



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: April 25, 2012

RE: CTA Acoustics, Inc. / 151-31438-00667

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.dot12/3/07



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April 25, 2012

Mr. John Zgoda
CTA Acoustics, Inc.
P. O. Box 448
Corbin, KY 40701

Re: Exempt Construction and Operation Status,
151-31438-00667

Dear Mr. Zgoda:

The application from CTA Acoustics, Inc., received on February 3, 2012, 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 thermal insulation production facility located at 9670 West Maple Street, Orland, IN 46776 is classified as exempt from air pollution permit requirements:

- (a) One (1) electrically heated, hydraulically activated automotive insulation press, identified as M1, approved for construction in 2012, with a maximum capacity of 32 per hour (110 inch x 64 inch at 16.5 lbs each or 528 lbs per hour) of fibrous phenolic resin blend, using no controls, and exhausting to stack 1.
- (b) One (1) electrically heated, hydraulically activated automotive insulation press, identified as M2, approved for construction in 2012, with a maximum capacity 32 per hour (110 inch x 64 inch at 16.5 lbs each or 528 lbs per hour) of fibrous phenolic resin blend, using no controls, and exhausting to stack 1.
- (c) One (1) electrically heated, hydraulically activated automotive insulation press, identified as M3, approved for construction in 2012, with a maximum capacity of 32 per hour (60" X 80" at 11.0 lbs each or 352 lbs per hour) of fibrous phenolic resin blend, using no controls, and exhausting to stack 1.
- (d) One (1) electrically heated, hydraulically activated automotive insulation press, identified as M4, approved for construction in 2012, with a maximum capacity of 32 per hour (110 inch x 64 inch at 16.5 lbs each or 528 lbs per hour) of fibrous phenolic resin blend, using no controls, and exhausting to stack 2.
- (e) One (1) electrically heated, hydraulically activated automotive insulation press, identified as M5, approved for construction in 2012, with a maximum capacity of 32 per hour (110 inch x 64 inch at 16.5 lbs each or 528 lbs per hour) of fibrous phenolic resin blend, using no controls, and exhausting to stack 2.
- (f) One (1) electrically heated, hydraulically activated automotive insulation press, identified as M6, approved for construction in 2012, with a maximum capacity of 32 per hour (60" X 80" at 11.0 lbs each or 352 lbs per hour) of fibrous phenolic resin blend, using no controls, and exhausting to stack 2.
- (g) One (1) water jet finished insulation trim, identified as WJ1, approved for construction in 2012, with a maximum capacity of 1,056 lbs per hour of fibrous phenolic resin blend, using no controls, and exhausting inside the building.

- (h) One (1) water jet finished insulation trim, identified as WJ2, approved for construction in 2012, with a maximum capacity of 352 lbs per hour of fibrous phenolic resin blend, using no controls, and exhausting inside the building.
- (i) One (1) water jet finished insulation trim, identified as WJ3, approved for construction in 2012, with a maximum capacity of 1,056 lbs per hour of fibrous phenolic resin blend, using no controls, and exhausting inside the building.
- (j) One (1) water jet finished insulation trim, identified as WJ4, approved for construction in 2012, with a maximum capacity of 352 lbs per hour of fibrous phenolic resin blend, using no controls, and exhausting inside the building.

The following conditions shall be applicable:

1. 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.
2. 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.
3. 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate from the processes listed in the table below shall be limited by the following:

Emission Unit	Process Weight Rate (lbs/hr)	Process Weight Rate (ton/hr)	Allowable PM Limit (lbs/hr)
M1	528	0.264	1.67
M2	528	0.264	1.67
M3	352	0.176	1.28
M4	528	0.264	1.67
M5	528	0.264	1.67
M6	350	0.176	1.28

2. Pursuant to 326 IAC 2-1.1-3 and to verify the exemption status of the source, no later than one hundred eighty (180) days after issuance of this exemption or within 60 days after achieving full production (whichever is later), the source shall conduct a one-time stack test for PM, Phenol, and formaldehyde emissions, utilizing methods as approved by IDEM, OAQ.

Pursuant to 326 IAC 3-6 (Performance Testing):

- (a) For performance testing required by this exemption, a test protocol shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date.

- (b) The source shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date.
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the source submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

This exemption is the first air approval issued to this source.

A copy of the 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 Bruce Farrar, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana, 46204-2251, at 317-234-5401 or at 1-800-451-6027 (ext 4-5401).

Sincerely,



Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

IC/bf

cc: File - Steuben County
Steuben County Health Department
Compliance and Enforcement Branch
Billing, Licensing and Training Section

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:	CTA Acoustics, Inc.
Source Location:	9670 West Maple Street, Orland, IN 46776
County:	Steuben
SIC Code:	3714 (Motor Vehicle Parts and Accessories)
Exemption No.:	151-31438-00667
Permit Reviewer:	Bruce Farrar

On February 3, 2012, the Office of Air Quality (OAQ) received an application from CTA Acoustics, Inc. related to the construction and operation of a new thermal insulation production facility.

Existing Approvals

There have been no previous approvals issued to this source.

County Attainment Status

The source is located in Steuben County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Unclassifiable or attainment effective June 15, 2004, 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 April 5, 2005, for PM _{2.5} .	

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

- (b) **PM_{2.5}**
 Steuben 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} and SO₂ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

- (c) Other Criteria Pollutants
Steuben 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 CTA Acoustics, Inc February 3, 2012, relating to the construction and operation of a plant that manufactures acoustic insulation material for automotive use.

The material is composed of fibers (fiberglass, cotton, nylon, and other fibrous materials), phenolic resin, and facing/barrier. The curing oven partially cures and "glues" the fibers together. This partially cured mat is identified as semi-cured material. The semi-cured material is then processed at the electrically heated mold presses where the material is heated to approximately 450 Deg F for 1 to 1.5 minutes. At the end of the mold press cycle, the finished product is ready for final trimming using water jets to trim excess material from the edge of the shape.

The CTA Acoustics plant in Orland, IN will receive the semi-cure material for finishing in the six mold presses.

CTA has two different types of molds:

- (a) One is identified as a "Super Cell" configuration that contains two identical molds (emission unit M1, M2 and M4, M5) that operate in tandem. One is heating while the other is being readied for the next cycle. The cycle of the super cell molds is 32 per hour. The size of the super cell molds is approximately 110" X 64" using a 16.5 lb insulated pelt (acoustic panel). Based on this configuration, the maximum throughput of material would be 16.5 lbs / pelt X 32 cycles/hr X 2 presses = 1,056 lbs per hour.
- (b) The other type of mold is a single press (M3 and M6) with a size of 60" X 80" using 11.0 lbs insulated pelt (acoustic panel). Based on this configuration, the maximum throughput of the single press is 11 lb X 32 cycles/hr = 352 pounds of finished acoustic panel/hour.

The edges of the molded panels are trimmed in a one of two water jet trimming machines. There are no particulate emissions from the water jet.

The following is a list of the new emission units:

- (a) One (1) electrically heated, hydraulically activated automotive insulation press, identified as M1, approved for construction in 2012, with a maximum capacity of 32 per hour (110 inch x 64 inch at 16.5 lbs each or 528 lbs per hour) of fibrous phenolic resin blend, using no controls, and exhausting to stack 1.
- (b) One (1) electrically heated, hydraulically activated automotive insulation press, identified as M2, approved for construction in 2012, with a maximum capacity 32 per hour (110 inch x 64 inch at 16.5 lbs each or 528 lbs per hour) of fibrous phenolic resin blend, using no controls, and exhausting to stack 1.
- (c) One (1) electrically heated, hydraulically activated automotive insulation press, identified as M3, approved for construction in 2012, with a maximum capacity of 32 per hour (60 inch x 80 inch at

- 11.0 lbs each or 352 lbs per hour) of fibrous phenolic resin blend, using no controls, and exhausting to stack 1.
- (d) One (1) electrically heated, hydraulically activated automotive insulation press, identified as M4, approved for construction in 2012, with a maximum capacity of 32 per hour (110 inch x 64 inch at 16.5 lbs each or 528 lbs per hour) of fibrous phenolic resin blend, using no controls, and exhausting to stack 2.
 - (e) One (1) electrically heated, hydraulically activated automotive insulation press, identified as M5, approved for construction in 2012, with a maximum capacity of 32 per hour (110 inch x 64 inch at 16.5 lbs each or 528 lbs per hour) of fibrous phenolic resin blend, using no controls, and exhausting to stack 2.
 - (f) One (1) electrically heated, hydraulically activated automotive insulation press, identified as M6, approved for construction in 2012, with a maximum capacity of 32 per hour (60 inch x 80 inch at 11.0 lbs each or 352 lbs per hour) of fibrous phenolic resin blend, using no controls, and exhausting to stack 2.
 - (g) One (1) water jet finished insulation trim, identified as WJ1, approved for construction in 2012, with a maximum capacity of 1,056 lbs per hour of fibrous phenolic resin blend, using no controls, and exhausting inside the building.
 - (h) One (1) water jet finished insulation trim, identified as WJ2, approved for construction in 2012, with a maximum capacity of 352 lbs per hour of fibrous phenolic resin blend, using no controls, and exhausting inside the building.
 - (i) One (1) water jet finished insulation trim, identified as WJ3, approved for construction in 2012, with a maximum capacity of 1,056 lbs per hour of fibrous phenolic resin blend, using no controls, and exhausting inside the building.
 - (j) One (1) water jet finished insulation trim, identified as WJ4, approved for construction in 2012, with a maximum capacity of 352 lbs per hour of fibrous phenolic resin blend, using no controls, and 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	PM10*	PM2.5	SO ₂	NO _x	VOC	CO	GHGs as CO ₂ e**	Total HAPs	Worst Single HAP
M1	0.17	0.17	0.17	-	-	0.32	-	-	0.59	0.27 (Phenon)
M2	0.17	0.17	0.17	-	-	0.32	-	-	0.59	0.27 (Phenon)
M3	0.12	0.12	0.12	-	-	0.21	-	-	0.39	0.18 (Phenon)
M4	0.17	0.17	0.17	-	-	0.32	-	-	0.59	0.27 (Phenon)
M5	0.17	0.17	0.17	-	-	0.32	-	-	0.59	0.27 (Phenon)
M6	0.12	0.12	0.12	-	-	0.21	-	-	0.39	0.18 (Phenon)
Total PTE of Entire Source	0.92	0.92	0.92	0.00	0.00	1.70	0.00	0.00	<25	<10
Exemptions Levels**	5	5	5	10	10	5	25	100,000	25	10
- = negligible *Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". **The 100,000 CO ₂ e 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) 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) 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.
- (c) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1) greenhouse gases (GHGs) is less than the Title V subject to regulation threshold of one hundred thousand (100,000) tons of CO₂ equivalent emissions (CO₂e) per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

- (a) The requirements of 40 CFR 60, Subpart MM (Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations) (326 IAC 12) are not included in this exemption because this source does not apply surface coatings to automobiles or light duty trucks.
- (b) The requirements of 40 CFR 60, Subpart DDD (Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry) (326 IAC 12) are not included in this exemption because this source does not manufacture polypropylene, polyethylene, polystyrene, or poly (ethylene terephthalate).
- (c) The requirements of 40 CFR 60, Subpart PPP (Standard of Performance for Wool Fiberglass Insulation Manufacturing Plants) (326 IAC 12) are not included in this exemption because this source does not have rotary spin wool fiberglass insulation manufacturing line.

- (d) 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)

- (e) The requirements of 40 CFR 63, Subpart W (National Emission Standards for Hazardous Air Pollutants for Epoxy Resins Production and Non-Nylon Polyamides Production) (326 IAC 20-20) are not included in this exemption for this source because this source is not a manufacturer of basic liquid epoxy resins (BLR) wet strength resins (WSR) and the source is not a major source of HAPs.
- (f) The requirements of 40 CFR 63, Subpart IIII (National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks) (326 IAC 20-85) are not included in this exemption for this source because this source does not apply surface coating materials to the automobiles or light-duty trucks.
- (g) There are no 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)

- (h) 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 6-4 (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.
- (f) 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.
- (g) 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.

Electrically Heated Presses (M1 through M6)

- (h) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
 Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate from the processes listed in the table below shall be limited by the following:

Emission Unit	Process Weight Rate (lbs/hr)	Process Weight Rate (ton/hr)	Allowable PM Limit (lbs/hr)
M1	528	0.264	1.67
M2	528	0.264	1.67
M3	352	0.176	1.28
M4	528	0.264	1.67
M5	528	0.264	1.67
M6	350	0.176	1.28

The pound per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

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

Based on calculations, a control device is not needed to comply with this limit.

Water Jet Trim (WJ1 through WJ4)

- (i) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
 326 IAC 6-3-2 does not apply to the water jet trims, because they produce no particulate.

Compliance Determination, Monitoring and Testing Requirements
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- (a) There are no compliance determination and monitoring requirements applicable to this source.
- (b) The testing requirements applicable to this source are as follows:

Emission Unit	Pollutant	Timeframe for Testing	Frequency of Testing
One of the electrically heated presses	PM, Phenol, and Formaldehyde	No later than 180 days after issuance of exemption or 60 days after achieving full production.	one time test

- (1) Pursuant to Air-014-NPD and 326 IAC 2-1.1-3, the Permittee shall perform a one-time performance test, to verify the exemption status of the source when operating the Electrically Heated Presses within 180 days after issuance of this Exemption 151-21438-00667 or within 60 days after achieving full production (whichever is later). This test is necessary because the emission factors used to calculate particulate, Phenon and Formaldehyde emissions are not approved by U.S. EPA or IDEM, OAQ.

In the case of particulate, AP-42 table 10.6.1-4 rating of the emission factor is "E". An "E" rating is poor. The factor is developed from C- and D-rated test data, and there may be reason to suspect that the facilities tested do not represent a random sample of the industry. There also may be evidence of variability within the source category population.

In the information provided by the source for justification of the emission factors, they admit that estimation formaldehyde is difficult.

The stack test provided by the source from their Kentucky plant for Phenol cannot be used, because the source conducted one run. In order for IDEM, OAQ to accept an emission factor from a stack test a minimum of three runs must be made, pursuant to Air-14-NPD.

- (2) IDEM, OAQ Compliance Determination Section will accept laboratory testing in lieu of a test at the facility.

Conclusion and Recommendation

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 February 3, 2012.

The construction and operation of this source shall be subject to the conditions of the attached proposed Exemption No. 151-31438-00667. The staff recommends to the Commissioner that this Exemption be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Bruce Farrar 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) 234-5401 or toll free at 1-800-451-6027 extension 4-5401.
- (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: Emission Calculations
Summary**

Company Name: CTA Acoustics, Inc.
Address City IN Zip: 9670 West Maple Street, Orland, IN 46776
Exemption Number: 151-31438-00667
Plt ID: 151-00667
Permit Reviewer: Bruce Farrar
Date: Febraury 3, 2012

Uncontrolled Emissions Tons per Year										
Emission Units	PM	PM10	PM2.5	SO2	NOx	VOC	CO	GHG as CO2e	Total HAPs	Single HAP
M1	0.17	0.17	0.17	-	-	0.32	-	-	0.59	0.27 Phenon
M2	0.17	0.17	0.17	-	-	0.32	-	-	0.59	0.27 Phenon
M3	0.12	0.12	0.12	-	-	0.21	-	-	0.39	0.18 Phenon
M4	0.17	0.17	0.17	-	-	0.32	-	-	0.59	0.27 Phenon
M5	0.17	0.17	0.17	-	-	0.32	-	-	0.59	0.27 Phenon
M6	0.12	0.12	0.12	-	-	0.21	-	-	0.39	0.18 Phenon
Total:	0.92	0.92	0.92	0.00	0.00	1.70	0.00	0.00	3.12	

**Appendix A: Emission Calculations
Particulate Emission Calculations**

Company Name: CTA Acoustics, Inc.
Address City IN Zip: 9670 West Maple Street, Orland, IN 46776
Exemption Number: 151-31438-00667
Pit ID: 151-00667
Permit Reviewer: Bruce Farrar
Date: Febraury 3, 2012

Emission Unit	Maximum Capacity (ft ² /hr) ¹	PM Emission Factor (lbs/1000 ft ²) ²	Potential PM (lbs/hr)	Potential PM (ton/yr)
M1	1564.44	0.11	0.17	0.75
M2	1564.44	0.11	0.17	0.75
M3	1066.67	0.11	0.12	0.51
M4	1564.44	0.11	0.17	0.75
M5	1564.44	0.11	0.17	0.75
M6	1066.67	0.11	0.12	0.51
Total:			0.92	4.04

Assume PM = PM10 = PM2.5

1. Maximum capacity:

M1, M2, M4 and M5 is 110 in X 64 in = 7040 sq in per piece and each unit is capable of 32 unit per hour.

(7040/144) *32 = 1564.44 sqft/hr.

M3 and M6 is 80 in X 60 in = 4800 sq in per piece and each unit has a capacity of 32 unit per hour.

(4800/144) *32 = 1066.67 sqft/hr.

2. Emission Factors from AP-42 Chapter 10.6.1 (Wood Products Industry) (dated 3/02), Table 10.6.1-4.

Methodology:

PM PTE (lb/hr) = Maximum Capacity (Sqft/hr) * PM Emission factor (lbs/1000 sqft)

PM PTE (ton/yr) = Maximum Capacity (Sqft/hr) * PM Emission factor (lbs/1000 sqft) * (8760 hr/1 yr) * (1 ton/2000 lbs)

Appendix A: Emission Calculations
VOC and HAP Emission Calculations

Company Name: CTA Acoustics, Inc.
Address City IN Zip: 9670 West Maple Street, Orland, IN 46776
Exemption Number: 151-31438-00667
Plt ID: 151-00667
Permit Reviewer: Bruce Farrar
Date: Febraury 3, 2012

Unit	Pound Resin per Unit ¹ (lbs/unit)	Maximum (unit/hour)	Weight % Phenon ²	Weight % Formaldehyde ³	Phenol Emissions (lbs/hr)	Formaldehyde Emissions (lbs/hr)	VOC Emissions (ton/yr)	Phenol Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)
M1	3.80	32.00	0.05%	0.06%	0.06	0.07	0.32	0.27	0.32
M2	3.80	32.00	0.05%	0.06%	0.06	0.07	0.32	0.27	0.32
M3	2.53	32.00	0.05%	0.06%	0.04	0.05	0.21	0.18	0.21
M4	3.80	32.00	0.05%	0.06%	0.06	0.07	0.32	0.27	0.32
M5	3.80	32.00	0.05%	0.06%	0.06	0.07	0.32	0.27	0.32
M6	2.53	32.00	0.05%	0.06%	0.04	0.05	0.21	0.18	0.21

Total Potential Emissions

1.70

1.42

1.70

1. M1, M2, M4 and M5 weight is 16.5 lbs per (110 in X 64 in) panel @ 23% resin.
1. M3 and M5 weight is 11 lbs per (80X60 in) panel @ 23% resin.
2. Phenol weight per Certificate of Analysis submitted February 3, 2012.
3. Formaldehyde weight % per source. Formaldehyde is considered a HAP and VOC.

METHODOLOGY

VOC emission rate (tons/yr) = pound material per hour * Maximum (unit/hr) * Weight % Formaldehyde * 8760 hrs/yr * 1 ton/2000 lbs

HAPS emission rate (tons/yr) = pound material per hour * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

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

TO: John Zgoda
CTA Acoustics, Inc.
PO Box 448
Corbin, KY 46776

DATE: April 25, 2012

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

SUBJECT: Final Decision
Exemption
151-31438-00667

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:
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 11/30/07

Mail Code 61-53

IDEM Staff	GHOTOPP 4/25/2012 CTA Acoustics, Inc 151-31438-00667 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		John Zgoda CTA Acoustics, Inc PO Box 448 Corbin KY 46776 (Source CAATS) via confirmed delivery										
2		Steuben County Board of Commissioners 317 S Wayne Suite 2H Angola IN 46703 (Local Official)										
3		Steuben County Health Department 317 S. Wayne St, Community Center Suite 3-A Angola IN 46703-1938 (Health Department)										
4		Mr. Steve Christman NISWMD 2320 W 800 S, P.O. Box 370 Ashley IN 46705 (Affected Party)										
5		Mr. Diane Hanson 490 E 300 N Angola IN 46703 (Affected Party)										
6		Orland Town Council P.O. Box 445 Orland IN 46776 (Local Official)										
7		Mr. Harold Boocher PO Box 264 Orland in 46776 (Affected Party)										
8		Dennis & Kathleen Gates 787 N Brys Dr Gross Pointe MI 48236 (Affected Party)										
9		Albert & Bonnie Henderson 5875 N SR 327 Orland IN 46776 (Affected Party)										
10		PO Box 445 Orland IN 46776 (Affected Party)										
11		Quality Converters PO Box 308 Orland IN 46776 (Affected Party)										
12		New Millennium Financial, Inc (Ucomm, Inc) PO Box 254 Orland IN 46776 (Affected Party)										
13		Allen (emery spade) Spade 6995 N CR 1100 E Howe IN 46746 (Affected Party)										
14		Little Willies R & R, Inc. PO Box 337 Orland IN 46776 (Affected Party)										
15		Diversapack, LLC ATTN: Bob Bard 9880 Maple St Orland IN 46776 (Affected Party)										

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
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Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handling 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		Diversapack, LLC ATTN: Bob Bard 6080 Jericho Turnpike Commack NY 11725 (Affected Party)									
2		Kathleen Bell 9785 W SR 120 Orland IN 46776 (Affected Party)									
3		Julio & Maria Gonzales 9765 W SR 120 Orland IN 46776 (Affected Party)									
4		Steuben Lakes Regional Waste District 8119 W 150 N Angola IN 46703 (Affected Party)									
5		Michael & Patti Tribble 9705 W SR 120 Orland IN 46776 (Affected Party)									
6											
7											
8											
9											
10											
11											
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15											

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
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