

217/782-2113

CONSTRUCTION PERMIT - NESHAP SOURCE

PERMITTEE

Trinity Structural Towers, Inc.
Attn: Scott Spear
Route 51 North
Clinton, Illinois 61727

Application No.: 08100015
Applicant's Designation:
Subject: Two New Coating Lines
Date Issued: TO BE DETERMINED
Location: Route 51 North, Clinton

I.D. No.: 039005ABC
Date Received: October 9, 2008

This Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of two new coating lines, as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1.1 Coating Lines

1.1.1 Description

Two additional new coating lines would be installed for coating components of steel towers for wind turbines and other metal products fabricated at the existing plant. Each coating line would be equipped with a natural gas fired curing oven. Filters would be used for control of particulate matter emissions from the spray application of coating.

Additional surface preparation equipment, i.e., one shot blast booth with dust collector, would be installed. This equipment is addressed by Condition 2.

1.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
PB-4	Coating line with curing oven	Filters
PB-5	Coating line with curing oven	Filters

1.1.3 Applicable Provisions and Regulations

- a. An "affected coating line" for the purpose of these unit-specific conditions, is a coating line as described in Conditions 1.1.1 and 1.1.2.

- b. Each affected coating line is subject to 35 IAC 215.204(j)(3), Miscellaneous Metal Parts and Products Coating (Extreme Performance Coating), which provides that the Permittee shall not cause or allow the emission of volatile organic material to exceed 3.5 lb/gallon on coating materials, excluding water and any compounds which are specifically exempted from the definition of volatile organic material, delivered to the coating applicator.
- c. Each affected coating line is subject to 35 IAC 212.321(a), which provides that no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].
- d.
 - i. Each affected coating line and the two existing coating lines at the source are subject to National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR 63, Subpart Mmmm.
 - ii. Pursuant to the NESHAP, overall organic HAP emissions from the coating lines shall not exceed 0.23 kilograms (kg) (1.9 lbs) organic HAP per liter (gal) coating solids used during each 12-month compliance period [40 CFR 63.3890(a)(1)].
 - iii. The Permittee shall comply with applicable requirements of the General Provisions of the NESHAP, as specified by 40 CFR 63.3901.
 - iv. The compliance date for this NESHAP is the date of initial startup of an affected coating line.

1.1.4 Non-Applicability of Regulations of Concern

- a. The affected coating lines, which are subject to the limitations of 35 IAC 215.204, are not required to meet the limitations of 35 IAC Part 215, Subpart K (35 IAC 215.301 or 215.302) [35 IAC 215.209].
- b. The source has addressed the applicability 40 CFR 52.21, Prevention of Significant Deterioration (PSD). The limits in this permit are intended to ensure that this project does not constitute construction of a new major source pursuant to these rules.

1.1.5 Control Requirements and Work Practices

- a.
 - i. The Permittee shall follow good operating practices for the paint booth filters, including periodic

inspection, routine maintenance and prompt repair of defects.

- ii. The filters shall be in operation at all times when coating is being sprayed in the associated coating line.
- b. The VOM emissions from cleaning of paint spray guns shall not exceed 5.0 pounds/day, monthly average or at least 98 percent of the solvent used for paint spray gun cleaning shall be recovered, i.e., not emitted into the atmosphere as VOM.

1.1.6 Production and Emission Limitations

- a. Operation and VOM emissions of the two new and two existing coating lines at the source (four lines in total) shall not exceed the following limits. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

Material	VOM Usage ^a		VOM Emissions	
	Tons/Mo	Tons/Yr	Tons/Mo	Tons/Yr
Coating	29.4	235.4	29.4	235.4
Solvent	5.5	44.0	0.1	0.9

^a Usage includes material shipped off-site for reclamation or disposal.

- b. i. The rated heat input capacity of the curing ovens on the coating lines at the source (four curing ovens in total) shall not exceed 21.5 mmBtu/hr.
- ii. Combustion related emissions from the curing ovens at the source shall not exceed the following limits.

Pollutant	Emissions
	Tons/Yr
NO _x	6.3
CO	5.3
PM/PM ₁₀	0.48
VOM	0.3
SO ₂	0.04

- c. This permit is issued based on minimal emissions of particulate matter from spraying of paint. For this purpose, emissions of particulate matter shall not exceed 0.55 lb/hour and 2.4 tons/year, per booth based on a minimum allowable rate.

1.1.7 Testing Requirements

- a. The VOM content of coatings shall be determined by Method 24, 40 CFR Part 60, Appendix A, incorporated by reference in 35 IAC 215.105 except for glues and adhesive coatings,

two component reactive coatings forming volatile reaction products, coatings requiring energy other than heat to initiate curing, and coatings requiring high temperature catalysis for curing, providing the person proposing testing of the material submits to the Illinois EPA proof that the Method 24 results would not be representative and proof that a proposed alternative test method gives representative, accurate test results. Any alternate test method must be approved by the Illinois EPA which shall consider data comparing the performance of the proposed alternative to the performance of the approved test method(s). If the Illinois EPA determines that such data demonstrates that the proposed alternative will achieve results equivalent to the approved test method(s), the Illinois EPA shall approve the proposed alternative [35 IAC 215.208(a)].

- b. The Permittee shall comply with the applicable initial compliance requirements of the NESHAP, 40 CFR 63.3941 or 63.3951.

1.1.8 Monitoring Requirements

Instrumental monitoring (e.g., continuous emission monitors) are not required for the affected coating lines.

1.1.9 Recordkeeping Requirements

- a. The Permittee shall comply with the applicable recordkeeping requirements of the NESHAP, 40 CFR 63.3930 and 63.3931.
- b. The Permittee shall maintain records of the following items for the affected coating lines and all other coating lines at the source, (four lines in total):
 - i. The name and identification number of each coating and cleaning solvent as applied.
 - ii. The usage of each coating and cleaning solvent (gallons/month and gallons/year).
 - iii. Density of each applied coating and cleaning solvent.
 - iv. The weight of VOM per volume of each coating, in lb/gal, (minus water and any compounds which are specifically exempted from the definition of VOM) as applied.
 - v. The weight of VOM per volume of each cleaning solvent, as applied (lbs/gallon).
 - vi. Solids content of each coating (lbs/gallon).
 - vii. VOM emissions with supporting calculations (tons/month and tons/year).

- viii. Aggregate records of the VOM content and the amount of materials disposed of or recycled shall be maintained for all coatings, cleaning solvents, and any other VOM containing material dispensed to the coating operations, which records shall be kept on at least a monthly basis.
 - ix. Process rate (tons/month and tons/year).
 - x. PM/PM₁₀ emissions with supporting documentation and calculations (tons/month and tons/year).
- c. The Permittee shall maintain a file that documents the rated heat input capacity of the two new curing ovens and all other curing ovens at the source.

1.1.10 Reporting Requirements

- a. The Permittee shall comply with the applicable notification requirements of the NESHAP, 40 CFR 63.3910.
- b. The Permittee shall comply with the applicable reporting requirements of the NESHAP, 40 CFR 63.3920.
- c. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA of deviations of an affected coating line with the permit requirements as follows. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- i. Deviations shall be reported within 30 days of the incident.

- 2. This permit is issued based on negligible emissions of particulate matter from the shot blast booth. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/yr.
- 3a. The affected coating lines and shot blast booth with dust collector addressed by this construction permit may be operated under this permit until final action is taken on the source's CAAPP permit.
- b. The Permittee shall submit a revised Title V application for the source, which addresses this project, within 12 months after commencing operation of the project, pursuant to Section 39.5(5)(x) of the Environmental Protection Act.

If you have any questions on this permit, please contact Jason Schnepf at 217/782-2113.

Edwin C. Bakowski, P.E.
 Manager, Permit Section

Date Signed: _____

Division of Air Pollution Control

ECB:JMS:jws

cc: Region