



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

TO: Interested Parties / Applicant
DATE: June 30, 2005
RE: BSWB, Inc / 019-21101-00118
FROM: Paul Dubenetzky
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, Room 1049, 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 1/10/05



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

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Samuel R. Lomax
BSWB, Inc.
860 Penn Street
Sellersburg, Indiana 47172

June 30, 2005

Dear Mr. Lomax:

Re: Exempt Construction and Operation Status,
019-21101-00118

The application from BSWB, Inc., received on April 8, 2005, 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 cultured marble countertop manufacturing operation, located at 860 Penn Street, Sellersburg, Indiana 47172, is classified as exempt from air pollution permit requirements:

- (a) A cultured marble countertop manufacturing operation, with a maximum capacity of 6.25 square feet of countertops per hour, consisting of:
 - (1) Gel coat application facilities used to apply gel coat to molds, identified as G1, installed in 2003, using hydraulic atomization spray application methods, using dry filters as control for particulate emissions, and exhausting to stack 1.
 - (2) Resin application facilities used to apply resin/marble mixture to molds, identified as G2, installed in 2003, using hand application methods, using dry filters as control for particulate emissions, and exhausting to stack 1.
- (b) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour, consisting of three (3) 0.1 MMBtu per hour space heaters.
- (c) Activities performed with hand-held equipment, including cutting, drilling, surface grinding, sanding, buffing and polishing, using no emission controls.

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, 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.

2. Pursuant to 326 IAC 6-3-2(f), particulate emissions from the reinforced plastics composites fabricating manufacturing processes shall be controlled by a dry particulate filter. 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 exemption is the first air approval issued to this source.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify 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 Stephen Treimel, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7902 to speak directly to Mr. Stephen Treimel. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Nysa James, Section Chief
Permits Branch
Office of Air Quality

ERG/ST

cc: File – Clark County
Clark County Health Department
Air Compliance – Ray Schick
Permit Tracking
Compliance Data Section
Program Planning and Policy – Scott Delaney

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

Technical Support Document (TSD) for an Exemption

Source Background and Description

Source Name:	BSWB, Inc
Source Location:	860 Penn Street, Sellersburg, Indiana 47172
County:	Clark
SIC Code:	3089
Operation Permit No.:	019-21101-00118
Permit Reviewer:	ERG/ST

The Office of Air Quality (OAQ) has reviewed an application from BSWB, Inc. relating to the operation of a cultured marble countertop manufacturing operation constructed in 2003.

Unpermitted Emission Units and Pollution Control Equipment

The source consists of the following unpermitted emission units:

- (a) A cultured marble countertop manufacturing operation, with a maximum capacity of 6.25 square feet of countertops per hour, consisting of:
 - (1) Gel coat application facilities used to apply gel coat to molds, identified as G1, installed in 2003, using hydraulic atomization spray application methods, using dry filters as control for particulate emissions, and exhausting to stack 1.
 - (2) Resin application facilities used to apply resin/marble mixture to molds, identified as G2, installed in 2003, using hand application methods, using dry filters as control for particulate emissions, and exhausting to stack 1.
- (b) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour, consisting of three (3) 0.1 MMBtu per hour space heaters.
- (c) Activities performed with hand-held equipment, including cutting, drilling, surface grinding, sanding, buffing and polishing, using no emission controls.

Note: The countertop manufacturing process consists of cleaning and preparing the molds, spraying gelcoat on the molds, mixing and applying a resin/marble aggregate mixture to the molds by hand, allowing sufficient time for the catalyzed resin to set, removing countertops from the molds, and then cutting, drilling, grinding and finishing the countertops.

Existing Approvals

This is the first operating approval to be issued to this source.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the 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.

A complete application for the purposes of this review was received on April 8, 2005.

Emission Calculations

See Appendix A of this document for detailed emission calculations (pages 1 and 2).

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	2.6
PM10	2.6
SO ₂	0
VOC	6.2
CO	0.1
NO _x	0.1

HAPs	Potential to Emit (tons/year)
Styrene	5.75
MEK	0.16
Total	5.91

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM, PM10, SO₂, VOC, CO and NO_x 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. An exemption will be issued.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3. An exemption will be issued.
- (c) Fugitive Emissions
 Since this type of operation is not 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 and Emission Offset applicability.

County Attainment Status

The source is located in Clark County.

Pollutant	Status
PM10	Attainment
PM 2.5	Nonattainment
SO ₂	Attainment
NO ₂	Attainment
1-hour Ozone	Maintenance Attainment
8-hour Ozone	Basic Nonattainment
CO	Attainment
Lead	Attainment

- (a) Clark County has been classified as nonattainment for PM2.5 in 70 FR 943 dated January 5, 2005. Until U.S. EPA adopts specific New Source Review rules for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions pursuant to the non-attainment New Source Review requirements. See the State Rule Applicability for the source section.
- (b) 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 the ozone standards. Clark County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Emission Offset (326 IAC 2-3). See the State Rule Applicability for the source section.
- (c) Clark 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. See the State Rule Applicability for the source section.

Source Status

New 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	0.54
PM10	0.54
SO ₂	0
VOC	6.2
CO	0.1
NO _x	0.1
Single HAP	5.75
Combination HAPs	5.91

This new source is not a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater, no nonattainment pollutant is emitted at a rate of 100 tons per year or greater, and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2 and 2-3, the PSD and Emission Offset requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This 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 the first air approval 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 exemption for this source.

- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Parts 61, 63) included in this exemption for this source. This source is a minor source of HAP.

State Rule Applicability – Entire Source

326 IAC 2-6 (Emission Reporting)

This source is located in Clark County and is not required to operate under the Part 70 permit program. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)

This source is located in Silver Creek Township in Clark County. 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 – Individual Facilities

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

The source was constructed after July 27, 1997. The operation of the gel coat and resin application facilities will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 6-1 (County Specific Particulate Matter Limitation: Clark County)

The source is located in Clark County. However, the potential to emit of particulate matter is less than 100 tons per year and the actual emissions of particulate matter are less than ten (10) tons per year. Therefore, the requirements of 326 IAC 6-1 do not apply.

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

The source has potential emissions greater than 0.551 pounds per hour. Particulate from the reinforced plastics composites fabricating manufacturing processes shall be controlled by a dry particulate filter, 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.

326 IAC 8-1-6 (Volatile Organic Compounds: New Facilities)

Although constructed after January 1, 1980, the potential to emit of volatile organic compounds for the entire source is less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 do not apply.

326 IAC 8-2 (Surface Coating Emission Limitations)

The facilities at this source do not apply surface coatings. Therefore, the requirements of 326 IAC 8-2 do not apply.

326 IAC 8-7 (Specific VOC Reduction Requirements: Clark County)

This source is located in Clark County, does not have the potential to emit greater than 100 tons of VOC per year and does not apply surface coatings. Therefore, the requirements of 326 IAC 8-7 do not apply.

326 IAC 20-25 (Reinforced Plastics Composites Fabricating Emission Units)

This source does not have the potential to emit ten (10) tons per year of a single hazardous air pollutant or twenty-five (25) tons per year of a combination of hazardous air pollutants. Therefore, the requirements of 326 IAC 20-25 do not apply.

Conclusion

The operation of this cultured marble countertop manufacturing operation shall be subject to the conditions of the attached Exemption No.: 019-21101-00118.

Appendix A: Emissions Calculations

HAP and VOC Emissions from Gel Coat and Resin Casting Operations

Company Name: BSWB, Inc.
 Address: 860 Penn Street, Sellersburg, Indiana 47172
 Exemption: 019-21101-00118
 Reviewer: ERG/ST
 Date: June 15, 2005

Material	Maximum Annual Usage ^a (tons/year)	VOC (weight %)	HAP (weight %)	VOC Emission Factor (lbs/ton material)	HAP Emission Factor (lbs/ton material)	PTE of Styrene (tons/year)	PTE of Methyl Ethyl Ketone (tons/year)	PTE of VOC (tons/year)	PTE of PM/PM10 Before Control (tons/year)	PTE of PM/PM10 After Control (tons/year)
Production Resin	253	33.0%	33.0%	19.8	19.8	2.50	0.00	2.50	0.00	0.00
Resin Catalyst	1.04	90.0%	29.0%	288	92.8	0.00	0.05	0.15		
Gelcoat	17.8	41.0%	41.0%	365	365	3.25	0.00	3.25	2.63	0.53
Gelcoat Catalyst	0.36	95.0%	41.0%	1425	615	0.00	0.11	0.25		
Totals						5.75	0.16	6.16	2.63	0.53

^a Based on maximum production capacity of 6.25 square feet of countertops per hour and 8760 possible hours of operation per year.

Assume all HAPs are equal to VOCs.

Emission factors (in lbs/ton) for styrene and MEK for resin casting are from the "Technical Discussion of the Unified Emission Factors for Open Molding of Composites" (April, 1999) Styrene emissions are a maximum of 3% of styrene content for casting operations.

Emission factors (in lbs/ton) for styrene and MEK for gelcoat application are from the CFA Unified Emission Factors (July 23, 2001)

Gelcoat is applied with a hydraulic atomized gun with a transfer efficiency of 75%. Resin is mixed with marble aggregate and applied by hand with 100% transfer efficiency. Dry filters control particulate emissions with 80% efficiency.

Methodology:

Maximum Annual Usage (tons/year) = Annual Usage (lbs/year) x 8760 (hours/year) / 2080 (actual work hours/year) x 1 ton/2000 lbs

VOC/HAP Emission Factor (lbs/ton material) = Weight % VOC x % VOC emitted x 2000 lbs/ton

PTE of VOC and HAPs (tons/year) = Max. Annual Usage (tons/year) x Emission Factor (lbs/ton material) x 1 ton/2000 lbs

PTE of PM/PM10 Before Control (tons/year) = Max. Annual Usage (tons/year) x (1 - VOC weight %) x (1 - Transfer Efficiency (%))

PTE of PM/PM10 After Control (tons/year) = Max. Annual Usage (tons/year) x (1 - VOC weight %) x (1 - Transfer Efficiency (%)) x (1 - Control Efficiency (%))

Appendix A: Emission Calculations

Emissions from the Natural Gas-fired Combustion: Space Heaters

Company Name: BSWB, Inc.

Address: 860 Penn Street, Sellersburg, Indiana 47172

Exemption: 019-21101-00118

Reviewer: ERG/ST

Date: June 15, 2005

Total Heat Input Capacity (MMBtu/hour)
0.3

Total Max. Potential Throughput (MMCF/year)
3

Pollutant Emission Factors (lbs/MMCF)						
PM*	PM10*	SO ₂	NO _x **	CO	VOC	HAPs
7.6	7.6	0.6	100	84.0	5.5	1.89

Potential To Emit (tons/year)						
PM	PM10	SO ₂	NO _x	CO	VOC	HAPs
0.01	0.01	0.00	0.13	0.11	0.01	0.002

*PM and PM10 emission factor are for condensable and filterable PM and PM10 combined.

**Emission factor for NO_x (Uncontrolled) = 100 lbs/MMCF

Emission factors are from AP 42, Chapter 1.4 - Natural Gas Combustion, Tables 1.4-1, 1.4-2, 1.4-3 and 1.4-4. SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03. (AP 42 Supplement D 7/98)

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF - 1,000,000 Cubic Feet of Gas

1000 Btu per cubic foot of natural gas

Methodology

Max. Potential Throughput (MMCF/year) = Heat Input Capacity (MMBtu/hour) x 8,760 (hours/year) x 1 MMCF/1,000 MMBtu

PTE (tons/year) = Max. Potential Throughput (MMCF/year) x Emission Factor (lbs/MMCF) x 1 ton/2000 lbs