

### Special Conditions

Permit Number 162531

1. This permit authorizes the construction of facilities used for the production of automobiles, light duty trucks and heavy-duty trucks, and cell material processes. These facilities are located at 1 Tesla Road, Austin, Travis County. This permit covers only those sources of emissions listed on the maximum allowable emission rates table (MAERT) and those sources are limited to the emission limits and other conditions specified in the attached table. The annual rates are based on any rolling 12-month period. **(11/2024)**
2. This permit does not include the facilities or maintenance, startup, or shutdown (MSS) activities at the site listed in Attachment I, except as noted in the MAERT. Instead, these facilities are authorized by a permit-by-rule (PBR) under Title 30 Texas Administrative Code (30 TAC) Chapter 106, standard exemption, exemption from permitting, or are a de minimis source listed under 30 TAC § 116.119. The lists provided in Attachment I are not intended to be all-inclusive and can be altered at the site without modifications to this permit.
3. The facilities and/or activities listed in the following table operate per the criteria of the referenced Standard Exemption (SE)/Permit by Rule (PBR)/Standard Permit and are incorporated by reference: **(05/2025)**

| Facilities/Activities                                                                                      | SE No./PBR No./Standard Permit | Registration No. |
|------------------------------------------------------------------------------------------------------------|--------------------------------|------------------|
| Die Shop                                                                                                   | 106.261, 106.262, 106.320      | 170443           |
| Coolant Flush System, Waterjet Facilities, Laser Cutting Facilities, Edge Rounding Facilities              | 106.261, 106.262               | 176316           |
| Crucible Cleaning, Laser Cutting Facilities                                                                | 106.261, 106.262               | 178265           |
| Windshield Cleaning Process, Crash Testing, Laser Cutting Facilities, PCS Process, Laser Trimming Facility | 106.261, 106.262               | 179238           |

4. A copy of this permit shall be kept at the site and made available at the request of personnel from the Texas Commission on Environmental Quality (TCEQ) or any other air pollution control agency with jurisdiction.
5. With the exception of fugitive sources, the holder of this permit shall clearly label all equipment at the property that has the potential of emitting air contaminants. Permitted emission points shall be clearly labeled corresponding to the emission point numbering on the MAERT.

### Emission Limitations

6. There shall be no visible emissions from the assembly building and this determination shall be made as follows:
  - A. Observe for visible emissions while the facility is in operation. Contributions from uncombined water shall not be included in determining compliance with this condition.
  - B. Observations shall be performed and recorded quarterly. If visible emissions are observed from the building openings or vents, identification of the source and cause of the visible emissions shall be conducted within 24 hours and documented.
  - C. Corrective action to eliminate the visible emissions shall be taken promptly and documented within one week of first observation of the visible emissions.

7. Opacity shall not exceed five percent averaged over a six-minute period from each exhaust stack or vent emission point with PM/PM<sub>10</sub>/PM<sub>2.5</sub> listed in the MAERT. The determination shall be made as follows:
  - A. Observe for visible emissions while each facility is in operation. Observations shall be made at least 15 feet and no more than 0.25 miles from the emission points. Up to three emission points may be read concurrently, provided that all three emission points are within a 70 degree viewing sector or angle in front of the observer such that the sun position is at the observer's back and can be maintained for all three emission points.
  - B. If visible emissions are observed from an emission point, corrective action shall be taken promptly to eliminate the cause of the visible emissions. Once the cause has been determined and corrective action has been taken, another visible emissions observation shall be performed to ensure the visible emissions have been eliminated.
  - C. Observations shall be performed and recorded quarterly.
  - D. The cause of the visible emissions and the corrective action taken to eliminate the cause shall be documented within one week of the first observation.

#### **New Source Performance Standards (NSPS)**

8. The operations shall comply with Title 40 CFR Part 60, Subpart A and the following NSPS standards:
  - A. Standards of Performance for Automobile and Light-Duty Truck Surface Coating Operations in Title 40 CFR Part 60, Subpart MM.
  - B. Standards of Performance for Automobile and Light-Duty Truck Surface Coating Operations in Title 40 CFR Part 60, Subpart MMa. **(11/2024)**
  - C. Standards of Performance for Metal Coil Surface Coating in Title 40 CFR Part 60, Subpart TT. **(11/2024)**
  - D. Standards of Performance for Stationary Compression Ignition Internal Combustion Engines in Title 40 CFR Part 60, Subpart IIII. **(01/2022)**

#### **Maximum Achievable Control Technology (MACT)**

9. The operations shall comply with Title 40 CFR Part 63, Subpart A and the following MACT standards:
  - A. Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, Title 40 CFR Part 63, Subpart HHHHHH, if any surface coating contains any one of the following hazardous air pollutants:
    - (1) Chromium, lead, nickel or cadmium compounds with a concentration greater than or equal to 0.1 percent by mass; or
    - (2) Manganese compounds with a concentration greater than or equal to 1.0 percent by mass.
  - B. National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production, Title 40 CFR Part 63, Subpart RRR. **(06/2023)**
  - C. National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources, Title 40 CFR Part 63, Subpart VVVVVV. **(11/2024)**

- D. National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, Title 40 CFR Part 63, Subpart ZZZZ. **(01/2022)**

#### Reasonably Available Control Technology (RACT)

10. The coating operations shall comply with the requirements of 30 TAC 115, Subchapter E regardless of whether the facilities would otherwise be subject to these rules. This special condition does not apply to sources and activities deemed exempt per 30 TAC 115 Subchapter E. The operations shall comply with the following: **(11/2024)**
- A. The volatile organic compound (VOC) emission limits for miscellaneous metal parts and products in 30 TAC 115.453(a)(1)(C);
  - B. The VOC emission limits for automotive/transportation coatings in 30 TAC 115.453(a)(1)(E);
  - C. The VOC emissions limits for motor vehicle materials applied to the metal and plastic parts in 30 TAC 115.453(a)(2);
  - D. The VOC emission limits for automobile and light-duty truck assembly surface coating processes in 30 TAC 115.453(a)(3);
  - E. Coating application systems requirements in 30 TAC 115.453(c);
  - F. Work practices in 30 TAC 115.453(d); and
  - G. The VOC emission limits for adhesives in 30 TAC 115.473(a).

#### Operating Limitations

11. The paint/coating/adhesive application systems for coating operation shall be limited to the following or any other coating application systems that are demonstrated to achieve equal or greater transfer efficiency:

| Coating Operation                | Coating Application Equipment               |
|----------------------------------|---------------------------------------------|
| Foil Coat Line                   | Roller                                      |
| E-coat – Lines 1, 2, and 3       | Dip                                         |
| Sealers, Adhesives and Deadeners | Non – Atomized - Including Extrusion        |
| Basecoat 1 Booth - Lines 1 and 2 | HVLP or Electrostatic Air Atomized          |
| Basecoat 2 Booth - Lines 1 and 2 | HVLP or Electrostatic Air Atomized          |
| Clearcoat Booth - Lines 1 and 2  | HVLP or Electrostatic Air Atomized          |
| Plastic Paint-Basecoat 1 Line 1  | HVLP or Electrostatic Air Atomized          |
| Plastic Paint-Basecoat 2 Line 1  | HVLP or Electrostatic Air Atomized          |
| Plastic Paint-Clearcoat Line 1   | HVLP or Electrostatic Air Atomized          |
| Powder Coating                   | Electrostatic Air Atomized                  |
| Windshield Install               | Non – Atomized                              |
| Stator                           | Non-atomized                                |
| Battery Module                   | Non-atomized                                |
| Offline Paint Repair Areas       | Brushes, Air Brushes, Air Atomized and HVLP |

|                                |                                               |
|--------------------------------|-----------------------------------------------|
| End of Line Paint Repair Areas | Brushes, Air Brushes, Air Atomized and HVLP   |
| E-Coat Touch Up                | Non-refillable aerosol cans, Brushes, Rollers |

**(11/2024)**

12. Particulate emissions shall be captured and exhausted through filter systems which meet the requirements as listed below. Particulate abatement equipment and their ventilation systems shall be maintained in good condition at all times and operated during all applicable operations.

| EPN                                                             | Manufacturing Process/ Emission Source                                                                                                          | Abatement Type | Arrestance (%) <sup>1</sup> | MERV <sup>2</sup> |
|-----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------------------|-------------------|
| LSRCUT-1&2                                                      | Laser Cutting 1 and 2                                                                                                                           | Dry            | 99.0                        | 14                |
| EDSND-01                                                        | E-Coat Sanding Line 1                                                                                                                           | Dry            | 99.0                        | 14                |
| HVSND-01                                                        | E-Coat Line 1 (Heavy Sanding)                                                                                                                   | Dry            | 99.0                        | 14                |
| EDSND-02                                                        | E-Coat Sanding Line 2                                                                                                                           | Dry            | 99.0                        | 14                |
| HVSND-02                                                        | E-Coat Line 2 (Heavy Sanding)                                                                                                                   | Dry            | 99.0                        | 14                |
| EDSND-03                                                        | E-Coat Sanding Line 3                                                                                                                           | Dry            | 99.0                        | 14                |
| HVSND-03                                                        | E-Coat Line 3 (Heavy Sanding)                                                                                                                   | Dry            | 99.0                        | 14                |
| TO-01                                                           | Basecoat 1 Booth Line 1                                                                                                                         | Dry            | 99.0                        | 14                |
| TO-01                                                           | Basecoat 2 Booth Line 1                                                                                                                         | Dry            | 99.0                        | 14                |
| TO-01                                                           | Clearcoat Booth Line 1                                                                                                                          | Dry            | 99.0                        | 14                |
| TO-02                                                           | Basecoat 1 Booth Line 2                                                                                                                         | Dry            | 99.0                        | 14                |
| TO-02                                                           | Basecoat 2 Booth Line 2                                                                                                                         | Dry            | 99.0                        | 14                |
| TO-02                                                           | Clearcoat Booth Line 2                                                                                                                          | Dry            | 99.0                        | 14                |
| TO-03                                                           | Plastic Paint-Basecoat #1                                                                                                                       | Dry            | 99.0                        | 14                |
| TO-03                                                           | Plastic Paint-Basecoat #2                                                                                                                       | Dry            | 99.0                        | 14                |
| TO-03                                                           | Plastic Paint-Clearcoat                                                                                                                         | Dry            | 99.0                        | 14                |
| PCCB1-01                                                        | Powder Coat Booth Line 2                                                                                                                        | Dry            | 99.0                        | N/A               |
| BODYPCF-01                                                      | Body Line Powder Coat Booth-01                                                                                                                  | Dry            | 99.0                        | N/A               |
| CLL-01, CLL-02, CLL-03, CLL-04 and CLL-06                       | Cell Dust Collection Systems 1 through 4 and 6                                                                                                  | Dry            | 99.9                        | 14                |
| CB1-P1-001 through CB1-P1-005 and CB1-P1-008 through CB1-P1-013 | Cell Process 1 Dust Collection Systems and individual process equipment filters venting to process building space and routed to applicable EPNs | Dry            | 99.9                        | N/A               |
| CB1-P1-006 and CB1-P1-007                                       | Cell Process 1 Kiln Dust Collection Systems                                                                                                     | Dry            | 90                          | N/A               |
| P1-RF-03, P1-RF-04                                              | Cell Process 2 Dust Collection Systems                                                                                                          | Dry            | 99.99                       | N/A               |
| CAS-21, CAS-23, CAS-25,                                         | Casting Trimming Machines                                                                                                                       | Dry            | 99.9                        | 14                |

|                    |                                                          |     |      |     |
|--------------------|----------------------------------------------------------|-----|------|-----|
| CAS-27, CAS-29     |                                                          |     |      |     |
| LASABL             | Laser Ablation                                           | Dry | 95.0 | N/A |
| DU-LA-01, DU-LA-02 | Drive Unit-1 Laser Ablation, Drive Unit-2 Laser Ablation | Dry | 99.9 | N/A |

**(11/2024)**

<sup>1</sup> American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Standard 52.1 (Gravimetric and Dust Spot Procedures for Testing Air Cleaning Devices Used in General Ventilation for Removing Particulate Matter).

<sup>2</sup> American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Standard 52.2-2007 (Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size). MERV - Mean Effective Removal Value

13. The capture and control/ventilation systems for the PM emitting sources listed in Item C of this Special Condition shall be designed and operated as follows: **(11/2024)**

- A. The capture and control system shall be operated and maintained in accordance with the manufacturer's recommendations to assure that the minimum control efficiency is met at all times when the sources in Special Condition Item 12 are in operation;
- B. The holder of this permit shall install, calibrate (if applicable), and maintain a differential pressure gauge to monitor pressure drop across the filter pads. Each monitoring device that requires calibration shall be calibrated annually or in accordance with the manufacturer's specifications and shall be accurate to within a range of  $\pm 0.5$  inch water gauge pressure ( $\pm 125$  pascals) or a span of  $\pm 3$  percent. The monitoring device that only requires to be zeroed shall be zeroed in accordance with the manufacturer's recommended frequency; **(11/2024)**
- C. The filter media differential pressure shall be maintained between the following limits (hourly average value), or as defined by the manufacturer, or as established during the commissioning of equipment: **(11/25)**

| EPN        | Manufacturing Process/<br>Emission Source | Differential<br>Pressure<br>Lower Limit<br>(in W.C.) | Differential<br>Pressure<br>Upper Limit<br>(in W.C.) |
|------------|-------------------------------------------|------------------------------------------------------|------------------------------------------------------|
| LSRCUT-1&2 | Laser Cutting 1 and 2                     | 0.2                                                  | 3.5                                                  |
| EDSND-01   | E-Coat Sanding Line 1                     | 0.2                                                  | 3.5                                                  |
| HVSND-01   | E-Coat Line 1 (Heavy Sanding)             | 0.2                                                  | 3.5                                                  |
| EDSND-02   | E-Coat Sanding Line 2                     | 0.2                                                  | 3.5                                                  |
| HVSND-02   | E-Coat Line 2 (Heavy Sanding)             | 0.2                                                  | 3.5                                                  |
| EDSND-03   | E-Coat Sanding Line 3                     | 0.2                                                  | 3.5                                                  |
| HVSND-03   | E-Coat Line 3 (Heavy Sanding)             | 0.2                                                  | 3.5                                                  |
| TO-01      | Basecoat 1 Booth Line 1                   | 0.2                                                  | 3.5                                                  |
| TO-01      | Basecoat 2 Booth Line 1                   | 0.2                                                  | 3.5                                                  |
| TO-01      | Clearcoat Booth Line 1                    | 0.2                                                  | 3.5                                                  |
| TO-02      | Basecoat 1 Booth Line 2                   | 0.2                                                  | 3.5                                                  |

|                                                                          |                                                                                                                                                            |     |     |
|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|
| TO-02                                                                    | Basecoat 2 Booth Line 2                                                                                                                                    | 0.2 | 3.5 |
| TO-02                                                                    | Clearcoat Booth Line 2                                                                                                                                     | 0.2 | 3.5 |
| TO-03                                                                    | Plastic Paint-Basecoat #1                                                                                                                                  | 0.2 | 3.5 |
| TO-03                                                                    | Plastic Paint-Basecoat #2                                                                                                                                  | 0.2 | 3.5 |
| TO-03                                                                    | Plastic Paint-Clearcoat                                                                                                                                    | 0.2 | 3.5 |
| PCCB1-01                                                                 | Powder Coat Booth Line 2                                                                                                                                   | 0.2 | 5.0 |
| BODYPCF-01                                                               | Body Line Powder Coat Booth-01                                                                                                                             | 0.2 | 5.0 |
| CLL-01, CLL-02,<br>CLL-03, CLL-04 and<br>CLL-06                          | Cell Dust Collection Systems 1<br>through 4 and 6                                                                                                          | 0.2 | 4.0 |
| CB1-P1-001 through<br>CB1-P1-005 and<br>CB1-P1-008 through<br>CB1-P1-013 | Cell Process1 Dust Collection<br>Systems and individual process<br>equipment filters venting to<br>process building space and routed<br>to applicable EPNs | 0.2 | 5.0 |
| CB1-P1-006 and<br>CB1-P1-007                                             | Cell Process 1 Kiln Dust Collection<br>Systems                                                                                                             | 0.2 | 5.0 |
| CP1-RF-03, P1-RF-<br>04                                                  | Cell Process 2 Dust Collection<br>Systems                                                                                                                  | 0.2 | 5.0 |
| CAS-21, CAS-23,<br>CAS-25, CAS-27,<br>CAS-29                             | Casting Trimming Machines                                                                                                                                  | 0.2 | 5.0 |
| LASABL                                                                   | Laser Ablation                                                                                                                                             | 0.2 | 3.5 |
| DU-LA-01, DU-LA-<br>02                                                   | Drive Unit-1 Laser Ablation, Drive<br>Unit-2 Laser Ablation                                                                                                | 0.2 | 3.5 |

- D. Pressure drop readings shall be recorded at least once per day that the system is required to be operated. Filters shall be replaced whenever the pressure drop across the filter media no longer meets the limits in Item C of this Special Condition or the manufacturer's recommendation or as established during the commissioning of equipment. **(11/2024)**
- E. If the filter system operating performance parameters are outside of the limits in Item C of this Special Condition or the manufacturer's recommended operating range or as established during the commissioning of equipment, the affected facility shall not be operated until the abatement equipment is repaired; **(11/2024)**
- F. With the exception of the casting furnaces, planned maintenance on the dust collection system shall be performed only when the facilities being controlled by the dust collection systems are not in operation;
- G. The capture system shall be maintained free of holes, cracks, and other conditions that would reduce the collection efficiency of the capture system; **(11/2024)**
- H. An inspection and maintenance log shall be kept for the filter system whereby the log shall note the date of each inspection, the name of the inspector and any repairs and/or maintenance work performed; and
- I. Failure to maintain the required pressure drop across the filter media or the documentation of particulate, deposition originating from this site beyond the property lines of this site shall be considered as demonstrating that the filters are not being maintained in good condition.

14. The following control equipment shall be used to control VOC and exempt solvent (ES) emissions from the following operations, except as authorized by Special Condition No. 19: **(11/2024)**

| Coating/Process Equipment                            | Zeolite Concentrator or Carbon Adsorption System (CAS) | RTO       |
|------------------------------------------------------|--------------------------------------------------------|-----------|
| E-coat Dip Tank Line 1                               | N/A                                                    | TO-01     |
| E-coat Oven Line 1                                   | N/A                                                    | TO-01     |
| Basecoat 1 Booth Line 1                              | ZEO-01                                                 | TO-01     |
| Basecoat 2 Booth Line 1                              | ZEO-01                                                 | TO-01     |
| Heated Flash Line 1                                  | ZEO-01                                                 | TO-01     |
| Clearcoat Booth Line 1                               | ZEO-01                                                 | TO-01     |
| Clearcoat Oven Line 1                                | N/A                                                    | TO-01     |
| E-coat Dip Tank Line 2                               | N/A                                                    | TO-02     |
| E-coat Oven Line 2                                   | N/A                                                    | TO-02     |
| Basecoat 1 Booth Line 2                              | ZEO-02                                                 | TO-02     |
| Basecoat 2 Booth Line 2                              | ZEO-02                                                 | TO-02     |
| Heated Flash Line 2                                  | ZEO-02                                                 | TO-02     |
| Clearcoat Booth Line 2                               | ZEO-02                                                 | TO-02     |
| Clearcoat Oven Line 2                                | N/A                                                    | TO-02     |
| Plastic Parts Basecoat #1                            | N/A                                                    | TO-03     |
| Plastic Parts Basecoat #2                            | N/A                                                    | TO-03     |
| Plastic Parts Clearcoat                              | N/A                                                    | TO-03     |
| E-coat Dip Tank Line 3                               | N/A                                                    | TO-04     |
| E-coat Ovens Line 3                                  | N/A                                                    | TO-04     |
| Body Powder Coat Ovens                               | N/A                                                    | TO-04     |
| Metal Coil Adhesive and Epoxy Curing and Application | N/A                                                    | TO-FOM-01 |
| Cell Assembly <sup>1</sup>                           | NA                                                     | TO-CLL    |
| Cell Assembly <sup>1</sup>                           | CAS                                                    | TO-03     |
| Powder Coat Line 2 Oven                              | NA                                                     | TO-PC-01  |
| Stator (FIN STR-01) <sup>2</sup>                     | NA                                                     | TO-DU-01  |
| Stator (FIN STR-02) <sup>2</sup>                     | NA                                                     | TO-DU-02  |
| Inverter (FIN PCB-01) <sup>3</sup>                   | NA                                                     | TO DU-01  |
| Inverter (FIN PCB-02) <sup>3</sup>                   | NA                                                     | TO-PCB-02 |

<sup>1</sup> Cell assembly is normally routed to TO-CLL. During the Alternate Operating Scenario (AOS) where TO-CLL malfunctions or is down for maintenance, a portion of the VOC stream from cell assembly is routed to TO-03 and the remainder is routed to the CAS (EPN CLL-05).

<sup>2</sup> Stator lines STR-01 and STR-02 are routed to RTOs TO-DU-01 and TO-DU-02 while both lines are in simultaneous operation. During the Alternate Operating Scenario (AOS) where STR-02 is not in operation, STR-01 may be uncontrolled and route through EPN STR-01.

<sup>3</sup> Inverter lines PCB-01 and PCB-02 are routed to RTOs TO-DU-01 and TO-PCB-02 while both lines are in simultaneous operation. During the Alternate Operating Scenario (AOS) where PCB-02 is not in operation, PCB-01 may be uncontrolled and route through EPN PCB-01.

15. Inverter Lines PCB-01 and PCB-02 shall both be operated by routing to the control devices specified in Special Condition 14 upon start of operation of any of the following sources: FINs: STM-02, HSTM-02, FOM-01, FOM-02, FOMCT-01, BIW-03, SND-04, PCBOOTH-04a/b, PCB-01, PCC-01, PC-PPT1, PC-SLR1, TO-PC-01, TO-PC-01SS, INV-02, PCB-02, STR-02, TO-DU-01, TO-DU-01SS, DRU-02, DU-LA-02, GAAA-03. Inverter line PCB-01 may be allowed to operate uncontrolled prior to the start of operation of any of the sources listed in this Special Condition. **(11/2024)**

Stator Lines STR-01 and STR-02 shall both be operated by routing to the control devices specified in Special Condition 14 upon start of operation of any of the following sources: FINs: STM-02, HSTM-02, FOM-01, FOM-02, FOMCT-01, BIW-03, SND-04, PCBOOTH-04a/b, PCB-01, PCC-01, PC-PPT1, PC-SLR1, TO-PC-01, TO-PC-01SS, INV-02, PCB-02, STR-02, TO-DU-01, TO-DU-01SS, DRU-02, DU-LA-02, GAAA-03. Stator Line STR-01 may be allowed to operate uncontrolled prior to the start of operation of any of the sources listed in this Special Condition. **(11/2024)**

16. The zeolite concentrators (ZEO-01 and ZEO-02) regenerative thermal oxidizers (RTOs) (TO-01, TO-02, TO-03 and TO-04, TO-FOM-01, TO-CLL, TO-PC-01, TO-DU-01, TO-DU-02, TO-PCB-02) shall meet the following requirements: **(05/2025)**

- A. The zeolite concentrator wheels shall achieve a 95 percent or greater control efficiency for organic compound emissions.
- B. The desorption stream from the concentrator wheels shall be routed to the RTOs.
- C. The following RTOs shall achieve a 98 percent or greater destruction efficiency for volatile organic compounds emissions: TO-01, TO-02, TO-03, TO-FOM-01, TO-CLL, TO-PC-01, TO-DU-01, TO-DU-02, TO-PCB-02. Regenerative Thermal Oxidizer TO-04 (EPN TO-04) shall achieve either an exhaust concentration of  $\leq 10$  ppmvd, or a  $\geq 98$  percent destruction efficiency, for volatile organic compounds emissions.
- D. The RTOs and the zeolite concentrators shall be equipped with monitors (temperature sensors) that continuously measures and records the temperature of the RTO combustion chamber (or in the duct immediately downstream of the combustion chamber before any substantial heat exchange occurs) and the desorption gas inlet temperature of the zeolite wheel. The temperature sensors shall be accurate to within  $\pm 4^{\circ}\text{F}$  or 0.75% of the temperature value, whichever is larger. The combustion chamber temperature and the zeolite desorption temperature shall be maintained at greater than or equal to the temperature specified in Item G of this Special Condition based on a 3-hour average temperature over four equally spaced measurement points per hour.
- E. Once every quarter an accuracy audit and a visual inspection shall be conducted to determine if the temperature sensor that is specified in Item D of this Special Condition is still functioning properly. Accuracy audit methods include comparisons of sensor output to redundant temperature sensors, to calibrated temperature measurement devices, or to temperature simulation devices. Redundant temperature sensors shall yield a reading within  $30^{\circ}\text{F}$  of the process temperature reading. The temperature sensor shall be replaced with a new sensor either if the sensor looks damaged and/or broken or the sensor no longer meets the accuracy requirement specified in Item D of this Special Condition.
- F. Conduct a visual inspection of each sensor every quarter if redundant temperature sensors are not used.

- G. The RTOs and zeolite concentrator wheels shall operate at the temperatures listed below or the manufacturers recommended operating temperature. **(11/25)**

| <b>Thermal Oxidizer</b> | <b>Minimum Combustion Chamber Temperature (°F)</b> | <b>Zeolite Concentrator</b> | <b>Minimum Desorption Gas Temperature (°F)</b> |
|-------------------------|----------------------------------------------------|-----------------------------|------------------------------------------------|
| TO-01                   | 1562 <sup>1</sup>                                  | ZEO-01                      | 428 <sup>1</sup>                               |
| TO-02                   | 1514 <sup>1</sup>                                  | ZEO-02                      | 428 <sup>1</sup>                               |
| TO-03                   | 1539 <sup>1</sup>                                  | N/A                         | N/A                                            |
| TO-04                   | 1496 <sup>1</sup>                                  | N/A                         | N/A                                            |
| TO-FOM-01               | 1500                                               | N/A                         | N/A                                            |
| TO-CLL                  | 1539                                               | N/A                         | N/A                                            |
| TO-PC-01                | 1500                                               | N/A                         | N/A                                            |
| TO-DU-01                | 1500                                               | N/A                         | N/A                                            |
| TO-DU-02                | 1500                                               | N/A                         | N/A                                            |
| TO-PCB-02               | 1500                                               | N/A                         | N/A                                            |

<sup>1</sup> Temperatures established by testing required by Special Condition No. 82. **(11/2024)**

- H. The RTOs and zeolite concentrator wheels may operate at temperatures different from those listed in Item G of this Special Condition or the manufacturers recommended operating temperature during preparation for source testing of the RTOs and zeolite concentrator wheels for actual testing and testing to demonstrate achieving the required control efficiency at lower operating temperatures.
- I. The operating instructions for the concentrator/RTO system shall be established and posted such that they are readily available to all of the concentrator/RTO operators.
- J. The concentrator/RTO system shall be operated and maintained in conformance with all of the manufacturer specifications and recommendations.
- K. The concentrator/RTO capture system's duct work shall be operated under negative pressure and an audio, visual, and olfactory (AVO) inspection of the capture system shall be performed monthly to check for leaking components. The capture system shall be maintained free of holes, cracks, and other conditions that would reduce the collection efficiency of the capture system;
- L. Spray booths and bake ovens shall have entry and exit air seals. Spray booth and bake oven air seals are not considered natural draft openings (NDO). **(11/2024)**
- M. An inspection and maintenance log shall be kept for the concentrator/RTO system whereby the log shall note the date of each inspection, the name of the inspector, and any repairs and/or maintenance work performed on the concentrator/RTO and its capture system.
- N. Materials containing halogenated organic compounds shall not be used in the surface coating operations and vented to the RTOs. **(01/2022)**
17. Planned maintenance on the zeolite concentrators and RTOs shall only be performed during periods when the facilities being controlled by the zeolite concentrators and RTOs are not in operation. **(01/2022)**
18. The applicable RTOs and concentrator bypasses shall have an automatic shutdown system in which the coating operation is stopped when flow is diverted by the bypass line away from the RTOs and the concentrators to the atmosphere when the coating lines are in operation. The automatic shutdown system as referenced in this condition means any parts/bodies already in the coating process are allowed to complete the coating process (application and/or curing), but no new

parts/bodies shall be introduced into the coating process until the concentrator/RTO are returned to normal operation. **(11/2024)**

- A. The automatic shutdown systems shall be verified to detect diversions of flow and shut down the coating operations when changes to control logic related to automatic shutdown systems are implemented. **(11/2024)**
  - B. Records shall be maintained of the control logic verification and the operational status of the automatic shutdown systems shall be included in the record. **(11/2024)**
  - C. Records of automatic shutdown system operation which include the time and date of the occurrence and the amount of time that the bypass remained open.
19. VOC and ES emissions from E-Coat dip tank systems overhead space may be vented to atmosphere without abatement. VOC emissions from the E-Coat dip tank system shall be calculated using US EPA's EIIP, Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities, Volume 2, Chapter 8 – Paint, Ink, and Other Coating Manufacturing, Equation 8.4-22 or equivalent method as approved by TCEQ. Emissions from this Special Condition shall be included in total emissions for the respective EPNs in the MAERT for compliance demonstration. **(11/2024)**

#### Corona Treaters

20. The corona treaters and ozone destruction units used in the Metal Coil Coating operation, and the Foil Coating Process are limited to the following: **(11/2024)**

| Emission Point No. | Process Line               | Corona Treater ID                              | Maximum Power Supply (kW) | Ozone Destructor Control Efficiency (%) |
|--------------------|----------------------------|------------------------------------------------|---------------------------|-----------------------------------------|
| FOM-CT-01          | Metal Coil Coating         | FOM-CT-01                                      | 5.0                       | 99.0                                    |
| CraTrt-01          | Cell Assembly Foil Coating | CraTrt-01, CraTrt-02, CraTrt-03, and CraTrt-04 | 40.0                      | 99.9                                    |

21. Records of maintenance performed shall be recorded and maintained as they occur. If the power supply parameters are outside of limits specified above, the affected facility shall not operate until the equipment is repaired. **(11/2024)**
22. Ozone destructor catalyst efficiency shall be verified per manufacturer recommendation by removing a sample of the catalyst and sending the sample to the vendor or a laboratory to check for surface contamination, activity and ozone reduction efficiency or using a portable ozone monitoring device on the exhaust of the ozone destructor. **(11/2024)**

If catalyst ozone destruction efficiency is less than the value specified in Special Condition No. 20, the affected facility shall not operate until the catalyst is cleaned or replaced. **(11/2024)**

#### Electrostatic Precipitator

23. The electrostatic control system for the Cooling Tubes operation shall be operated and maintained in accordance with the manufacturer's recommendations to ensure that the minimum control efficiency is met at all times. **(11/2024)**

24. The holder of this permit shall install, calibrate, and maintain a device to monitor the power output of the secondary side of the transformer/rectifier set for each field in each electrostatic precipitator. The voltage shall be maintained between 1.8 kilovolts (kV) and 40 kV for each field. The current shall be maintained between 0 milliamperes (mA) and 200 mA for each field. The system programmable logic controller may be used to read, record and display voltage and current for each field. **(11/2024)**
25. The Programmable Logic Controller (PLC) shall be calibrated at least annually in accordance with the manufacturer's specifications and shall be accurate to within a range  $\pm 5.0$  percent. For the annual calibration of the PLC, a multi-meter to measure voltage shall be used to monitor each field for each individual electrostatic precipitator. The multi-meter shall be accurate to within a range  $\pm 0.5$  percent. The results of the multi-meter readings shall be compared to the voltage displayed on the system PLC. **(11/2024)**

Voltage and current output from the PLC shall be recorded at least once per day that the system is required to be operated. Records of maintenance performed shall be recorded and maintained as they occur. If the electrostatic precipitator transformer/rectifier set parameters are outside of limits specified above, the affected facility shall not operate until the abatement equipment is repaired. **(11/2024)**

#### Initial Startup

26. During initial facility startup (shakedown period) of each coating line a maximum of three vehicle bodies per hour and 100 bodies per coating line in total may be in operation prior to the installation of the rotary concentrator/RTO systems used to control VOC and ES emissions. The PM/PM<sub>10</sub>/PM<sub>2.5</sub> filter systems must be in operation during this period. During this period, records of the dates and times of operation, and hourly and total throughput and VOC, ES and PM/PM<sub>10</sub>/PM<sub>2.5</sub> emissions shall be maintained on a daily basis. **(01/2022)**

#### Fuel Specifications, Metering and Work Practices

27. Fuel for the melting furnaces, boilers, process ovens, RTO, process air supply houses, heating ventilation and air conditioning units, and miscellaneous process equipment and air makeup units is limited to pipeline-quality, sweet natural gas containing no more than 0.23 grain hydrogen sulfide (H<sub>2</sub>S) and 0.21 grains total sulfur per 100 dry standard cubic feet (dscf). Standard commercial grade pipeline natural gas is assumed to meet this requirement. **(11/2024)**
28. Natural gas consumption shall be monitored and recorded as follows: **(11/2024)**

| Process or Specific Equipment                   | Metering Requirements                         | Monitoring Frequency | Recalibration Frequency                                                                            |
|-------------------------------------------------|-----------------------------------------------|----------------------|----------------------------------------------------------------------------------------------------|
| Fuel Billing Meter                              | Metering (1) for the entire site              | Monthly              | NA                                                                                                 |
| RTOs                                            | Metering for each RTO (8)                     | Monthly              | Annually or minimum frequency specified by manufacturer or interval specified by industry standard |
| Boilers                                         | Metering (1) for each group of boilers        | Monthly              |                                                                                                    |
| Melting/Casting Furnaces                        | Metering for each (8) melting/casting furnace | Monthly              |                                                                                                    |
| Paint Line, Heaters, Ovens and Air Makeup Units | Metering for each (4) paint lines             | Monthly              |                                                                                                    |
| Powder Coating Lines                            | Metering for each (2) powder coating          | Monthly              |                                                                                                    |

|  |      |  |                                           |
|--|------|--|-------------------------------------------|
|  | line |  | practice per<br>this Special<br>Condition |
|--|------|--|-------------------------------------------|

Other than the billing meter, each meter shall be calibrated prior to the start of production operations, unless the new meter has a manufacturer supplied calibration certificate, as follows:

- A. Use the calibration procedures specified by the flow meter manufacturer; or
- B. Use an appropriate flow meter calibration method published by a consensus-based standards organization. Consensus-based standards organizations include, but are not limited to, the following: ASTM International (100 Barr Harbor Drive, P.O. Box CB700, West Conshohocken, Pennsylvania 19428-B2959, (800) 262-1373, <http://www.astm.org>), the American National Standards Institute (ANSI, 1819 L Street, NW., 6th floor, Washington, DC 20036, (202) 293-8020, <http://www.ansi.org>), the American Gas Association (AGA, 400 North Capitol Street, NW., 4th Floor, Washington, DC 20001, (202) 824-7000, <http://www.aga.org>), the American Society of Mechanical Engineers (ASME, Three Park Avenue, New York, NY 10016-5990, (800) 843-2763, <http://www.asme.org>), the American Petroleum Institute (API, 1220 L Street, NW., Washington, DC 20005-4070, (202) 682-8000, <http://www.api.org>), and the North American Energy Standards Board (NAESB, 801 Travis Street, Suite 1675, Houston, TX 77002, (713) 356-0060, <http://www.api.org>); or
- C. Use an industry-accepted practice.

29. For the natural gas combustion sources, work practices shall be as follows:

- A. Inspect the burners and the heaters, ovens or thermal oxidizers on a quarterly basis; and
- B. Perform preventative maintenance as required on an annual basis.

### Emergency Engines

30. The emergency engines shall comply with the following requirements: **(06/2023)**

- A. The fuel for the emergency engines is limited to ultra-low sulfur diesel fuel with a sulfur content of 15 ppmw or less as specified in 40 CFR 80.6.
- B. Engine operation is limited to 100 hours per rolling 12-month period during non-emergency situations, as defined at 40 CFR § 63.6640(f) for Emergency Fire Pump No. 1, Emergency Fire Pump No. 2, Emergency Fire Pump No. 3, and Emergency Fire Pump No. 4.
- C. Each engine shall be equipped with a non-resettable run time meter. Run time hours shall be recorded monthly.
- D. The engine shall satisfy the Tier 3 exhaust emission standards specified at 40 CFR § 89.112.
- E. Compliance with the requirements of paragraph D of this Special Condition shall be demonstrated by retaining a copy of the manufacturers' certificate of conformity, or through other methods receiving prior written approval of the TCEQ Executive Director.
- F. A copy of the engine manufacturer's design and operation specifications and all emission-related maintenance requirements must be kept.
- G. Records of maintenance activities and the duration of the activity shall be kept for five years.

**Boilers, Heaters, Furnaces and RTO Burners**

31. Emissions from the following combustion devices shall not exceed the following: **(06/2023)**

A. Emissions from the following combustion devices shall not exceed the following based on vendor documentation: **(11/2024)**

| Facility ID(s)                                                                                                                   | EPN(s)                                  | Pollutant       | Standard        | Averaging Period       |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-----------------|-----------------|------------------------|
| Ecoat Oven Line 1 Burners, Topcoat Oven Line 1 Burners                                                                           | TO-01                                   | NO <sub>x</sub> | 0.073 lbs/MMBtu | 1-hr routine operation |
|                                                                                                                                  |                                         | CO              | 0.148 lbs/MMBtu | 1-hr routine operation |
| TO-01 and Concentrator Wheel Burner                                                                                              | TO-01                                   | NO <sub>x</sub> | 0.073 lbs/MMBtu | 1-hr routine operation |
|                                                                                                                                  |                                         | CO              | 0.300 lbs/MMBtu | 1-hr routine operation |
| Ecoat Oven Line 2 Burners, Topcoat Oven Line 2 Burners                                                                           | TO-02                                   | NO <sub>x</sub> | 0.073 lbs/MMBtu | 1-hr routine operation |
|                                                                                                                                  |                                         | CO              | 0.148 lbs/MMBtu | 1-hr routine operation |
| TO-02 Concentrator Wheel Burner                                                                                                  | TO-02                                   | NO <sub>x</sub> | 0.073 lbs/MMBtu | 1-hr routine operation |
|                                                                                                                                  |                                         | CO              | 0.292 lbs/MMBtu | 1-hr routine operation |
| TO-02                                                                                                                            | TO-02                                   | NO <sub>x</sub> | 0.073 lbs/MMBtu | 1-hr routine operation |
|                                                                                                                                  |                                         | CO              | 0.296 lbs/MMBtu | 1-hr routine operation |
| Heated Flash Line 1 Burners, Dehumidifier Line 1 Air Supply Heater, Heated Flash Line 2, Dehu Line 2 and one flash line 2 burner | BRN-01, BRN-02, BRN-03, and BRN-04      | NO <sub>x</sub> | 0.073 lbs/MMBtu | 1-hr routine operation |
|                                                                                                                                  |                                         | CO              | 0.291 lbs/MMBtu | 1-hr routine operation |
| ASH Paint Mix Room, ASH-03, ASH-04, ASH-01, ASH-02, ASH Clean Room                                                               | BRN-06, BRN-07, BRN-08                  | NO <sub>x</sub> | 0.091 lbs/MMBtu | 1-hr routine operation |
|                                                                                                                                  |                                         | CO              | 0.182 lbs/MMBtu | 1-hr routine operation |
| ASU Booth, ASU Clean Room, ASU Shop/Workdeck                                                                                     | TO-03 (PL-BRN-01), PL-BRN-07, PL-BRN-08 | NO <sub>x</sub> | 0.065 lbs/MMBtu | 1-hr routine operation |
|                                                                                                                                  |                                         | CO              | 0.292 lbs/MMBtu | 1-hr routine operation |
| ARU Heated Flash 1, ARU Heated Flash 2                                                                                           | PL-BRN-02, PL-BRN-03                    | NO <sub>x</sub> | 0.072 lbs/MMBtu | 1-hr routine operation |
|                                                                                                                                  |                                         | CO              | 0.291 lbs/MMBtu | 1-hr routine operation |

|                                                   |                                                                   |                 |                 |                        |
|---------------------------------------------------|-------------------------------------------------------------------|-----------------|-----------------|------------------------|
| Oven Zone 1/2, Oven Zone 3/Holdup 1, and Holdup 2 | PL-BRN-04, PL-BRN-05, PL-BRN-06                                   | NO <sub>x</sub> | 0.072 lbs/MMBtu | 1-hr routine operation |
|                                                   |                                                                   | CO              | 0.148 lbs/MMBtu | 1-hr routine operation |
| ASH-05, ASH-06, and ASH-07                        | ASH-05, ASH-06, and ASH-07                                        | NO <sub>x</sub> | 0.073 lbs/MMBtu | 1-hr routine operation |
|                                                   |                                                                   | CO              | 0.292 lbs/MMBtu | 1-hr routine operation |
| TO-03                                             | TO-03                                                             | NO <sub>x</sub> | 0.075 lbs/MMBtu | 1-hr routine operation |
|                                                   |                                                                   | CO              | 0.300 lbs/MMBtu | 1-hr routine operation |
| TO-04                                             | TO-04                                                             | NO <sub>x</sub> | 0.055 lbs/MMBtu | 1-hr routine operation |
|                                                   |                                                                   | CO              | 0.300 lbs/MMBtu | 1-hr routine operation |
| Body Paint Line 3- Ecoat Oven and Heated Flashoff | TO-04                                                             | NO <sub>x</sub> | 0.073 lbs/MMBtu | 1-hr routine operation |
|                                                   |                                                                   | CO              | 0.182 lbs/MMBtu | 1-hr routine operation |
| Paint Line 3 ASU                                  | ASH-08a, ASH-08b, ASH-09a, and ASH-09b                            | NO <sub>x</sub> | 0.072 lbs/MMBtu | 1-hr routine operation |
|                                                   |                                                                   | CO              | 0.150 lbs/MMBtu | 1-hr routine operation |
| TO-PC-01, TO-CLL, TO-DU-01                        | TO-PC-01, TO-CLL, TO-DU-01                                        | NO <sub>x</sub> | 0.037 lbs/MMBtu | 1-hr routine operation |
|                                                   |                                                                   | CO              | 0.300 lbs/MMBtu | 1-hr routine operation |
| TO-DU-02 and TO-PCB-02                            | TO-DU-02 and TO-PCB-02                                            | NA              | Electric        | N/A                    |
| Body PC Cure Oven 1 and Body PC Cure Oven 2       | TO-04                                                             | NO <sub>x</sub> | 0.07 lbs/MMBtu  | 1-hr routine operation |
|                                                   |                                                                   | CO              | 0.18 lbs/MMBtu  | 1-hr routine operation |
| P Coat Oven Dryoff and Curing                     | PCDO1-01a, PCDO1-01b, PCDO1-02a, PCDO1-02b, and TO-PC-01 (PCC-01) | NO <sub>x</sub> | 0.04 lbs/MMBtu  | 1-hr routine operation |
|                                                   |                                                                   | CO              | 0.15 lbs/MMBtu  | 1-hr routine operation |
| FCD -01 through 06 Burners                        | FCD-01                                                            | NO <sub>x</sub> | 0.046 lbs/MMBtu | 1-hr routine operation |
|                                                   |                                                                   | CO              | 0.116 lbs/MMBtu | 1-hr routine operation |
| Melting Furnaces MC-01                            | MC-123                                                            | NO <sub>x</sub> | 0.099 lbs/MMBtu | 1-hr routine           |

|                       |        |                 |                 |                        |
|-----------------------|--------|-----------------|-----------------|------------------------|
| and MC-02             |        |                 |                 | operation              |
|                       |        | CO              | 0.075 lbs/MMBtu | 1-hr routine operation |
| Melting Furnace MC-03 | MC-123 | NO <sub>x</sub> | 0.074 lbs/MMBtu | 1-hr routine operation |
|                       |        | CO              | 0.037 lbs/MMBtu | 1-hr routine operation |

- B. Emissions from the following combustion devices shall not exceed the following based on portable analyzer, source testing, or CEMS data: **(11/2024)**

| Facility ID(s)                      | EPN(s)                         | Pollutant       | Standard                                                             | Averaging Period                                       | Compliance Method          |
|-------------------------------------|--------------------------------|-----------------|----------------------------------------------------------------------|--------------------------------------------------------|----------------------------|
| BLR-1 through BLR-40                | BLR-1 through BLR-15           | NO <sub>x</sub> | 0.011 lbs/MMBtu                                                      | 1-hr routine operation                                 | Portable analyzer readings |
|                                     |                                | CO              | 0.082 lbs/MMBtu                                                      | 1-hr routine operation                                 | Portable analyzer readings |
| Casting Furnace Nos. 1, 2, 3, and 5 | CAS-01, CAS-02, CAS-03, CAS-05 | NO <sub>x</sub> | 0.092 lbs/MMBtu                                                      | 1-hr routine operation                                 | Source testing             |
|                                     |                                | CO              | 0.049 lbs/MMBtu                                                      | 1-hr routine operation                                 | Source testing             |
| Casting Furnace No. 4               | CAS-04MC                       | NO <sub>x</sub> | 0.079 lbs/MMBtu                                                      | 1-hr routine operation                                 | Source testing             |
|                                     |                                | CO              | 0.037 lbs/MMBtu                                                      | 1-hr routine operation                                 | Source testing             |
| Melting Furnaces MC-01 and MC-02    | MC-123                         | NH <sub>3</sub> | 10 ppmv @ 15% O <sub>2</sub> (dry basis) (Not applicable for MC-AOS) | 24-hrs (if equipped with NH <sub>3</sub> CEMS)         | CEMS data                  |
|                                     |                                |                 |                                                                      | 1-hr block (if not equipped with NH <sub>3</sub> CEMS) | Source testing             |
| Melting Furnace MC-03               | MC-123                         | NH <sub>3</sub> | 10 ppmv @ 15% O <sub>2</sub> (dry basis) (Not applicable for MC-AOS) | 24-hrs (if equipped with NH <sub>3</sub> CEMS)         | CEMS data                  |
|                                     |                                |                 |                                                                      | 1-hr block (if not equipped with NH <sub>3</sub> CEMS) | Source testing             |

- C. The site shall maintain records of the NO<sub>x</sub> and CO emission factors from the vendors for each type of equipment listed in table A of this Special Condition above. Only one record is required where there are multiple identical units to demonstrate compliance with the NO<sub>x</sub> and CO emissions limits. **(11/2024)**
- D. The actual firing rates for Line 1 and Line 2 E-coat Oven, Line 1 and Line 2 Top Coat Oven, Paint Mix Room, Clean Rooms, ASH-07 and the Casting Furnaces shall be limited as follows: **(11/2024)**

| EPN       | Source Description                      | Maximum Allowable Firing Rate (MMBtu/hr) |
|-----------|-----------------------------------------|------------------------------------------|
| TO-01     | E-coat Oven Line 1 Burners              | 12.83                                    |
| TO-01     | Top Coat Oven Line 1 Burners            | 11.23                                    |
| BRN-01    | Heated Flash Line 1 Burners             | 4.09                                     |
| TO-02     | E-coat Oven Line 2 Burners              | 14.43                                    |
| TO-02     | Top Coat Oven Line 2 Burners            | 11.23                                    |
| BRN-06    | ASH Paint Mix Room                      | 3.14                                     |
| ASH-07    | ASH -07                                 | 5.00                                     |
| BRN-08    | ASH Clean Room                          | 3.07                                     |
| PL-BRN-07 | ASU Clean Room                          | 0.66                                     |
| CAS-01    | Aluminum Melting Furnace 1              | 8.36                                     |
| CAS-02    | Aluminum Melting Furnace 2              | 8.36                                     |
| CAS-03    | Aluminum Melting Furnace 3              | 8.36                                     |
| CAS-05    | Aluminum Melting Furnace 5              | 8.36                                     |
| CAS-04    | Aluminum Melting Furnace 4-Main Chamber | 21.60                                    |

### Melting and Die Casting Operations

32. The die casting operations shall be limited to 8 melting/casting furnaces and to the following hourly and annual charge rates: **(11/2024)**

| Furnace ID                                                                             | Tons per hour                                           | Tons per year in any rolling 12-month period |
|----------------------------------------------------------------------------------------|---------------------------------------------------------|----------------------------------------------|
| All clean charge furnaces combined (CAS-01, CAS-02, CAS-03, CAS-04, CAS-05, and MC-03) | 33.96                                                   | 297,490                                      |
| All scrap melting furnaces combined (MC-01 and MC-02)                                  | Clean charge and runaround scrap = 44.1<br>Scrap = 27.6 | 628,092                                      |

33. Emissions from die casting operations from all casting and melting furnaces shall be limited to hourly and annual emissions listed in the MAERT table of this permit. Compliance with this condition shall be demonstrated by calculations performed as listed in this Special Condition. **(03/2022)**
- Hourly natural gas consumption (MMBtu) = Measured natural gas flow (MMscf) x BTU content (monthly average Btu/scf value from natural gas supplier);
  - Hourly emissions (lb/hr) = Hourly natural gas consumption (MMBtu) x Emission factor (lb/MMBtu);
  - Annual emissions (tons/year) = Annual natural gas consumption (MMBtu) x Emission factor (lb/MMBtu);
  - Following sources shall be used for emission factors in lb/MMBtu or lb/MMscf
    - Vendor guarantee
    - Test data from similar equipment at the site or other locations; or
    - AP-42

34. Selective Catalytic Reduction (SCR) shall be used to control NO<sub>x</sub> emissions from EPN MC-123, except during authorized AOS for FINs MC-01, MC-02, and MC-03. Aqueous ammonia shall be used in the SCR system(s) and shall have a concentration of less than 20% ammonia by weight. **(11/2024)**
35. The concentration of ammonia (NH<sub>3</sub>) from EPNs MC-123 shall not exceed 10 parts per million by volume dry (ppmvd) corrected to 15 percent oxygen (O<sub>2</sub>), on a rolling 24-hour average and an annual average. This concentration limit shall not apply to MSS activities, during which emissions are limited by the emission rates shown on the MAERT. **(11/2024)**
36. The NH<sub>3</sub> concentration in Exhaust Stack (EPNs MC-123) shall be tested or calculated according to one of the methods listed below and shall be tested or calculated according to frequency listed below. Testing for NH<sub>3</sub> slip is only required on days when the SCR unit is in operation. **(05/2025)**

The holder of this permit may install, calibrate, maintain, and operate a CEMS to measure and record the concentrations of NH<sub>3</sub>. The NH<sub>3</sub> concentrations shall be corrected and reported in accordance with Special Condition No. 35.

As an approved alternative, the NH<sub>3</sub> slip may be measured using a sorbent or stain tube device specific for NH<sub>3</sub> measurement in the 5 to 10 ppm range. The frequency of sorbent or stain tube testing shall be daily for the first 60 days of operation, after which, the frequency may be reduced to weekly testing if operating procedures have been developed to prevent excess amounts of NH<sub>3</sub> from being introduced in the SCR unit and when operation of the SCR unit has been proven successful with regard to controlling NH<sub>3</sub> slip. Daily sorbent or stain tube testing shall resume when the catalyst is within 30 days of its useful life expectancy. If monitoring cannot be conducted due to weather or safety conditions, the date, time, and specific conditions prohibiting sampling shall be recorded in lieu of the required daily monitoring. These results shall be recorded and used to determine compliance with Special Condition No. 35.

If the sorbent or stain tube testing indicates an ammonia slip concentration which exceeds 5 parts per million (ppm) at any time, the permit holder shall begin NH<sub>3</sub> testing by either the Phenol-Nitroprusside Method, the Indophenol Method, or EPA Conditional Test Method (CTM) 27 on a quarterly basis in addition to the daily/weekly sorbent or stain tube testing. The quarterly testing shall continue until such time as the SCR unit catalyst is replaced; or if the quarterly testing indicates NH<sub>3</sub> slip is 4 ppm or less, the Phenol-Nitroprusside/Indophenol/CTM 27 tests may be suspended until sorbent or stain tube testing again indicate 5 ppm NH<sub>3</sub> slip or greater. These results shall be recorded and used to determine compliance with Special Condition No. 35.

As an approved alternative to sorbent or stain tube testing or an NH<sub>3</sub> CEMS, the permit holder may install and operate a second NO<sub>x</sub> CEMS probe located upstream of the SCR and after any combustion device, upstream of the stack NO<sub>x</sub> CEMS, which may be used in association with the SCR efficiency and NH<sub>3</sub> injection rate to estimate NH<sub>3</sub> slip. This condition shall not be construed to set a minimum NO<sub>x</sub> reduction efficiency on the SCR unit. These results shall be recorded and used to determine compliance with Special Condition No. 35.

As an approved alternative to sorbent or stain tube testing, NH<sub>3</sub> CEMS, or a second NO<sub>x</sub> CEMS, the permit holder may install and operate a dual stream system of NO<sub>x</sub> CEMS at the exit of the SCR. One of the exhaust streams would be routed, in an unconverted state, to one NO<sub>x</sub> CEMS, and the other exhaust stream would be routed through a NH<sub>3</sub> converter to convert NH<sub>3</sub> to NO<sub>x</sub> and then to a second NO<sub>x</sub> CEMS. The NH<sub>3</sub> slip concentration shall be calculated from the delta between the two NO<sub>x</sub> CEMS readings (converted and unconverted). These results shall be recorded and used to determine compliance with Special Condition No. 35.

Any other method used for measuring NH<sub>3</sub> slip shall require prior approval from the TCEQ Regional Director.

37. If using a portable analyzer to determine compliance, the holder of this permit shall measure and record in-stack concentrations of NO<sub>x</sub>, CO, and O<sub>2</sub> in each Exhaust Stack (EPN MC-123) using a portable analyzer. The portable analyzer shall be operated in accordance with the Environmental Protection Agency's, Office of Air Quality Planning & Standards, Emission Measurement Center Conditional Test Method - Determination of Oxygen, Carbon Monoxide, and Oxides of Nitrogen from Stationary Sources for Periodic Monitoring (Portable Electrochemical Analyzer Procedure) [CTM-034] (September 8, 1999) or CEMS. These measured concentrations shall be used to calculate NO<sub>x</sub>, CO, and NH<sub>3</sub> emission rates to determine compliance with emission limits specified in MAERT. **(11/2024)**
38. If using CEMS to determine compliance, the holder of this permit shall install, calibrate, and maintain a CEMS to measure and record the in-stack concentrations of NO<sub>x</sub>, CO, and O<sub>2</sub> emissions from EPNs MC-123. **(11/2024)**
- A. The CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and the data analysis and reporting requirements specified in the applicable Performance Specification Nos. 1 through 9, 40 CFR Part 60, Appendix B. If there are no applicable performance specifications in 40 CFR Part 60, Appendix B, contact the TCEQ Office of Air, Air Permits Division in Austin for requirements to be met.
  - B. The system shall be zeroed and spanned daily, and corrective action taken when the 24-hour span drift exceeds two times the amounts specified in the applicable Performance Specification Nos. 1 through 9, 40 CFR Part 60, Appendix B, or as specified by the TCEQ if not specified in Appendix B. Zero and span is not required on weekends and plant holidays if instrument technicians are not normally scheduled on those days.
  - C. Each monitor shall be quality-assured at least quarterly using Cylinder Gas Audits (CGA) in accordance with 40 CFR Part 60, Appendix F, Procedure 1, § 5.1.2, with the following exception: a RATA is not required once every four quarters (i.e., four successive quarterly CGA may be conducted). An equivalent quality assurance method approved by the TCEQ may also be used. Successive quarterly audits shall occur no closer than two months.
  - D. All CGA exceedances of ±15 percent accuracy and any unscheduled CEMS downtime not corrected within 24 hours shall be reported to the TCEQ Regional Director, and necessary corrective action shall be taken. Unscheduled CEMS downtime is any CEMS downtime not required for daily span checks and annual RATA. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Director.
  - E. The monitoring data shall be reduced to average hourly concentrations at least once every day, using a minimum of four data points from each one-hour period. Readings shall be taken at least once every 15-minute quadrant of the clock hour and the average values shall be recorded from for each one-hour period. The individual average concentrations shall be reduced to units of the permit allowable emission rate in tons per year at least once every month. Compliance with the annual allowable contained on the MAERT shall be based on a 12-month rolling average.
  - F. All monitoring data and quality-assurance data shall be maintained by the source for a period of two years and shall be made available to the TCEQ Executive Director or a representative upon request. The data from the CEMS may, at the discretion of the TCEQ, be used to determine compliance with the conditions of this permit.
  - G. The appropriate TCEQ Regional Office shall be notified at least 15 days prior to any required RATA to provide them the opportunity to observe the testing.

- H. The CEMS reporting requirements of 30 TAC § 117.119 may be substituted for the reporting requirements if the CEMS is not subject to the requirements of 40 CFR Part 60.
39. Particulate emissions from the casting and melting furnaces and silos shall be captured and exhausted through filter systems which meet the requirements as listed below, except for equipment operating under an Alternate Operating Scenario (AOS) as authorized in accordance with Special Condition Nos. 41, 42 and 46. Particulate abatement equipment and their ventilation systems shall be maintained in good condition at all times and operated during all applicable operations. **(10/2023)**

| EPN       | Manufacturing Process/<br>Emission Source | Abatement<br>Type | Arrestance<br>(%) <sup>1</sup> | Outlet Grain<br>Loading (gr/scf) |
|-----------|-------------------------------------------|-------------------|--------------------------------|----------------------------------|
| CAS-01    | Casting Furnace 01                        | Dry               | 85                             | N/A                              |
| CAS-02    | Casting Furnace 02                        | Dry               | 85                             | N/A                              |
| CAS-03    | Casting Furnace 03                        | Dry               | 85                             | N/A                              |
| CAS-04    | Casting Furnace 04                        | Dry               | 85                             | N/A                              |
| CAS-05    | Casting Furnace 05                        | Dry               | 85                             | N/A                              |
| MC-123    | Melt Furnace -01 through 03               | Dry               | 99                             | N/A                              |
| MCSILO-01 | Lime Silo 1                               | Dry               | N/A                            | 0.01                             |
| MCSILO-02 | Lime Silo 2                               | Dry               | N/A                            | 0.01                             |

<sup>1</sup> American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Standard 52.1 (Gravimetric and Dust Spot Procedures for Testing Air Cleaning Devices Used in General Ventilation for Removing Particulate Matter). **(11/2024)**

40. The particulate matter capture and control/ventilation systems for the casting and melting furnaces and silos shall be designed and operated as follows: **(06/2023)**
- A. The capture and control system shall be operated and maintained in accordance with the manufacturer's recommendations to assure that the minimum control efficiency is met at all times when the sources in Special Condition No. 39 are in operation;
- B. The holder of this permit shall install, calibrate (if applicable), and maintain a differential pressure gauge to monitor pressure drop across the filter pads. Each monitoring device that requires calibration shall be calibrated at least annually or in accordance with the manufacturer's specifications and shall be accurate to within a range of  $\pm 0.5$ -inch water gauge pressure ( $\pm 125$  pascals) or a span of  $\pm 3$  percent. The monitoring device that only requires to be zeroed shall be zeroed in accordance with the manufacturer's recommended frequency; **(11/2024)**
- C. The filter media differential pressure shall be maintained between the following limits (hourly average value), or as defined by the manufacturer, or as established during the commissioning of equipment: **(11/2024)**

| EPN    | Manufacturing Process/<br>Emission Source | Differential<br>Pressure Lower<br>Limit (in W.C.) | Differential<br>Pressure Upper<br>Limit (in W.C.) |
|--------|-------------------------------------------|---------------------------------------------------|---------------------------------------------------|
| CAS-01 | Casting Furnace 01                        | 0.2                                               | 3.5                                               |
| CAS-02 | Casting Furnace 02                        | 0.2                                               | 3.5                                               |

|           |                            |     |     |
|-----------|----------------------------|-----|-----|
| CAS-03    | Casting Furnace 03         | 0.2 | 3.5 |
| CAS-04    | Casting Furnace 04         | 0.2 | 3.5 |
| CAS-05    | Casting Furnace 05         | 0.2 | 3.5 |
| MC-123    | Melt Furnace 01 through 03 | 0.2 | 3.5 |
| MCSILO-01 | Lime Silo 1                | 0.2 | 3.5 |
| MCSILO-02 | Lime Silo 2                | 0.2 | 3.5 |

- D. Pressure drop readings shall be recorded at least once per day that the system is required to be operated. Filters shall be replaced whenever the pressure drop across the filter media no longer meets the limits in Item C of this Special Condition or the manufacturer's recommendation, or as established during the commissioning of equipment; **(11/2024)**
  - E. If the filter system operating performance parameters are outside of the limits in Item C of this Special Condition or the manufacturer's recommended operating range, or as established during the commissioning of equipment, the affected facility shall not be operated until the abatement equipment is repaired; **(11/2024)**
  - F. Except for the casting and melting furnaces, planned maintenance on the dust collection system shall be performed only when the facilities being controlled by the dust collection systems are not in operation; **(10/2023)**
  - G. The capture system shall be maintained free of holes, cracks, and other conditions that would reduce the collection efficiency of the capture system. This condition does not apply to bin vent filters on silos; **(11/2024)**
  - H. An inspection and maintenance log shall be kept for the filter system whereby the log shall note the date of each inspection, the name of the inspector and any repairs and/or maintenance work performed; and
  - I. Failure to maintain the required pressure drop across the filter media or the documentation of particulate, deposition originating from this site beyond the property lines of this site shall be considered as demonstrating that the filters are not being maintained in good condition.
41. During bypass for filter media replacement for the filtration system controlling the emissions from the melting/holding furnaces (EPNs: CAS-01, CAS-02, CAS-03, and CAS-05), only the burners in the holding section of each furnace may be in operation. Bypass for filter media replacement is limited to a total of 150 hr/yr for each furnace. For these periods, records of the dates and times of filter media replacement and the total number of hours of filter media replacement on a rolling 12-month period shall be maintained. **(06/2023)**
42. During abatement equipment maintenance for the melting furnaces (FINs MC-01, MC-02, and MC-03), the following shall apply: **(11/2024)**
- A. Furnaces MC-01, MC-02, and MC-03 shall only melt clean charge and/or runaround scrap. Scrap metal shall not be charged or processed in Furnaces MC-01 and MC-02 when abatement system(s) is/are not in operation;
  - B. Records shall be kept, including natural gas consumption, to demonstrate compliance with the MAERT emission limits for all melting furnaces (FINs MC-01, MC-02, and MC-03/EPN: MC-123) during abatement equipment maintenance.
43. Solid reactive flux shall only be used in Furnaces MC-01, MC-02, and MC-03 when lime injected bag house is in operation. **(11/2024)**

44. Solid reactive flux addition shall be accomplished by adding flux material into the molten metal in a manner that minimizes fugitive emissions. **(11/2024)**
45. Lime shall be injected into the duct work leading to the filtration system for melting furnaces MC-01 through MC-03, except when operating as authorized in accordance with Special Condition Nos. 42 and 46. Lime handling shall be accomplished in a manner that minimizes fugitive emissions. **(10/2023)**
46. The following requirements shall apply during the Alternate Operating Scenario (AOS): **(11/2024)**
  - A. Furnaces MC-01, MC-02, and MC-03 shall only melt clean charge and/or runaround scrap;
  - B. Flux shall not be used in Furnaces MC-01, MC-02, and MC-03;
  - C. Furnaces MC-01, MC-02, and MC-03 are authorized to operate up to 8,760 hours per year during the AOS;
  - D. Natural gas consumption shall be recorded at all times to demonstrate compliance with the MAERT emission limits; and
  - E. Emissions from operation of melt furnaces MC-01, MC-02, and MC-03 shall not be exhausted from EPNs MC-AOS and MC-123 simultaneously.

**Compliance Assurance Monitoring (CAM) (06/2023)**

47. If using a portable analyzer to determine compliance, the holder of this permit shall use a portable analyzer once per day to monitor nitrogen oxides in the exhaust stream of the control device for EPNs MC-123. If monitoring cannot be conducted due to weather or safety conditions, the date, time, and specific conditions prohibiting sampling shall be recorded in lieu of the required daily monitoring. The portable analyzer shall be operated in accordance with the Environmental Protection Agency's, Office of Air Quality Planning & Standards, Emission Measurement Center Conditional Test Method - Determination of Oxygen, Carbon Monoxide, and Oxides of Nitrogen from Stationary Sources for Periodic Monitoring (Portable Electrochemical Analyzer Procedure) [CTM-034] (September 8, 1999). NO<sub>x</sub> Emissions shall be corrected/calculated in units of the underlying applicable emission limitation. **(05/2025)**
48. The holder of this permit may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging times specified, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. All monitoring data shall be collected in accordance with the requirements specified in 40 CFR § 64.7(c).
49. The holder of this permit shall perform monthly inspections to verify proper operation of the capture systems of EPN: MC-123 to verify there are no holes, cracks, and/or other conditions that would reduce the collection efficiency of the emission capture system as represented. If the results of the inspections indicate that the capture system is not operating properly, the permit holder shall promptly take necessary corrective actions.
50. The control devices shall not be bypassed during normal operation of furnaces (EPN: MC-123) and silos (EPNs: MCSILO-01 and MCSILO-02), except when operating as authorized in accordance with Special Condition No. 42 and 46. **(11/2024)**

51. If using CEMS, the TCEQ Regional Office shall be notified as soon as possible after the discovery of any monitor malfunction that is expected to result in more than 24 hours of lost CEMS data. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Director in case of extended monitor downtime. Necessary corrective action shall be taken if the CEMS downtime exceeds 5 percent of the melting furnaces MC-01 and MC-02 operating hours in the quarter. Failure to complete any corrective action as directed by the TCEQ Regional Office may be deemed a violation of the permit. **(11/2024)**

### Storage Tanks

52. Storage tank and tote throughput and service shall be limited to the following: **(11/2024)**

| Tank Identifier | Service                           | Tank Capacity (gal) | Fill Rate (gallons/hour) | Rolling 12 Month Throughput (gallons) |
|-----------------|-----------------------------------|---------------------|--------------------------|---------------------------------------|
| GAAT-01         | Windshield Washer Fluid 1         | 7,500               | 8,000                    | 356,632                               |
| GAAT-02         | Windshield Washer Fluid 2         | 7,500               | 8,000                    | 356,632                               |
| GAAT-03         | Windshield Washer Fluid 3         | 7,500               | 8,000                    | 356,632                               |
| GAAT-04         | Coolant                           | 16,500              | 16,500                   | 2,544,000                             |
| GAAT-05         | Brake Fluid                       | 16,500              | 16,500                   | 198,000                               |
| GAAT-06         | Windshield Washer Fluid Totes     | 350                 | 350                      | 356,632                               |
| GAAT-07         | Gear Oil Bulk Tank-1              | 16,500              | 16,500                   | 156,000                               |
| GAAT-08         | Gear Oil Bulk Tank-2              | 16,500              | 16,500                   | 849,600                               |
| GAAT-09         | Coolant Dilute Buffer Container   | 2,050               | 2,050                    | 5,088,000                             |
| CLLT-01         | DMC Tank                          | 6,605               | 6,605                    | 79,260                                |
| CLLT-02         | DMC/Waste Electrolyte             | 6,605               | 6,605                    | 79,260                                |
| CAS-NH3         | Casting Shop Aqueous Ammonia Tank | 10,000              | 6,500                    | 120,000                               |
| SBCT            | IPA Cleaning solution tote        | 350                 | 350                      | 356,632                               |
| DUT-01          | DU Coolant Totes                  | 350                 | 350                      | 1,109,523                             |
| DUT-02          | DU Gear Oil Totes                 | 350                 | 350                      | 1,109,523                             |
| P1-53TK-02      | Aqueous Ammonia                   | 7,000               | 7,000                    | 2,314,147                             |
| CB1-NH3         | Aqueous Ammonia                   | 3,500               | 6,500                    | 260,000                               |
| P1-53TK-01      | Nitric acid                       | 7,000               | 7,000                    | 5,206,831                             |
| P1-53TK-03      | Sulfuric acid tank                | 7,000               | 7,000                    | 925,659                               |
| P1-53TT-01      | Sulfuric acid tote                | 275                 | 275                      | 380,672                               |
| P1-53TT-02      | Sulfuric acid tote                | 275                 | 275                      | 380,672                               |
| CB1-H2SO4-1     | Sulfuric acid tote                | 275                 | 275                      | 25,676                                |
| CB1-H2SO4-2     | Sulfuric acid tote                | 275                 | 275                      | 25,676                                |

53. Storage tanks are subject to the following requirements:

- A. Except for labels, logos, etc. not to exceed 15 percent of the tank total surface area, uninsulated tank exterior surfaces exposed to the sun shall be white or unpainted aluminum.

- B. Storage tanks must be equipped with permanent submerged fill pipes. The fill level of these storage tanks shall not exceed a level that is in line with good engineering practices and shall include a high-level alarm to prevent overflow.
  - C. The permit holder shall maintain a record of tank throughput for the previous month and the rolling 12-month period for each tank.
  - D. Refrigerant used in the vehicle air conditioning systems shall be stored in a pressure tank. The tank pressure shall not exceed that of any relief valve or rupture disk on the tank.
  - E. Anhydrous ammonia used in the die shop shall be stored in a pressure tank. The tank pressure shall not exceed that of any relief valve or rupture disk on the tank. **(06/2023)**
54. The permit holder shall maintain prevention and protection measures for the NH<sub>3</sub> storage system which include the following: **(06/2023)**
- A. Marking and securing the NH<sub>3</sub> storage tank to protect the tank from accidents that could cause a rupture.
  - B. For the anhydrous ammonia storage tank, a water deluge system shall be installed to cover the tank and loading area to mitigate any airborne releases of NH<sub>3</sub>. The water deluge system must activate when an ambient safety sensor level of 200 parts per million by volume of NH<sub>3</sub> is detected.
  - C. For the anhydrous ammonia tank, the permit holder shall follow the mitigation procedures set out in the risk management plan for the site with regard to anhydrous ammonia, as required by 40 CFR Part 68, if applicable.
55. The following requirements apply to handling of ammonia, except when using abatement device option(s) in Special Condition No. 56: **(11/2024)**
- A. Double closures are required on the connecting line that will minimize potential emissions after loading when the lines are disconnected.
  - B. When transferring ammonia, all vapors shall be vapor balanced to the host tank and never to the atmosphere.
56. If an abatement device is used to treat ammonia vapors generated during ammonia handling, then ammonia vapors shall be captured and directed to an abatement device as listed in the table below in Item A of this Special Condition. **(11/2024)**
- A. List of ammonia handling tanks/equipment subject to this Special Condition and associated permit requirements:

| FIN     | Service                      | Abatement Device  | Optional or Required?                                                                             | Requirement                                                                                  |
|---------|------------------------------|-------------------|---------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| CAS-NH3 | Casting Aqueous Ammonia tank | None              | Required if not using optional abatement devices in Item A of this Special Condition for this FIN | Meet requirements of Special Condition No. 55                                                |
|         |                              | Diffusion Chamber | Optional                                                                                          | Diffusion chamber containing at least two gallons of fresh water per pound of ammonia vapors |

|            |                                                                                                              |                                    |                                                                                                   |                                                                           |
|------------|--------------------------------------------------------------------------------------------------------------|------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
|            |                                                                                                              |                                    |                                                                                                   | that may be discharged during ammonia handling operation                  |
|            |                                                                                                              | Adsorption Drums                   | Optional                                                                                          | Ammonia breakthrough monitoring using detector tubes or portable analyzer |
| CB1-NH3    | CMP1 Aqueous Ammonia Storage Tank                                                                            | None                               | Required if not using optional abatement devices in Item A of this Special Condition for this FIN | Meet requirements of Special Condition No. 55                             |
|            |                                                                                                              | Scrubber                           | Optional                                                                                          | Minimum removal efficiency of 99%                                         |
| P1-AMM-CAP | CMP2 Aqueous Ammonia Storage Tank, CMP2 Waste Tank, CMP2 RO System, CMP2 Process Tanks, CMP2 Process Vessels | Scrubber(s) [P1-SCU-01, P1-SCU-02] | Required                                                                                          | Meet requirements of Special Condition No. 69                             |

### Carbon Adsorption System

57. The cell assembly area shall vent through TO-CLL, TO-03, or a carbon adsorption system (CAS) according to Special Condition 14. The CAS shall consist of at least two activated carbon canisters that are connected in series (EPN CLL-05). **(11/2024)**
- A. The CAS shall be sampled daily to determine breakthrough of volatile organic compounds (VOC). The sampling point shall be at the outlet of the initial canister but before the inlet to the second or final polishing canister. Sampling shall be done during cell production.
  - B. The VOC sampling and analysis shall be performed using an instrument with a flame ionization detector (FID), or a TCEQ-approved alternative detector. The instrument/FID must meet all requirements specified in Section 8.1 of EPA Method 21 (40 CFR 60, Appendix A). Sampling and analysis for VOC breakthrough shall be performed as follows:
    - (1) Immediately prior to performing sampling, the instrument/FID shall be calibrated with zero and span calibration gas mixtures. Zero gas shall be certified to contain less than 0.1 ppmv total hydrocarbons. Span calibration gas shall be propane at a concentration within  $\pm 10$  percent of 20 ppmv and certified by the manufacturer to be  $\pm 2$  percent accurate. Calibration error for the zero and span calibration gas checks must be less than  $\pm 5$  percent of the span calibration gas value before sampling may be conducted.
    - (2) The sampling point shall be at the outlet of the initial canister but before the inlet to the second or final polishing canister. Sample ports or connections must be designed such that air leakage into the sample port does not occur during sampling.
    - (3) During sampling, data recording shall not begin until after two times the instrument response time. The VOC concentration shall be monitored for at least 5 minutes, recording 1-minute averages, during cell production.

- C. Breakthrough shall be defined as the highest 1-minute average measured VOC concentration at or exceeding 20 ppmv. When the condition of breakthrough of VOC from the initial saturation canister occurs, the waste gas flow shall be switched to the second canister and a fresh canister shall be placed as the new final polishing canister within 24 hours of breakthrough detection. Sufficient new activated carbon canisters shall be maintained at the site to replace spent carbon canisters such that replacements can be done in the above specified time frame.
- D. Records of the CAS monitoring maintained at the plant site shall include (but are not limited to) the following:
  - (1) Sample time and date.
  - (2) Monitoring results (ppmv).
  - (3) Corrective action taken including the time and date of that action.
- E. Alternate monitoring or sampling requirements that are equivalent or better may be approved by the TCEQ Regional Manager. Alternate requirements must be approved in writing before they can be used for compliance purposes.

**Cell Materials Processes 1 & 2 (11/2024)**

- 58. Unabated emissions from FIN: CB1-P1-400 can discharge through EPNs: CB1-P1-006 and CB1-P1-007, when operating under Operating Scenario 1 (OS1). **(11/2024)**
- 59. Selective Catalytic Reduction (SCR) shall be used to control NOx emissions from FIN: CB1-P1-400 routing through EPN: CB1-CAT-01 during operating scenario 2 (OS2) and using feed from Cell Materials Process 2. If using SCR to demonstrate compliance with MAERT emission limits for FIN: CB1-P1-400, the SCR shall not be bypassed during normal operation, except as authorized under Special Condition No. 61. Aqueous ammonia shall be used in the SCR system(s) and shall have a concentration of less than 20% ammonia by weight. **(11/2024)**
- 60. Records shall be kept, including both operating scenarios for FIN: CB1-P1-400, to demonstrate compliance with MAERT emission limits at all times of operation. **(11/2024)**
- 61. During abatement system maintenance for FIN: CB1-P1-400 operating under OS2, the following shall apply: **(11/2024)**
  - A. Exhaust from FIN: CB1-P1-400 shall be routed through EPNs: CB1-P1-006 and CB1-P1-007.
  - B. Records shall be kept to demonstrate compliance with MAERT emission limits for EPNs: CB1-P1-006 and CB1-P1-007.
- 62. The holder of this permit may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging times specified, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances in order to avoid reporting deviations. All monitoring data shall be collected in accordance with the requirements specified in 40 CFR § 64.7(c). **(11/2024)**
- 63. The capture system shall be maintained free of holes, cracks, and other conditions that would reduce the collection efficiency of the capture system. **(11/2024)**

64. The concentration of ammonia ( $\text{NH}_3$ ) from EPN CB1-CAT-01 shall not exceed 10 parts per million by volume dry (ppmvd) corrected to 3 percent oxygen ( $\text{O}_2$ ), on a rolling 24-hour average and an annual average. This concentration limit shall not apply to MSS activities, during which emissions are limited by the emission rates shown on the MAERT. **(11/2024)**
65. The  $\text{NH}_3$  concentration in Exhaust Stack (EPN CB1-CAT-01) shall be tested or calculated according to one of the methods listed below and shall be tested or calculated according to frequency listed below. Testing for  $\text{NH}_3$  slip is only required on days when the SCR unit is in operation. **(05/2025)**

The holder of this permit may install, calibrate, maintain, and operate a CEMS to measure and record the concentrations of  $\text{NH}_3$ . The  $\text{NH}_3$  concentrations shall be corrected and reported in accordance with Special Condition No. 64.

As an approved alternative, the  $\text{NH}_3$  slip may be measured using a sorbent or stain tube device specific for  $\text{NH}_3$  measurement in the 5 to 10 ppm range. The frequency of sorbent or stain tube testing shall be daily for the first 60 days of operation, after which, the frequency may be reduced to weekly testing if operating procedures have been developed to prevent excess amounts of  $\text{NH}_3$  from being introduced in the SCR unit and when operation of the SCR unit has been proven successful with regard to controlling  $\text{NH}_3$  slip. Daily sorbent or stain tube testing shall resume when the catalyst is within 30 days of its useful life expectancy. If monitoring cannot be conducted due to weather or safety conditions, the date, time, and specific conditions prohibiting sampling shall be recorded in lieu of the required daily monitoring. These results shall be recorded and used to determine compliance with Special Condition No. 64.

If the sorbent or stain tube testing indicates an ammonia slip concentration which exceeds 5 parts per million (ppm) at any time, the permit holder shall begin  $\text{NH}_3$  testing by either the Phenol-Nitroprusside Method, the Indophenol Method, or EPA Conditional Test Method (CTM) 27 on a quarterly basis in addition to the daily/weekly sorbent or stain tube testing. The quarterly testing shall continue until such time as the SCR unit catalyst is replaced; or if the quarterly testing indicates  $\text{NH}_3$  slip is 4 ppm or less, the Phenol-Nitroprusside/Indophenol/CTM 27 tests may be suspended until sorbent or stain tube testing again indicate 5 ppm  $\text{NH}_3$  slip or greater. These results shall be recorded and used to determine compliance with Special Condition No. 64.

As an approved alternative to sorbent or stain tube testing or an  $\text{NH}_3$  CEMS, the permit holder may install and operate a second  $\text{NO}_x$  CEMS probe located upstream of the SCR and after any combustion device, upstream of the stack  $\text{NO}_x$  CEMS, which may be used in association with the SCR efficiency and  $\text{NH}_3$  injection rate to estimate  $\text{NH}_3$  slip. This condition shall not be construed to set a minimum  $\text{NO}_x$  reduction efficiency on the SCR unit. These results shall be recorded and used to determine compliance with Special Condition No. 64.

As an approved alternative to sorbent or stain tube testing,  $\text{NH}_3$  CEMS, or a second  $\text{NO}_x$  CEMS, the permit holder may install and operate a dual stream system of  $\text{NO}_x$  CEMS at the exit of the SCR. One of the exhaust streams would be routed, in an unconverted state, to one  $\text{NO}_x$  CEMS, and the other exhaust stream would be routed through a  $\text{NH}_3$  converter to convert  $\text{NH}_3$  to  $\text{NO}_x$  and then to a second  $\text{NO}_x$  CEMS. The  $\text{NH}_3$  slip concentration shall be calculated from the delta between the two  $\text{NO}_x$  CEMS readings (converted and unconverted). These results shall be recorded and used to determine compliance with Special Condition No. 64.

Any other method used for measuring  $\text{NH}_3$  slip shall require prior approval from the TCEQ Regional Director. **(11/2024)**

66. If using a portable analyzer to determine compliance when feed from Cell Materials Process 2 is used in FIN: CB1-P1-400, the holder of this permit shall measure and record in-stack concentrations of NO<sub>x</sub>, CO, and O<sub>2</sub> in each Exhaust Stack(s) (EPNs CB1-P1-006, CB1-P1-007, and/or CB1-CAT-01) using a portable analyzer. If monitoring cannot be conducted due to weather or safety conditions, the date, time, and specific conditions prohibiting sampling shall be recorded in lieu of the required daily monitoring. The portable analyzer shall be operated in accordance with the Environmental Protection Agency's, Office of Air Quality Planning & Standards, Emission Measurement Center Conditional Test Method - Determination of Oxygen, Carbon Monoxide, and Oxides of Nitrogen from Stationary Sources for Periodic Monitoring (Portable Electrochemical Analyzer Procedure) [CTM-034] (September 8, 1999) or CEMS. These measured concentrations shall be used to calculate NO<sub>x</sub>, CO, and NH<sub>3</sub> emission rates to determine compliance with emission limits specified in MAERT. **(05/2025)**
67. If using CEMS to determine compliance, the holder of this permit shall install, calibrate, and maintain a CEMS to measure and record the in-stack concentrations of NO<sub>x</sub>, CO, and O<sub>2</sub> emissions from EPN CB1-CAT-01. **(11/2024)**
- A. The CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and the data analysis and reporting requirements specified in the applicable Performance Specification Nos. 1 through 9, 40 CFR Part 60, Appendix B. If there are no applicable performance specifications in 40 CFR Part 60, Appendix B, contact the TCEQ Office of Air, Air Permits Division in Austin for requirements to be met.
  - B. The system shall be zeroed and spanned daily, and corrective action taken when the 24-hour span drift exceeds two times the amounts specified in the applicable Performance Specification Nos. 1 through 9, 40 CFR Part 60, Appendix B, or as specified by the TCEQ if not specified in Appendix B. Zero and span is not required on weekends and plant holidays if instrument technicians are not normally scheduled on those days.
  - C. Each monitor shall be quality-assured at least quarterly using Cylinder Gas Audits (CGA) in accordance with 40 CFR Part 60, Appendix F, Procedure 1, § 5.1.2, with the following exception: a RATA is not required once every four quarters (i.e., four successive quarterly CGA may be conducted). An equivalent quality assurance method approved by the TCEQ may also be used. Successive quarterly audits shall occur no closer than two months.
  - D. All CGA exceedances of ±15 percent accuracy and any unscheduled CEMS downtime not corrected within 24 hours shall be reported to the TCEQ Regional Director, and necessary corrective action shall be taken. Unscheduled CEMS downtime is any CEMS downtime not required for daily span checks and annual RATA. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Director.
  - E. The monitoring data shall be reduced to average hourly concentrations at least once every day, using a minimum of four data points from each one-hour period. Readings shall be taken at least once every 15-minute quadrant of the clock hour and the average values shall be recorded for each one-hour period. The individual average concentrations shall be reduced to units of the permit allowable emission rate in tons per year at least once every month. Compliance with the annual allowable contained on the MAERT shall be based on a 12-month rolling average.
  - F. All monitoring data and quality-assurance data shall be maintained by the source for a period of two years and shall be made available to the TCEQ Executive Director or a representative upon request. The data from the CEMS may, at the discretion of the TCEQ, be used to determine compliance with the conditions of this permit.
  - G. The appropriate TCEQ Regional Office shall be notified at least 15 days prior to any required RATA to provide them the opportunity to observe the testing.

- H. The CEMS reporting requirements of 30 TAC § 117.119 may be substituted for the reporting requirements if the CEMS is not subject to the requirements of 40 CFR Part 60.
68. If using CEMS, the TCEQ Regional Office shall be notified as soon as possible after the discovery of any monitor malfunction that is expected to result in more than 24 hours of lost CEMS data. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Director in case of extended monitor downtime. Necessary corrective action shall be taken if the CEMS downtime exceeds 5 percent of the CB1-CAT-01 operating hours in the quarter. Failure to complete any corrective action as directed by the TCEQ Regional Office may be deemed a violation of the permit. **(11/2024)**
69. The ammonia scrubbers in the cell materials processes 1 and 2 shall meet the following requirements: **(11/2024)**

- A. The scrubbers listed in the table below shall meet the listed removal efficiencies for ammonia on an hourly average.

| CIN(s)               | Operating Scenario                           | Removal Efficiency |
|----------------------|----------------------------------------------|--------------------|
| CB1-SCU-01           | Normal                                       | 99%                |
| P1-SCU-01, P1-SCU-02 | P1-AMM-CAP (Dual Scrubber, normal operation) | 99.9%              |
|                      | P1-AMM-MSS (Single Scrubber, MSS)            | 99%                |

- B. Planned maintenance on each scrubber shall be performed only during periods when the facilities being controlled by the scrubber are not in operation, except under scenario P1-AMM-MSS as authorized by this special condition.
- C. The scrubber system designated as EPN P1-SCU-02 shall consist of two scrubbers operating in series. When one scrubber is down for maintenance, the vapors shall be bypassed to the redundant scrubber. Otherwise, the scrubber's emissions capture system shall have no bypass under normal operating conditions. An audio, visual, and olfactory (AVO) inspection of the capture system shall be performed monthly to check for leaking components. The hooding (if applicable) and ductwork shall be maintained free of holes, cracks, and other conditions that would reduce the collection efficiency of the emissions capture system. Planned maintenance on the scrubber system (CIN P1-SCU-01/P1-SCU-02) shall meet the following requirements:
- (1) At least one of the scrubbers (CINs P1-SCU-01 and P1-SCU-02) shall be operational while maintenance is performed on the other scrubber.
  - (2) Maintenance time on scrubbers during scenario P1-AMM-MSS (CINs P1-SCU-01 and P1-SCU-02) shall not exceed 168 hours in any rolling 12-month period, if at least one of the scrubbers is operating during these maintenance activities.
  - (3) CMP2 vessels (FINs P1-20RX-01 to P1-20RX-09) shall not be vented to the scrubbers (CINs P1-SCU-01 and P1-SCU-02) during scrubber maintenance events, except one of the vessels (FINs P1-20RX-01 to P1-20RX-09) may be used as material storage/holding vessel.
- D. The scrubbers shall be equipped with a mist eliminator.
- E. The scrubbing solution in the NH<sub>3</sub> scrubber shall be maintained at a pH value equal to or lower than 7.0 or per manufacturer recommendation on a 3-hour average basis measured

over four equally spaced points per hour. The pH of the scrubbing solution shall be recorded using a pH monitor which meets the following requirements:

- (1) Each monitoring device shall be cleaned with an automatic cleaning system, or cleaned quarterly using hydraulic, chemical, or mechanical cleaning.
  - (2) Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications and shall be accurate to within +/- 0.5 pH unit.
- F. The scrubber circulation rate shall be monitored as follows:
- (1) The flow rate as determined by the flow monitoring device shall be recorded at least once every eight (8) hours when the process equipment the scrubber is controlling is in operation.
  - (2) The scrubbers shall be equipped with an audio or visual alarm system to immediately notify personnel if the circulation pump is not operational. The audio or visual alarm shall be tested monthly to ensure the alarm is functioning properly.
- G. The pH monitors and the pressure gauges shall function to provide quality assured (or valid) data when the scrubbers are operating except during the performance of a zero and/or span check. Loss of valid data due to periods of monitor breakdown, out-of control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in hours) that the scrubbers operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.
- H. The scrubbing solution from the scrubber sump shall be purged as needed to achieve proper scrubbing and replaced with fresh solution as necessary to meet the pH level specified in Item E of this Special Condition.
- I. An inspection of the scrubber and associated equipment including recirculation pumps, piping, and fan, shall be performed in accordance with manufacturer's recommendations to check for such problems as leaks, plugged nozzles, channeling in packing, accumulation of sludge in packing, pump malfunction, and fan malfunction.
- J. Inspection and maintenance records shall be kept for the scrubbers including the date of each inspection, the name of the inspector, and any repairs and/or maintenance work performed.
- K. Operating instructions shall be established and maintained such that they are readily available to all scrubber operators.

### Cell Abuse Testing

70. Cell abuse testing is limited to 60 cells/hr and 31,200 cells/yr. Records shall be maintained of the number of cells tested each hour and each calendar day. Records shall also be kept of the number of cells tested on a rolling 12-month basis. **(11/2024)**
71. Particulate emissions from the cell abuse test chamber shall be captured and exhausted through filter systems during testing which meet the requirements as listed below. Particulate abatement equipment and their ventilation systems shall be maintained in good condition at all times and operated during all applicable operations. **(06/2023)**

| EPN | Manufacturing Process/<br>Emission Source | Abatement Type | Arrestance (%) <sup>1</sup> |
|-----|-------------------------------------------|----------------|-----------------------------|
|-----|-------------------------------------------|----------------|-----------------------------|

|        |                     |     |      |
|--------|---------------------|-----|------|
| CLLABT | Cell Abuse Test Lab | Dry | 99.5 |
|--------|---------------------|-----|------|

<sup>1</sup> American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Standard 52.1 (Gravimetric and Dust Spot Procedures for Testing Air Cleaning Devices Used in General Ventilation for Removing Particulate Matter).

72. The capture and control/ventilation systems for the cell abuse testing operations shall be designed and operated as follows: **(06/2023)**

- A. The capture and control system shall be operated and maintained in accordance with the manufacturer's recommendations to assure that the minimum control efficiency is met at all times when the sources in Special Condition No. 71 are in operation;
- B. The holder of this permit shall install, calibrate (if applicable), and maintain a differential pressure gauge to monitor pressure drop across the filter media. Each monitoring device that requires calibration shall be calibrated at least annually or in accordance with the manufacturer's specifications and shall be accurate to within a range of  $\pm 0.5$ -inch water gauge pressure ( $\pm 125$  pascals) or a span of  $\pm 3$  percent. The monitoring device that only requires to be zeroed shall be zeroed in accordance with the manufacturer's recommended frequency; **(11/2024)**
- C. The filter media differential pressure shall be maintained between the following limits (hourly average value), or as defined by the manufacturer;

| EPN    | Manufacturing Process/<br>Emission Source | Differential Pressure<br>Lower Limit (in W.C.) | Differential Pressure<br>Upper Limit (in W.C.) |
|--------|-------------------------------------------|------------------------------------------------|------------------------------------------------|
| CLLABT | Cell Abuse Test Lab                       | 0.2                                            | 3.5                                            |

- D. Pressure drop readings shall be recorded at least once per day that the system is required to be operated. Filters shall be replaced whenever the pressure drop across the filter media no longer meets the limits in Item C of this Special Condition or the manufacturer's recommendation;
- E. If the filter system operating performance parameters are outside of the limits in Item C of this Special Condition or the manufacturer's recommended operating range, the affected facility shall not be operated until the abatement equipment is repaired;
- F. Planned maintenance on the dust collection system shall be performed only when the facilities being controlled by the dust collection systems are not in operation;
- G. The capture system shall be maintained free of holes, cracks, and other conditions that would reduce the collection efficiency of the capture system; **(11/2024)**
- H. An inspection and maintenance log shall be kept for the filter system whereby the log shall note the date of each inspection, the name of the inspector and any repairs and/or maintenance work performed; and
- I. Failure to maintain the required pressure drop across the filter media or the documentation of particulate, deposition originating from this site beyond the property lines of this site shall be considered as demonstrating that the filters are not being maintained in good condition.

## Wastewater

73. Process wastewater shall be immediately directed to a covered system. All lift stations, manholes, junction boxes, conveyances, and any other wastewater facilities shall be covered to minimize emissions.

74. The daily wastewater flow into the wastewater treatment plant shall be monitored and recorded. The rolling 12-month wastewater flow shall be totaled on a monthly basis.
75. Wastewater treatment plant emissions shall be estimated every month using the following procedure. **(11/2024)**
- A. The permit holder shall sample the wastewater prior to the Pipeline 1 Dump Tank and Pipeline 1 Rinse Tank monthly to determine the concentrations of all air contaminants. Sampling locations, sampling procedures, test methods and calculations shall be as specified in permit application, PI-1 dated December 8, 2023. The influent wastewater flow rates shall be measured and recorded when a sample required by this condition is collected. Records of sampling results shall be maintained for all air contaminants.
  - B. The permit holder shall calculate short term loading rate in terms of pounds per hour (lb/hr) and rolling 12 month loading rate in terms of tons per year (tpy) for each air contaminant. The measured concentrations of each speciated air contaminant shall be converted to an equivalent mass emission rate based upon the flow rates during the sample collection period using the calculation methods and assumptions in the permit application, PI-1 dated December 8, 2023. The short-term emission rate calculations for such air contaminants shall be based on the concentrations and flow rates measured during sampling. The rolling 12-month emission rate calculation for each air contaminant shall be based on the rolling 12-month average contaminant concentration and the rolling 12-month wastewater flow. All other inputs into the calculation shall match those in the permit application for that averaging period (worst case). Total VOC mass emission rates shall be calculated as the sum of the individual speciated VOC mass emission rates.
  - C. Records of sampling location, sampling procedures, sample chain of custody forms, test methods, sampling results, calculated emission rates, and sample of calculations shall be maintained.

### Cooling Towers

76. The cooling towers (EPNs CTW-01 to CTW-46) and cooling towers (EPN CB1CTWCAP) shall be operated and monitored in accordance with the following: **(11/2024)**
- A. Each cooling tower shall be equipped with drift eliminators having manufacturer's design assurance of 0.001% drift or less. Drifts eliminators shall be maintained and inspected at least annually. The permit holder shall maintain records of all inspections and repairs.
  - B. Dissolved solids in the cooling water drift are considered to be emitted as PM, PM<sub>10</sub>, and PM<sub>2.5</sub> as represented in the permit application calculations. Emissions shall be calculated as required in Item E of this Special Condition and shall not exceed emission rates as listed in the MAERT. **(05/2025)**
  - C. Cooling towers shall be analyzed for particulate emissions using one of the following methods:
    - (1) Cooling water shall be sampled at least once per day for total dissolved solids (TDS); or
    - (2) TDS monitoring may be reduced to weekly if conductivity is monitored daily and TDS is calculated using a ratio of TDS-to-conductivity (in ppmw per  $\mu$ mho/cm or ppmw/siemens). The ratio of TDS-to-conductivity shall be determined by concurrently monitoring TDS and conductivity on a weekly basis. The permit holder may use the average of two consecutive TDS-to-conductivity ratios to calculate daily TDS; or

- (3) TDS monitoring may be reduced to quarterly if conductivity is monitored daily and TDS is calculated using a correlation factor established for each cooling tower. The correlation factor shall be the average of nine consecutive weekly TDS-to-conductivity ratios determined using C(2) above provided the highest ratio is not more than 10% larger than the smallest ratio.
  - (4) The permit holder shall validate the TDS-to-conductivity correlation factor once each calendar quarter. If the ratio of concurrently sampled TDS and conductivity is more than 10% higher or lower than the established factor, the permit holder shall increase TDS monitoring to weekly until a new correlation factor can be established.
- D. A sample of cooling tower water shall be taken from the circulated water stream(s) entering the cooling tower. The analysis shall be conducted using the approved methods below:
  - (1) The analysis method for TDS shall be EPA Method 160.1, ASTM D5907, or SM 2540 C [SM - 19th edition of Standard Methods for Examination of Water]. Water samples should be capped upon collection and transferred to a laboratory area for analysis.
  - (2) The analysis method for conductivity shall be either ASTM D1125-14 Test Method A (field or routine laboratory testing) or ASTM D1125-14 Test Method B (continuous monitor). The analysis may be conducted at the sample site or with a calibrated process conductivity meter. If a conductivity meter is used, it shall be calibrated at least annually. Documentation of the method and any associated calibration records shall be maintained.
  - (3) Alternate sampling and analysis methods may be used to comply with D(1) and D(2) with written approval from the TCEQ Regional Director. If approved by the TCEQ Regional Director, the permit holder shall submit a permit application to incorporate the alternative sampling and analysis method into the permit within 2 months of the date of written approval.
  - (4) Records of all instrument calibrations and test results and process measurements used for the emission calculations shall be retained.
- E. Emission rates of PM, PM<sub>10</sub> and PM<sub>2.5</sub> shall be calculated using the measured TDS or correlation of TDS to conductivity measurements, the design drift rate and the daily maximum and average actual cooling water circulation rate for the short term and annual average rates. Alternately, the design maximum circulation rate may be used for all calculations. Emission records shall be updated monthly. **(11/2024)**

#### **Physical Inspections of Piping, Valves, Pumps, and Compressors – 28AVO**

- 77. The permit holder shall maintain the piping and valves in NH<sub>3</sub> service in Cell 2 Ammonia system as follows: **(11/2024)**
  - A. Audio, olfactory, and visual checks for NH<sub>3</sub> leaks and nitric acid leaks within the operating area shall be made every 24 hours or once per calendar day.
  - B. Immediately, but no later than 24 hours upon detection of a leak, plant personnel shall take one or more of the following actions:
    - (1) Locate and isolate the leak, if necessary.
    - (2) Commence repair or replacement of the leaking component.
    - (3) Use a leak collection or containment system to control the leak until repair or replacement can be made if immediate repair is not possible.

- C. Stored aqueous  $\text{NH}_3$  must have a concentration of less than 20%  $\text{NH}_3$  by weight.
- D. Records of AVO checks, any maintenance performed on piping and valves in  $\text{NH}_3$  service and nitric acid service, accidental releases, venting, and any corrective actions taken shall be maintained by the holder of this permit. **(11/2024)**

#### **Physical Inspections of Piping, Valves, Pumps, and Compressors – 28PI**

78. Except as may be provided for in the special conditions of this permit, the following requirements apply to the piping and valves associated with  $\text{NH}_3$  service (SCR Ammonia System(s), Die Shop Ammonia System, Cell 1 Ammonia System) and nitric acid service in cell materials process 2; and piping associated with the DMC tank and electrolyte/DMC waste tank in cell manufacturing (FINs: CLLT-01 and CLLT-02) and the piping associated with the windshield washer fluid storage tanks (FINs: GAAT-01, GAAT-02, and GAAT-03): **(11/2024)**
- A. Construction of new and reworked piping, valves, pump systems, and compressor systems shall conform to applicable American National Standards Institute (ANSI), American Petroleum Institute (API), American Society of Mechanical Engineers (ASME), or equivalent codes.
  - B. New and reworked underground process pipelines shall contain no buried valves such that fugitive emission monitoring is rendered impractical.
  - C. To the extent that good engineering practice will permit, new and reworked valves and piping connections shall be so located to be reasonably accessible for leak-checking during plant operation. Non-accessible valves, as defined in Title 30 Texas Administrative Code (30 TAC) Chapter 115, shall be identified in a list to be made available upon request.
  - D. New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter.
  - E. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve. Except during sampling, the second valve shall be closed.
  - F. All piping components shall be inspected by visual, audible, and/or olfactory means at least monthly, with the exception of windshield washer fluid piping system, by operating personnel walk-through. Windshield washer fluid piping systems shall be inspected weekly by operating personnel walk-through.
  - G. Damaged or leaking valves, connectors, compressor seals, and pump seals found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. A leaking component shall be repaired as soon as practicable, but no later than 15 days after the leak is found. If the repair of a component would require a unit shutdown, the repair may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging.
  - H. At the discretion of the TCEQ Executive Director or designated representative, early unit shutdown or other appropriate action may be required based on the number and severity of tagged leaks awaiting shutdown.
  - I. Date and time of each inspection shall be noted in the operator's log or equivalent. Records shall be maintained at the plant site of all repairs and replacements made due to leaks. These records shall be made available to representatives of the Texas Commission on Environmental Quality (TCEQ) upon request.

79. The ventilation systems for the sources listed below shall include exhaust stacks that have no obstructions or restrictions to vertical exhaust flow, such as rain caps, unless such devices are designed to automatically open when the facilities being controlled are in operation. Stacks identified in the footnote for the table in this Special Condition may not have vertical exhaust flow. The exhaust stacks shall have a height (as measured from ground level to the discharge point) that is equal to or greater than the following and may be adjusted as part of as-built amendment per Special Condition No. 102: **(11/2024)**

| <b>Emission Point Number (EPN)</b> | <b>Emission Point Name</b>                  | <b>Height (m)</b> | <b>Height (feet)</b> |
|------------------------------------|---------------------------------------------|-------------------|----------------------|
| LSRCUT-1, LSRCUT-2                 | Laser Cutting                               | 24.7              | 81                   |
| CAS-01                             | Casting Furnace 01                          | 30.2              | 99                   |
| CAS-02                             | Casting Furnace 02                          | 30.2              | 99                   |
| CAS-03                             | Casting Furnace 03                          | 30.2              | 99                   |
| CAS-04MC                           | Casting Furnace 04-Main Chamber             | 30.5              | 100                  |
| CAS-04SW                           | Casting Furnace 04-Side well                | 30.5              | 100                  |
| CAS-05                             | Casting Furnace 05                          | 30.5              | 100                  |
| MC-123                             | Melt Furnace -01, 02 and 03                 | 31.4              | 103                  |
| MC-AOS                             | MC-03 Alternative Operating Scenario        | 24.4              | 80                   |
| MCSILO-01                          | Lime Silo 1                                 | 15.2              | 50                   |
| MCSILO-02                          | Lime Silo 2                                 | 15.2              | 50                   |
| BIW-01-01 to 17                    | Body-In-White - 1                           | 25.0              | 82                   |
| BIW-02-01 to 07 <sup>1</sup>       | Body-In-White - 2                           | 24.4              | 80                   |
| BIW-03-01 to 06                    | Body-In-White - 3                           | 24.4              | 80                   |
| SND-01                             | Sanding 1                                   | 25.0              | 82                   |
| SND-02                             | Sanding 2                                   | 25.0              | 82                   |
| SND-03                             | Sanding 3                                   | 25.0              | 82                   |
| SND-04                             | Sanding 4                                   | 25.0              | 82                   |
| PDC-01                             | Die release (Plastics IMM)                  | 24.1              | 79                   |
| EDSND-01                           | E-Coat (Sanding) - Line 1                   | 24.7              | 81                   |
| HVSND-01                           | E-Coat (Heavy Sanding) - Line 1             | 24.7              | 81                   |
| EDSND-02                           | E-Coat (Sanding) - Line 2                   | 24.7              | 81                   |
| HVSND-02                           | E-Coat (Heavy Sanding) - Line 2             | 24.7              | 81                   |
| EDSND-03                           | E-Coat (Sanding) - Line 3                   | 24.1              | 79                   |
| HVSND-03                           | E-Coat (Heavy Sanding) - Line 3             | 24.1              | 79                   |
| TO-01                              | Regenerative Thermal Oxidizer No. 1         | 32.3              | 106                  |
| TO-02                              | Regenerative Thermal Oxidizer No. 2         | 33.5              | 110                  |
| TO-03                              | Regenerative Thermal Oxidizer No. 3         | 32.3              | 106                  |
| TO-04                              | Regenerative Thermal Oxidizer No. 4         | 32.3              | 106                  |
| BODYPCF-01                         | Body Line Powder Coat Booth-01              | 24.1              | 79                   |
| ASH-08a, ASH-08b                   | Body paint line 3 ASH 8 Stack a and Stack b | 24.7              | 81                   |

|                             |                                             |      |     |
|-----------------------------|---------------------------------------------|------|-----|
| ASH-09a, ASH-09b            | Body paint line 3 ASH 9 Stack a and Stack b | 24.7 | 81  |
| PMIXCHK                     | Paint Mix Room                              | 24.7 | 81  |
| HS-01                       | Heat Staking                                | 23.9 | 78  |
| BM-LASABL                   | Battery -Module Laser Ablation              | 23.9 | 78  |
| INV-01                      | Inverter Lines                              | 24.0 | 79  |
| INV-02                      | Inverter Lines                              | 24.0 | 79  |
| STR-01 and BRO-01           | Stator Lines                                | 24.1 | 79  |
| TO-DU-01                    | Stator Lines (North) Process emissions      | 30.5 | 100 |
| TO-DU-02                    | Stator Lines (South) Process emissions      | 25.9 | 85  |
| DRU-02                      | Drive Unit-2                                | 24.0 | 79  |
| DU-LA-01                    | Drive Unit-1 Laser Ablation                 | 23.9 | 78  |
| DU-LA-02                    | Drive Unit-2 Laser Ablation                 | 23.9 | 78  |
| CLL-01, CLL-06 <sup>1</sup> | Cell Assembly                               | 24.1 | 79  |
| CLL-02 <sup>1</sup>         | Cell Assembly                               | 24.7 | 81  |
| CLL-03, CLL-04 <sup>1</sup> | Cell Assembly                               | 24.4 | 80  |
| CLL-05 (AOS)                | Cell Assembly (AOS)                         | 24.1 | 79  |
| TO-CLL                      | Cell Process Emissions                      | 26.5 | 87  |
| CLLABT                      | Cell Abuse Test Stacks 1 and 2              | 6.7  | 22  |
| PC-PPT1                     | Powder Coat Pretreat Line                   | 24.7 | 81  |
| PCCB-01                     | Powder Coat booth (Process)                 | 24.7 | 81  |
| PCDO1-01a                   | Powder Coat Parts Dryoff Oven 1-Stack 1a    | 24.7 | 81  |
| PCDO1-01b                   | Powder Coat Parts Dryoff Oven 1-Stack 1b    | 24.7 | 81  |
| PCDO1-02a                   | Powder Coat Parts Dryoff Oven 1-Stack 2a    | 24.7 | 81  |
| PCDO1-02b                   | Powder Coat Parts Dryoff Oven 1-Stack 2b    | 24.7 | 81  |
| TO-PC-01                    | Powder Coat Parts Curing Oven               | 30.5 | 100 |
| CB1-P1-001 to CB1-P1-013    | Cell Materials Process-1                    | 24.1 | 79  |
| CB1-CAT-01                  | Cell Materials Process-1 (AOS)              | 24.1 | 79  |
| P1-RF-03 <sup>1</sup>       | Cell Materials Process-2 Material Handling  | 23.9 | 78  |
| P1-RF-04 <sup>1</sup>       | Cell Materials Process-2 Material Handling  | 23.9 | 78  |
| P1-SCU-02                   | Cell Materials Process-2 Ammonia Scrubbers  | 25.0 | 82  |
| FOM-01 <sup>1</sup>         | Coil Passivation                            | 24.4 | 80  |
| TO-FOM01                    | Surface Coating                             | 21.9 | 72  |
| TO-PCB-02                   | PCB Flux Use Process Emissions              | 25.9 | 85  |

<sup>1</sup> Includes vertical and/or horizontal discharge

### Material Usage Flexibility

80. In addition to the approved materials, the use of new materials or products that meet all of the following sub-conditions are allowed. Pollutants from categories of air pollutants not currently authorized on the MAERT cannot be authorized using this special condition. This special condition

does not authorize the use of any chlorinated or fluorinated compound when emissions are routed to a thermal control device.

- A. All the ingredients of the new material are known; i.e., the weight percentages of the ingredients add to 100 percent or more.
- B. The maximum hourly (short-term) or annual emission rates from new or existing air contaminant ingredients (aka air contaminants) shall not cause any increases in the short-term or annual emission rates as listed on the MAERT.
- C. Emissions from the new material shall only be from the emission points represented in the table provided in paragraph G(2) of this special condition.
- D. Any air contaminant in the new material is exempt from paragraphs E through H of this special condition if the air contaminant is currently authorized under this permit and the proposed emission rate from each EPN is less than or equal to the authorized emission rate from the same EPN.
- E. Any air contaminant in the new material is exempt from paragraphs F through H of this special condition if:

- (1) The air contaminant is a particulate and no specific short-term effects screening level (ESL) is included in the most current set of ESLs available through the TCEQ Toxicity Factor Database (must meet NAAQS); or
- (2) The air contaminant is not included in the most current set of ESLs available through the TCEQ Toxicity Factor Database.

If the compound is not on the current ESL list and does not belong to a category of compounds on the list, the permit holder shall request confirmation from the Toxicology Division that an ESL need not be created for authorization through this condition. If the Toxicology Division determines that an ESL is not required under this condition, confirmation that no ESL is required shall be kept on file by the applicant.

- F. Any air contaminant in the new material is exempt from paragraphs G and H of this special condition if:

- (1) it is emitted at a rate and has a short-term ESL and an annual ESL as stated in the following table; or

| Emission Rate (lbs/hr) | Short-term ESL ( $\mu\text{g}/\text{m}_3$ ) | Annual ESL ( $\mu\text{g}/\text{m}_3$ ) |
|------------------------|---------------------------------------------|-----------------------------------------|
| $\leq 0.04$            | $\geq 2$ and $< 500$                        | $\geq 0.2$ and $< 50$                   |
| $\leq 0.10$            | $\geq 500$ and $< 3,500$                    | $\geq 50$ and $< 350$                   |
| $\leq 0.40$            | $\geq 3,500$                                | $\geq 350$                              |

- (2) it is not sprayed and it has at least one of the following physical characteristics:

- (a) a vapor pressure less than 0.01 mm Hg (0.0002 psi) at 68°F;
- (b) a boiling point at atmospheric pressure that is above 400°F (204°C), provided the compound is not heated above room temperature in the process; or
- (c) a molecular weight that is above 200 g/g-mol, provided the compound is not heated above room temperature in the process.

- G. For all other new air contaminants or increases in existing air contaminants, the following procedure shall be completed to determine if the short-term impacts are acceptable.

- (1) Determine the emission rate of each air contaminant including emissions of the same air contaminant (if an existing air contaminant) from the currently authorized materials that may be emitted at the same time from each emission point.
- (2) Multiply the emission rate of the air contaminant by the unit impact multiplier for each emission point from the following table to determine the off-property impact Ground Level Concentration (GLC)MAX for each emission point. **(11/2024)**

| Emission Point Name                             | EPN                     | Short Term Unit Impacts ( $\mu\text{g}/\text{m}_3$ per lb/hr) | Annual Unit Impacts ( $\mu\text{g}/\text{m}_3$ per tpy) |
|-------------------------------------------------|-------------------------|---------------------------------------------------------------|---------------------------------------------------------|
| Stamping Line 1                                 | STM-01-0X <sup>1</sup>  | 20.14                                                         | 0.05                                                    |
| Stamping Line 2                                 | STM-02-0X <sup>1</sup>  | 21.46                                                         | 0.07                                                    |
| Body in White (BIW) EPNs BIW-01-01 to BIW-01-24 | BIW-01-XX <sup>1</sup>  | 25.02                                                         | 0.07                                                    |
| Body in White (BIW) EPNs BIW-02-01 to BIW-02-07 | BIW-02-XX <sup>1</sup>  | 118.73                                                        | 0.29                                                    |
| Body in White (BIW) EPNs BIW-03-01 to BIW-03-06 | BIW-03-XX <sup>1</sup>  | 26.90                                                         | 0.08                                                    |
| Paint Mixing                                    | PMIXCHK                 | 26.53                                                         | 0.10                                                    |
| Pre-Treat Lines 1 and 2                         | PPT-01 and PPT-02       | 27.59                                                         | 0.11                                                    |
| Pre-Treat Line 3                                | PPT-03                  | 27.30                                                         | 0.08                                                    |
| Stator Line                                     | STR-AOS                 | 21.35                                                         | 0.09                                                    |
| Inverter Lines                                  | INV-0X <sup>1</sup>     | 30.16                                                         | 0.19                                                    |
| Cell Materials Process 1                        | CB1-P1-00X <sup>1</sup> | 44.36                                                         | 0.40                                                    |
| Cell Materials Process 1 (AOS)                  | CB1-CAT-01              | 22.62                                                         | 0.25                                                    |
| Cell Materials Process 2                        | P1-SCU-02               | 28.11                                                         | 0.21                                                    |
| Process Raw Feed                                | PI-RF-0X <sup>1</sup>   | 64.66                                                         | 0.69                                                    |
| Cells EPNs CLL-01 and CLL-06                    | CLL-0X <sup>1</sup>     | 83.70                                                         | 0.88                                                    |
| Cells EPN CLL-02                                | CLL-02                  | 51.92                                                         | 0.54                                                    |
| Cells EPN CLL-03 and CLL-04                     | CLL-0X <sup>1</sup>     | 55.46                                                         | 0.58                                                    |
| Cells CLL-05                                    | CLL-05                  | 22.04                                                         | 0.22                                                    |
| Battery Modules                                 | BTM-01-0X <sup>1</sup>  | 59.02                                                         | 0.22                                                    |
| Paint Repair Areas                              | PRA-CAP                 | 97.23                                                         | 1.25                                                    |
| Regenerative Thermal Oxidizer TO-01             | TO-01                   | 7.19                                                          | 0.05                                                    |
| Regenerative Thermal Oxidizer TO-02             | TO-02                   | 7.47                                                          | 0.05                                                    |
| Regenerative Thermal Oxidizer TO-03             | TO-03                   | 12.54                                                         | 0.08                                                    |
| Regenerative Thermal Oxidizer TO-04             | TO-04                   | 11.09                                                         | 0.06                                                    |
| Coil Passivation                                | FOM-01                  | 109.42                                                        | 1.10                                                    |

|                                           |                       |        |      |
|-------------------------------------------|-----------------------|--------|------|
| Coil Coating Oxidizer - TO-FOM-01         | TO-FOM-01             | 15.78  | 0.20 |
| E-Coat Touch Up                           | ET-01                 | 17.17  | 0.09 |
| Cell Assembly Oxidizer – TO-CLL           | TO-CLL                | 12.56  | 0.15 |
| Drive Unit - 1 Laser Ablation             | DU-LA-01              | 22.37  | 0.08 |
| Drive Unit - 2 Laser Ablation             | DU-LA-02              | 49.20  | 0.21 |
| Powder Coating Line 2 Oxidizer - TO-PC-01 | TO-PC-01              | 12.97  | 0.07 |
| Drive Unit Oxidizer No. 1 - TO-DU-01      | TO-DU-01              | 12.82  | 0.07 |
| Drive Unit Oxidizer No. 2 - TO-DU-02      | TO-DU-02              | 14.87  | 0.11 |
| Inverter Oxidizer No. 2 - TO-PCB-02       | TO-PCB-02             | 26.97  | 0.19 |
| Powder Coat Pre Treat-Line                | PC-PPT1               | 26.44  | 0.09 |
| Body Line Powder Coat Booth-01            | BODYPCF-01            | 21.16  | 0.09 |
| Powder Coat Booth                         | PCCB1-01              | 24.31  | 0.07 |
| General Assembly - Storage Tanks          | GAAT-XX               | 18.67  | 0.09 |
| General Assembly Line 1                   | GAAA-01               | 77.06  | 0.47 |
| General Assembly Line 2                   | GA-02-0X <sup>1</sup> | 120.02 | 0.29 |
| General Assembly Line 3                   | GA-03-0X <sup>1</sup> | 28.16  | 0.06 |
| General Wipe Cleaning                     | WIP-01                | 13.77  | 0.11 |

<sup>1</sup> Represents the worst case UIM for the source group.

- (3) Sum the impacts from each emission point/emission point group to determine a total short-term off-property impact (Total GLC<sub>MAX</sub>) for the new or existing air contaminant.
- (4) Compare the total short-term off-property impact to the short-term ESL for the air contaminant as shown below to determine if it is less than or equal to the ESL. If the total off-property impact exceeds the short-term ESL, then a permit amendment is required to authorize the emission rate for the air contaminant.

$$\text{Total GLC}_{\text{MAX}} \leq \text{ESL}_{\text{SHORT}}$$

Where:

Total GLC<sub>MAX</sub> = The sum of the short-term GLCs from each emission point.

ESL<sub>SHORT</sub> = The short-term ESL of the new or existing air contaminant from the most current set of ESLs available through the TCEQ Toxicity Factor Database and the date of the database retrieval or as specifically derived by the TCEQ Toxicology Division. The ESL shall be obtained in writing prior to the use of the new or increased air contaminant.

- H. For all other new air contaminants or increases in existing air contaminants, the following procedure shall be completed to determine if the annual impacts are acceptable.

- (1) Determine the annual emission rate (tpy) of each air contaminant including emissions of the same air contaminant (if an existing air contaminant) from the currently authorized materials that may be emitted at the same time from each emission point.
- (2) Multiply the annual emission rate (tpy) of the air contaminant determined in paragraph H(1) of this special condition by the annual unit impact multiplier for each emission point from the table provided in paragraph G(2) of this special condition to determine the off-property impact  $GLC_{MAX}$  for each emission point.
- (3) Sum the impacts from each emission point to determine a total annual off-property impact (Total  $GLC_{MAX}$ ) for the new or existing air contaminant.
- (4) Compare the annual off-property impact to the annual ESL for the air contaminant as shown below to determine if it is less than or equal to the ESL. If the annual off-property impact exceeds the annual ESL, then a permit amendment is required to authorize the emission rates for the air contaminant.

$$\text{Annual } GLC_{MAX} \leq ESL_{ANNUAL}$$

Where:

$ESL_{ANNUAL} =$  The annual ESL of the new or existing air contaminant from the most current set of ESLs available through the TCEQ Toxicity Factor Database or as specifically derived by the TCEQ Toxicology Division.

### Sampling/Testing

81. Sampling ports and platforms shall be incorporated into the design of all exhaust stacks according to the specifications set forth in the enclosure entitled "Chapter 2, Stack Sampling Facilities." Alternate sampling facility designs may be submitted for approval by the TCEQ Regional Director.
82. The holder of this permit shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants emitted into the atmosphere as well as capture system and control device performance. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at their expense. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual and in accordance with the appropriate U.S. Environmental Protection Agency (EPA) Reference Methods, as referenced in this Special Condition.
  - A. RTO and zeolite wheel (concentrator) performance testing to determine control efficiency for Paint Line 1 (ZEO-01 and TO-01), Paint Line 2 (ZEO-02 and TO-02), Plastic Parts Line (EPN TO-03), Paint Line 3 (TO-04), Metal Coil Coating Line (TO-FOM-01), Cell Assembly (TO-CLL), Inverter (TO-PCB-02), Drive Unit (TO-DU-01 and TO-DU-02), and Powder Coat Line 2 (TO-PC-01) shall be conducted using the relevant EPA Test Method (TM) found in 40 CFR Part 60, Appendix A-1 through A-7 or on the web at the EPA Emission Measurements Center (EMC). The TMs to be used include: **(11/2024)**

| EPN(s)                                                                 | Test Method(s)                                     | Parameter(s)                                                   |
|------------------------------------------------------------------------|----------------------------------------------------|----------------------------------------------------------------|
| ZEO-01, TO-01, ZEO-02, TO-02, TO-03, TO-04, TO-CLL, TO-FOM-01, TO-PCB- | EPA Method 1 or 1A as appropriate                  | Stack sample location selections and number of traverse points |
|                                                                        | EPA Method 2, 2A, 2C, 2D, 2F, or 2G as appropriate | Stack volumetric flow rate determination                       |
|                                                                        | EPA Method 3, 3A, or 3B as                         | Dry molecular weight of the stack gas                          |

|                                         |                                     |                                                           |
|-----------------------------------------|-------------------------------------|-----------------------------------------------------------|
| 02, TO-DU-01,<br>TO-DU-02, TO-<br>PC-01 | appropriate                         |                                                           |
|                                         | EPA Method 4                        | Moisture content of the stack gas                         |
|                                         | EPA Method 25 or 25A as appropriate | Total gaseous non-methane organic compound determinations |

- B. Compliance with the total VOC and exempt solvent emission limits listed on the MAERT for the RTO and each concentrator shall be determined using the TM in Item A of this Special Condition.
- C. The RTO combustion chamber temperature to achieve the temperature high enough to ensure compliance with the minimum destruction efficiency for each RTO specified in Special Condition No. 16 shall be determined and recorded during each sample run. In addition, the zeolite wheel desorption gas inlet temperature shall be recorded.
- D. Transfer efficiency testing shall be conducted for the primer surfacer, basecoat and clearcoat operations. Testing methods to be used include; **(11/25)**
- (1) ASTM Method DD5066-91 (Reapproved 2001), Standard Test Method for Determination of the Transfer Efficiency Under Production Operations for Spray Application of Automotive Paints-Weight Basis.
  - (2) Protocol for Determining Daily Volatile Organic Compound Emission rate of Automobile and Light – Duty Truck Topcoat Operations – EPA- 450/3-88-018.
  - (3) Protocol for Determining Daily Volatile Organic Compound Emission rate of Automobile and Light – Duty Truck Primer Surfacer and Topcoat Operations – EPA- 453/R-08-002.
- E. The aluminum melting furnaces performance testing to determine NO<sub>x</sub>, CO, PM, PM<sub>10</sub>, PM<sub>2.5</sub> and ammonia emissions shall be conducted using the relevant EPA Test Method (TM) found in 40 CFR Part 60, Appendix A-1 through A-7 or on the web at the EPA Emission Measurements Center (EMC). The TMs to be used include: **(06/2023)**

| EPN(s)                                                                       | Test Method(s)                                                  | Parameter(s)                                                               |
|------------------------------------------------------------------------------|-----------------------------------------------------------------|----------------------------------------------------------------------------|
| CAS-01,<br>CAS-02,<br>CAS-03,<br>CAS-04MC,<br>CAS-04SW,<br>CAS-05,<br>MC-123 | EPA Method 1 or 1A as appropriate                               | Stack sample location selections and number of traverse points             |
|                                                                              | EPA Method 2, 2A, 2C, 2D, 2F, or 2G as appropriate              | Stack volumetric flow rate determination                                   |
|                                                                              | EPA Method 3, 3A, or 3B as appropriate                          | Dry molecular weight of the stack gas                                      |
|                                                                              | EPA Method 4                                                    | Moisture content of the stack gas                                          |
|                                                                              | EPA Method 7, 7A, 7B, 7C, 7D, 7E as appropriate                 | Nitrogen oxides                                                            |
|                                                                              | EPA Method 10, 10A and 10B as appropriate                       | Carbon monoxide                                                            |
|                                                                              | EPA Method 5                                                    | Particulate matter                                                         |
|                                                                              | EPA Method 202                                                  | Condensable particulate matter                                             |
| MC-123                                                                       | Conditional Test Method (CTM27)/Phenol-Nitroprusside/Indophenol | Ammonia                                                                    |
|                                                                              | EPA Method 26 or 26A as appropriate                             | Hydrogen chloride and Hydrogen fluoride (40 CFR 63, Subpart RRR and MAERT) |
|                                                                              | EPA Method 23                                                   | Dioxins and Furans (40 CFR 63, Subpart RRR)                                |

For units that are identical, at least half of the units shall be tested.

- F. The boiler performance testing to determine NO<sub>x</sub> and CO, shall be conducted using the relevant EPA Test Method (TM) found in 40 CFR Part 60, Appendix A-1 through A-7 or on the web at the EPA Emission Measurements Center (EMC) or a portable analyzer. The TMs to be used if conducting a performance test include: **(11/2024)**

| EPN(s)           | Test Method(s)                                     | Parameter(s)                                                   |
|------------------|----------------------------------------------------|----------------------------------------------------------------|
| BLR-01 to BLR-40 | EPA Method 1 or 1A as appropriate                  | Stack sample location selections and number of traverse points |
|                  | EPA Method 2, 2A, 2C, 2D, 2F, or 2G as appropriate | Stack volumetric flow rate determination                       |
|                  | EPA Method 3, 3A, or 3B as appropriate             | Dry molecular weight of the stack gas                          |
|                  | EPA Method 4                                       | Moisture content of the stack gas                              |
|                  | EPA Method 7, 7A, 7B, 7C, 7D, 7E as appropriate    | Nitrogen oxides                                                |
|                  | EPA Method 10, 10A and 10B as appropriate          | Carbon monoxide                                                |

For units that are identical, at least half of the units shall be tested.

- G. The scrubber performance testing to determine NH<sub>3</sub> emissions from the two ammonia scrubber systems (CINs CB1-SCU-01 and P1-SCU-01/P1-SCU-02; EPNs CB-P1-011 and P1-SCU-02) shall be conducted using the relevant EPA Test Method (TM) found on the web at the EPA Emission Measurements Center (EMC). **(11/2024)**
- H. Submit a proposed test plan if conducting a performance test to accomplish the testing required by Nos. A, D, E and F of this Special Condition, for approval to the TCEQ Austin Regional Office, except if using a portable analyzer for performance testing. The proposed test plan must be submitted within 60 days, unless approved in writing by TCEQ Austin Regional Office for a different duration, after reaching normal operating conditions of the sources authorized under this permit that require performance testing in this special condition. **(11/2024)**
- I. The TCEQ Austin Regional Office shall be contacted as soon as testing is scheduled, but not less than 45 days prior to sampling, unless approved in writing by TCEQ Austin Regional Office for a different duration, to schedule a pretest meeting, if necessary. The notice shall include:
- (1) Date for pretest meeting.
  - (2) Date sampling will occur.
  - (3) Name of firm conducting sampling.
  - (4) Sampling equipment to be used.
  - (5) Method or procedure to be used in sampling.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports. A proposed written description of

any deviation from sampling procedures or methods specified in permit conditions, the TCEQ or the EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The TCEQ Regional Director shall approve or disapprove of any deviation from specified sampling procedures or methods. Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. Test waivers and alternate/equivalent procedure proposals for testing, which must have the EPA approval, shall be submitted to the TCEQ Austin Regional Office. Testing shall be completed no later than 90 days after the test plan has been approved.

A notification and pretest meeting are not required for performance test using portable analyzers. **(11/2024)**

- J. The plant shall operate at representative operating conditions for the process, unless the Administrator specifies or approves alternate operating conditions during stack emissions testing. Primary operating parameters that enable determination of production rate shall be monitored and recorded during the stack test. These parameters shall be determined at the pretest meeting and shall be stated in the sampling report. If the plant is unable to operate at maximum rates during testing, then future production rates may be limited to the rates established during testing. Additional stack testing may be required when higher production rates are achieved.

- K. Two copies of the final sampling report shall be forwarded to the TCEQ within 30 days after receipt of sampling report, but no more than 60 days after testing. Sampling reports shall comply with the attached provisions of Chapter 14 of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:

One copy to the TCEQ Austin Regional Office; and

One copy to the Stack Test Online Reporting System (STORS) available in [STEERS](#) (State of Texas Environmental Electronic Reporting System).

A final sampling report submission is not required for performance test using portable analyzers. Records of performance tests using portable analyzers shall be maintained on site. **(11/2024)**

- L. Additional performance tests for sources may be required by the TCEQ Austin Regional Director. Any required performance tests must be completed within the manner and time frame requested by the Regional Director.

83. Submit an alteration request to the TCEQ within 6 months of the testing to incorporate into the permit the minimum temperature determined to achieve the required control efficiency in Special Condition No. 16.G for TO-01, TO-02, TO-03, **TO-04**, TO-CLL, TO-FOM-01, TO-PC-01, TO-PCB-02, TO-DU-01, TU-DU-02 and the desorption temperature for the zeolite concentrators. **(11/2024)**

84. For each emission source covered by Special Condition No. 82, the sampling and testing shall be repeated within five years of the previous testing. **(06/2023)**

85. Testing was last completed as follows: **(11/25)**

| Emission Source            | Emission Point No. | Completion Date of Initial or Repeat Sampling |
|----------------------------|--------------------|-----------------------------------------------|
| Thermal Oxidizer No. 1     | TO-01              | September 15, 2022                            |
| Zeolite Concentrator No. 1 | TO-01              | September 13-14, 2022                         |
| Thermal Oxidizer No. 2     | TO-02              | August 22-23, 2023                            |

|                            |        |                       |
|----------------------------|--------|-----------------------|
| Zeolite Concentrator No. 2 | TO-02  | August 22-23, 2023    |
| Thermal Oxidizer No. 3     | TO-03  | January 24, 2023      |
| Thermal Oxidizer No. 4     | TO-04  | March 25, 2025        |
| Cell Thermal Oxidizer      | TO-CLL | October 11, 2024      |
| Furnace 2                  | CAS-02 | September 15-16, 2022 |
| Furnace 3                  | CAS-03 | September 13-15, 2022 |
| Furnace 4                  | CAS-04 | January 25-26, 2023   |

## Recordkeeping

86. General Condition No. 7 regarding information and data to be maintained on file is supplemented as follows and shall be used to demonstrate compliance with the special conditions and the MAERT:
- A. Environmental Data Sheet (EDS) or similar documentation (including safety data sheets or air quality data sheets) for all die lubricants, paints, solvents, sealants, adhesives used in the coating operations and all solvents used in the gun cleaning units. The EDS or similar documentation for materials shall indicate the maximum composition of all constituents.
  - B. Data shall be recorded as follows:
    - (1) Daily total gallons of each coating material (including exempt solvents) used in each coating operation and monthly gallons for dip operations;
    - (2) Daily hours and times of day of operation for each coating operation and monthly for dip operations; and
    - (3) As applied coating VOC and ES content for each coating material used in each coating operation booth or dip operation.
  - C. The data recorded in Item B of this Special Condition shall be used to produce a monthly summary that reflects:
    - (1) The VOC, PM, and exempt solvent emissions in lbs/hr as daily averages for each day;
    - (2) The VOC, PM, and exempt solvent emissions in tons per year (tpy) over the previous 12 months; and
    - (3) Hazardous Air Pollutant (HAP) emissions in tpy over the previous 12 months for each individual HAP and total HAPs.
  - D. Field records of quarterly opacity observations as prescribed in 40 CFR Part 60, Appendix A, Test Method 9 or of visible emissions observations as required by Special Condition Nos. 6 and 7.
  - E. Detailed records shall as required by the applicable rules be kept for Special Condition Nos. 8 and 9. Also, documentation of all applicable notification, reporting, testing, monitoring, and recordkeeping requirements shall be kept for all the USEPA standards indicated in Special Condition Nos. 8 and 9.
  - F. Detailed records of coating VOC content, less water and exempt solvent, to demonstrate compliance with the pounds of VOC /gallon and pounds of VOC per gallon solids limits in Special Condition No. 10.
  - G. Records of the calibrations performed as specified in Special Condition Nos. 13.B, 24, 25, 28, 40.B, 69.E(2), 72.B, and 76.D(4). **(11/2024)**

- H. Records pertaining to the dry filter particulate matter control systems to demonstrate compliance with Special Condition Nos. 13.D, 40.D, 72.D which shall also include the manufacturers recommended differential pressure ranges for the dry filter systems. **(11/2024)**
- I. A log documenting each inspection or maintenance action on the particulate matter and VOC control equipment and ventilation systems ducted to the control equipment, including the date, name of the inspector, and a description of any repair or maintenance work performed shall be kept at the site as required by Special Condition Nos. 13.H, 16.K, 40.H, and 72.H. **(11/2024)**
- J. Records of dates and times during which each Alternative Operating Scenarios occurs as specified in Special Condition Nos. 14, 15, 46, 56, 58, and 59. **(11/2024)**
- K. Records documenting the temperature monitoring and calibration requirements as required by Special Condition No. 16.D and 16.E of the oxidizers temperature monitoring systems to demonstrate compliance with Special Condition No. 16.
- L. Records required by Special Condition No. 18 concerning the RTO automatic shutdown system.
- M. Records of ozone destruction efficiency as required by Special Condition 22. **(11/2024)**
- N. Records of the power output of the secondary side of the transformer set for each field of the electrostatic precipitators as required by Special Condition 24. **(11/2024)**
- O. Records of calibrations performed for the Programmable Logic Controller and records of voltage and current output as required by Special Condition 25. **(11/2024)**
- P. Records concerning the production of vehicle bodies and emissions during facility startup (shakedown period) as required by Special Condition No. 26.
- Q. Records of natural gas consumption on a monthly and rolling 12-month basis for each of the gas meters listed in Special Condition No. 28 and the meter calibrations required by Special Condition No. 28.
- R. Records of the number of operating hours for each emergency engine as required by Special Condition No. 30. **(01/2022)**
- S. Records of the manufacturers representation for the NO<sub>x</sub> and CO emission rates for each type of combustion unit listed in Special Condition No. 31.A as required by Special Condition No. 31.C. **(06/2023)**
- T. Records of material charge rates for the melting furnaces on an hourly and rolling 12- month basis as required by Special condition No. 32. **(06/2023)**
- U. Records of the ammonia concentrations from the CEMS, sorbents or stain tubes. If using CEMS, records of CEMS calibrations, quality assurance (QA) activities, corrective actions and CEMS downtime as required by Special Condition Nos. 36 and 65. **(06/2023)**
- V. Records of the NO<sub>x</sub>, CO and O<sub>2</sub> concentrations from the melting furnaces and cell materials process (FIN: CB1-P1-400). If using CEMS, records of CEMS calibrations, quality assurance (QA) activities, corrective actions and CEMS downtime as required by Special Condition Nos. 38, 51, 67 and 68. **(06/2023)**
- W. Records of the number of hours of filtration system bypass for filter media maintenance on a rolling 12-month basis as required by Special Condition No. 41.
- X. Records during furnace abatement equipment maintenance as required by Special Condition No. 42. **(10/2023)**

- Y. Records during the Alternate Operating Scenario as required by Special Condition Nos. 46, 58, 59, and 60. **(10/2023)**
  - Z. Records of storage tank throughput as required by Special Condition No. 53.C.
  - AA. Records required by Special Condition No. 56 if an optional abatement device is used for ammonia vapors, and records for the ammonia scrubber system required by Special Condition No. 69 for cell materials process 2. **(11/2024)**
  - BB. Records of CAS monitoring as required by Special Condition No. 57.D.
  - CC. Records of the number of cells tested on an hourly and rolling 12-month basis as required by Special Condition No. 70. **(06/2023)**
  - DD. Records of wastewater treatment plant sampling and operations as required by Special Condition No. 75.C.
  - EE. Records of the cooling tower cooling water circulation rate, cooling water TDS, and the ratio or correlation of TDS to conductivity measurements, design drift loss and PM, PM<sub>10</sub> and PM<sub>2.5</sub> emissions as required by Special Condition No. 76.E. **(06/2023)**
  - FF. Records of AVO checks, maintenance activities, and corrective actions required by Special Condition No. 77.D, and inspections, and all repairs and replacements made due to leaks as required by Special Condition No. 78.I. **(06/2023)**
  - GG. Records, including calculations, for all material changes that are implemented under Special Condition No. 80.
  - HH. Records, documentation from the manufacturers, or actual test results pertaining to abatement equipment efficiency and system operating and maintenance recommendations.
  - II. A copy of the test report specified in Special Condition No. 82 and any records of subsequent stack testing performed shall be kept for the life of the permit.
  - JJ. The following records shall be maintained to demonstrate compliance with the CAM requirements: **(06/2023)**
    - (1) All monitoring data and support information as specified in 30 TAC § 122.144; and
    - (2) Inspections of capture systems and abatement devices shall be recorded as they occur.
87. The records required by the special conditions shall be maintained in hard copy or electronic format and shall be maintained for at least five years rather than the two-year period specified in General Condition No. 7. The recordkeeping summary required shall contain examples of the calculations performed (including units, conversion factors, transfer efficiency, and emission factors), any assumptions made in the calculations, and the basis for those assumptions. These records shall be kept on-site and made available for review upon request by representatives of the TCEQ or any air pollution control agency with appropriate jurisdiction.

### **Pollution Prevention**

88. All paint gun and coating application equipment cleanup shall be performed in a spray booth with the fans operating by discharging the cleaning solvent into closed containers. Alternatively, paint guns may be cleaned in an enclosed gun cleaner which may be located outside of the spray booths. Any collected waste shall be either recycled or placed in closed containers.
89. Paint pots shall be covered while filled with solvent during cleaning.

90. The need for paint gun cleanup shall be minimized through the use of covers on equipment (disposable or reusable) and the use of spray-on masking or other protective coatings.
91. The topcoat system shall be equipped with a system for the capture and reclaim or recovery of purge materials (excluding applicator nozzles/tips).
92. Mixing vessels, other than day tanks equipped with continuous agitation systems, which contain VOC containing coatings and other materials must be closed except when adding to, removing, or mixing the contents.
93. All VOC containing coatings and solvents, waste coatings and solvents shall be stored in closed containers. In no case shall any container be left uncovered whose contents exceed one inch in depth as measured with the container placed on a level surface.
94. Spills of VOC-containing coatings shall be minimized and all coating and solvent spills shall be cleaned up immediately using appropriate procedures.
95. Solvent moistened wipes, towels, rags, sponges, or other materials used for cleanup operations shall be placed into closed containers immediately after use.
96. Containers that contain waste coatings and solvent, equipment cleaning waste and spill cleanup materials may be opened to allow for the addition or removal of material and shall be closed immediately after the transfer operation is complete. All waste materials shall be kept in storage until removed from the plant site in accordance with all applicable waste rules.
97. Organic-HAP-containing coatings, thinners, cleaning materials, and waste materials must be conveyed from one location to another in closed containers or pipes.
98. Waste solvent shall not be disposed of or transferred to another party such that the waste solvent will evaporate into the atmosphere.
99. All filters used for the control of PM from the painting, grinding, sanding, machining operations or the melting furnaces shall be removed and disposed of in such a manner that minimizes trapped PM from escaping into the atmosphere.
100. The emissions from cleaning of spray booth grates shall be limited through the use of one or more the following:
  - A. Controlled burn-off;
  - B. Rinsing with high-pressure water (in place);
  - C. Rinsing with high-pressure water (off-line);
  - D. Use of spray-on masking or other type of liquid masking; or
  - E. Use of low-VOC or no-VOC content cleaners.
101. The emissions from cleaning of spray booth walls shall be limited through the use of one or more of the following:
  - A. Use of masking materials (contact paper, plastic sheet, or other similar type of material);
  - B. Use of spray-on masking;

- C. Use of rags and manual wipes instead of spray application when cleaning walls;
- D. Use of low-HAP or no-HAP content cleaners; or
- E. Controlled access to cleaning solvents.

**As-Built Amendment**

102. No later than 1 year after start of operation of the new sources represented in the permit amendment (TCEQ Project No. 367523), an application shall be submitted to include all as-built changes for sources covered by this permit. For each of these sources, the hourly and annual criteria pollutant and individual species emission rates shall be quantified to reflect the as-built configuration and to accommodate the maximum anticipated production rates on an hourly and annual basis. For increases in emissions above the current allowable emission rates that are required to be authorized under 30 TAC 116.116, the application shall include all of the application elements required by 30 TAC §116.111. **(11/25)**

Date: November 3, 2025

**Permit Number 178948**

**Attachment I**

**PBR and De Minimis Sources**

| <b>Source or Activity – PBR</b>                                                                                                                                             | <b>Authorization</b>                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| Water-based surfactants/detergents, greater than 2,500 gallons per year, site-wide                                                                                          | § 106.261 and/or § 106.262                   |
| Enclosed abrasive blasting cleaning operations                                                                                                                              | § 106.452(1)                                 |
| Routine facility maintenance including painting and abrasive blasting on immovable structures                                                                               | § 106.263                                    |
| Parts cleaning equipment with cold solvent/remote reservoir, conveyORIZED, open-top cleaners including maintenance startup and shutdown                                     | § 106.454                                    |
| Usage of organic solvents for maintaining equipment                                                                                                                         | § 106.261 and/or § 106.262                   |
| Baghouse/dust collector/filter system for facilities authorized by PBR                                                                                                      | § 106.231, § 106.392, and/or § 106.452       |
| Baghouse/dust collector/filter system for facilities authorized in this permit                                                                                              | § 106.263(c)(1)                              |
| Cleanup of overspray on plenums, booth surfaces, and interior of stacks by mechanical means not covered in this permit                                                      | § 106.263(c)(1)                              |
| Cleanup of overspray on plenums, booth surfaces, and interior of stacks by using solvents not covered in this permit                                                        | § 106.263(c)(1)                              |
| Startup and shutdown activities not included in the conditions of this permit for combustion units used as control devices                                                  | § 106.263(c)(2)                              |
| Maintenance, startup, and shutdown of boilers, heaters, and other combustion devices emitting only products of combustion of the fuel and authorized by a PBR               | § 106.183                                    |
| Maintenance, startup, and shutdown of heat cleaning devices                                                                                                                 | § 106.495                                    |
| Purging of ovens and dryers before startup of natural gas or other organic compounds to atmosphere                                                                          | § 106.263(c)(2)                              |
| Startup and shutdown of ovens and dryers authorized by a permit                                                                                                             | § 106.263(c)(2)                              |
| Maintenance of ovens and dryers authorized by a permit                                                                                                                      | § 106.263(c)(1)                              |
| Maintenance, startup, and shutdown of portable and emergency engines and turbines authorized by a PBR                                                                       | § 106.511                                    |
| Maintenance, startup, and shutdown of stationary engines and turbines authorized by a PBR                                                                                   | § 106.512                                    |
| Startup and shutdown of engines and turbines authorized by a permit                                                                                                         | § 106.263(c)(2)                              |
| Fugitive component repair, replacement; leaks – piping, pumps, valves, flanges, etc. for facilities not authorized by a permit                                              | § 106.261 and/or § 106.262                   |
| Fugitive component repair, replacement; leaks – piping, pumps, valves, flanges, etc. for facilities authorized by a permit                                                  | § 106.261, § 106.262, and/or § 106.263(c)(1) |
| Maintenance, startup, and shutdown of storage tanks authorized by a PBR                                                                                                     | § 106.472, § 106.473, and/or § 106.474       |
| Abrasive blasting, painting, and surface preparation of storage tanks                                                                                                       | § 106.263(c)(3)                              |
| Maintenance, startup, and shutdown of refrigeration equipment used in support of manufacturing operations                                                                   | § 106.373                                    |
| Maintenance of sewage treatment facility                                                                                                                                    | § 106.531                                    |
| Maintenance of water and wastewater treatment facility                                                                                                                      | § 106.532                                    |
| Welding, soldering, and brazing                                                                                                                                             | § 106.227                                    |
| Routine maintenance activities which are planned and predictable and ensure the continuous normal operation of a facility or control device or return a facility or control | § 106.263(c)(1)                              |

Special Conditions  
Permit Number 178948  
Attachment I Page 2

|                                                                                                      |                               |
|------------------------------------------------------------------------------------------------------|-------------------------------|
| device to normal operating conditions                                                                |                               |
| Manually operated and hand-held equipment                                                            | § 106.265                     |
| Routine MSS of facilities and temporary maintenance facilities                                       | § 106.263(c)(3)               |
| Blasting, painting, and surface preparation of immovable fixed structures                            | § 106.263(c)(3)(A)            |
| Natural gas-fired comfort heating                                                                    | § 106.102                     |
| Equipment fueling                                                                                    | § 106.412                     |
| Diesel fuel storage tanks, gasoline storage tanks, lube oil storage tanks, and loading and unloading | § 106.472 and/or<br>§ 106.473 |
| Emergency diesel fire water pumps, electric generators, and portable engines                         | § 106.511                     |

| Source or Activity – De Minimis                                                                                                                                                                                                                                                             | Authorization      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| Cleaning and Stripping solvents, less than or equal to 50 gallons per year, site-wide                                                                                                                                                                                                       | § 116.119(a)(2)(A) |
| Water-base surfactants/detergents ≤ 2,500 gallons per year, site-wide                                                                                                                                                                                                                       | § 116.119(a)(2)(F) |
| Application of aqueous detergents, surfactants, and other cleaning solutions containing not more than one percent of any organic compound by weight or containing not more than five percent of any organic compound with a vapor pressure less than 0.002 pounds per square inch absolute. | § 116.119(a)(1)    |
| Glove box/self-contained abrasive blasting and filter replacement                                                                                                                                                                                                                           | § 116.119(a)(1)    |
| Blast cleaning operations with water as the cleaning media                                                                                                                                                                                                                                  | § 116.119(a)(1)    |
| Manual application of cleaning or stripping solutions or coatings                                                                                                                                                                                                                           | § 116.119(a)(1)    |
| Usage of organic chemicals including lubricants, greases, and oils without propellants other than air or nitrogen for maintaining equipment                                                                                                                                                 | § 116.119(a)(1)    |
| Office equipment maintenance and cleaning (printers, copiers, etc.)                                                                                                                                                                                                                         | § 116.119(a)(1)    |
| Maintenance and cleaning of in-situ computer and office equipment                                                                                                                                                                                                                           | § 116.119(a)(1)    |
| Janitorial and maid services                                                                                                                                                                                                                                                                | § 116.119(a)(1)    |
| Ground maintenance and landscaping                                                                                                                                                                                                                                                          | § 116.119(a)(1)    |
| Maintenance of heating and cooling equipment for personal use                                                                                                                                                                                                                               | § 116.119(a)(1)    |
| Comfort air conditions or comfort ventilation systems which are not used to remove air contaminants generated by or released from specific units or equipment                                                                                                                               | § 116.119(a)(1)    |
| Maintenance of equipment used for hydrostatic testing                                                                                                                                                                                                                                       | § 116.119(a)(1)    |
| Aerosol can puncturing, recycling and disposal                                                                                                                                                                                                                                              | § 116.119(a)(1)    |
| Application of lubricants for maintaining equipment                                                                                                                                                                                                                                         | § 116.119(a)(1)    |
| Application of argon, ethane, helium, hydrogen, methane, neon, nitrogen, and propane for testing, purging, and leak checking of equipment.                                                                                                                                                  | § 116.119(a)(1)    |
| Aerosol product use – less than 4 cans/64 oz/day                                                                                                                                                                                                                                            | § 116.119(a)(1)    |
| Pesticide and insecticide use and fumigation                                                                                                                                                                                                                                                | § 116.119(a)(1)    |

Date: April 7, 2021