



Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

February 2, 2005

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

TO: Interested Parties / Applicant

RE: Novae Corporation / 069-20107-00066

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Registration

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 4-21.5-3-4(d) this order is effective when it is served. When served by U.S. mail, the order is effective three (3) calendar days from the mailing of this notice pursuant to IC 4-21.5-3-2(e).

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FN-REGIS.dot 9/16/03



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

Mr. Steve Bermes
Novae Corporation
2302 Pennsylvania Street
Fort Wayne, Indiana 46803

February 2, 2005

Re: Revised Registered Construction and Operation
Status, 069-20107-00066

Dear Mr. Bermes:

The application from Novae Corporation received on January 3, 2005, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following emission units of a trailer fabricating and assembly plant, located at Markle Industrial Park, County Road 500 East, Markle, Indiana 46770, are classified as registered:

- (a) Powder Coating Line 1, constructed in 2004, and consisting of the following:
 - (1) One (1) natural gas fired hot water power wash station, identified as PWS 1, with a maximum heat input capacity of 0.25 MMBtu/hr and a maximum throughput rate of 8 trailers per hour.
 - (2) One (1) natural gas fired drying oven, with a maximum heat input capacity of 0.25 MMBtu/hr.
 - (3) One (1) powder coating booth, with a maximum coating usage of 8 pounds per unit and a maximum throughput rate of 8 parts per hour, controlled by cartridge filters.
 - (4) One (1) natural gas fired curing oven, with a maximum heat input capacity of 2.5 MMBtu/hr.
- (b) Wet Paint Coating Line 2, to be constructed in 2005, and consisting of the following:
 - (1) One (1) wet paint booth, identified as PB1, using air atomized spray guns, with a maximum throughput rate of 8 trailers per day, controlled by dry filters, and exhausting through stacks PB1 and PB2.
 - (2) One (1) natural gas fired hot water power wash station, identified as PWS 2, with a maximum heat input capacity of 0.25 MMBtu/hr and a maximum throughput rate of 8 trailers per hour.

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 Alternative Opacity Limitations), opacity shall meet the following:
 - (a) Opacity shall not exceed an average of forty percent (40%) in 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 15 minutes (60 readings) in a 6-hour period 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 8-2-9 (Miscellaneous Metal Coating Operations), the VOC content of the coatings applied to the wet paint booth PB1 shall be limited as follows:
- (a) Three and five tenths (3.5) pounds VOC per gallon of coating, excluding water, delivered to the applicators that apply extreme performance coatings.
 - (b) Solvent sprayed from the application equipment during clean-up or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is completed, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
3. Pursuant to 326 IAC 6-3-2(d) (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from the wet paint booth PB1 shall be controlled by a dry particulate filter or an equivalent control device, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:

- (a) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
- (b) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

This registration is a revised registration issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Quality that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

**Compliance Data Section
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206-6015**

no later than March 1 of each year, with the annual notice being submitted in the format attached.

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 existing emission units, or otherwise modify the source.

Pursuant to Contract No. A305-5-65, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Ms. Yu-Lien Chu, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7871 to speak directly to Ms. Chu. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Original signed by

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

ERG/YC

cc: File – Huntington County
Huntington County Health Department
Air Compliance – Ryan Hillman
Permit Tracking
Compliance Data Section

Registration Annual Notification

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3).

Company Name:	Novae Corporation
Address:	Markle Industrial Park, County Road 500 East
City:	Markle, Indiana 46770
Authorized individual:	Steve Bermes
Phone #:	(260) 424-9027
Registration #:	069-20107-00066

I hereby certify that Novae Corporation, is still in operation and is in compliance with the requirements of Registration No. 069-20107-00066.

Name (typed):
Title:
Signature:
Date:

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Revised Registration

Source Background and Description

Source Name:	Novae Corporation
Location:	Markle Industrial Park, County Road 500 East, Markle, Indiana 46770
County:	Huntington
SIC Code:	3799
Registration No.:	069-20107-00066
Permit Reviewer:	ERG/YC

The Office of Air Quality (OAQ) has reviewed an application from Novae Corporation relating to the operation of an existing trailer fabricating and assembly plant.

Permitted Emission Units and Pollution Control Equipment

- (a) Powder Coating Line 1, constructed in 2004, and consisting of the following:
- (1) One (1) natural gas fired hot water power wash station, identified as PWS 1, with a maximum heat input capacity of 0.25 MMBtu/hr and a maximum throughput rate of 8 trailers per hour.
 - (2) One (1) natural gas fired drying oven, with a maximum heat input capacity of 0.25 MMBtu/hr.
 - (3) One (1) powder coating booth, with a maximum coating usage of 8 pounds per unit and a maximum throughput rate of 8 parts per hour, controlled by cartridge filters.
 - (4) One (1) natural gas fired curing oven, with a maximum heat input capacity of 2.5 MMBtu/hr.
- (b) Wet Paint Coating Line 2, to be constructed in 2005, and consisting of the following:
- (1) One (1) wet paint booth, identified as PB1, using HVLP spray guns, with a maximum throughput rate of 8 trailers per day, controlled by dry filters, and exhausting through stacks PB1 and PB2.
 - (2) One (1) natural gas fired hot water power wash station, identified as PWS 2, with a maximum heat input capacity of 0.25 MMBtu/hr and a maximum throughput rate of 8 trailers per hour.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted emission units operating at this source during this review process.

New Emission Units and Pollution Control Equipment

The Permittee stated that they were unable to operate the HVLP spray guns for the proposed wet paint booth PB1, as permitted in the previous registration (R069-19249-00066, issued on August 4, 2004), due to the poor quality of the products. The Permittee requested a revision to the registration to allow the use of air atomized spray guns in this wet paint booth. This will increase the potential to emit PM/PM10 of this paint booth because the transfer efficiency for the air atomized spray guns are lower than can be achieved using the HVLP spray guns.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (1) Registration #069-19249-00066, issued on August 4, 2004.

All conditions from previous approvals were incorporated into this permit.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. 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 January 3, 2005.

Emission Calculations

See Appendix A of this document for detailed emissions calculations for the modified wet paint booth PB1 (pages 1 and 2). The emission calculations for other existing units are included in the TSD for Registration #069-19249-00066, issued on August 4, 2004.

Potential to Emit of Revision Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit 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 department, or the appropriate local air pollution control agency."

Pollutant	Potential to Emit (tons/year)
PM	12.5
PM10	12.5
SO ₂	--
VOC	13.0
CO	--
NO _x	--

HAPs	Potential to Emit (tons/yr)
Ethyl Benzene	0.02
MIBK	1.86
Styrene	0.39
Glycol Ether	0.52
Total	2.78

Potential to Emit of the Source Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit 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 department, or the appropriate local air pollution control agency.”

Pollutant	Potential to Emit (tons/year)
PM	12.9
PM10	12.9
SO ₂	Negligible
VOC	13.1
CO	2.00
NO _x	2.40

HAPs	Potential to Emit (tons/yr)
Total	2.78

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of all criteria pollutants is less than 100 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-1.1-1(16)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (c) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of all criteria pollutants is less than 25 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-6.1(MSOP).
- (d) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of the source is greater than 10.0 ton/yr for VOC, greater than 5 tons/yr for PM/PM10, and greater than 2.5 tons/yr for total HAPs. Therefore, the source is not subject to the provisions of 326 IAC 2-1.1-3 (Exemptions).
- (e) Fugitive Emissions
 Since this type of operation is not in one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD.

County Attainment Status

The source is located in Huntington County.

Pollutant	Status
PM-10	Attainment
SO ₂	Attainment
NO ₂	Attainment
8-Hour Ozone	Attainment
1-Hour Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC emissions and NOx are considered when evaluating the rule applicability relating to ozone. Huntington County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions and NOx were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) Huntington County has been classified as attainment in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (c) Fugitive Emissions
 Since this type of operation is not in one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD applicability.

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the emission units after controls.

Process/Emission Unit	Potential To Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Wet Paint Booth PB1	2.51*	2.51*	-	13.0	-	-	2.78
Powder Coating Booth**	0.2	0.2	-	-	-	-	-
NG Combustion Units**	0.2	0.2	Negligible	0.1	2.00	2.40	Negligible
Total PTE of the Entire Source	2.91	2.91	Negligible	13.1	2.00	2.40	2.78
Registration Thresholds	25	25	25	25	100	25	10 for a single HAP and 25 for total HAPs

Note: (*) The PM/PM10 emissions from this paint booth are controlled by dry filters.
 (**) PTE of these existing units are from Registration #069-19249-00066, issued on August 4, 2004.

The potential to emit of the entire source after modifying the permitted wet paint booth PB1 is still less than the registration thresholds. Therefore, a revised registration will be issued to this source.

Source Status

Existing Source PSD Definition (emissions after controls, based on 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	0.65
PM10	0.65
SO ₂	Negligible
VOC	13.1
CO	2.00
NO _x	2.40

- (a) This existing source is not a PSD major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, the PSD requirements of attainment new source review do not apply.
- (b) These emissions are based on the potential to emit of the entire source after this revision.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons per year.

This is based on all the air approvals issued to this source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) included in this permit.
- (b) The source does not perform surface coating operations to metal furniture. Therefore, the New Source Performance Standards for Surface Coating of Metal Furniture (40 CFR Part 60.310 - 60.316, Subpart EE) are not applicable.
- (c) The New Source Performance Standards for Automobile and Light Duty Truck Surface Coating Operations (40 CFR 60.390 - 60.398, Subpart MM) are not applicable to this source. This source is not an automobile assembly plant.
- (d) The New Source Performance Standards for Metal Coil Surface Coating (40 CFR Part 60.460 - 60.466, Subpart TT) are not applicable to this source. The source does not perform metal coil surface coating operations.
- (e) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14 and 20, and 40 CFR Part 61 and 63) applicable to this source.
- (f) The National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Miscellaneous Metal Parts and Products (40 CFR Part 63.3880 - 63.3981,

Subpart MMMM) are not applicable to this source. This source is not a major source for HAPs.

State Rule Applicability – Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

The source was constructed in 2004 and modified in 2005. This source is not in 1 of 28 source categories defined in 326 IAC 2-2-1(p)(1) and the potential to emit of PM and all criteria pollutant is less than 250 tons/yr before control. Therefore, this source is a PSD minor source and the requirements of 326 IAC 2-2 (PSD) are not applicable to the 2004 construction or the 2005 modification.

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

The source was constructed in 2004 and modified in 2005. The potential to emit HAP from the entire source is less than 10 tons/yr for a single HAP and less than 25 tons/yr for total HAPs. Therefore, the requirements of 326 IAC 2-4.1 (MACT) are not applicable.

326 IAC 2-6 (Emission Reporting)

This source is located in Huntington County, the potential to emit of all criteria pollutants is less than one hundred (100) tons per year, and the source does not need to operate under a Part 70 Permit. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in the permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in 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 – Wet Paint Booth PB1

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

The wet paint booth PB1 performs metal coating operations and the source operates under the Standard Industrial Classification (SIC) Code of major group #37. In addition, this paint booth will be constructed after July 1, 1991 and has actual VOC emissions greater than 15 lbs/day.

Therefore, the VOC content of the coatings applied to this facility shall be limited as follows:

- (a) Three and five tenths (3.5) pounds VOC per gallon of coating, excluding water, delivered to the applicators that apply extreme performance coatings.
- (b) Solvent sprayed from the application equipment during clean-up or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is completed, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Based on the MSDS submitted by the Permittee, the VOC contents of the coatings delivered to the wet paint booth PB1 are in compliance with the requirements above.

326 IAC 8-1-6 (General Reduction Requirements for VOC Emissions)

Since the requirements of 326 IAC 8-2-9 apply to this wet paint booth, the requirements of 326 IAC 8-1-6 (BACT) are not applicable.

326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)

The maximum coating usage for the wet paint booth PB1 is greater than 5 gallons/day. Pursuant to 326 IAC 6-3-2(d), particulate emissions from the surface coating shall be controlled by a dry particulate filter or an equivalent control device, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:

- (a) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
- (b) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

State Rule Applicability – Powder Coating Booth

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

The powder coating booth does not have any VOC emissions. Therefore, the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) are not applicable.

326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)

The potential particulate emissions from this powder coating booth are less than 0.551 lbs/hr, which is equivalent to 2.41 tons/yr. Therefore, the particulate emissions from this booth are exempt from the requirements of 326 IAC 6-3, pursuant to 326 IAC 6-3-1(b)(14).

State Rule Applicability – Power Wash Stations

326 IAC 8-3 (Organic Solvent Degreasing Operations)

The power wash stations (PWS 1 and PWS 2) at this source use only hot water to clean the parts. No organic solvent is used in these cleaning operations. Therefore, the requirements of 326 IAC 8-3 (Organic Solvent Degreasing Operations) are not applicable.

State Rule Applicability – Natural Gas Combustion Units

There are no specifically applicable requirements for these natural gas fired units.

Conclusion

The operation of this trailer fabricating and assembly plant shall be subject to the conditions of the Registration No.: 069-20107-00066.

**Appendix A: Emission Calculations
VOC and PM/PM10 Emissions
From the Wet Paint Booth (PB1)**

Company Name: Novae Corporation

Address: Markle Industrial Park, County Road 500 East, Markle, IN 46770

Registration: 069-20107-00066

Reviewer: ERG/YC

Date: January 14, 2005

Material	Density (lbs/gal)	Weight % Volatile (H ₂ O & Organics)	Weight % Water	Weight % Organics	Maximum Throughput (unit/hr)	Maximum Usage (gal/unit)	Pounds VOC per gallon of coating	PTE of VOC (lbs/hr)	PTE of VOC (lbs/day)	PTE of VOC (tons/yr)	*PTE of PM/PM10 before Control (lbs/hr)	*PTE of PM/PM10 before Control (tons/yr)	**Transfer Efficiency	PM/PM10 Control Efficiency	PTE of PM/PM10 after Control (lbs/hr)	PTE of PM/PM10 after Control (tons/yr)
Primer - SW CC-A28	11.7	28.3%	0.0%	28.3%	0.33	1.10	3.31	1.20	28.8	5.26	1.83	8.00	40%	80%	0.37	1.60
Topcoat - SW CC-B21	8.10	41.4%	0.0%	41.4%	0.33	1.10	3.35	1.22	29.2	5.33	1.03	4.53	40%	80%	0.21	0.91
Cleaning Solvent - MAK	6.75	100%	0.0%	100%	0.33	0.25	6.75	0.56	13.4	2.44	0.00	0.00	100%	80%	0.00	0.00
Total								2.98	71.4	13.0	2.86	12.5			0.57	2.51

*Assume all the PM emissions are PM10 emissions.

** Air atomized spray guns are used in this booth. The transfer efficiency is from AP-42, Table 4.2.2.11-1 (AP-42, 01/95).

METHODOLOGY

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

PTE of VOC (lbs/hr) = Pounds of VOC per Gallon coating (lbs/gal) * Max. Throughput (unit/hr) * Max. Usage (gal/unit)

PTE of VOC (lbs/day) = Pounds of VOC per Gallon coating (lbs/gal) * Max. Throughput (unit/hr) * Max. Usage (gal/unit) * (24 hr/day)

PTE of VOC (tons/yr) = Pounds of VOC per Gallon coating (lbs/gal) * Max. Throughput (unit/hr) * Max. Usage (gal/unit) * (8760 hr/yr) * (1 ton/2000 lbs)

PTE of PM/PM10 before Control (lbs/hr) = Max. Throughput (unit/hr) * Max. Usage (gal/unit) * Density (lbs/gal) * (1- Weight % Volatile) * (1-Transfer efficiency)

PTE of PM/PM10 before Control (tons/yr) = Max. Throughput (unit/hr) * Max. Usage (gal/unit) * Density (lbs/gal) * (1- Weight % Volatile) * (1-Transfer efficiency) * (8760 hrs/yr) * (1 ton/2000 lbs)

PTE of PM/PM10 after Control (lbs/hr) = PTE of PM/PM10 before Control (lbs/hr) * (1 - PM/PM10 Control Efficiency)

PTE of PM/PM10 after Control (tons/yr) = PTE of PM/PM10 before Control (lbs/hr) * (1 - PM/PM10 Control Efficiency) * (8760 hr/yr) x (1 ton/2000 lbs)

**Appendix A: Emission Calculations
HAP Emissions
From the Wet Paint Booth (PB1)**

Company Name: Novae Corporation

Address: Markle Industrial Park, County Road 500 East, Markle, IN 46770

Registration: 069-20107-00066

Reviewer: ERG/YC

Date: January 14, 2005

Material	Density (lbs/gal)	Maximum Throughput (unit/hr)	Maximum Usage (gal/unit)	Weight % Ethyl Benzene	PTE of Ethyl Benzene (tons/yr)	Weight % MIBK	PTE of MIBK (tons/yr)	Weight % Styrene	PTE of Styrene (tons/yr)	Weight % Glycol Ethers	PTE of Glycol Ethers (tons/yr)
Primer - SW CC-A28	11.7	0.33	1.10	0.10%	0.02	10.0%	1.86	0.00%	0.00	0.00%	0.00
Topcoat - SW CC-B21	8.10	0.33	1.10	0.00%	0.00	0.00%	0.00	3.00%	0.39	4.00%	0.52
Total					0.02		1.86		0.39		0.52

Note: According to the TSD for R069-19246-00066, issued August 4, 2004, the cleaning solvent used in this paint booth does not contain HAPs.

Total HAPs = 2.78 tons/yr

METHODOLOGY

PTE of HAP (tons/yr) = Density (lbs/gal) x Max. Throughput (unit/hr) x Max. Usage (gal/unit) x Weight % HAP x 8760 hr/yr x 1 ton/2000 lbs