



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

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

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

TO: Interested Parties / Applicant
DATE: November 19, 2013
RE: Horton, Inc./E057-33796-00077
FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision – Approval

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 326 IAC 2, this approval was effective immediately upon submittal of the application.

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, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days from 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
FNPER-AM.dot 6/13/2013



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Michael R. Pence
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Don Niese
Horton, Inc.
201 West Carmel Drive
Carmel, IN 46032

November 19, 2013

Re: Exempt Construction and Operation Status,
E057-33796-00077

Dear Mr. Niese:

An application from Horton, Inc., received on October 21, 2013, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following stationary fan blade manufacturing plant located at 201 West Carmel Drive, Carmel, Indiana 46032 is classified as exempt from air pollution permit requirements:

- (a) One (1) E-Coat Line, constructed prior to 2005, with a maximum capacity of 131,400 fans per year, consisting of the following:
 - (1) One (1) natural gas-fired Dip Tank Heater, identified as E-1, with a maximum heat input capacity of 0.8 MMBtu/hr, utilizing no controls, exhausting inside the building;
 - (2) One (1) natural gas-fired Dip Tank Heater, identified as E-2, with a maximum heat input capacity of 0.8 MMBtu/hr, utilizing no controls, exhausting inside the building;
 - (3) One (1) natural gas-fired Water Heater, identified as E-3, with a maximum heat input capacity of 0.04 MMBtu/hr, utilizing no controls, exhausting inside the building;
 - (4) One (1) natural gas-fired Cure Oven, identified as E-4, with a maximum heat input capacity of 1.6 MMBtu/hr, utilizing no controls, exhausting inside the building;
 - (5) One (1) natural gas-fired Paint Line Oven, identified as E-5, with a maximum heat input capacity of 1.6 MMBtu/hr, utilizing no controls, exhausting outside the building;
 - (6) Eleven (11) open-top dip tanks, with each tank containing a different washing, rinsing, cleaning, sealing, coating, or final rinse solution. Each part coated goes through each tank sequentially; therefore, this is considered one manufacturing process. The liquid used in each of the rinse tanks is water.
- (b) One (1) Laser-cutting Operation, identified as D-1, consisting of two (2) lasers, constructed prior to 2005, and one (1) laser, constructed in 2013, with a maximum throughput capacity of 131,400 fans per year, controlled by dust collector D-1, exhausting through stack D-1. The laser cutting operation cuts plastic, steel and nylon resin materials.
- (c) One (1) Touch-up Paint Booth, identified as P-1, constructed prior to 2005, using handheld spray paint cans for occasional use, with maximum capacity of 365 cans per year, utilizing an exhaust hood for particulate and fume control, exhausting inside the building.
- (d) One (1) closed-system Plastic Injection Molding Operation, consisting of two machines, identified as IM-1, constructed prior to 2005, with a maximum capacity of 200 pounds of non-VOC plastic per hour, each, utilizing no controls, exhausting inside the building.



A State that Works

- (e) Twenty (20) natural gas-fired Comfort Heating Units, constructed prior to 2005, with a combined maximum heat input capacity of 6.14 MMBtu/hr, utilizing no controls, exhausting inside the building.

The following conditions shall be applicable:

- (a) 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 this permit:
 - (1) 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.
 - (2) 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.
- (b) Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.

This exemption supersedes Exemption 057-29967-00077, issued on March 18, 2011. A copy of this Exemption is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

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. If you have any questions on this matter, please contact Deborah Cole, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana, 46204-2251, at 317-234-5377 or at 1-800-451-6027, (ext. 4-5377).

Sincerely,



Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

IC/dac

cc: File - Hamilton County
Hamilton County Health Department
Compliance and Enforcement Branch

**Indiana Department of Environmental Management
Office of Air Quality**

Technical Support Document (TSD) for an Exemption

Source Description and Location
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Source Name: Horton, Inc.
Source Location: 201 West Carmel Drive, Carmel, Indiana 46032
County: Hamilton
SIC Code: 3564 (Industrial and Commercial Fans and Blowers and Air Purification Equipment)
Exemption No.: 057-33796-00077
Permit Reviewer: Deborah Cole

On October 21, 2013, the Office of Air Quality (OAQ) received an application from Horton, Inc. related to the operation of an existing stationary fan blade manufacturing plant.

Existing Approvals

The source was issued Exemption No.: 057-29967-00077 on March 18, 2011. This exemption, No.: 057-33796-00077, will supersede Exemption No.: 057-29967-00077.

County Attainment Status

The source is located in Hamilton County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Attainment effective October 19, 2007, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.
¹ Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective federally July 11, 2013, for PM _{2.5} .	

- (a) **Ozone Standards**
 Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) 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 and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Hamilton County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (b) **PM_{2.5}**
 Hamilton County has been classified as attainment for PM_{2.5}. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM_{2.5} emissions. These rules became effective on July 15, 2008. On May 4, 2011, the air pollution control board issued an emergency rule establishing the direct PM_{2.5} significant level at ten (10) tons per year. This rule became effective June 28, 2011. Therefore, direct PM_{2.5}, SO₂, and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (c) Other Criteria Pollutants
Hamilton County has been classified as attainment or unclassifiable 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.

Fugitive Emissions

The fugitive emissions of criteria pollutants, hazardous air pollutants, and greenhouse gases are counted toward the determination of 326 IAC 2-1.1-3 (Exemptions) applicability.

Background and Description of Emission Units and Pollution Control Equipment

The Office of Air Quality (OAQ) has reviewed an application, submitted by Horton, Inc. on October 21, 2013, relating to a stationary fan blade manufacturing plant. The manufacturing system includes plastic injection molding systems, laser cutting operations for steel and plastic, multiple combustion units, and an E-Coat Line, coating plastic and steel substrate. Emissions calculations are shown in Appendix A of this document. The potential uncontrolled emissions are within the Exemption threshold; therefore, an Exemption will be issued.

The source consists of the following existing emission units:

- (a) One (1) E-Coat Line, constructed prior to 2005, with a maximum capacity of 131,400 fans per year, consisting of the following:
- (1) One (1) natural gas-fired Dip Tank Heater, identified as E-1, with a maximum heat input capacity of 0.8 MMBtu/hr, utilizing no controls, exhausting inside the building;
 - (2) One (1) natural gas-fired Dip Tank Heater, identified as E-2, with a maximum heat input capacity of 0.8 MMBtu/hr, utilizing no controls, exhausting inside the building;
 - (3) One (1) natural gas-fired Water Heater, identified as E-3, with a maximum heat input capacity of 0.04 MMBtu/hr, utilizing no controls, exhausting inside the building;
 - (4) One (1) natural gas-fired Cure Oven, identified as E-4, with a maximum heat input capacity of 1.6 MMBtu/hr, utilizing no controls, exhausting inside the building;
 - (5) One (1) natural gas-fired Paint Line Oven, identified as E-5, with a maximum heat input capacity of 1.6 MMBtu/hr, utilizing no controls, exhausting outside the building;
 - (6) Eleven (11) open-top dip tanks, with each tank containing a different washing, rinsing, cleaning, sealing, coating, or final rinse solution. Each part coated goes through each tank sequentially; therefore, this is considered one manufacturing process. The liquid used in each of the rinse tanks is water.
- (b) One (1) Laser-cutting Operation, identified as D-1, consisting of two (2) lasers, constructed prior to 2005, and one (1) laser, constructed in 2013, with a maximum throughput capacity of 131,400 fans per year, controlled by dust collector D-1, exhausting through stack D-1. The laser cutting operation cuts plastic, steel and nylon resin materials.
- (c) One (1) Touch-up Paint Booth, identified as P-1, constructed prior to 2005, using handheld spray paint cans for occasional use, with maximum capacity of 365 cans per year, utilizing an exhaust hood for particulate and fume control, exhausting inside the building.
- (d) One (1) closed-system Plastic Injection Molding Operation, consisting of two machines, identified as IM-1, constructed prior to 2005, with a maximum capacity of 200 pounds of non-VOC plastic per hour, each, utilizing no controls, exhausting inside the building.

- (e) Twenty (20) natural gas-fired Comfort Heating Units, constructed prior to 2005, with a combined maximum heat input capacity of 6.14 MMBtu/hr, utilizing no controls, exhausting inside the building.

Enforcement Issues

There are no pending enforcement actions related to this source.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – Exemption

The following table reflects the unlimited potential to emit (PTE) of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Process/ Emission Unit	Potential To Emit of the Entire Source (tons/year)									
	PM	PM ₁₀ *	PM _{2.5} *	SO ₂	NO _x	VOC	CO	GHGs as CO ₂ e**	Total HAPs	Worst Single HAP
E-Coat Line – Combustion E-1 through E-5 and Comfort Heaters	0.10	0.38	0.38	0.03	5.06	0.28	4.25	6,107.11	0.10	0.09 (hexane)
E-Coat Line – Dip Tanks and Cleaning (11 units)	0.00	0.00	0.00	0.00	0.00	4.53	0.00	0.00	2.36	2.36 (glycol ethers)
Laser Operation D-1	2.28	2.28	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.04 (manganese)
Touchup Paint P-1	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00
Plastic Injection Molding IM-1	negl.	negl.	negl.	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PTE of Entire Source	2.38	2.67	2.67	0.03	5.06	4.92	4.25	6,107.11	2.52	2.49
Exemptions Levels**	< 5	< 5	< 5	< 10	< 10	< 10	< 25	< 100,000	< 25	< 10

negl. = negligible
 *Under the Part 70 Permit program (40 CFR 70), PM10 and PM2.5, not particulate matter (PM), are each considered as a regulated air pollutant".
 **The 100,000 CO₂e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.

- (a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of all regulated criteria pollutants are less than the levels listed in 326 IAC 2-1.1-3(e)(1). Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3 (Exemptions).
- (b) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and the PTE of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (a) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR 63, Subpart MMMM, are not included in the permit, since this source is not a major source of HAPs. Therefore, the requirements of 40 CFR 63, Subpart MMMM do not apply.
- (b) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Plastic Parts and Products, 40 CFR 63, Subpart PPPP, are not included in the permit, since this source is not a major source of HAPs. Therefore, the requirements of 40 CFR 63, Subpart PPPP do not apply.
- (c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Paint Stripping and Miscellaneous Surface Coating at Area Sources, 40 CFR 63, Subpart HHHHHH, are not included in the permit, since this source does not perform any paint stripping, or spray application of coatings that contain target HAPs, or spray application of coating to motor vehicles and motor equipment. Therefore, the requirements of 40 CFR 63, Subpart HHHHHH do not apply.
- (d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Area Source Standards for Plating and Polishing Operations, 40 CFR 63, Subpart WWWWWW, are not included in the permit, since this source does not perform any plating. Therefore, the requirements of 40 CFR 63, Subpart WWWWWW do not apply.
- (e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Area Source Standards for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63, Subpart XXXXXX, are not included in the permit, since the activities at this source are not listed as one of the source categories listed in the rule. Therefore, the requirements of 40 CFR 63, Subpart XXXXXX do not apply.
- (f) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.

Compliance Assurance Monitoring (CAM)

- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the unlimited potential to emit of the source is less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

State Rule Applicability Determination

The following state rules are applicable to the source:

- (a) 326 IAC 2-1.1-3 (Exemptions)
Exemption applicability is discussed under the Permit Level Determination – Exemption section above.
- (b) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-4.1.
- (c) 326 IAC 2-6 (Emission Reporting)
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.
- (d) 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 this permit:
 - (1) 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.
 - (2) 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.
- (e) 326 IAC 6-3 (Particulate Emission Limitation for Manufacturing Operations)
The source is not subject to the requirements of 326 IAC 6-3, because uncontrolled potential to emit is less than 0.551 pounds per hour. Therefore, the requirements of 326 IAC 6-3 do not apply.
- (f) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.
- (g) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
The source is not subject to the requirements of 326 IAC 6-5, because the source does not have potential fugitive particulate emissions greater than 25 tons per year. Therefore, 326 IAC 6-5 does not apply.
- (h) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
Each of the emission units at this source is not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from each emission unit is less than twenty-five (25) tons per year.

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application submitted by the applicant. An application for the purposes of this review was received on October 21, 2013.

The operation of this source shall be subject to the conditions of the attached proposed Exemption No. 057-29967-00077. The staff recommends to the Commissioner that this Exemption be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Deborah Cole at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5377 or toll free at 1-800-451-6027 extension 4-5377.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.in.gov/idem

**Appendix A: Emissions Calculations
Uncontrolled Emissions Summary**

Company Name: Horton, Inc.
Address City IN Zip: 201 West Carmel Drive, Carmel, Indiana 46236
Permit Number: 057-33796-00077
Plt ID: 057-00077
Reviewer: Deborah Cole

Emission Units / Pollutant	Emissions (tons per year)									Worst HAP	Name
	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO	GHG	Total HAPs		
Combustion Units	0.10	0.38	0.38	0.03	5.06	0.28	4.25	6,107.11	0.10	0.09	Hexane
Dip Tanks (Eleven (11) units)	0.00	0.00	0.00	0.00	0.00	4.53	0.00	0.00	2.36	2.36	Glycol Ethers
Laser-cutting Operation D-1	2.28	2.28	2.28	0.00	0.00	0.00	0.00	0.00	0.06	0.04	Manganese
Touch-up Paint Booth P-1	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	
Plastic Injection Molding IM-1**	negl.	negl.	negl.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Source Total Uncontrolled Emissions	2.38	2.67	2.67	0.03	5.06	4.92	4.25	6,107.11	2.52	2.49	
Exemption Threshold	<5 tpy	<5 tpy	<5 tpy	<10 tpy	<10 tpy	<10 tpy*	<25 tpy	<100,000 tpy	<10 tpy	<25 tpy	

* VOC threshold for Exemption is less than 5 tons per year if the source is required to use control devices to comply with 325 IAC Article 8 and <10 tons per year otherwise. For this source, there are no control devices that are required in order to comply with 326 IAC 8; therefore, the threshold for Exemption is <10 tons per year.

** The plastic injection molding system is a closed-loop system, and the plastic used contains no VOC's. There are no known emissions factors for this process, and emissions would be negligible (negl.).

Appendix A: Emissions Calculations

Natural Gas Combustion Only
MM BTU/HR <100

Company Name: Horton, Inc.
Address City IN Zip: 201 West Carmel Drive, Carmel, Indiana 46236
Permit Number: 057-33796-00077
Plt ID: 057-00077
Reviewer: Deborah Cole

Unit	Heat Input Capacity MMBtu/hr
Dip Tank Heater E-1	1.60
Dip Tank Heater E-2	0.80
Water Heater E-3	0.04
Cure Oven E-4	1.60
Paint Line Oven E-5	1.60
Comfort Heaters (20)	6.14
TOTAL	11.78

Heat Input Capacity MMBtu/hr
11.78

HHV mmBtu	Potential Throughput MMCF/yr
1.020	101.17

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx 100 **see below	VOC	CO
Potential Emission in tons/yr	0.10	0.38	0.38	0.03	5.06	0.28	4.25

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

PM2.5 emission factor is filterable and condensable PM2.5 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

HAPS Calculations

Emission Factor in lb/MMcf	HAPS - Organics					Total - Organics
	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03	
Potential Emission in tons/yr	1.062E-04	6.070E-05	3.794E-03	9.105E-02	1.720E-04	9.519E-02

Emission Factor in lb/MMcf	HAPS - Metals					Total - Metals
	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	
Potential Emission in tons/yr	2.529E-05	5.564E-05	7.082E-05	1.922E-05	1.062E-04	2.772E-04

Methodology is the same as above.

Total HAPs	9.546E-02
Worst HAP	9.105E-02

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Greenhouse Gas Calculations

Emission Factor in lb/MMcf	Greenhouse Gas		
	CO2 120,000	CH4 2.3	N2O 2.2
Potential Emission in tons/yr	6,070.16	0.12	0.11
Summed Potential Emissions in tons/yr	6,070.39		
CO _{2e} Total in tons/yr	6,107.11		

Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.

Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.

Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

CO_{2e} (tons/yr) = CO₂ Potential Emission ton/yr x CO₂ GWP (1) + CH₄ Potential Emission ton/yr x CH₄ GWP (21) + N₂O Potential Emission ton/yr x N₂O GWP (310).

**Appendix A: Emissions Calculations
Dip Tank Coating Emissions**

Company Name: Horton, Inc.
Address City IN Zip: 201 West Carmel Drive, Carmel, Indiana 46236
Permit Number: 057-33796-00077
Pit ID: 057-00077
Reviewer: Deborah Cole

Tank No.	Tank Use	Contents	Potential Usage (lb/hr)	Potential Usage (lb/yr)*	Potential Usage (lb/hr)	Potential Usage (lb/yr)*	VOC Emissions			HAP Emissions		
							VOC %	VOC (lb/yr)	VOC (tons/yr)	HAPs Content**	HAPs (lb/yr) (Glycol Ethers)***	Total HAPs (tons/yr)
1	Wash	Chemklean 618			548.6	13166.4	3.0	394.99	0.20	3.0	394.99	0.20
2	Wash	Chemklean 618			457.2	10972.0	3.0	329.16	0.16	3.0	329.16	0.16
3	Rinse	City Water			0.0	0.0	0.0	0.00	0.0	0.0	0.00	0.00
4	Phosphate	Chemfos 158			614.5	14747.6	0.0	0.00	0.0	0.0	0.00	0.00
5	Rinse	City Water			0.0	0.0	0.0	0.00	0.0	0.0	0.00	0.00
6	Sealing	Chemseal 6			105.1	2523.6	0.0	0.00	0.0	0.0	0.00	0.00
7	Rinse	RO Water			0.0	0.0	0.0	0.00	0.0	0.0	0.00	0.00
8	E-Coat Tank	Powercron Black Paste	602.9	14469.1			20.0	2893.82	1.45	20.0	2893.82	1.45
		Powercron Resin	3056.8	73362.2			5.0	3668.11	1.83	0.0	0	0.0
		CA-517 Solvent	16.0	382.8			100.0	382.84	0.19	100.0	382.84	0.19
		Acedic Acid	26.4	633.0			100.0	633.00	0.32	0.0	0.00	0.00
		CA662 Analyte Additive	4.8	116.3			30.0	34.88	0.02	0.0	0.00	0.00
		Total Tank 8	3706.8	88963.4	3706.8	88963.4	255.0	7612.6	3.81	120.0	3276.7	1.64
9	Permeate Spray Rinse	RO Water			0.0	0.0	0.0	0.00	0.00	0.0	0.00	0.00
10	Permeate Rinse	RO Water			0.0	0.0	0.0	0.00	0.00	0.0	0.00	0.00
11	Permeate Rinse	RO Water			0.0	0.0	0.0	0.00	0.00	0.0	0.00	0.00
(any)	Tank Cleaning	ChemKleen 39c			44.1	1058.4	68.0	719.70	0.36	68.0	719.70	0.36
					Total (tpy)				4.53			2.36

Glycol Ethers

Methodology:

* - Chemical usage and volume of each tank was supplied by the source, and is the maximum amount needed for each step in order to process 131,400 fans per year, which is the maximum capacity of throughput.

Therefore, maximum potential chemical usage is based on 8,760 hours per year, and is the maximum potential chemical usage per year.

** - VOC and Hap content supplied by PPG Industries, Inc. Environmental Data Sheets

*** - All HAPs present in Tank 8 E-Coat Process are Glycol Ethers.

VOC (lb/yr) = Potential Chemical usage (lb/yr) x VOC Content %

VOC (tons/yr) = VOC (lb/yr) / 2000 (lb/ton)

HAPs (lb/yr) = Potential Chemical usage (lb/yr) x HAPs Content %

HAPs (tons/yr) = HAPs (lb/yr) / 2000 (lb/ton)

**Appendix A: Emissions Calculations
Laser Cutting Emissions**

Company Name: Horton, Inc.
Address City IN Zip: 201 West Carmel Drive, Carmel, Indiana 46236
Permit Number: 057-33796-00077
Plt ID: 057-00077
Reviewer: Deborah Cole

Laser Cutting Operation D-1

				Emission Calculations (tons per year)										
											HAPs			
Station No.	Material Cut	Maximum Units / Year	Material Removed (lb/fan)	PM	PM10	PM2.5					Total HAPS			
							Concentration Levels (per lb)*	Manganese	Nickel	Chromium		Lead		
1	Steel	131,400	0.0130	0.854	0.854	0.854	0.017	0.002	0.005	0.0001	2.058E-02			
2	Steel	131,400	0.0045	0.296	0.296	0.296	5.026E-03	5.913E-04	1.478E-03	2.957E-05	7.125E-03			
2	Plastic	131,400	0.0100	0.657	0.657	0.657	1.117E-02	1.314E-03	3.285E-03	6.570E-05	1.583E-02			
3	Steel	65,700	0.0045	0.148	0.148	0.148	9.539E-03	1.122E-03	2.806E-03	5.611E-05	1.352E-02			
3	Nylon Resin	65,700	0.0100	0.329	0.329	0.329	3.302E-03	3.885E-04	9.712E-04	1.942E-05	4.681E-03			
Laser Cutting Total Emissions				2.283	2.283	2.283	4.356E-02	5.124E-03	1.281E-02	2.562E-04	6.175E-02			

Worst Case HAP is Manganese

Methodology:

Maximum number of units cut per year is 360 fans per 24-hour day x 365 days = 131,400 fans per year

Material removed per fan by laser process is based on mass-balance trials at source, and provided by source, and has been approved by OAQ, CDS Section on March 7, 2011.

Calculations assume that all material removed will be emitted at rate of 100%.

PM, PM10, PM2.5 emissions (tons per year) = units per year x material removed per fan (lb/fan) = lb/year. PM, PM10, PM2.5 emissions (tons per year) = lbs/yr / 2000 lb/ton.

HAPs emissions (tons per year) = units per year x material removed per fan (lb/fan) x HAP concentration = lb/yr. HAP emissions (tons/year = lbs/yr / 2000 lb/ton).

*HAP concentration levels were taken from Material Safety Data Sheets from the manufacturer and provided by the source.

PM10 and PM2.5 presumed to be equal to PM.

**Appendix A: Emissions Calculations
Paint Booth Emissions**

Company Name: Horton, Inc.
Address City IN Zip: 201 West Carmel Drive, Carmel, Indiana 46236
Permit Number: 057-33796-00077
Plt ID: 057-00077
Reviewer: Deborah Cole

Spray Paint Booth P-1

Product	Maximum Usage per year (no. cans)	Material Weight (oz per can)	%VOC	Total VOC (oz/yr)	Total VOC (lb/yr)	Total VOC (tons/yr)
PPG TrueFinish (W49153c 40-50 Black)	365	12	86	3766.80	235.43	0.12
					TOTAL	0.12

Methodology:

This paint operation is a touch-up paint booth with occasional use only, with hand-held spray paint.

Based on its maximum throughput of its fan production operation, it has never used more than one (1) can of spray paint in a 24-hour day.

Therefore, the above calculations were based on 365 total cans per year of usage, which exceeds its historical purchases.

VOC content is based on Material Safety Data Sheets from the paint manufacturer, provided by the source.

Total VOC (oz/yr) = No. cans per year x 12 oz/can x %VOC Content = 365 x 12 x 0.86 = 3766.8 oz. year

Total VOC (lb/yr) = Total VOC (oz/yr) / 16 oz/lb

Total VOC (tons/yr) = Total VOC (lb/yr) / 2000 lb/ton

**Appendix A: Emissions Calculations
Plastic Injection Molding Emissions**

Company Name: Horton, Inc.
Address City IN Zip: 201 West Carmel Drive, Carmel, Indiana 46236
Permit Number: 057-33796-00077
Pit ID: 057-00077
Reviewer: Deborah Cole

** The plastic injection molding system is a closed-loop system, and the plastic used and the parting agents used contain no VOC's or HAPs. There are no known emissions factors for this process, and particulate emissions are assumed to be negligible (negl.).



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

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(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Don Niese
Horton, Inc.
201 West Carmel Drive
Carmel, IN 46032

DATE: November 19, 2013

FROM: Matt Stuckey, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
Exempt Construction and Operation Status
E057-33796-00077

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
Chris Bishop, Environmental Consultant, Cardno ATC
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 6/13/2013

Mail Code 61-53

IDEM Staff	PWAY 11/19/2013 Horton, Inc. 057-33796-00077 (final)		Type of Mail: CERTIFICATE OF MAILING ONLY	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		Don Niese Horton, Inc. 201 W Carmel Dr Carmel IN 46032 (Source CAATS)										
2		Hamilton County Health Department 18030 Foundation Dr. #A Noblesville IN 46060-5405 (Health Department)										
3		Carmel City Council and Mayors Office 1 Civic Square Carmel IN 46032 (Local Official)										
4		Hamilton County Board of Commissioners One Hamilton County Square Noblesville IN 46064 (Local Official)										
5		Glidden Fence Co. 17804 Spring Mill Rd Westfield IN 46074 (Affected Party)										
6		Environmental Field Services, Inc. 40 SR 32 W Westfield IN 46074 (Affected Party)										
7		Chris Bishop Cardno ATC 7988 Centerpoint Drive Indianapolis IN 46256 (Consultant)										
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