

Dan Conkey
INCOTEC, Inc.
4755 Highway 31 E
Clarksville, IN 47129-9220

Re: Exempt Construction and Operation Status
019-14306-00106

Dear Mr. Conkey:

The application from INCOTEC, Inc., received on April 20, 2001, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that your emission source, an industrial surface coating operation located at 11452 Highway 62, Charlestown IN 47111-1240, is classified as exempt from air pollution permit requirements. The emission source consists of one (1) spray booth, with dry filters rated at 80% efficiency.

The following conditions shall be applicable:

1. Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:
 - (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
2. Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitations), particulate matter (PM) emissions shall be limited by the following equation for process weight rates up to sixty thousand (60,000) pounds per hour:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

This spray booth is not subject to 326 IAC 8-2-9 since the actual volatile organic compound (VOC) emissions are less than 15 pounds per day before controls.

This exemption is the first air approval issued to this source. An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify the existing emission unit, or otherwise modify the source.

Any change or modification which increases:

- (a) the actual VOC emissions to 15 pounds per day or more from the spray booth,
- (b) the potential VOC emissions to 10 tons per year or more from the emission source,
- (c) the potential emissions of any single hazardous air pollutant (HAP) to 10 tons per year or more from the emission source, or
- (d) the potential emissions for total HAPs to 25 tons per year or more from the emission source,

must be approved by the Office of Air Quality (OAQ) before such change may occur.

Sincerely,

Original signed by

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

ARD

cc: File - Clark County
Clark County Health Department
Air Compliance Section Inspector - Joe Foyst
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for an Exemption

Source Background and Description

Source Name: INCOTEC, Inc.
Source Location: 11452 Highway 62, Charlestown IN 47111-1240
County: Clark
SIC Code: 3479
Application No.: 019-14306-00106
Reviewer: Allen R. Davidson

On April 20, 2001, the Office of Air Quality (OAQ) received an application from INCOTEC, Inc. relating to the construction and operation of an industrial surface coating operation. The emission source consists of one (1) spray booth, with dry filters rated at 80% efficiency.

History

This is a new emission source. This application is the first received for this source.

Enforcement Issues

There are no enforcement actions pending against this emission source.

Recommendation

The staff recommends to the Commissioner that the application be approved as an exemption. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on April 20, 2001.

Emission Calculations

See Appendix A of this document for detailed emissions calculations. (2 pages)

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

The following table reflects the existing source potential to emit. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit:

Pollutant	Potential To Emit (tons/year)
PM	2.7
PM-10	2.7
SO ₂	0
VOC	3.1
CO	0
NO _x	0

HAP's	Potential To Emit (tons/year)
Xylene	1.23
Toluene	0.95
Ethylbenzene	0.55
Glycol Ethers	0.27
TOTAL	3.00

The potential to emit (as defined in 326 IAC 2-7-1(29)) volatile organic compounds (VOC) is less than ten tons per year and the potential to emit particulate matter (PM) is less than five tons per year. Therefore, the application does not require review under 326 IAC 2-5.1 and can be classified as exempt under 326 IAC 2-1.1-3.

This is not a major source for PSD or Emission Offset because the potential to emit every attainment pollutant is less than the significant levels. Therefore, pursuant to 326 IAC 2-2, 326 IAC 2-3, and 40 CFR 52.21, the PSD and Emission Offset requirements do not apply.

County Attainment Status

The source is located in Clark County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	nonattainment (moderate)
CO	attainment
Lead	attainment

Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Clark County has been designated as nonattainment for ozone. Therefore, these emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

Clark County has been classified as attainment or unclassifiable for all other pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Federal Rule Applicability

There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants)

This source is not subject to 326 IAC 2-4.1-1 (New Source Toxics Control). The source does not have potential to emit 10 tons per year of any HAP or 25 tons per year of any combination of HAPs.

326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting), because:

- (a) Although it is located in Clark County, it does not have the potential to emit more than ten (10) tons per year of volatile organic compounds or nitrogen oxides.
- (b) It does not have the potential to emit more than one hundred (100) tons per year of any other pollutant specified in the rule.

326 IAC 5-1 (Visible Emissions Limitations)

This source is not located in Jeffersonville township of Clark County. Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Spray Booth

326 IAC 8-2-9 (Miscellaneous Metal Coating Operations)

This emission unit is not subject to 326 IAC 8-2-9. Pursuant to 326 IAC 8-2-1 (Applicability), the rule is not applicable since the actual volatile organic compound (VOC) emissions are less than 15 pounds per day before controls.

326 IAC 6-3-2 (Particulate Emissions Limitations)

This emission unit is subject to 326 IAC 6-3-2. Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitations), particulate matter (PM) emissions shall be limited by the following equation for process weight rates up to sixty thousand (60,000) pounds per hour:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The control equipment is not required to be in operation at all times this emission unit is in operation in order to comply with this limit.

326 IAC 8-7 (VOC Reduction Requirements for Lake, Porter, Clark, and Floyd Counties)

This facility is not subject to 326 IAC 8-7. Although it is located in Clark County, the coating facility's VOC emissions are less than 10 tons per year.

Conclusion

The construction and operation of these facilities shall be subject to the conditions of the attached exemption, No 019-14306-00106.

**Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations**

Company Name: INCOTEC, Inc.
Address City IN Zip: 11452 Highway 62, Charleston, IN 47111
ID: 019-14306-00106
Reviewer: Allen R. Davidson
Date: 07/26/01

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
PorterGlaze 4300FD Lt. Grey	12.12	29.15%	0.0%	29.2%	0.0%	50.84%	1.00000	0.125	3.53	3.53	0.44	10.60	1.93	1.18	6.95	75%
PorterGlaze 4300FD Convert	12.98	15.97%	0.0%	16.0%	0.0%	71.25%	1.00000	0.125	2.07	2.07	0.26	6.22	1.13	1.49	2.91	75%
or																
Porterthane 9000 White	10.48	45.28%	0.0%	45.3%	0.0%	48.09%	1.00000	0.125	4.75	4.75	0.59	14.24	2.60	0.78	9.87	75%
Porterthane 9000 Converter	8.65	0.00%	0.0%	0.0%	0.0%	100.00%	0.14286	0.125	0.00	0.00	0.00	0.00	0.00	0.17	0.00	75%

State Potential Emissions

Add coatings to determine worst case scenario

0.70

16.82

3.07

2.67

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

The following calculations determine the emission limit under 326 IAC 6-3-2:

$$E = 4.1 * (0.063 \wedge 0.67) = 0.64 \text{ lb/hr (will comply)}$$

$$0.64 \text{ lb/hr} * 8760 \text{ hr/yr} / 2000 \text{ lb/ton} = 2.80 \text{ ton/yr}$$

