two- and three-part products. A transfer efficiency of 75% for the airless paint guns is used, a conservative assumption given the large size of the painting targets. Although the current mix of coating products may not be used at all times, the total solids content of them may be used to estimate particulate emissions. PM shown below does not take into account any particle size (droplet size) distribution from spray-coating operations, so assuming an equivalence of PM = PM<sub>10</sub> = PM<sub>2.5</sub> is highly conservative.

| <b>Solids Content<br/>(Lb/gal)</b> | <b>Transfer<br/>Efficiency</b> | <b>Control<br/>Efficiency</b> | <b>PM Emissions<br/>(TPY)</b> |
|------------------------------------|--------------------------------|-------------------------------|-------------------------------|
| 9.7 (average)                      | 75%                            | 99%                           | 1.87                          |

VOC emissions from calculated using MSDS and assuming the maximum use of each product yields 242 TPY. A similar calculation for HAP yields 71 TPY.

**Plasma Torch Cutting**

Emissions from plasma torch cutting are taken from “Emission of Fume, Nitrogen Oxides and Noise in Plasma Cutting of Stainless and Mild Steel,” Swedish Institute of Production Engineering Research Document IE-174-93, March 1994. Excerpts from this paper are

mentioned as Related Emission Factor Documents on the title page of Chapter 12: Metallurgical Industry, in Volume 1 of AP-42, 5<sup>th</sup> Edition. The facility uses 30 grams per minute for the PM factor, which is a conservatively high value, in that emission rates decrease with thickness, and the facility chose a thickness at the low end of the various sheet thicknesses usually handled. Also, dry cutting factors are the highest factors listed with respect to PM emissions. Plasma cutting occurs over a water table. According to Fume Emissions Testing for Plasma Arc Cutting (2/99), a research paper prepared for Hypertherm, a manufacturer of plasma torches, water tables are considered to be 75% efficient at particulate capture. The Research Document lists emissions of NO<sub>x</sub> in units of liters per minute (l/m) and shows that they are roughly linear with respect to the thickness cut. The closest values to the material cut at this facility (3/8" to 1") are 8 mm and 35 mm. Interpolating to a value representative of 1" yields approximately 6.5 l/m. According to the Research Document, NO<sub>2</sub> represents only 8% of the NO<sub>x</sub> emissions, so 6.5 l/m may be converted to pounds per hour, using the following calculation, and assuming all measurements are at STP.

$$6.5 \text{ l/min} \times 1 \text{ mol}/22.4 \text{ l} \times 31.28 \text{ g/mol} \times 60 \text{ min/hr} \times 1 \text{ lb}/453.6 \text{ g} = 1.2 \text{ lb/hr}$$

Assuming 8,760 hours per year of this activity yields the conservatively high PTE results shown below. Note that the facility operates three plasma torches. Actual cutting time is limited, because the large sized pieces require manipulation by crane, so plasma torches are not continually operating. Each torch is equipped with an hour-meter.

| Unit         | Emission Factor | Efficiency | PM <sub>10</sub> =PM <sub>2.5</sub> Emissions – Plasma Torch |            |         |
|--------------|-----------------|------------|--|------------|---------|
|              |                 |            | lb/hr (each)   | TPY (each) | TPY (3) |
| Plasma Torch | 30 g/min        | 75%        | 0.99   | 4.35       | 13.04   |

| Unit         | Emission Factor (liters/minute/unit) | NO <sub>x</sub> Emissions – Plasma Torch |            |         |
|--------------|--------------------------------------|--|------------|---------|
|              |                                      | lb/hr (each)                             | TPY (each) | TPY (3) |
| Plasma Torch | 6.5                                  | 1.2                                      | 5.26       | 15.8    |

**Welding**

The facility uses both submerged arc welding (SAW) and gas metal arc welding (GMAW). Emission factors for SAW and E70S GMAW are taken from Table 12.19-1 of AP-42 (1/95). The lb/hr estimate is back-calculated from the TPY figure, which is based on estimated maximum annual use of material, and assuming continuous operation.

| Welding Type  | Usage, Lb/year   | Emission Factor, (lb/10 <sup>3</sup> lb electrode) | PM <sub>10</sub> =PM <sub>2.5</sub> Emissions |             |
|---------------|------------------|--|---|-------------|
|               |                  |  | lb/hr   | TPY         |
| SAW           | 1,680,000        | 0.05   | 0.01  | 0.04        |
| GMAW          | 756,000          | 5.2  | 0.45  | 1.97        |
| <b>Totals</b> | <b>2,436,000</b> |  | <b>0.46</b>                                   | <b>2.01</b> |

**Metalizing**

Metalizing is an allied operation to welding and is performed in the blast booth with fabric filter control in operation. The manufacturer of the material used suggests an emission factor of 0.4 pounds per pound of material used which yields a conservatively high estimate. This implies a transfer efficiency of 60%, which is low to reasonable, considering the size and expansiveness of

the objects being coated. As seen in the discussion of welding above, the lb/hr estimate is back-calculated from the TPY figure.

| Annual Usage | Transfer efficiency | Control Efficiency | PM Emissions |      |
|--------------|---------------------|--------------------|--------------|------|
|              |                     |                    | lb/hr        | TPY  |
| 180,000 lbs  | 60%                 | 99%                | 0.08         | 0.36 |

**Combustion Units**

At this time, the facility has no combustion units with heat input greater than 5-MMBTUH. Emissions from combined natural gas-fired paint booth heaters are conservatively calculated based on 19.8-MMBTUH combined heat input assuming 1,020-Btu/scf natural gas heating value with factors taken from AP-42 Tables 1.4-1 and -2 (7/98), and 8,760-hr/yr operation.

| Unit ID              | Pollutant        | Emission Factor, lb/MMCF | Total Emissions |      |
|----------------------|------------------|--------------------------|-----------------|------|
|                      |                  |                          | lb/hr           | TPY  |
| Paint Curing Heaters | NO <sub>x</sub>  | 100                      | 1.94            | 8.51 |
|                      | CO               | 84                       | 1.63            | 7.15 |
|                      | VOC              | 5.5                      | 0.11            | 0.47 |
|                      | PM <sub>10</sub> | 7.6                      | 0.15            | 0.65 |

**Abrasive Blasting**

Emissions from shot blasting and grit blasting operations are based on factors in Table 13.2.6-1 of AP-42 (9/97). The two large original units exhaust to the interior of the plant, so their emissions should be treated as fugitives. Exhaust from the newest unit pass through a side wall of the facility and are treated by a baghouse. The Blastec plate blaster exhausts to atmosphere, but its emissions are negligible. Based on material purchased to date, Blastec material use has been, and is expected to remain, approximately equal to the total material used by shot and grit blasting.

| Operation            | Annual Material Use | Emission Factor, (lb/10 <sup>3</sup> lb abrasive) | PM Emissions |             |
|----------------------|---------------------|---|--------------|-------------|
|                      |                     |   | lb/hr        | TPY         |
| Shot & Grit Blasting | 120,000             | 0.69  | 0.01         | 0.04        |
| Blastec              | 120,000             | 0.69  | 0.01         | 0.04        |
| <b>TOTALS</b>        |                     |   | <b>0.02</b>  | <b>0.08</b> |

**Facility-Wide Emission Totals (TPY)**

| Operation                       | PM <sub>10</sub> | NO <sub>x</sub> | VOC        | CO          |
|---------------------------------|------------------|-----------------|------------|-------------|
| Coating                         | 1.87             |                 | 242        |             |
| Cutting Torches                 | 13.04            | 15.80           |            |             |
| Welding                         | 2.01             |                 |            |             |
| Metallizing                     | 0.36             |                 |            |             |
| Combustion (paint cure heaters) | 0.65             | 8.51            | 0.47       | 7.15        |
| Abrasive Blasting               | 0.08             |                 |            |             |
| <b>TOTALS</b>                   | <b>18.01</b>     | <b>24.31</b>    | <b>242</b> | <b>7.15</b> |

Based on the projected products usage, HAP emissions may exceed 10 TPY for any single HAP and will exceed 25 TPY for all HAPs combined.

#### Significant Discharge Points

| Stack ID | Process        | Height Feet | Diameter Inches | Flow Rate ACFM | Temperature °F |
|----------|----------------|-------------|-----------------|----------------|----------------|
| EP-01    | Paint Booth #1 | 60          | 36              | 44,000         | 77             |
| EP-02    | Paint Booth #2 | 60          | 36              | 44,000         | 77             |
| EP-03    | Paint Booth #3 | 60          | 36              | 44,000         | 77             |
| EP-04    | Paint Booth #4 | 20          | 48              | 44,000         | 77             |

### SECTION V. OKLAHOMA AIR POLLUTION CONTROL RULES

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

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

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

OAC 252:100-5 (Registration, Emissions Inventory and Annual Operating Fees) [Applicable]  
Subchapter 5 requires sources of air contaminants to register with Air Quality, file emission inventories annually, and pay annual operating fees based upon total annual emissions of regulated pollutants. An emission inventory was 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 HAP 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 existing Part 70 operating permit or

from the current application, or are 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 affirmative defense, 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 equipment with a heat input rating of 10 MMBTUH or less. All space heaters use commercial quality natural gas, ensuring compliance.

Section 19-12 limits particulate emissions from new and existing directly fired fuel-burning units (and/or) emission points in an industrial process based on process weight rate, as specified in Appendix G.

| Emission Unit      | Process Rate<br>TPH | Emissions (Lb/hr) |                     |
|--------------------|---------------------|-------------------|---------------------|
|                    |                     | Appendix G Limit  | Potential Emissions |
| Welding            | 4.55                | 11.31             | 0.46                |
| Painting           | 4.55                | 11.31             | 0.43                |
| Metallizing        | 4.55                | 11.31             | 0.08                |
| Grit/Shot Blasting | 4.55                | 11.31             | 0.01                |
| Blastec            | 4.55                | 11.31             | 0.01                |
| Plasma Torches     | 4.55                | 11.31             | 1.98                |

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. The permit requires maintenance of air pollution controls on the paint booths to ensure compliance with this rule.

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

OAC 252:100-31 (Sulfur Compounds) [Applicable]  
Part 5 limits sulfur dioxide emissions from new fuel-burning equipment (constructed after July 1, 1972). For gaseous fuels 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 1,203 ppmv. The permit requires the use of gaseous fuel with sulfur content less than 343 ppmv 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<sub>x</sub> per MMBTU, three-hour average. There are no equipment items that exceed the 50 MMBTUH threshold.

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

OAC 252:100-37 (Volatile Organic Compounds) [Applicable]  
Part 5 limits the VOC content of coatings used in coating lines and operations. The specified standards are expressed in pounds of VOC per gallon of coating, as shown below.

| Coating Type           | VOC Content Limit (lb/gal) |
|------------------------|----------------------------|
| Alkyd primer           | 4.8                        |
| Vinyls                 | 6.0                        |
| NC lacquers            | 6.4                        |
| Acrylics               | 6.0                        |
| Epoxies                | 4.8                        |
| Maintenance finishes   | 4.8                        |
| Custom products finish | 6.5                        |

No coating has VOC content in excess of 3.5 pounds per gallon (ppg) as mixed, and allocating thinners and solvents to the various products results in no coating having VOC content in excess of 4 ppg, well below the most stringent limit of 4.8 ppg.

Part 7 requires fuel-burning equipment to be operated and maintained so as to minimize emissions. Temperature and available air must be sufficient to provide essentially complete combustion. All combustion equipment is designed to provide essentially complete combustion of organic materials.

OAC 252:100-42 (Toxic Air Contaminants (TAC)) [Not 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 required to demonstrate compliance with any federal or state emission limit or standard, or any requirement set forth in a valid permit shall be recorded, maintained, and submitted as required by this subchapter, an applicable rule, or permit requirement. Data from any required testing or monitoring not conducted in accordance with the provisions of this subchapter shall be considered invalid. Nothing shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

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

|                |                       |                           |
|----------------|-----------------------|---------------------------|
| OAC 252:100-11 | Alternative 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 252:100-39 | Nonattainment Areas   | not in area               |
| OAC 252:100-47 | Landfills             | not in source category    |

**SECTION V FEDERAL REGULATIONS**

PSD, 40 CFR Part 52 [Not Applicable]  
 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 [Not Applicable]  
 There are no affected facilities or sources at this site covered under any subpart.

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

NESHAP, 40 CFR Part 63 [Subpart M MMMM Applicable]  
Subpart M 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. Related activities, such as surface preparation, cleaning, mixing, etc., may be included as part of the operation.

The plant commenced operations in January 2008 under a minor source construction permit and received its operating permit in September 2008. According to the information submitted with its application for the initial Part 70 operating permit, the plant suspected that increasing throughput and emissions would cause it to become a major source for HAP and to become subject to this MACT at that time. The facility is considered to be new, since it was constructed after August 13, 2002. According to §63.3883(c)(1), the compliance date occurred at start-up, which means May 20, 2010, the date of issuance of the initial Part 70 permit. The facility currently maintains all data and records necessary to demonstrate compliance with the MACT.

This facility meets the §63.3881(a)(2) definition of “general use subcategory,” which includes all surface coating operations that are not high performance, magnet wire, rubber-to-metal, or extreme performance fluoropolymer coating operations. An organic HAP emission limitation of 1.9 pounds per gallon (ppg) of coating solids is imposed on general use operations at “new” affected sources, per §63.3890(a)(1). Three compliance options are described in §63.3891. Each option may be used independently from any others and different options may be used from time to time for any operation, with stringent limitations. For instance, a facility with three different coating operations could use a different compliance option for each operation. Further, any single operation could use any of the three options at will, except that for those options using rolling 12-months data, the operation must have been in compliance with the proposed new option for at least the preceding 11 months.

**First**, the “compliant material option” requires that each coating comply with the 1.9 ppg standard discussed above, and that each thinner and/or other additive and cleaning material used contain no organic HAP. EPA has indicated that each “part” of a two- or three-part coating must meet this standard; not just the as-mixed coating. Each coating must meet the required standards at all times and no averaging is authorized.

**Second**, the “emission rate without add-on controls option” requires compliance with the 1.9 ppg standard described above, but allows it to be calculated on a broader basis. For instance, all materials used in a coating operation may be considered together and their composite average compared with the standard. This allows individual “parts” of a multi-part coating to exceed the standard, provided that the as-mixed final material meets the standard. This option requires that thinners and metal preparation solvents be included in the calculation, but does not require that the thinners and solvents be HAP-free. Finally, the calculations must be performed monthly and compliance with standards shown on a 12-month rolling average.

**Third**, the “emission rate with add-on controls option” is similar to the second option, except that extensive requirements concerning control equipment are added.

This facility complies with this subpart using the second option. The facility understands that it may use either of the other options if it chooses to do so.

Subpart HHHHHH (Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources) affects stripping using methylene chloride; auto body painting; and spray painting using lead, nickel, chromium, manganese, or cadmium compounds. This facility is a major source.

Subpart XXXXXX (Area Source Standards for 9 Metal Fabrication and Finishing Source Categories) affects dry abrasive blasting, machining operations, dry grinding and polishing, spray painting, and welding, targeting five metal fabrication and finishing HAPs. This facility performs many of the named operations, but is a major source.

CAM, 40 CFR Part 64

[Not Applicable]

This part applies to any pollutant-specific emissions unit at a major source that is required to obtain an operating permit, for any application for an initial operating permit submitted after April 20, 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

Although the facility has volatile HAP emissions in excess of the 40 CFR 63.2 thresholds that establish it as a major source, these emissions are not affected by a control device. Additionally, VHAPs are subject to monitoring per the standards of NESHAP Subpart MMMM, which would be considered presumptively acceptable monitoring in accordance with 40 CFR 64.4(b)(4).

Chemical Accident Prevention Provisions, 40 CFR Part 68

[Not Applicable]

This facility does not store any regulated substance above the applicable threshold limits. More information on this federal program is available at the web site: <http://www.epa.gov/ceppo/>.

Stratospheric Ozone Protection, 40 CFR Part 82

[Subpart 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. This facility does not utilize any Class I & II substances.

## SECTION VII. COMPLIANCE

### Inspection

On January 15, 2015, an unannounced inspection of the facility was conducted by Drake Hanna, Environmental Programs Specialist, who was accompanied by Anthony Maxwell, Permit Engineer, both from the DEQ Regional Office at Tulsa. Amy McLain, Health and Safety Manager for Trinity Containers represented the facility. No violations were found.

### Tier Classification and Public Review

This application has been determined to be a **Tier II** based on the request for renewal of an operating permit for a Part 70 source. The applicant has submitted an affidavit that they are not seeking a permit for any operation upon or use of land owned by others without their knowledge. The affidavit certifies that the applicant owns the real property. Information on all permit actions

is available for review by the public in the Air Quality section of the DEQ website at <http://www.deq.state.ok.us>.

The applicant published the “Notice of Filing a Tier II Application” on December 17, 2014, in the *Tulsa World*, a daily newspaper of general circulation printed in the city of Tulsa, Tulsa County. The notice stated that the permit application was available for public review at the Catoosa Public Library or at the DEQ Air Quality Division’s main office at 707 North Robinson, Oklahoma City, Oklahoma.

A “Notice of a Tier II Draft Permit” will be published when a draft of this permit is made available for public review for a period of thirty days. This site is not located within 50 miles of any state along the Oklahoma border.

**Fee Paid**

A fee of \$7,500 has been paid for renewal of a Part 70 Source Operating Permit.

**SECTION VIII. SUMMARY**

The facility is operating as described in the operating permit. There are no compliance or enforcement issues concerning this facility that would prevent the issuance of this permit. Issuance of the permit is recommended, contingent upon public and EPA review.

**DRAFT**

**PERMIT TO OPERATE  
AIR POLLUTION CONTROL FACILITY  
SPECIFIC CONDITIONS**

**Trinity Containers, LLC  
Tulsa Plant 1609**

**Permit No. 2014-2280-TVR**

The permittee is authorized to operate in conformity with the specifications submitted to Air Quality on November 20, 2014. The Evaluation Memorandum dated May 23, 2016, explains the derivation of applicable permit requirements and estimates of emissions; however, it does not contain limitations or permit requirements. Continuing operations under this permit constitutes acceptance of, and consent to the conditions contained herein.

1. Limitations.

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

Facility-wide emissions shall not exceed 249 TPY of VOC, 99 TPY of NO<sub>x</sub>, or 25 TPY of PM<sub>10</sub>. Facility-wide emissions of all hazardous air pollutants (HAP) shall not exceed 71 TPY.

**EUG-1 Facility-wide**

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

**EUG 2 Spray Booths**

There are four large spray booths, two with clearances of slightly over 16' wide, 19' high and slightly less than 128' long, one with dimensions of 32' wide, 17' high and 134' long, and one with dimensions 20' wide, 18' tall and 144' long.

| <b>EU ID</b> | <b>Booth Dimensions</b> | <b>Description</b>      |
|--------------|-------------------------|-------------------------|
| EP-01        | 32'W × 17'H × 134'L     | South Bay Spray Booth 1 |
| EP-02        | 16'W × 19'H × 128'L     | North Bay Spray Booth 2 |
| EP-03        | 16'W × 19'H × 128'L     | Spray Booth 3           |
| EP-04        | 20'W × 18'H × 144'L     | High Bay Spray Booth 4  |

**EUG 3 (Reserved)**

No equipment items are currently identified in this emissions unit group, and it is currently held in reserve for any future equipment items as necessary.

2. 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)]

3. Fuel-burning equipment shall be fired with pipeline grade natural gas or other gaseous fuel with a sulfur content less than 343 ppmv. Compliance can be shown by a current gas company bill or other approved methods. Compliance shall be demonstrated at least once per calendar year. [OAC 252:100-31]

4. Particulate emissions from paint booth overspray shall be controlled by dry filters with efficiency of at least 99%. The filters or alternative device with the same or better control efficiency shall be maintained and operated in accordance with manufacturer's specifications.

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

5. Abrasive blasting operations shall be conducted in enclosures with fabric filter or equivalent (99% or higher PM control efficiency) air pollution control devices. The filters or alternative devices shall be maintained and operated in accordance with manufacturer's specifications.

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

6. Coating materials shall not exceed the standards for VOC content as stated in Oklahoma Regulations and expressed in pounds of VOC per gallon of coating.

[OAC 252:100-37-25(a)]

| Coating Type           | VOC Content Limit (lb/gal) |
|------------------------|----------------------------|
| Alkyd primer           | 4.8                        |
| Vinyls                 | 6.0                        |
| NC lacquers            | 6.4                        |
| Acrylics               | 6.0                        |
| Epoxies                | 4.8                        |
| Maintenance finishes   | 4.8                        |
| Custom products finish | 6.5                        |

7. Compliance with criteria pollutants and HAP annual emissions limits shall be demonstrated monthly and shall be based on a 12-month rolling total and the following data.

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

- a. Monthly usage rates and the maximum HAP and VOC contents as listed on respective safety data sheets (MSDS or SDS) for coating operations.
- b. Monthly usage rates, the maximum solids contents as listed on respective safety data sheets (MSDS or SDS), 75% transfer efficiency, and 99% filter efficiency for PM<sub>10</sub> from coating operations.
- c. Monthly welding material usage rates and published emission factors.
- d. Monthly usages of plasma torches, a factor of 30 grams/minute/torch for PM<sub>10</sub>, and a factor of 1.2 lb/hr/torch for NO<sub>x</sub>.
- e. Monthly metalizing wire usage rates, transfer efficiency of 60% and 99% filter efficiency for PM<sub>10</sub>.
- f. Monthly material use at the grit and shot blasting booths and at Blastec and published emission factors.
- g. Periodic inspections of painting and abrasive blasting operations filters per manufacturer specifications.

8. The facility is subject to MACT MMMM and shall comply with the following requirements.

[40 CFR Part 63, Subpart MMMM]

- a. §63.3880 Purpose of this subpart.
- b. §63.3881 Am I subject to this subpart?

- c. §63.3882 What parts of my plant does this subpart cover?
- d. §63.3883 Compliance dates.
- e. §63.3890 - §3900: Compliance requirements, including emissions limits, operating limits, work practice standards, and general requirements.
- f. §63.3901 General Provisions.
- g. §63.3910 - §3931 Notifications reports, and recordkeeping.
- h. §63.3940 - §3961 Initial and continuous compliance demonstrations.
- i. §63.3962 (Reserved)
- j. §63.3963 How do I demonstrate continuous compliance with the emissions limitations?
- k. §63.3964 General requirements for performance tests.
- l. §63.3965 - §3967 Emission control system capture, destruction, and removal efficiency determinations.
- m. §63.3968: What are the requirements for continuous parameter monitoring system installation, operation, and maintenance?
- n. §63.3980: Who implements and enforces this subpart?
- o. §63.3981: What definitions apply to this subpart?

9. The following records shall be maintained on-site. All such records shall be made available to regulatory personnel upon request. These records shall be maintained for a period of at least five years after the time they are made. [OAC 252:100-43]

- a. A material safety data sheet (MSDS or SDS) that documents the chemical composition (VOC and HAP contents) of each coating product.
- b. Documentation of fuel sulfur content as required by Specific Condition No. 3.
- c. Monthly usage rates of each coating material.
- d. Monthly records of welding electrode usage.
- e. Monthly metalizing wire usage.
- f. Monthly use of abrasives for shot blasting and grit blasting operations; or alternatively, maximum process rates (equipment capacity) and hours of operation for each unit.
- g. Monthly calculations of PM<sub>10</sub> emissions from the abrasive blasting operations, metalizing operation, welding operations, surface coating operations, and plasma torch cutting operations.
- h. Monthly calculations of VOC and HAP emissions from surface coating operations.
- i. Monthly calculations of emissions from combustion units (paint cure heaters).
- j. All records required by 40 CFR 63 Subpart M per Specific Condition #8.

10. This permit supersedes all previous Air Quality operating permits issued for this facility.

DRAFT



# PART 70 PERMIT

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

Permit Number: 2014-2280-TVR

Trinity Containers, LLC,

having complied with the requirements of the law, is hereby granted permission to operate their Tulsa Plant 1609, located at 15300 Tiger Switch Road, in the SW/4 of the NE/4 of Section 27 – Township 20N – Range 14E, Rogers County,

subject to standard conditions dated July 21, 2009, and specific conditions, both attached.

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

\_\_\_\_\_  
Eddie Terrill,  
Division Director

\_\_\_\_\_  
Date

S. Theis Rice, Sr. Vice President  
Trinity Containers, LLC  
2525 Stemmons Freeway  
Dallas, Texas 75207

Permit Writer: Anthony Maxwell

SUBJECT: Permit No. **2014-2280-TVR**  
Tulsa Manufacturing Plant 1609 (FAC ID 6426)  
SW/4 NE/4 Sec. 27 – T20N – R14E, Rogers County  
15300 Tiger Switch Road, Tulsa, Oklahoma 74116

Dear Mr. Rice:

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 252:4-7-13(c) the draft permit is now ready for public review. The requirements for public review of the draft permit include the following steps which you must accomplish:

1. Publish at least one legal notice (one day) in at least one newspaper of general circulation within the county where the facility is located. (Instructions enclosed).
2. Provide for public review (for a period of 30 days following the date of the newspaper announcement) a copy of this draft permit at a convenient location **within the county** of the facility (preferably at a public library).
3. Send AQD a written affidavit of publication for the notice from Item #1 above together with any additional comments or requested changes which you may have for the permit application within 20 days of publication.
4. At the end of the public review period, send AQD a written notice of any public comments that you may have received from the public.

After public review, a Proposed Permit will be drafted and submitted for EPA review. Contingent on public and EPA review, the permit will be issued as a "Title V Renewal" operating permit. The permit review time is hereby tolled pending the receipt of the affidavit of publication. Thank you for your cooperation. If you have any questions, please refer to the permit number above and contact the permit writer at [amaxwell@deq.ok.gov](mailto:amaxwell@deq.ok.gov) or (918) 293-1600.

Sincerely,

Phillip Fielder, P.E.  
Permits and Engineering Group Manager  
**Air Quality Division**

Enclosure

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

**APPLICANT RESPONSIBILITIES**

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

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

1. A statement that a Tier II or Tier III draft permit has been prepared by DEQ;
2. Name and address of the applicant;
3. Name, address, driving directions, legal description and county of the site or facility;
4. The type of permit or permit action being sought;
5. A description of activities to be regulated, including an estimate of emissions from the facility;
6. Location(s) where the application and draft permit may be reviewed (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.**

**DRAFT**

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

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

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

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

**In response to the application, DEQ has prepared a draft permit [modification] (Permit Number: ...xx-xxx-x...), which may be reviewed at ...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 in the Air Quality Section of DEQ's Web Page: <http://www.deq.state.ok.us/>**

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

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

**In addition to the public comment opportunity offered under this notice, this draft permit is subject to U.S. Environmental Protection Agency (EPA) review, EPA objection, and petition to EPA, as provided by 40 CFR § 70.8. [For Construction Permits, add: The requirements of the construction permit will be incorporated into the Title V permit through the administrative amendment process. Therefore, no additional opportunity to provide comments or EPA review, EPA objection, and petitions to EPA will be available to the public when requirements from the construction permit are incorporated into the Title V permit.]**

**If the Administrator (EPA) does not object to the proposed permit, the public has 60 days following the Administrator's 45 day review period to petition the Administrator to make such an objection as provided in 40 CFR 70.8(d) and in OAC 252:100-8-8(j). Information on all permit actions and applicable review time lines is available in the Air Quality section of the DEQ Web page: <http://www.deq.state.ok.us/>.**

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

**MAJOR SOURCE AIR QUALITY PERMIT  
STANDARD CONDITIONS  
(July 21, 2009)**

**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<sub>10</sub>). 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(18) 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]