This information is maintained by the Mechanical/Coatings NSR Section and is subject to change. Last update was made **July 2018**. These special conditions represent current NSR boilerplate guidelines and are provided for informational purposes only. The special conditions for any permit or amendment are subject to change through TCEQ case-by-case evaluation procedures [30 TAC 116.111(a)].

Special Conditions
Permit Number XXXXXXX

1. This permit authorizes the operation of facilities associated with the manufacturing of **{specify operation}**. These facilities are located at **{Street Address}**, **{City}**, **{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 consecutive 12-month period.

2. This permit does not include the facilities or maintenance, startup, or shutdown (MSS) activities at the site, except as noted in the MAERT. Instead, these facilities and/or activities 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.

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:

Facilities/Activities	SE No./PBR No./Standard Permit	Registration No.
Enclosed Abrasive Blasting	106.452(1)	N/A
Degreaser	106.454	XXXXXX
Heaters	106.183	N/A

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. **{OUTDOOR FUGITIVES}** No visible emissions shall cross the property line at any time. This determination shall be made as follows.

   A. Observe for visible emissions while **{specify the activity**} is ongoing. Observations shall be made along the property line nearest to the **{specify the activity}.** 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 crossing the property line, identification of the source and cause of the visible emissions shall be conducted within 24 hours and documented.

   C. Corrective action to eliminate the cause of visible emissions shall be taken promptly. Corrective action shall be documented within one week of first observation of the visible emissions. After corrective action has been taken, another visible emissions observation shall be performed and recorded to ensure the visible emissions have been eliminated.

7. **{BUILDING FUGITIVES}** There shall be no visible emissions from building openings or vents. This determination shall be made as follows.

A. Observe for visible emissions while **{specify the activity}** is ongoing. 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 cause of visible emissions shall be taken promptly. Corrective action shall be documented within one week of the first observation of the visible emissions. After corrective action has been taken, another visible emissions observation shall be performed and recorded to ensure the visible emissions have been eliminated.

8. **{VENT/STACK EMISSIONS}** Opacity shall not exceed five percent averaged over a six-minute period from each exhaust stack or vent emission point and 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. **{as applicable -** 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.**}** 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 an emission point, then the opacity shall be determined and documented within 24 hours for that emission point using Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Appendix A, Test Method 9.

C. If the opacity exceeds five percent, corrective action to eliminate the cause of the excessive visible emissions shall be taken promptly. Corrective action shall be documented within one week of the first visible emission observation. After corrective action has been taken, another visible emissions observation shall be performed and recorded to ensure the visible emissions have been eliminated.

OR **{if visible emission observations are acceptable in place of opacity observations}**

B. Observations shall be performed and recorded quarterly. If visible emissions are observed from an emission point, corrective action shall be taken promptly to eliminate the cause of the visible emissions.

C. 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. After corrective action has been taken, another visible emissions observation shall be performed and recorded to ensure the visible emissions have been eliminated.

9. The surface coating operations at the site shall comply with the applicable requirements of Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart **{Applicable MACT}**, National Emission Standards for **{Applicable MACT Title}**.

OR

The surface coating operations at the site shall comply with the National Emission Standards for Hazardous Air Pollutants: 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.

OR

The operations at the site shall comply with the National Emission Standards for Hazardous Air Pollutants Area Source Standard for Nine Metal Fabrication and Finishing Source Categories, 40 CFR Part 63, Subpart XXXXXX, 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.

10. The coatings used in the facilities covered by this permit shall comply with the individual volatile organic compound (VOC) content limits specified in **{Rule Citation}** for **{Operation Type}** less water and exempt solvents regardless of whether the facilities would otherwise qualify for an exemption. Compliance with the individual VOC content limits shall be demonstrated on a daily weighted average basis for all coatings and solvents "as mixed" and applied per coating line.

OR

The coatings used in the facilities covered by this permit shall comply with the individual volatile organic compound (VOC) content limits specified in **{Rule Citation}** for **{Operation Type}** less water and exempt solvents regardless of whether the facilities would otherwise be subject to § 115.453 **{or 421}**. Compliance with the individual VOC content limits shall be demonstrated on a monthly weighted average basis for all coatings and solvents "as mixed" and applied.

11. The site shall comply with 30 TAC § 115.453(d)(1) and (d)(2) regardless of whether the facilities would otherwise be subject to these requirements.

Operation Limitations

12. Surface coating operations include the application of surface coatings, **{the drying of surface coatings,}** all cleanup activities involving the use of solvent, the mixing of surface coatings, and the thinning of surface coatings using solvents.

13. All surface coating operations **{except the drying of surface coatings,}** shall be restricted to the coating booth(s) **{EPN XXX}** and shall be performed according to the following requirements:

A. Airless or high-volume, low-pressure (HVLP) spray application equipment or other equipment, such as electrostatic systems, that is demonstrated to reach the same or higher transfer efficiency shall be used. This equipment shall be operated and maintained within the limits set forth by the manufacturer.

B. All doors to the coating booth(s) shall remain closed at all times when surface coating operations are in progress.

OR

B. The face velocity across each natural draft opening (NDO) on each coating booth **{and oven}** shall be at least 100 feet per minute (fpm) during all surface coating **{and drying}** operations.

C. **{If parts dried in booth}** Coated parts shall remain in the booth, with the ventilation system in operation, for no less than 3 hours after application of surface coating has been completed.

14. Each coating booth shall be equipped with a ventilation system that is designed to capture all emissions from the surface coating operations and shall be operated according to the following requirements.

    A. The ventilation system for the coating booth shall be equipped with filter pads designed or warranted to achieve a filter efficiency of 99 percent or greater for particulate matter (PM).

    B. The filter 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 coating booth is in operation.

    C. The holder of this permit shall install, calibrate (if applicable), and maintain a differential pressure gauge to monitor pressure drop across the filter pads. If a monitoring device requires calibration, it shall be calibrated at least annually in accordance with the manufacturer's specifications and shall be accurate to within a range of ± 0.5 inch water gauge pressure (± 125 pascals) or a span of ± 3 percent. If a monitoring device requires to be zeroed, it shall be zeroed at least once a week.

    D. The filter media differential pressure shall be maintained within the operating range specified by the manufacturer. Filters shall be replaced whenever the pressure drop reading across the filter media is outside the manufacturer's specified operating range.

    E. Pressure drop readings shall be recorded at least once per day that the system is required to be operated.

    F. Maintenance on the ventilation system, including filter replacement, shall be performed only when the facility being controlled is not in operation.

15. The ventilation system for each coating booth **{and associated oven}** shall route the **{filtered}** emissions to a thermal control device (e.g., thermal oxidizer) which meets the following requirements:

    A. The thermal control device shall achieve a 98 percent or greater destruction efficiency for organic compounds emissions.

    OR

    The rotary concentrator shall achieve a 96 percent or greater capture efficiency of organic compounds and the associated thermal control device shall achieve a 99 percent or greater destruction efficiency of organic compounds in order to achieve a 95 percent or greater overall reduction in emissions.

    B. The thermal control device shall be equipped with a monitor (temperature sensor) that continuously measures and records the temperature of the thermal control device combustion chamber or in the duct immediately downstream of the combustion chamber before any substantial heat exchange occurs) and shall be accurate to within ± 5°F. The combustion chamber temperature shall be maintained at greater than or equal to **{insert temperature}** °F based on a 3-hour average temperature over four equally spaced measurement points per hour.

    C. Once every quarter an accuracy audit shall be conducted to determine if the temperature sensor 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. The temperature sensor shall be replaced with a new sensor either if the sensor looks damaged and/or broken or the sensor is no longer accurate to within ± 5°F.

    D. Conduct a visual inspection of each sensor every quarter if redundant temperature sensors are not used.

    E. The operating instructions for the thermal control device shall be established and posted such that they are readily available to all of the thermal control device operators.

F. The thermal control device shall be operated and maintained in conformance with all of the manufacturer specifications and recommendations.

G. The thermal control device capture system's ductwork shall be operated under negative pressure. 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.

H. An inspection and maintenance log shall be kept for the thermal control device 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 thermal control device and its capture system.

I. Materials containing halogenated organic compounds shall not be used in the surface coating operations and vented to the thermal control device.

16. Planned maintenance on the thermal control device shall only be performed during periods when the facilities being controlled by the thermal control device are not in operation.

OR

Manufacturing operations that vent to the thermal control device shall be limited to **{120}** hours of uncontrolled operation over a rolling 12-month period during times when the thermal control device is off-line for maintenance or repair.

17. The ventilation systems for **{specify the facilities}** shall include exhaust stacks that have no obstructions or restrictions to 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:

Emission Point Number (EPN)	Height (feet)
BOOTH1	XX
OVEN1	XX
RTO1	XX

18. Fuel for the boilers, drying ovens, and thermal control device shall be limited to pipeline-quality, sweet natural gas as provided by the gas distributor.

Material Usage Flexibility

19. 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 PM air contaminant in the new material is exempt from paragraphs F through H of this special condition if:

(1) 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.

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 (µg/m^3)	Annual ESL (µg/m^3)
≤ 0.04	≥ 2 and < 500	≥ 0.2 and < 50
≤ 0.10	≥ 500 and < 3,500	≥ 50 and < 350
≤ 0.40	≥ 3,500	≥ 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.

EPN	Unit Impacts (µg/m^3 per lb/hr)
XXXXX	XX.XX
XXXX	XX.XX

(3) Sum the impacts from each emission point/emission point group to determine a total short-term off-property impact (Total GLC_{MAX}) 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.

Total $GLC_{MAX} \leq ESL_{SHORT}$

Where:

Total GLC_{MAX} = The sum of the short-term GLCs from each emission point.

ESL_{SHORT} = 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) Convert the annual emission rate to an hourly emission rate using 8760 hours per year and 2000 pounds per ton.

(3) Multiply the hourly emission rate (lb/hr) of the air contaminant determined in paragraph H(2) of this special condition by the 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.

(4) Sum the impacts from each emission point to determine a total off-property impact (Total GLC_{MAX}) for the new or existing air contaminant.

(5) Multiply the total off-property impact (Total GLC_{MAX}) determined in paragraph H(4) of this special condition by 0.08 to determine the annual off-property impact (Annual GLC_{MAX}) for the new or existing air contaminant.

(6) 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.

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.

Initial Determination of Compliance

20. One-time testing and sampling of the thermal control device shall be performed in order to do the following:

A. Verify the destruction efficiency of the thermal control device; **{or** Verify the removal efficiency of the rotary concentrator and the destruction efficiency of the associated thermal control device;**}** and

B. Determine the minimum operating temperature needed to meet the minimum required destruction efficiency. The operating temperature shall be based on a 3-hour rolling average.

21. Specific requirements of the testing are as follows:

A. Submit a proposed test plan to accomplish the required testing for approval to the appropriate TCEQ regional office. The proposed test plan must be submitted within 60 days after reaching normal operating conditions of the thermal control device under this permit. The testing should be performed as follows:

(1) The testing shall be performed during maximum operating conditions for the facilities that are controlled by the thermal control device; and

(2) The thermal control device shall operate at a temperature high enough to ensure compliance with the minimum required destruction efficiency.

B. Schedule a pretest meeting with the appropriate TCEQ regional office staff at least 45 days in advance of testing. The purpose of the meeting is to review the test details which include sampling and measuring procedures to be used, the forms required for recording the pertinent data, and the format and content of the test report as outlined in Chapter 14 of the TCEQ Sampling Procedures Manual;

C. Testing shall be completed no later than 90 days after regional approval of the test plan and no later than 180 days after reaching normal operating conditions; and

D. Submit a test report to the appropriate TCEQ regional office and TCEQ Austin Office of Air, Air Permits Division, no later than 60 days after the testing has been completed. The report shall provide documentation including calculations which demonstrate compliance with the required destruction efficiency.

22. Submit an alteration request to the TCEQ within 6 months of the testing to incorporate into the permit the minimum operating temperature needed to meet the minimum required destruction efficiency.

Recordkeeping

23. 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 material safety data sheets) for all paints and solvents used in the coating operations and all solvents used in the cleanup operations. 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 paint and solvent **{(including exempt solvents)}** used in each coating booth;

(2) Daily hours and times of day of operation for each coating booth; and

(3) As-applied coating VOC **{and exempt solvent}** content for each paint and solvent used in each coating booth.

C. The data recorded in paragraph [B] of this special condition shall be used to produce a monthly summary that reflects:

(1) The VOC**{, exempt solvent,}** and PM emissions in lbs/hr as a daily average;

(2) The VOC**{, exempt solvent,}** and PM 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 visible emissions observation and/or opacity measurements. Records of any corrective action taken.

E. Records sufficient to demonstrate compliance with the applicable requirements of 40 CFR Part 63, Subparts **{insert any applicable subparts}**.

F. Records sufficient to demonstrate compliance with the applicable requirements of 30 TAC Chapter 115.

G. Records of the manufacturer's specifications for the spray application equipment employed by the facility.

H. Manufacturer's documentation on PM control efficiency for the filters used in the coating booths. Documentation which shows the manufacturer's specified operating range and the procedures recommended for replacement of the filters.

I. Records of the calibrations performed on each differential pressure gauge.

J. Records of the differential pressure readings across the filter pads.

K. Records of when filters were replaced.

L. Records of the combustion chamber temperature for the thermal control device.

M. Records of the thermal control device temperature sensor accuracy audit and visual inspection (if applicable). Records of temperature sensor replacement.

N. Records of AVO inspections and a maintenance log for the thermal control device capture system.

O. Records of the inspections and maintenance performed on the thermal control device.

P. Records and calculations demonstrating compliance with Material Usage Flexibility condition for the introduction of any new materials.

Q. A copy of initial test reports and any records of subsequent testing performed shall be kept for the life of the permit.

24. The records required by the special conditions shall be maintained in hard copy or electronic format and shall be maintained for at least two years **{Title V sources -** 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

25. All paint gun cleanup shall be performed in a coating 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 coating booths. Any collected waste shall be either recycled or placed in closed containers.

26. Paint pots shall be covered while filled with solvent during cleaning.

27. All 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.

28. All coating and solvent spills shall be cleaned up immediately using appropriate procedures.

29. Towels, rags, sponges, or other materials used for cleanup operations shall be placed into closed containers immediately after use.

30. 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.

31. All filters used for the control of PM from the surface coating operations shall be removed and disposed of in such a manner that minimizes trapped PM from escaping into the atmosphere.