

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



May 2, 2016

Bridget Bohac, Chief Clerk
Texas Commission on Environmental Quality
P.O. Box 13087, MC 105
Austin, Texas 78711-3087

Re: Compliance History Report, Technical Review, and Draft Permit for
Kloeckner Metals Corporation, Permit No. 131681
TCEQ Docket No. 2016-0145-AIR

Dear Ms. Bohac:

Enclosed please find a copy of the Compliance History Report, Technical Review, and Draft Permit for Kloeckner Metals Corporation, Permit No. 131681. If you have any questions, please do not hesitate to call me at extension 1088.

Sincerely,

A handwritten signature in black ink that reads "PN Petty".

Becky Nash Petty
Staff Attorney
Environmental Law Division

Enclosure

Construction Permit Source Analysis & Technical Review

Company	Kloeckner Metals Corporation	Permit Number	131681
City	Houston	Project Number	232456
County	Harris	Account Number	N/A
Project Type	Initial	Regulated Entity Number	RN108250184
Project Reviewer	Stephen Akers, P.E.	Customer Reference Number	CN604792085
Site Name	Metal Preservation Line		

Project Overview

Kloeckner Metals Corporation (Kloeckner Metals) has applied for a permit to authorize one (1) automated surface coating line, one (1) paint mixing room (paint kitchen), one (1) distillation room (solvent recycling room), and one (1) regenerative thermal oxidizer (RTO). These facilities will be located at 14200 Almeda Road, Houston, Harris County. This site will use these facilities as well as other facilities authorized via permit-by-rule (PBR) to cut, weld, abrasively blast, and surface coat steel plates and structural steel. The facilities authorized via PBR include but are not limited to welding equipment, a natural gas-fired convection oven, an abrasive blasting booth, and manually operated equipment used for cutting steel. Various other facilities at the site are considered to be de minimis sources under 30 TAC § 116.119. The total annual allowable emission rates for the permit are as follows.

Emission Summary

Air Contaminant	Proposed Allowable Emission Rates (tpy)
PM	0.41
PM ₁₀	0.41
PM _{2.5}	0.41
VOC	4.82
NO _x	4.43
CO	2.22
SO ₂	0.01
Exempt Solvent	<0.01

Compliance History Evaluation - 30 TAC Chapter 60 Rules

A compliance history report was reviewed on:	April 15, 2015
Site rating & classification:	N/A
Company rating & classification:	N/A
If the rating is 50<RATING<55, what was the outcome, if any, based on the findings in the formal report:	N/A
Has the permit changed on the basis of the compliance history or rating?	No

Public Notice Information - 30 TAC Chapter 39 Rules

Rule Citation	Requirement
39.403	Date Application Received: April 6, 2015
	Date Administratively Complete: April 13, 2015
	Small Business Source? No
	Date Leg Letters mailed: April 13, 2015
39.603	Date Published: April 30, 2015
	Publication Name: Houston Chronicle
	Pollutants: organic compounds, particulate matter including particulate matter with diameters of 10 microns or less and 2.5 microns or less, nitrogen oxides, carbon monoxide, and sulfur dioxide

Construction Permit Source Analysis & Technical Review

Permit No. 131681
Page 2

Regulated Entity No. RN108250184

Rule Citation	Requirement
	Date Affidavits/Copies Received: May 8, 2015
	Is bilingual notice required? Yes
	Language: Spanish
	Date Published: May 3, 2015
	Publication Name: La Voz De Houston
	Date Affidavits/Copies Received: May 8, 2015
	Date Certification of Sign Posting / Application Availability Received: June 5, 2015
39.604	Public Comments Received? Yes
	Hearing Requested? Yes
	Meeting Request? Yes
	Date Response to Comments sent to OCC:
	Consideration of Comments: Yes
	Is 2nd Public Notice required? Yes
39.419	Date 2nd Public Notice/Preliminary Decision Letter Mailed: June 26, 2015
39.413	Date Cnty Judge, Mayor, and COG letters mailed: N/A
	Date Federal Land Manager letter mailed: N/A
39.605	Date affected states letter mailed: N/A
39.603	Date Published: July 23, 2015
	Publication Name: Houston Chronicle
	Pollutants: organic compounds, particulate matter including particulate matter with diameters of 10 microns or less and 2.5 microns or less, nitrogen oxides, carbon monoxide, sulfur dioxide, and hazardous air pollutants
	Date Affidavits/Copies Received: August 7, 2015
	Is bilingual notice required? Yes
	Language: Spanish
	Date Published: July 26, 2015
	Publication Name: La Voz De Houston
	Date Affidavits/Copies Received: August 7, 2015
	Date Certification of Sign Posting / Application Availability Received: August 28, 2015
	Public Comments Received? Yes
	Meeting Request? Yes
	Date Meeting Held: No meeting held (Number of requests not significant)
	Hearing Request? Yes
	Date Hearing Held:
	Request(s) withdrawn? No

Construction Permit Source Analysis & Technical Review

Permit No. 131681
Page 3

Regulated Entity No. RN108250184

Rule Citation	Requirement
	Date Withdrawn:
	Consideration of Comments: Yes
39.421	Date RTC, Technical Review & Draft Permit Conditions sent to OCC: December 8, 2015
	Request for Reconsideration Received?
	Final Action:
	Are letters Enclosed?

Construction Permit & Amendment Requirements - 30 TAC Chapter 116 Rules

Rule Citation	Requirement
116.111(a)(2)(G)	Is the facility expected to perform as represented in the application? Yes
116.111(a)(2)(A)(i)	Are emissions from this facility expected to comply with all TCEQ air quality Rules & Regulations, and the intent of the Texas Clean Air Act? Yes
116.111(a)(2)(B)	Emissions will be measured using the following method: Records of material usage and emission factors will be used to determine emissions.
	Comments on emission verification: None
116.111(a)(2)(D)	Subject to NSPS? No NSPS does not apply to this site type since there are no NSPS promulgated for miscellaneous metal parts and products surface coating facilities.
116.111(a)(2)(E)	Subject to NESHAP? No No NESHAPs apply to this operation since the facility does not emit any air contaminants regulated under 40 CFR Part 61.
116.111(a)(2)(F)	Subject to NESHAP (MACT) for source categories? No Kloeckner will not be a major source of hazardous air pollutants (HAPs); therefore, 40 CFR Part 63, Subpart MMMM (National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products) is not applicable. In addition, Subpart XXXXXX is not applicable since Kloeckner is not one of the nine source categories which this rule applies to. Lastly, Subpart HHHHHH is not applicable since the coatings to be used at the site do not contain any of the target HAPs.
116.111(a)(2)(H)	Is nonattainment review required? No Is the site located in a nonattainment area? Yes Is the site a federal major source for a nonattainment pollutant? No Is the project a federal major source for a nonattainment pollutant by itself? No Is the project a federal major modification for a nonattainment pollutant? No
116.111(a)(2)(I)	Is PSD applicable? No Is the site a federal major source (100/250 tons/yr of a non-GHG pollutant)? No Is the project a federal major modification for non-GHG pollutants? No Is the project a federal major source for non-GHG pollutants by itself? No
116.111(a)(2)(L)	Is Mass Emissions Cap and Trade applicable to the new or modified facilities? No If yes, did the proposed facility, group of facilities, or account obtain allowances to operate: N/A
116.140 - 141	Permit Fee: \$6,383.79 Fee certification: Yes

Title V Applicability - 30 TAC Chapter 122 Rules

Rule Citation	Requirement
122.10(14)(A)	Is the site a major source under FCAA Section 112(b)? No
	Does the site emit 10 tons or more of any single HAP? No
	Does the site emit 25 tons or more of a combination? No

Construction Permit Source Analysis & Technical Review

Permit No. 131681
Page 4

Regulated Entity No. RN108250184

122.10(14)(C)	Is the site a federal major source (100/250 tons/yr of a non-GHG pollutant)	No
122.10(14)(D)	Is the site a non-attainment major source?	No
122.602	Periodic Monitoring (PM) applicability: Not Applicable Title V is not applicable (not a major source); therefore, periodic monitoring is not applicable. However, periodic monitoring will be performed in the form of quarterly visible emissions checks, records of pressure drop readings across the paint booth filters, continuous monitoring of the RTO combustion chamber temperature while in operation, AVO inspections of the RTO capture system ductwork, and records of material usage in order to demonstrate compliance with their MAERT.	
122.604	Compliance Assurance Monitoring (CAM) applicability: Not Applicable The site is not a major source for HAPs or any criteria pollutants; therefore, CAM is not applicable.	

Request for Comments

Received From	Program/Area Name	Reviewed By/Date	Comments
Region:	12	Margaret Dickson 5/14/15	Comments were submitted by Ms. Dickson
City:	Houston		
County:	Harris		
ADMT:		N/A	Screen3 submitted and not reviewed by ADMT.
EB&T:		N/A	
Toxicology:		N/A	Impacts for all compounds below ESLs
Compliance:			No compliance issues
Legal:			No legal issues
Comment resolution and/or unresolved issues:			All of Ms. Dickson's concerns and comments were addressed in the revised draft permit.

Process/Project Description

At the Kloeckner Metals site, stock steel plates and structural steel (steel parts) are received and, if needed, cut to size per customer specifications. The equipment used to cut the steel parts to size will be authorized via PBR § 106.265. The steel parts are then loaded onto a conveyor line using a crane. Once on the conveyor line, the steel parts move down the conveyor line to an indirect natural gas-fired oven (Preheat Oven) where the parts are heated up. The Preheat Oven will be authorized via PBR § 106.183. After heating up, the steel parts proceed to the abrasive blast booth where they are abrasively blasted using steel shot. The abrasive blasting booth will be authorized via PBR § 106.452. The steel parts then proceed into a paint booth (*i.e.*, Primer Booth) where the parts are primer coated using automated airless spray equipment. After surface coating, the steel parts move down the conveyor line through a drying tunnel where all of the surface coated parts are dried. Drying of the surface coating in the drying tunnel is aided by warm air from the Preheat Oven being routed to the drying tunnel. After exiting the drying tunnel, the painted parts are removed from the conveyor line and shipped to the customer.

The primer will be received in 5-gallon buckets and cleaning solvents will be received in 55-gallon drums. All mixing of paints and solvents is performed inside the Paint Kitchen. All spray gun cleaning will occur within the Primer Booth with the exhaust fan on and with the solvent emissions being vented to the RTO. All waste from paint line cleaning will be collected and placed in closed containers for storage prior to recycling in the Distillation Room or being sent off-site for disposal. The Paint Kitchen and the Distillation Room are both vented to the RTO.

Pollution Prevention, Sources, Controls and BACT- [30 TAC 116.111(a)(2)(C)]

Emission sources include the following: VOC, PM, and exempt solvent emissions from the surface coating operations (*i.e.*, painting, cleanup activities, solvent recycling, mixing of paints and solvents) and the drying of surface coatings; and POCs from the operation of the RTO. All emissions generated inside the Primer Booth and drying tunnel will be captured and

Construction Permit Source Analysis & Technical Review

Permit No. 131681
Page 5

Regulated Entity No. RN108250184

exhausted through filters which have a minimum control efficiency of 99% for PM and then vented to an RTO which has a minimum destruction efficiency of 98% for organic compounds. All VOC and exempt solvent emissions generated inside the Paint Kitchen and Distillation Room are captured and vented to the RTO.

Painting emissions are reduced through a combination of process controls that are as follows:

- All emissions from the surface coating operations and the drying of surface coatings will be captured and vented to an RTO which has a minimum destruction efficiency of 98% for organic compounds;
- The use of high transfer efficiency application equipment (*i.e.*, automated airless spray guns) to reduce coating consumption which reduces VOC and PM emissions;
- The Primer Booth will be equipped with filters which have a minimum control efficiency of 99% for PM; and
- Good housekeeping practices during application equipment cleanup, and disposal of waste solvent and coatings.

These measures are considered BACT for enclosed surface coating operations of this size.

Supplemental fuel for the RTO will be pipeline-quality, sweet natural gas. This is BACT for natural gas-fired combustion units of type.

Planned Maintenance, Startup, and Shutdown (MSS)

Kloeckner Metals identified a number of process and general facility planned MSS activities to be authorized. A review indicates that the identification of activities is appropriate for this type of facility. All of the planned MSS activities at the site are included in the permit or authorized under a PBR (30 TAC Chapter 106) or are de minimis sources (30 TAC § 116.119) and have been included in Attachment I.

For the activities authorized by the permit, the MSS activities for the surface coating operations have no emissions that are different in character (composition) than the emissions during the normal operations, and the emissions from MSS are intrinsically less than normal operation. The short-term and annual emissions from MSS are already included in the emission calculations because they are based on the maximum amount of coating that may be used in an hour and on an annual basis. The MSS activities for the thermal oxidizer have no emissions that are different in character than the emissions during the normal operations, and the emissions from MSS are intrinsically less than normal operation.

Impacts Evaluation - 30 TAC 116.111(a)(2)(J)

Was modeling conducted?	Yes	Type of Modeling:	Screen3
Will GLC of any air contaminant cause violation of NAAQS?			No
Is this a sensitive location with respect to nuisance?			Yes
[§116.111(a)(2)(A)(ii)] Is the site within 3000 feet of any school?			Yes
Additional site/land use information: Site is surrounded by a mixture of residences, industrial facilities, and undeveloped land.			

Summary of Modeling Results

Modeling was performed using SCREEN3 to determine the worst case impacts for each air contaminant from the surface coating operations. All surface coating operation emissions will vent to the RTO which exhausts to EPN RTO-1. This stack was modeled as a point source using an emission rate of 1 lb/hr. The maximum off-property concentration for each air contaminant emitted from the RTO (EPN RTO-1) was determined by multiplying the unit impact multiplier from the screen model by the emission rate for that air contaminant. The off-property impacts for all of the air contaminants were below their respective effects screening level (ESL). Given this, no adverse impacts to public health and the environment is anticipated.

A NAAQS analysis was performed for NO₂, CO, SO₂, PM₁₀, and PM_{2.5}. The following results were obtained from the analysis:

- The impacts for CO (1-hour and 8-hour), SO₂ (1-hour, 3-hour, 24-hour, and annual), PM₁₀ (24-hour), and NO₂ (1-hour

Construction Permit Source Analysis & Technical Review

Permit No. 131681
Page 6

Regulated Entity No. RN108250184

and annual) emissions were below their respective de minimis impact levels. As such, no further analysis was required for these pollutants and their NAAQS; and

- For the PM_{2.5} emission rates, the maximum off-property concentrations were below the SIL for the 24-hour and annual NAAQS; therefore, no further analysis was required for PM_{2.5}. The 24-hour and annual SILs for PM_{2.5} were vacated; however, an evaluation was conducted to justify the use of the SILs for this project. Because the differences between the PM_{2.5} NAAQS and the monitored background concentrations are greater than the PM_{2.5} SILs, the SILs may be used for this project's impacts evaluation. Background concentrations for PM_{2.5} were obtained from the EPA AIRS monitor 482010058 located at 7210 ½ Bayway Drive, Baytown, Harris County. The monitor selection is appropriate due to a greater amount of industry surrounding the monitor site relative to the project site. The background concentration (22.4 µg/m³) for the 24-hour PM_{2.5} NAAQS was based on the averages of the 98th percentile from the years 2012 to 2014. The background concentration (10.2 µg/m³) for the annual PM_{2.5} NAAQS was based on the averages from the years 2012 to 2014. The impacts for this project were below the SILs; therefore, a more comprehensive cumulative modeling analysis for PM_{2.5} was not required.

Modeling Results for the NAAQS

Pollutant	Averaging Time	GLCmax modeled (µg/m ³)	De Minimis (µg/m ³)	Less than De Minimis?	Background (µg/m ³)	GLCmax + Background (µg/m ³)	Standard (µg/m ³)
PM ₁₀	24-Hour	0.35	5	Yes			150
PM _{2.5}	24-Hour	0.35	1.2	Yes	22.4		35
	Annual	0.07	0.3	Yes	10.2		12
NO ₂	1-Hour	7.03	7.5	Yes			188
	Annual	0.56	1	Yes			100
SO ₂	1-Hour	0.2	7.8	Yes			196
	3-Hour	0.02	25	Yes			1,300
	24-Hour	0.01	5	Yes			365
	Annual	0.002	1	Yes			80
CO	1-Hour	4.41	2,000	Yes			40,000
	8-Hour	3.09	500	Yes			10,000

Given this, the predicted concentrations from the sources at the site will not result in an exceedance of the NAAQS.

An analysis was performed for SO₂ property line standard for Harris County (*i.e.*, net ground level concentration of 0.28 ppmv averaged over any 30-minute period). The following results were obtained from the analysis.

Pollutant	Averaging Time	GLCmax modeled (µg/m ³)	De Minimis (µg/m ³)	Less than De Minimis?	Background (µg/m ³)	GLCmax + Background (µg/m ³)	Standard (µg/m ³)
SO ₂	1-Hour	0.2	14.3	Yes			715

Given that the 1-hour impact is less than de minimis, the predicted concentrations from the sources at the site will not result in an exceedance of the SO₂ property line standard.

Permit Concurrence and Related Authorization Actions

Is the applicant in agreement with special conditions?	Yes
Company representative(s):	Bruno Ferraro, Grove Scientific & Engineering
Contacted Via:	E-mail
Date of contact:	6/17/15
Other permit(s) or permits by rule affected by this action:	No

Construction Permit
Source Analysis & Technical Review

Permit No. 131681
Page 7

Regulated Entity No. RN108250184

List permit and/or PBR number(s) and actions required or taken:

N/A

Project Reviewer

Date

Team Leader/Section Manager/Backup

Date

Emission Sources - Maximum Allowable Emission Rates

Permit Number 131681

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (6)	
			lbs/hour	TPY (4)
RTO-1	Regenerative Thermal Oxidizer – Primer Booth and Associated Drying Tunnel, Paint Kitchen, Distillation Room	VOC (5)	0.02	0.10
		PM (5)	0.09	0.40
		PM ₁₀ (5)	0.09	0.40
		PM _{2.5} (5)	0.09	0.40
		NO _x (5)	1.01	4.43
		CO (5)	0.51	2.22
		SO ₂ (5)	<0.01	0.01
		VOC	4.30	4.72
		Exempt Solvent	0.01	<0.01
		PM	0.01	0.01
		PM ₁₀	0.01	0.01
		PM _{2.5}	0.01	0.01

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) Exempt Solvent - Those carbon compounds or mixtures of carbon compounds used as solvents which have been excluded from the definition of volatile organic compound.
 - VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 - NO_x - total oxides of nitrogen
 - SO₂ - sulfur dioxide
 - PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}
 - PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}
 - PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
 - CO - carbon monoxide
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Products of combustion emissions – regenerative thermal oxidizer.
- (6) Allowable emission rates include planned maintenance, startup and shutdown activities.

Date: **Month Day, 2016**



Compliance History Report

PUBLISHED Compliance History Report for CN604792085, RN108250184, Rating Year 2015 which includes Compliance History (CH) components from September 1, 2010, through August 31, 2015.

Customer, Respondent, or Owner/Operator:	CN604792085, Kloeckner Metals Corporation	Classification: UNCLASSIFIED	Rating: -----
Regulated Entity:	RN108250184, KLOECKNER METALS	Classification: UNCLASSIFIED	Rating: -----
Complexity Points:	6	Repeat Violator:	NO
CH Group:	14 - Other		
Location:	14200 ALMEDA RD HOUSTON, TX 77053-2510, HARRIS COUNTY		
TCEQ Region:	REGION 12 - HOUSTON		
ID Number(s):			
AIR NEW SOURCE PERMITS PERMIT	131681		
Compliance History Period:	September 01, 2010 to August 31, 2015	Rating Year:	2015
		Rating Date:	09/01/2015
Date Compliance History Report Prepared:	May 02, 2016		
Agency Decision Requiring Compliance History:	Permit - Issuance, renewal, amendment, modification, denial, suspension, or revocation of a permit.		
Component Period Selected:	September 01, 2010 to August 31, 2015		
TCEQ Staff Member to Contact for Additional Information Regarding This Compliance History.			
Name:	Steve Akers	Phone:	(512) 239-1141

Site and Owner/Operator History:

- 1) Has the site been in existence and/or operation for the full five year compliance period? NO
- 2) Has there been a (known) change in ownership/operator of the site during the compliance period? NO
- 3) If **YES** for #2, who is the current owner/operator? N/A
- 4) If **YES** for #2, who was/were the prior owner(s)/operator(s)? N/A
- 5) If **YES**, when did the change(s) in owner or operator occur? N/A

Components (Multimedia) for the Site Are Listed in Sections A - J

A. Final Orders, court judgments, and consent decrees:

N/A

B. Criminal convictions:

N/A

C. Chronic excessive emissions events:

N/A

D. The approval dates of investigations (CCEDS Inv. Track. No.):

N/A

E. Written notices of violations (NOV) (CCEDS Inv. Track. No.):

A notice of violation represents a written allegation of a violation of a specific regulatory requirement from the commission to a regulated entity. A notice of violation is not a final enforcement action, nor proof that a violation has actually occurred.

N/A

F. Environmental audits:

N/A

G. Type of environmental management systems (EMSs):

N/A

H. Voluntary on-site compliance assessment dates:

N/A

I. Participation in a voluntary pollution reduction program:

N/A

J. Early compliance:

N/A

Sites Outside of Texas:

N/A

Special Conditions

Permit Number 131681

1. This permit authorizes the operation of one (1) automated surface coating booth (Primer Booth) and its associated drying tunnel, one (1) paint mixing room (Paint Kitchen), one (1) solvent recycling room (Distillation Room), and one (1) regenerative thermal oxidizer (RTO) which are used for surface coating steel plates and structural steel. These facilities are located at 14200 Almeda Road, Houston, Harris 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 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. 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.
4. 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 Limits

5. Emissions from the facility shall comply with 30 TAC § 101.4 regarding nuisance as determined using the Frequency, Intensity, Duration, and Offensiveness (FIDO) Chart in the TCEQ's Odor Complaint Investigation Procedures (September 18, 2007, or as subsequently updated).
 - A. If compliance with 30 TAC § 101.4 so requires, the permit shall be amended to control nuisance-causing emissions either through process controls or additional emission controls.
 - B. Complaints from affected persons of nuisance odors and/or particulate matter (PM) emissions from the facility that are verified by personnel from the TCEQ or any air pollution control agency with jurisdiction shall be the basis for requiring prompt remedial action to eliminate such odors and/or PM emissions, regardless of whether or not the odors are judged to be of sufficient concentration and duration as to constitute a nuisance.
 - C. The TCEQ may require these facilities to implement one or more of the following measures: temporary production curtailment; temporary shutdown during adverse

meteorological conditions; installation of any additional controls that are necessary to control odor and/or PM emissions, etc., according to a schedule determined by the TCEQ.

6. Opacity shall not exceed five percent averaged over a six-minute period from Emission Point Number (EPN) RTO-1 and the determination shall be made as follows.
 - A. Observe for visible emissions while the surface coating line is in operation. Observations shall be made at least 15 feet and no more than 0.25 miles from the emission points.
 - B. If visible emissions are observed from EPN RTO-1, 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 emission 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.
7. The site shall operate a vapor control system (the RTO and its associated emissions capture system) which meets the requirements 30 TAC § 115.453(b).

Operational Limitations

8. Surface coating operations include the spray application of surface coatings, the drying of surface coatings, all cleanup activities involving the use of solvent, the mixing of various surface coatings, and the thinning of various surface coatings and solvents.
9. All surface coating operations, except what is authorized via either permit-by-rule or de minimis (brush painting), shall be restricted to the Primer Booth and its associated drying tunnel, the Paint Kitchen, and the Distillation Room.
10. Automated airless spray application equipment shall be used for all spray application of surface coatings. This equipment shall be operated and maintained within the limits set forth by the manufacturer.
11. The Paint Kitchen and the Distillation Room shall each be equipped with a ventilation system that is designed to capture all emissions from each room and shall route those emissions to the RTO specified in Special Condition No. 13.
12. The Primer Booth and its associated drying tunnel 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 exhaust fan for the system shall be in operation during all surface coating and drying operations.

- B. The ventilation system shall be equipped with filters designed or warranted to achieve a minimum control efficiency of 99 percent for PM.
 - C. The ventilation system shall be operated and maintained in accordance with the manufacturer's recommendations as to assure that the minimum control efficiency is met at all times during surface coating operations.
 - D. The holder of this permit shall install, calibrate, and maintain a differential pressure gauge to monitor pressure drop across the filters. The pressure gauge 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.
 - E. The differential pressure across the filters shall be maintained between 2 and 6 inches water column, or as defined by the manufacturer.
 - F. Pressure drop readings shall be recorded at least once per day that the system is required to be operated. The filters shall be replaced whenever the pressure drop across the filters no longer meets the limits specified in Special Condition No. 12E or the manufacturer's recommendation.
 - G. If the ventilation system's operating performance parameters are outside of the 2 and 6 inches water column or the manufacturer's recommended operating range, the Primer Booth shall not be operated until the system is repaired.
 - H. Planned maintenance on the ventilation system shall be performed only when the Primer Booth and associated drying tunnel are not in operation.
 - I. Failure to maintain the required pressure drop across the filters 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.
13. The ventilation system specified in Special Condition No. 12 shall route the filtered emissions to an RTO which meets the following requirements.
- A. The RTO shall achieve either a 98 percent or greater destruction efficiency for organic compound emissions or an exhaust concentration of less than 20 parts per million by volume dry (ppmvd) measured as propane for organic compounds.
 - B. The RTO shall be equipped with a monitor (temperature sensor) 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 shall be accurate to within $\pm 5^{\circ}\text{F}$. The combustion chamber temperature shall be maintained at greater than or equal to 1600°F based on a 3-hour average temperature over four equally spaced measurement points per hour.
 - C. Once every quarter an accuracy audit and a visual inspection shall be conducted to determine if the temperature sensor that is specified in Special Condition No. 13B 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 no longer meets the accuracy requirement specified in Special Condition No. 13B.

- D. Conduct a visual inspection of each sensor every quarter if redundant temperature sensors are not used.
 - E. The operating instructions for the RTO shall be established and posted such that they are readily available to all of the RTO operators.
 - F. The RTO shall be operated and maintained in conformance with all of the manufacturer specifications and recommendations.
 - G. The RTO 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 RTO 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 RTO and its capture system.
 - I. Materials containing halogenated organic compounds shall not be used in the surface coating operations and vented to the RTO.
14. Planned maintenance on the RTO shall only be performed during periods when all of the facilities (Primer Booth and its associated drying tunnel, Paint Kitchen, Distillation Room) being controlled by the RTO are not in operation.
15. The ventilation system for the RTO (EPN RTO-1) shall include an exhaust stack that has no obstructions or restrictions to vertical exhaust flow. The exhaust stack shall have a height (as measured from ground level to the discharge point) that is equal to or greater than 66.0 feet.
16. Fuel fired in the RTO shall be limited to pipeline-quality, sweet natural gas. Standard commercial grade pipeline natural gas is assumed to meet this requirement.

Testing of the Thermal Oxidizer

17. One-time testing and sampling of the RTO shall be performed in order to do the following:
- A. Verify the destruction efficiency of the RTO (or verify that the exhaust concentration for organic compounds is less than 20 ppmvd measured as propane) as specified in Special Condition No. 13A;

- B. Verify that the short-term (maximum hourly) organic compound emission rates from the RTO (EPN RTO-1) are less than or equal to the allowable emission rates as specified on the MAERT; and
- C. Determine the minimum operating temperature needed to meet the destruction efficiency (or maximum concentration) specified in Special Condition No. 13A. The operating temperature shall be based on a 3-hour rolling average.

18. Specific requirements of the testing are as follows:

- A. Submit a proposed test plan to accomplish the testing required by Special Condition No. 17 for approval to the TCEQ Region 12 Office. The proposed test plan must be submitted within 60 days after reaching normal operating conditions of the RTO authorized 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 RTO; and
 - (2) The RTO shall operate at a temperature high enough to ensure compliance with the minimum destruction efficiency specified in Special Condition No. 13A.
- B. Once the test plan has been approved, schedule a pretest meeting with the TCEQ Region 12 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 the test plan has been approved; and
- D. Submit a test report to the TCEQ Region 12 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 requirements of Special Condition No. 17.

19. Submit an alteration request to the TCEQ Air Permits Division within six (6) months of the testing to incorporate into the permit the minimum operating temperature determined in Special Condition No. 17C.

Material Usage Flexibility

- 20. In addition to the currently-approved materials represented in the permit application submitted and received on April 6, 2015, the use of new and replacement VOC, exempt solvent, and PM containing materials or products that meet all of the following sub-conditions are allowed.
 - A. The new material shall serve the same basic function, and the emissions shall be from the same emission point as the emissions from the current materials.

- B. All the ingredients of the new material are known; i.e., the weight percentages of the ingredients add to 100 percent or more.
- C. Any air contaminant ingredient in the new material is exempt from Special Condition Nos. 20D, 20E, and 20F if the air contaminant is currently authorized under this permit and the proposed emission rate from EPN RTO-1 is less than or equal to the authorized emission rate from EPN RTO-1.
- D. Any air contaminant ingredient in the new material is exempt from Special Condition Nos. 20E and 20F if:
 - (1) it is emitted at a rate and has a short-term effects screening level (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 ($\mu\text{g}/\text{m}^3$)
≤ 0.04	≥ 2 and < 500	≥ 0.2 and < 50
≤ 0.10	≥ 500 and $< 3,500$	≥ 50 and < 350
≤ 0.40	$\geq 3,500$	≥ 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, provided the compound is not heated above room temperature in the process.
- E. For all other new 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 ingredient, including emissions of the same air contaminant (if an existing air contaminant) from currently authorized materials that may be emitted at the site.
 - (2) Multiply the emission rate of the air contaminant by the unit impact multiplier to determine the short-term off-property impact Ground Level Concentration (GLC)_{MAX} at the site.

Emission Point Number	Unit Impacts ($\mu\text{g}/\text{m}^3$ per lb/hr)
RTO-1	8.7

- (3) Compare the 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 off-property impact exceeds the short-term ESL, then a permit amendment is required to authorize the emission rate for the air contaminant.

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

Where:

ESL_{SHORT} = The short-term ESL of the new or existing air contaminant from the most current ESL list published by the TCEQ 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.

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

- (1) Multiply the short-term off-property impact (GLC_{MAX}) determined in Special Condition No. 20E(2) by 0.08 to determine the annual off-property impact (Annual GLC_{MAX}) for the new or existing air contaminant.
- (2) 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 ESL list published by the TCEQ or as specifically derived by the TCEQ Toxicology Division.

- G. The short-term or annual emission rates from new or existing air contaminants shall not cause any increases in the short-term or annual emission rates as listed on the MAERT.
- H. This special condition does not authorize the use of any chlorinated or fluorinated compounds.

Recordkeeping

21. 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. 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 the Primer Booth;
 - (2) Daily hours of operation for the Primer Booth; and
 - (3) As applied coating VOC content for each paint and solvent used.
- C. The data recorded in Special Condition No. 21B shall be used to produce a monthly summary that reflects:
 - (1) For EPN RTO-1, the emissions of VOCs, exempt solvent, and PM in pounds per hour (lbs/hr) as a daily average. The hourly emission rates may be determined by calculating the daily VOC, exempt solvent, and PM emissions and dividing by the actual daily hours of operation of the Primer Booth;
 - (2) Emissions of VOC, exempt solvent, and PM in tons per year (tpy) over the previous 12-month period; and
 - (3) Hazardous Air Pollutant (HAP) emissions in tpy over the previous 12 months for each individual HAP and total HAPs.
- D. The monthly summary generated in Special Condition No. 21C shall be used to demonstrate compliance with the MAERT.
- E. Field records of visible emissions observations as specified in Special Condition No. 6. Records of any corrective action taken to eliminate any visible emissions as specified in Special Condition No. 6B.
- F. Records of the manufacturer's specifications for the spray equipment employed by the facility as specified in Special Condition No. 10.
- G. Manufacturer's documentation on PM control efficiency for the filters used in the Primer Booth as specified in Special Condition No. 12B. Documentation which shows the procedures for following the manufacturer's recommended replacement of the filters.
- H. Records of the calibrations performed as specified in Special Condition No. 12D.
- I. Records of the differential pressure readings as specified in Special Condition No. 12F.
- J. Records of when filters were replaced as specified in Special Condition No. 12F.
- K. Records of any PM deposition originating from this site beyond the property lines of this site as specified in Special Condition No. 12I.
- L. Records of the combustion chamber temperature for the RTO as required by Special Condition No. 13B (at least four equally spaced temperature readings per hour and 3-hour average temperature readings).

- M. Records of quarterly accuracy audit and visual inspection of the RTO temperature sensor and records of when the sensor is replaced as specified in Special Condition No. 13C.
 - N. Records of AVO inspections and a maintenance log for the capture system per Special Condition Nos. 13G and 13H.
 - O. Records of the inspections and maintenance performed on the RTO as specified in Special Condition No. 13H.
 - P. Records of all material substitutions authorized under Special Condition No. 20.
 - Q. Maintain for the life of the permit a copy of the initial stack test report required by Special Condition No. 18D and a copy of any reports for any subsequent stack testing performed on the RTO (EPN RTO-1).
22. The records required by Special Condition No. 21 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 summary required in Special Condition No. 21C 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

- 23. All paint gun cleanup shall be performed with the Primer Booth exhaust fan operating and the solvent emissions being vented to the RTO for destruction. Any collected waste from cleaning the paint lines shall be either recycled or placed in closed containers.
- 24. Any solvent recovery performed on unused paint or spent solvent shall be performed in the Distillation Room.
- 25. Paint pots shall be covered while filled with solvent during cleaning.
- 26. 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.
- 27. All coating and solvent spills shall be cleaned up immediately using appropriate procedures.
- 28. Towels, rags, sponges, or other materials used for cleanup operations shall be placed into closed containers immediately after use.
- 29. 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.

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

Date: **Month Day, 2016**

Attachment I

Permit Number 131681

Planned MSS Activities and Other Authorizations

Source or Activity – PBR	Authorization
Baghouse/dust collector/filter system for facilities authorized by PBR	§ 106.231, § 106.392, and/or § 106.452(1)
Equipment used for washing products fabricated from metal	§ 106.453
Routine facility maintenance including painting and abrasive blasting on immovable structures	§ 106.263(c)(3)(A)
Remote reservoir and cold solvent cleaners for maintenance	§ 106.454
Parts cleaning equipment with cold solvent/remote reservoir, conveyORIZED, and open-top cleaners	§ 106.454
Maintenance, startup, and shutdown of degreasers/ solvent cleaning machines authorized by a PBR	§ 106.263(c)(1) and § 106.263(c)(2)
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)
Natural gas-fired comfort heating	§ 106.102
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	§ 106.263(c)(1) and § 106.263(c)(2)
Maintenance, startup, and shutdown of heat cleaning devices	§ 106.263(c)(1) and § 106.263(c)(2)
Purging of natural gas or other organic compounds to atmosphere from ovens and	§ 106.263(c)(2)

Source or Activity – PBR	Authorization
dryers before startup	
Preheat Oven	§ 106.183
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)
Emergency diesel fire water pumps, electric generators, and portable engines	§ 106.511
Maintenance, startup, and shutdown of portable and emergency engines and turbines authorized by a PBR	§ 106.511
Abrasive Blast Booth	§ 106.452
Fugitive component repair, replacement; leaks – piping, pumps, valves, flanges, etc. for facilities authorized by a permit	§ 106.263(c)(1)
Maintenance, startup, and shutdown of refrigeration equipment used in support of manufacturing operations	§ 106.263(c)(1) and § 106.263(c)(2)
Welding, soldering, and brazing equipment	§ 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 device to normal operating conditions	§ 106.263(c)(1)
Routine maintenance, startup, and shutdown of facilities and temporary maintenance facilities	§ 106.263(c)(3)
Manually operated and hand-held equipment	§ 106.265
Equipment fueling	§ 106.412
Diesel fuel storage tanks, gasoline storage tanks, lube oil storage tanks, and loading and unloading	§ 106.472 and/or § 106.473
Maintenance, startup, and shutdown of storage tanks authorized by a PBR	§ 106.263(c)(1) and § 106.263(c)(2)
Abrasive blasting, painting, and surface preparation of storage tanks	§ 106.263(c)(3)

Source or Activity – De Minimis	Authorization
Manual application of surface coatings using brushes	§ 116.119(a)(1)
Equipment used exclusively for steam cleaning of fabrics, plastics, rubber, wood, or vehicle engines or drive trains	§ 116.119(a)(1)
Water-base surfactants/detergents less than or equal to 2,500 gallons per year, site-wide	§ 116.119(a)(2)(F)
Application of aqueous detergents, surfactants, and other cleaning solutions containing less than 1% of any organic compound by weight	§ 116.119(a)(1)
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)
Manual application of cleaning or stripping solutions or coatings for maintenance	§ 116.119(a)(1)
Glove box/self-contained abrasive blasting and associated filter replacement	§ 116.119(a)(1)
Blast cleaning operations with water as the cleaning media	§ 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)
Application of lubricants 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)
Grounds maintenance and landscaping	§ 116.119(a)(1)
Maintenance of heating and cooling equipment for personal use	§ 116.119(a)(1)

Source or Activity – De Minimis	Authorization
Comfort air conditioning 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 by hydraulic or hydrostatic testing	§ 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) per day – 12 month rolling average	§ 116.119(a)(1)
Aerosol can puncturing, recycling, and disposal – less than 40 cans per 24-hour period	§ 116.119(a)(1)
Pesticide and insecticide use and fumigation	§ 116.119(a)(1)

Date: **Month Day, 2016**