



Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
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Indianapolis, Indiana 46206-6015
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June 22, 2004

Ms. Gayle Pahmeir
flexcel - Salem
1600 Royal Street
Jasper, Indiana 47549

Re: 175-19188-00007
Minor Source Modification to:
Part 70 permit No.:T175-6062-00007

Dear Ms. Pahmeir:

flexcel - Salem was issued a Part 70 operating permit T175-6062-00007 on June 18, 2002 for a wood furniture manufacturing plant. An application to modify the source was received on May 17, 2004. Pursuant to 326 IAC 2-7-10.5, the following emission units are approved for construction at the source:

- (a) One (1) down draft spray booth with a flash tunnel, identified as SB27, constructed in 2004, using dry filters for overspray control, and exhausting to stack SB27.
- (b)* One (1) natural gas fired air make-up unit, constructed in 2004, with a maximum heat input capacity of 8.75 MMBtu/hr.
- (c)* Two (2) natural gas fired air make-up units, constructed in 2004, each with a maximum heat input capacity of 1.13 MMBtu/hr.

*Note: These units are considered insignificant activities, pursuant to 326 IAC 2-7-1(21)(G)(i).

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

The source may begin construction when the minor source modification has been issued. Operating conditions shall be incorporated into the Part 70 Operating Permit as a Significant Permit Modification in accordance with 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12. Operation is not approved until the Significant Permit Modification has been issued.

Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Yu-Lien Chu, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7871 to speak directly to Ms. Chu. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, press 0 and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,
Original signed by

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

- Technical Support Document, Permit

ERG/YC

cc: File - Washington County
Washington County Health Department
Air Compliance Section Inspector - Ray Schick
Compliance Data Section
Administrative and Development - Sara Cloe
Technical Support and Modeling - Michele Boner



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PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**flexcel - Salem
Hwy. 56 East
Salem, Indiana 47617**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T175-6062-00007	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: June 18, 2002 Expiration Date: June 18, 2007

First Minor Permit Modification: 175-16767-00007, issued February 24, 2003

Second Minor Source Modification No.: 175-19188-00007	
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: June 22, 2004

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) . The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary wood office manufacturing plant.

Responsible Official: General Manager
Source Address: Highway 56 East, Salem, Indiana 47167
Mailing Address: 200 Kimball Boulevard, Salem, Indiana 47167
Phone Number: (812) 634-3702
SIC Code: 2521
County Location: Washington
County Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
Minor Source, under PSD;
Major Source, Section 112 of the Clean Air Act
Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) Twenty-seven (27) surface coating operations consisting of the following:
 - (1) Eighteen (18) spray booths, constructed in 1986, with water pans and dry filters for particulate control, identified as:
 - (A) #1 through #6 and #8 through #14, exhausting to stack vents 1A-D, 2A&B, 3A&B, 4A&B, 5A-C, 6A-C, 8A-C, 9A&B, 10A-C, 11A&B, 12A&B, 13A&B, and 14A&B;
 - (B) #15, exhausting to stack vents 15A-D;
 - (C) #16 through #18, exhausting to stack vents 16A&B through 18A&B; and
 - (D) #7, a down draft booth, equipped with dry filters and exhausting to stack 7A and 7B.
 - (2) One (1) down draft filter spray booth, identified as SB19, constructed in 1997, using HVLP spray guns and a down draft flash tunnel, equipped with dry filters and exhausting to stack SB19A.
 - (3) One (1) down draft booth, identified as SB20, constructed in 1998, using HVLP spray guns, emissions controlled by a water pan, exhausting to stack vents 20A&B.
 - (4) One (1) touch up/repair/special project spray booth, identified as SB21, constructed in 1999, using HVLP spray guns, equipped with dry filters and exhausting to two stacks, SB21A and SB21B.

- (5) One (1) Flat Line Finishing Process, constructed in 2003, having a maximum throughput capacity of 2.2 bookcases per hour, and consisting of the following surface coating booths:
 - (A) One (1) enclosed flat line automatic surface coating unit (identified as SB22) with emissions of particulate matter are controlled using dry filters, which exhaust to stack 22.
 - (B) Two (2) spray booths (identified as SB23 and SB24) with emissions of particulate matter controlled using dry filters. Spray booth SB23 exhausts at stacks 23A and 23B, while spray booth SB24 exhausts at stacks 24A and 24B.
 - (C) Two (2) down draft spray booths (identified as SB25 and SB26) with emissions of particulate matter are controlled using dry filters. Spray booth SB25 and SB26 exhaust at stacks 25 and 26, respectively.
- (6) One (1) down draft spray booth with a flash tunnel, identified as SB27, constructed in 2004, using dry filters for overspray control, and exhausting to stack SB27.
- (b) Two (2) thirty-nine and one half (39.5) MMBtu CNB tri-fuel boilers, identified as Boiler 1 and 2, constructed in 1986, fired by coal and wood, with natural gas as backup fuel, using Breslove Regenerative Fly Ash Cyclonic Collectors for particulate control, identified as BRC1 and BRC2, each boiler exhausting to its own stack/vent.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Woodworking facilities equipped with a baghouse with an air flow rate no greater than 125,000 cubic feet of air per minute and a grain loading no greater than 0.003 grains per dry standard cubic feet of outlet air: Woodworking facilities with a Moldow MX baghouse system with four air exchange ports, a maximum capacity of 3.09 tons wood per hour, an aggregate air flow rate of 105,000 cfm and grain loading less than 0.0001 gr/dscf, exhausting through a closed loop system conveyed to a storage bin. [326 IAC 2-7-1(21)(G)(xxix)]
- (b) Woodworking facilities equipped with a baghouse with an air flow rate no greater than 125,000 cubic feet of air per minute and a grain loading no greater than 0.003 grains per dry standard cubic feet of outlet air: Woodworking facilities with two (2) Torrit/Day baghouses, each with: a maximum capacity of 3.09 tons wood per hour, an air flow rate of 45,000 cfm, and grain loading less than 0.0001 gr/dscf, exhausting through a closed loop system conveyed to a storage bin. [326 IAC 2-7-1(21)(G)(xxix)]
- (c) Covered conveyors for coal or coke conveying of less than or equal to 360 tons per day. [326 IAC 6-3-2]
- (d) Coal bunker and coal scale exhausts and associated dust collector vents. [326 IAC 6-3-2]
- (e) Activities with emissions equal to or less than 5 tons per year PM or PM10: one (1) chip bin and one (1) coal bin. [326 IAC 6-3-2]
- (f) Vents from ash transport systems not operated at positive pressure. [326 IAC 6-3-2]

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (a) Twenty-seven (27) surface coating operations consisting of the following:
- (1) Eighteen (18) spray booths, constructed in 1986, with water pans and dry filters for particulate control, identified as:
 - (A) #1 through #6 and #8 through #14, exhausting to stack vents 1A-D, 2A&B, 3A&B, 4A&B, 5A-C, 6A-C, 8A-C, 9A&B, 10A-C, 11A&B, 12A&B, 13A&B, and 14A&B;
 - (B) #15, exhausting to stack vents 15A-D;
 - (C) #16 through #18, exhausting to stack vents 16A&B through 18A&B; and
 - (D) #7, a down draft booth, equipped with dry filters and exhausting to stack 7A and 7B.
 - (2) One (1) down draft filter spray booth, identified as SB19, constructed in 1997, using HVLP spray guns and a down draft flash tunnel, equipped with dry filters and exhausting to stack SB19A.
 - (3) One (1) down draft booth, identified as SB20, constructed in 1998, using HVLP spray guns, emissions controlled by a water pan, exhausting to stack vents 20A&B.
 - (4) One (1) touch up/repair/special project spray booth, identified as SB21, constructed in 1999, using HVLP spray guns, equipped with dry filters and exhausting to two stacks, SB21A and SB21B.
 - (5) One (1) Flat Line Finishing Process, constructed in 2003, having a maximum throughput capacity of 2.2 bookcases per hour, and consisting of the following surface coating booths:
 - (A) One (1) enclosed flat line automatic surface coating unit (identified as SB22) with emissions of particulate matter are controlled using dry filters, which exhaust to stack 22.
 - (B) Two (2) spray booths (identified as SB23 and SB24) with emissions of particulate matter controlled using dry filters. Spray booth SB23 exhausts at stacks 23A and 23B, while spray booth SB24 exhausts at stacks 24A and 24B.
 - (C) Two (2) down draft spray booths (identified as SB25 and SB26) with emissions of particulate matter are controlled using dry filters. Spray booth SB25 and SB26 exhaust at stacks 25 and 26, respectively.
 - (6) One (1) down draft spray booth with a flash tunnel, identified as SB27, constructed in 2004, using dry filters for overspray control, and exhausting to stack SB27.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 PSD Minor Limit [326 IAC 2-2]

In order to make the requirements of 326 IAC 2-2 (PSD) not applicable, the surface coating operations shall use less than 247.7 tons of VOC, including coatings, dilution solvents, and cleaning solvents, per twelve (12) consecutive month period with compliance determined at the end of each month.

Combined with the VOC emissions from the boilers and the insignificant activities, the potential to emit of VOC from the entire source is limited to less than 250 tons per twelve (12) consecutive month period. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

D.1.2 General Provisions Relating to HAPs [326 IAC 20-14][40 CFR 63, Subpart A]

The provisions of 40 CFR 63, Subpart A - General Provisions, which are incorporated as 326 IAC 20-14, apply to the facility described in this section except when otherwise specified in 40 CFR 63, Subpart JJ.

D.1.3 Wood Furniture Manufacturing Operations NESHAP [40 CFR 63, Subpart JJ] [326 IAC 20-14-1]

- (a) The wood furniture manufacturing operations are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 63, Subpart JJ, incorporated by reference as 326 IAC 20-14-1, with a compliance date of November 21, 1997.
- (b) Pursuant to 40 CFR 63, Subpart JJ, the wood furniture coating operations shall comply with the following conditions:
 - (1) Limit the Volatile Hazardous Air Pollutants (VHAP) emissions from finishing operations as follows:
 - (A) Achieve a weighted average volatile hazardous air pollutant (VHAP) content across all coatings of one (1.0) pound VHAP per pound solids, as applied; or
 - (B) Use compliant finishing materials in which all stains, washcoats, sealers, topcoats, basecoats and enamels have a maximum VHAP content of one (1.0) pound VHAP per pound solid, as applied. Thinners used for on-site formulation of washcoats, basecoats, and enamels have a three percent (3.0%) maximum VHAP content by weight. All other thinners have a ten percent (10.0%) maximum VHAP content by weight; or
 - (C) Use a control device to limit emissions to one (1.0) pound VHAP per pound solids; or
 - (D) Use any combination of (A), (B), and (C).
 - (2) Limit VHAP emissions from contact adhesives as follows:
 - (A) For foam adhesives used in products that meet the upholstered seating flammability requirements, the VHAP content shall not exceed 1.8 pound VHAP per pound solids;
 - (B) For all other contact adhesives (except aerosols and contact adhesives applied to nonporous substrates) the VHAP content shall not exceed one (1.0) pound VHAP per pound solids;
 - (C) Use a control device to limit emissions to one (1.0) pound VHAP per pound solids.

- (3) The strippable spray booth material shall have a maximum VOC content of eight-tenths (0.8) pounds VOC per pound solids, as applied.

D.1.4 Work Practice Standards for Wood Furniture Manufacturing Operations [40 CFR 63, Subpart JJ]

The owner or operator of an affected source subject to this subpart shall maintain a written work practice implementation plan, as required by 40 CFR 63.803(a). The work practice implementation plan must define environmentally desirable work practices for each wood furniture manufacturing operation and at a minimum address each of the following work practice standards as defined under 40 CFR 63.803:

- (a) Operator training course.
- (b) Leak inspection and maintenance plan.
- (c) Cleaning and washoff solvent accounting system.
- (d) Chemical composition of cleaning and washoff solvents.
- (e) Spray booth cleaning.
- (f) Storage requirements.
- (g) Conventional air spray guns shall only be used under the circumstances defined under 40 CFR 63.803(h).
- (h) Line cleaning.
- (i) Gun cleaning.
- (j) Washoff operations.
- (k) Formulation assessment plan for finishing operations.

D.1.5 Volatile Organic Compounds (VOC): Best Available Control Technology (BACT) [326 IAC 8-1-6]

IDEM has determined that compliance with 326 IAC 8-2-12 will serve as BACT for the spray booths (booths #1 through #18) at this source. Therefore, booths #1 through #18 will utilize 326 IAC 8-2-12 compliant methods of application. Compliance with 326 IAC 8-2-12 will satisfy the requirements of 326 IAC 8-1-6.

D.1.6 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture, cabinets, and bookcases from each spray booth shall utilize one of the following application methods:

- Airless Spray Application
- Air Assisted Airless Spray Application
- Electrostatic Spray Application
- Electrostatic Bell or Disc Application
- Heated Airless Spray Application
- Roller Coating
- Brush or Wipe Application
- Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between

one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

D.1.7 Particulate [40 CFR 52, Subpart P]

Pursuant to MSM 175-11390-00007, issued November 11, 1999, and CP 175-9419-00007, issued on March 24, 1998 and 40 CFR 52, Subpart P, the particulate emissions from each of the spray booths shall be limited by the following:

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:

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

D.1.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

D.1.9 VOC Limitations [326 IAC 8-1-2] [326 IAC 8-1-4]

Compliance with the VOC limitations contained in Conditions D.1.1 and D.1.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer.

D.1.10 Particulate [326 IAC 6-3-2(d)]

Pursuant to CP 175-8773-00007, issued March 28, 1997, CP 175-9419-00007, issued on March 24, 1998, MSM 175-11390-00007, issued November 11, 1999, 326 IAC 6-3-2(d), and in order to comply with Condition D.1.7, the particulate control shall be in operation in accordance with manufacturers specifications and control emissions from the paint booths at all times the paint booths are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.11 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the spray booth stacks (SB-19A, SB21A, SB21B, 22, 23A, 23B, 24A, 24B, 25, 26, and 27) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) Daily inspections shall be performed to verify that the water level of the water pans meet the manufacturer's recommended level. To monitor the performance of the water pans, the water level of the pans shall be maintained weekly at a level where surface agitation indicates impact of the air flow. Water shall be kept free of solids and floating material that reduces the capture efficiency of the water pan. To monitor the performance of the baffles, weekly inspections of the baffle panels shall be conducted to verify placement and configuration meet recommendations of the manufacturer. In addition, weekly observations shall be made of the overspray from the surface coating booth stacks 1A-D, 2A&B, 3A&B, 4A&B, 5A-C, 6A-C, 7A&B, 8A-C, 9A&B, 10A-C, 11A&B, 12A&B, 13A&B, 14A&B, 15A-D, 16A&B, 17A&B, 18A&B, and SB20A&B, while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan -

Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

- (c) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (d) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.12 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken daily and shall be complete and sufficient to establish compliance with the VOC emission limits established in Condition D.1.1.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
 - (2) The volume weighted VOC content of the coatings used for each month;
 - (3) The total VOC usage for each month; and
 - (4) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Condition D.1.3, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be complete and sufficient to establish compliance with the VHAP usage limits established in Condition D.1.3.
 - (1) Certified Product Data Sheet for each finishing material, thinner, contact adhesive and strippable booth coating.
 - (2) The VHAP content in pounds of VHAP per pounds of solids, as applied, for all finishing materials and contact adhesives used.
 - (3) The VOC content in pounds of VOC per pounds of solids, as applied, for each strippable spray booth coating used.
 - (4) The VHAP content in weight percent of each thinner used.
 - (5) When the averaging compliance method is used, copies of the averaging calculations for each month as well as the data on the quantity of coating and thinners used to calculate the average.
- (c) To document compliance with Condition D.1.4, the Permittee shall maintain records demonstrating actions have been taken to fulfill the Work Practice Implementation Plan.

- (d) To document compliance with Condition D.1.11, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.13 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the responsible official as defined by 326 IAC 2-7-1(34).
- (b) A semi-annual Continuous Compliance Report to document compliance with Condition D.1.3 and the Certification form, shall be submitted to the addresses listed in section C- General Reporting Requirements- of this permit, within thirty (30) days after the end of the six (6) months being reported.

The six (6) month periods shall cover the following months:

- (1) January 1 through June 30.
 - (2) July 1 through December 31.
- (c) The report required by (b) of this condition shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Data Section**

Part 70 Quarterly Report

Source Name: flexcel - Salem
Source Address: Highway 56 East, Salem, Indiana 47167
Mailing Address: 200 Kimball Boulevard, Salem, Indiana 47167
Part 70 Permit No.: 175-6062-00007
Facilities: Surface coating operations: spray booths #1 through #18, SB19 through SB27.
Parameter: VOC usage: including coatings, dilution solvents, and cleaning solvents
Limit: Less than 247.7 tons per 12 consecutive month period

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY Compliance Branch

PART 70 OPERATING PERMIT Semi-Annual Report VOC and VHAP usage - Wood Furniture NESHAP

Source Name: flexcel - Salem
 Source Address: Highway 56 East, Salem, Indiana 47167
 Mailing Address: 200 Kimball Boulevard, Salem, Indiana 47167
 Part 70 Permit No.: 175-6062-00007
 Facilities: All surface coating operations: spray booths #1 through #18, SB19 through SB27.
 Parameter: VOC and VHAPs - NESHAP
 Limit: (1) Finishing operations - 1.0 lb VHAP/lb Solids
 (2) Thinners used for on-site formulation of washcoats, basecoats and enamels - 3% VHAP content by weight
 (3) All other thinners - 10% VHAP content by weight
 (4) Foam adhesives meeting the upholstered seating flammability requirements - 1.8 lb VHAP/lb Solids
 (5) All other contact adhesives - 1.0 lb VHAP/lb Solids
 (6) Strippable spray booth material - 0.8 pounds VOC per pound solids

Month	Finishing Operations (lb VHAP/lb Solid)	Thinners (% by weight)	Thinner/Solvent mixtures (% by weight)	Foam adhesives (upholstered) (lb VHAP/lb Solid)	Contact adhesives (lb VHAP/lb Solid)	Strippable spray booth material (lb VOC/lb Solid)
1						
2						
3						
4						
5						
6						

9 No deviation occurred in this six month period.
 9 Deviation/s occurred in this six month period.
 Deviation has been reported on: _____

Submitted by: _____
 Title/Position: _____
 Signature: _____
 Date: _____
 Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Minor Source Modification and Part 70 Significant Permit Modification

Source Background and Description

Source Name:	flexcel - Salem
Source Location:	Hwy. 56 East, Salem, Indiana 47617
County:	Washington
SIC Code:	2521
Operation Permit No.:	T175-6062-00007
Operation Permit Issuance Date:	June 18, 2002
Minor Source Modification No.:	175-19188-00007
Significant Permit Modification No.:	175-19173-00007
Permit Reviewer:	ERG/YC

The Office of Air Quality (OAQ) has reviewed a modification application from flexcel - Salem relating to the construction and operation of the following emission units and pollution control devices:

- (a) One (1) down draft spray booth with a flash tunnel, identified as SB27, constructed in 2004, using dry filters for overspray control, and exhausting to stack SB27.
- (b)* One (1) natural gas fired air make-up unit, constructed in 2004, with a maximum heat input capacity of 8.75 MMBtu/hr.
- (c)* Two (2) natural gas fired air make-up units, constructed in 2004, each with a maximum heat input capacity of 1.13 MMBtu/hr.

*Note: These units are considered insignificant activities, pursuant to 326 IAC 2-7-1(21)(G)(i).

History

On May 17, 2004, flexcel - Salem submitted an application to the OAQ requesting to add a new spray booth SB27 with a flash tunnel and three natural gas fired air make-up units. flexcel - Salem is an existing wood furniture manufacturing plant and a Part 70 permit (T175-6062-00007) was issued to this source on June 18, 2002. Pursuant to T175-6062-00007, the VOC usage for all the surface coating operations at this source is limited to less than 247.7 tons/yr. Therefore, the existing source is a PSD minor source. The source proposed to maintain this VOC usage limit for all the surface coating operations after this modification.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
27	Spray Booth SB27	33	2.83	14,000	75

Recommendation

The staff recommends to the Commissioner that the Part 70 Minor Source Modification and Significant Permit Modification be approved. This recommendation is based on the following facts and conditions:

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

An application for the purposes of this review was received on May 17, 2004. Additional information was received on May 27, 2004.

Emission Calculations

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

Potential To Emit of Modification

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

This table reflects the PTE before controls and waste disposal. Control equipment and solvent recovery is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	24.3
PM-10	24.3
SO ₂	-
VOC	107
CO	-
NO _x	-

HAP's	Potential To Emit (tons/year)
TOTAL	Negligible

Justification for Modification

This modification is being performed through a Part 70 Minor Source Modification because the new spray booth is similar to the existing permitted spray booths and will comply with the same requirements, pursuant to 326 IAC 2-7-10.5(d)(9). The permit modification is being performed through a Part 70 Significant Permit Modification pursuant to 326 IAC 2-7-12(d) because this is a modification under a provision of Title I of CAA.

County Attainment Status

The source is located in Washington County.

Pollutant	Status
PM-10	Attainment
SO ₂	Attainment
NO _x	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Washington County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD) and 326 IAC 2-2.
- (b) Washington County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD) and 326 IAC 2-2.
- (c) Fugitive Emissions
 Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD applicability.

Source Status

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

Pollutant	Emissions (tons/year)
PM	100
PM-10	70.4
SO ₂	150
VOC	<250
CO	<250
NO _x	30.1

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of two hundred fifty (250) tons per year or more, and it is not in one (1) of the twenty-eight (28) listed source categories.
- (b) These emissions are based on the limited potential to emit provided in the Technical Support Document for the Title V Permit (T175-6062-00007), issued June 18, 2002.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

Process/facility	Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Paint Booth SB27	Less than 4.79	Less than 4.79	-	107	-	-	-
NG Fired Air Make-up Units (Insignificant)	0.37	0.37	0.03	0.27	4.05	4.82	Negligible
Total PTE of this Modification	Less than 5.16	Less than 5.16	0.03	107	4.05	4.82	Negligible
*Total PTE of the Existing Units	108	78.6	150	Less than 250	142	30.1	260
Total PTE of the Entire Source after this Modification	Less than 113	Less than 83.8	150	**Less than 250	146	34.9	260
PSD Significant Thresholds	250	250	250	250	250	250	NA

Note: (*) The PTE of the existing units is from the TSD for MSM #175-16272-00007, issued on December 19, 2002.

(**) The source proposed to continue to limit the VOC emissions from the entire source to less than 250 tons/yr after this modification.

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply. The source will still maintain a PSD minor source status after this modification.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
- (b) The source does not perform surface coating operations to metal furniture. Therefore, the New Source Performance Standards for Surface Coating of Metal Furniture (40 CFR Part 60.310 - 60.316, Subpart EE) are not applicable.
- (c) This existing wood furniture manufacturing plant has HAP emissions greater than 10 tons/yr for a single HAP and greater 25 tons/yr for any combination of HAPs. Therefore, this source is subject to the National Emission Standards for Wood Furniture Manufacturing Operations (326 IAC 20-14, 40 CFR 63.800 - 63.808, Subpart JJ). Since the new paint booth is used for wood furniture coating operations, it is subject to the requirements of 40 CFR 63, Subpart JJ. The requirements of this NESHAP were included in the source's Title V permit (T039-7669-00245, issued September 23, 1999).

This source is considered an existing affected source for this NESHAP. Therefore, pursuant to 43 CFR 63.802, the Permittee shall comply with the following emission limits for the new spray booth SB27:

- (1) Limit the Volatile Hazardous Air Pollutants (VHAP) emissions from the finishing operations as follows:

- (A) Achieve a weighted average volatile hazardous air pollutant (VHAP) content across all coatings of one (1.0) pound VHAP per pound solids; or
 - (B) Use compliant finishing materials in which all stains, washcoats, sealers, topcoats, basecoats and enamels have a maximum VHAP content of one (1.0) pound VHAP per pound solid, as applied. Thinners used for on-site formulation of washcoats, basecoats, and enamels have a three percent (3.0%) maximum VHAP content by weight. All other thinners have a ten percent (10.0%) maximum VHAP content by weight; or
 - (C) Use a control device to limit emissions to one (1.0) pound VHAP per pound solids; or
 - (D) Use a combination of (A), (B), and (C).
- (2) Limit VHAP emissions contact adhesives as follows:
- (A) For foam adhesives used in products that meet the upholstered seating flammability requirements, the VHAP content shall not exceed 1.8 pound VHAP per pound solids;
 - (B) For all other contact adhesives (except aerosols and contact adhesives applied to nonporous substrates) the VHAP content shall not exceed one (1.0) pound VHAP per pound solids;
 - (C) Use a control device to limit emissions to one (1.0) pound VHAP per pound solids.
- (3) The strippable spray booth material shall have a maximum VOC content of eight-tenths (0.8) pounds VOC per pound solids, as applied.

Pursuant to 40 CFR 63.803, the Permittee shall prepare and maintain a work practice implementation plan that defines environmentally desirable work practices for each wood furniture manufacturing operation and at a minimum address each of the following work practice standards:

- (1) Operator training course.
- (2) Leak inspection and maintenance plan.
- (3) Cleaning and washoff solvent accounting system.
- (4) Chemical composition of cleaning and washoff solvents.
- (5) Spray booth cleaning.
- (6) Storage requirements.
- (7) Conventional air spray guns shall only be used under the circumstances defined under 40 CFR 63.803(h).
- (8) Line cleaning.
- (9) Gun cleaning.
- (10) Washoff operations.

- (11) Formulation assessment plan for finishing operations.
- (d) This modification does involve a pollutant-specific emissions unit (spray booth SB27) as defined in 40 CFR 64.1:
 - (1) With the potential to emit before controls equal to or greater than the major source threshold;
 - (2) That is subject to an emission limitation or standard; and
 - (3) Uses a control device as defined in 40 CFR 64.1 to comply with that emission limitation or standard.

However, the proposed spray booth (SB27) is subject to the NESHAP for Wood Furniture Manufacturing Operations (40 CFR 63, Subpart JJ) and this NESHAP was promulgated after November 15, 1990. Pursuant to 40 CFR 64.2(b)(i), therefore, this unit is exempt from the requirements of 40 CFR 64 (Compliance Assurance Monitoring).

State Rule Applicability - Spray Booth SB27

326 IAC 2-2 (PSD)

This source was an existing PSD minor source and is not in 1 of 28 source categories. The potential to emit all criteria pollutants from the new spray booth SB27 is less than the PSD significant thresholds of 250 tons/yr. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable to this modification.

In addition, the source proposed to maintain the VOC usage limit of 247.7 tons/yr in T175-6062-00007, issued on June 18, 2002, for all the surface coating operations, including the new proposed spray booth SB27. Combined with the VOC emissions from the existing boilers and insignificant activities, the VOC emissions from the entire source are limited to less than 250 tons/yr. Therefore, this source is still a PSD minor source after this modification.

326 IAC 2-4.1 (New Source Toxic Control)

The potential to emit HAP from the proposed paint booth SB27 is less than 10 tons per year for a single HAP and less than 25 tons per year for any combination of HAPs. Therefore, the requirements of 326 IAC 2-4.1 (MACT) are not applicable to this modification.

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:

- (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.

326 IAC 8-2-12 (Wood Furniture and Cabinet Coating)

The potential to emit VOC from the proposed spray booth SB27 is greater than 15 pounds per day. Pursuant to 326 IAC 8-2-12, the surface coating applied to wood furniture and cabinets shall utilize one of the following application methods,

- Airless Spray Application
- Air Assisted Airless Spray Application

Electrostatic Spray Application
Electrostatic Bell or Disc Application
Heated Airless Spray Application
Roller Coating
Brush or Wipe Application
Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

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

The potential VOC emissions from the proposed spray booth SB27 are greater than 25 tons per year. Since the requirements of 326 IAC 8-2-12 apply to this coating operation, the requirements of 326 IAC 8-1-6 are not applicable.

326 IAC 6-3-2 (Process Operations)

On June 12, 2002, revisions to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) became effective; this rule was previously referred to as 326 IAC 6-3 (Process Operations). As of the date this permit is being issued, these revisions have not been approved by EPA into the Indiana State Implementation Plan (SIP); therefore, the following requirement from the previous version of 326 IAC 6-3 (Process Operations), which has been approved into the SIP, remains an applicable requirement until the revisions to 326 IAC 6-3 are approved into the SIP and the condition is modified in a subsequent permit action.

Pursuant to 40 CFR 52, Subpart P, the particulate matter (PM) from spray booth SB27 shall be limited by the following:

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:

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

Under the rule revision, particulate from this paint booth shall be controlled by dry filters, or equivalent control devices, and the Permittee shall operate the control device in accordance with manufacturer's specifications. This source will use dry filters to control overspray from this booth. Therefore, spray booth SB27 is in compliance with 326 IAC 6-3-2(d).

State Rule Applicability - Natural Gas Fired Air Make-up Units (Insignificant)

There are no specifically applicable requirements for these units. Therefore, these units are only documented in this TSD and will not be listed in the source's Part 70 permit.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The Compliance monitoring requirements applicable to this modification are as follows:

1. The spray booth SB27 has applicable compliance monitoring conditions as specified below:
 - (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stack (stack SB27) while the booth is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
 - (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission occurs or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
 - (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

These monitoring conditions are necessary because the dry filters for this booth must operate properly to ensure compliance with 40 CFR 52, Subpart P.

Proposed Changes

The source's name has been corrected to "flexcel - Salem" through the whole permit. Language with a line through it has been deleted. Added text has been bolded.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary wood office manufacturing plant.

Responsible Official: ~~Mr. Keith Zenow~~**General Manager**
Source Address: Highway 56 East, Salem, Indiana 47167
Mailing Address: 200 Kimball Boulevard, Salem, Indiana 47167
Phone Number: (812) 634-3702
SIC Code: 2521
County Location: Washington
County Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
Minor Source, under PSD;

Major Source, Section 112 of the Clean Air Act
Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) Twenty-~~sevensix~~ (2627) surface coating operations consisting of the following:
.....
- (6) **One (1) down draft spray booth with a flash tunnel, identified as SB27, constructed in 2004, using dry filters for overspray control, and exhausting to stack SB27.**

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (a) Twenty-~~sevensix~~ (2627) surface coating operations consisting of the following:
 - (1) Eighteen (18) spray booths, constructed in 1986, with water pans and dry filters for particulate control, identified as:
 - (A) #1 through #6 and #8 through #14, exhausting to stack vents 1A-D, 2A&B, 3A&B, 4A&B, 5A-C, 6A-C, 8A-C, 9A&B, 10A-C, 11A&B, 12A&B, 13A&B, and 14A&B;
 - (B) #15, exhausting to stack vents 15A-D;
 - (C) #16 through #18, exhausting to stack vents 16A&B through 18A&B; and
 - (D) #7, a down draft booth, equipped with dry filters and exhausting to stack 7A and 7B.
 - (2) One (1) down draft filter spray booth, identified as SB19, constructed in 1997, using HVLP spray guns and a down draft flash tunnel, equipped with dry filters and exhausting to stack SB19A.
 - (3) One (1) down draft booth, identified as SB20, constructed in 1998, using HVLP spray guns, emissions controlled by a water pan, exhausting to stack vents 20A&B.
 - (4) One (1) touch up/repair/special project spray booth, identified as SB21, constructed in 1999, using HVLP spray guns, equipped with dry filters and exhausting to two stacks, SB21A and SB21B.
 - (5) One (1) Flat Line Finishing Process, constructed in 2003, having a maximum throughput capacity of 2.2 bookcases per hour, and consisting of the following surface coating booths:

Facility Description [326 IAC 2-7-5(15)]:

- (A) One (1) enclosed flat line automatic surface coating unit (identified as SB22) with emissions of particulate matter are controlled using dry filters, which exhaust to stack 22.
 - (B) Two (2) spray booths (identified as SB23 and SB24) with emissions of particulate matter controlled using dry filters. Spray booth SB23 exhausts at stacks 23A and 23B, while spray booth SB24 exhausts at stacks 24A and 24B.
 - (C) Two (2) down draft spray booths (identified as SB25 and SB26) with emissions of particulate matter are controlled using dry filters. Spray booth SB25 and SB26 exhaust at stacks 25 and 26, respectively.
- (6) One (1) down draft spray booth with a flash tunnel, identified as SB27, constructed in 2004, using dry filters for overspray control, and exhausting to stack SB27.**

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 PSD Minor Limit [326 IAC 2-2] [~~40 CFR 52.21~~]

~~Pursuant to MSM 175-11617-00007, issued on February 14, 2000~~ **In order to make the requirements of 326 IAC 2-2 (PSD) not applicable**, the surface coating operations shall use less than 247.7 tons of VOC (~~250 tpy less the maximum VOC emissions from the boilers~~), including coatings, dilution solvents, and cleaning solvents, per twelve (12) consecutive month period **with compliance determined at the end of each month.**

Combined with the VOC emissions from the boilers and the insignificant activities, This usage limit is required to limit the total source potential to emit of VOC **from the entire source is limited** to less than 250 tons per twelve (12) consecutive month period. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and ~~40 CFR 52.21~~ not applicable.

D.1.6 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture, cabinets, and bookcases from **each** spray booths #1 through #18, ~~SB19, SB20, SB21, SB22, SB23, SB24, SB25, and SB26~~ shall utilize one of the following application methods:

....

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.11 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the spray booth stacks (SB-19A, SB21A, SB21B, 22, 23A, 23B, 24A, 24B, 25 and 26, **and 27**) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in

accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

....

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY Compliance Data Section

Part 70 Quarterly Report

Source Name: fFlexcel - Salem
Source Address: Highway 56 East, Salem, Indiana 47167
Mailing Address: 200 Kimball Boulevard, Salem, Indiana 47167
Part 70 Permit No.: 175-6062-00007
Facilities: Surface coating operations: spray booths #1 through #18, SB19 **through SB27;**
~~SB20, SB21, SB22, SB23, SB24, SB25, and SB26.~~
Parameter: VOC usage: including coatings, dilution solvents, and cleaning solvents
Limit: Less than 247.7 tons per 12 consecutive month period

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY Compliance Branch

PART 70 OPERATING PERMIT Semi-Annual Report VOC and VHAP usage - Wood Furniture NESHAP

Source Name: fFlexcel - Salem
 Source Address: Highway 56 East, Salem, Indiana 47167
 Mailing Address: 200 Kimball Boulevard, Salem, Indiana 47167
 Part 70 Permit No.: 175-6062-00007
 Facilities: All surface coating operations: spray booths #1 through #18, SB 19 through **SB27**, ~~SB20, SB21, SB22, SB23, SB24, SB25, and SB26.~~
 Parameter: VOC and VHAPs - NESHAP
 Limit: (1) Finishing operations -1.0 lb VHAP/lb Solids
 (2) Thinners used for on-site formulation of washcoats, basecoats and enamels - 3% VHAP content by weight
 (3) All other thinners - 10% VHAP content by weight
 (4) Foam adhesives meeting the upholstered seating flammability requirements - 1.8 lb VHAP/lb Solids
 (5) All other contact adhesives - 1.0 lb VHAP/lb Solids
 (6) Strippable spray booth material - 0.8 pounds VOC per pound solids

Month	Finishing Operations (lb VHAP/lb Solid)	Thinners (% by weight)	Thinner/Solvent mixtures (% by weight)	Foam adhesives (upholstered) (lb VHAP/lb Solid)	Contact adhesives (lb VHAP/lb Solid)	Strippable spray booth material (lb VOC/lb Solid)
1						
2						
3						
4						
5						
6						

9 No deviation occurred in this six month period.
 9 Deviation/s occurred in this six month period.
 Deviation has been reported on: _____

Submitted by: _____
 Title/Position: _____
 Signature: _____
 Date: _____
 Phone: _____

Attach a signed certification to complete this report.

Conclusion

The construction and operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification No. 175-19188-00007 and Significant Permit Modification No. 175-19173-00007.

**Appendix A: Emission Calculations
VOC and PM/PM10 Emissions
From Spray Booth SB27**

**Company Name: flexcel - Salem
Address: Highway 56 East, Salem, IN 47167
MSM: 175-19188-00007
Reviewer: ERG/YC
Date: May 27, 2004**

*Material	Density (lbs/gal)	Weight % Volatile (H ₂ O & Organics)	Weight % Water	Weight % Organics	Maximum Throughput (unit/hr)	Maximum Usage (gal/unit)	Pounds VOC per gallon of coating	PTE of VOC (lbs/hr)	PTE of VOC (lbs/day)	PTE of VOC (tons/yr)	**PTE of PM/PM10 before Control (lbs/hr)	**PTE of PM/PM10 before Control (ton/yr)	***Transfer Efficiency	PM/PM10 Control Efficiency	PTE of PM/PM10 after Control (lbs/hr)	PTE of PM/PM10 after Control (tons/yr)
T77FH108	7.79	61.1%	0.0%	61.1%	5.6	0.92	4.76	24.5	589	107	5.46	23.9	65%	80%	1.09	4.79
Total								24.5		107	5.46	23.9			1.09	4.79

* This is the worst case coating. All the coating used at this booth do not contain regulated HAPs.

**Assume all the PM emissions are PM10 emissions.

*** HVLP application method is used in this booth. The transfer efficiency is from a HVLP document prepared by BINKS.

METHODOLOGY

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

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

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

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

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

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

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

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

**Appendix A: Emission Calculations
 Natural Gas Combustion
 (MMBtu/hr < 100)
 From One (1) 8.75 MMBtu and Two (2) 1.13 MMBtu/hr Air Make-up Units**

**Company Name: flexcel - Salem
 Address: Highway 56 East, Salem, IN 47167
 MSM: 175-19188-00007
 Reviewer: ERG/YC
 Date: June 9, 2004**

Heat Input Capacity
 MMBtu/hr
 11.0 (3 units total)

Potential Throughput
 MMCF/yr
 96.4

	Pollutant					
	PM*	PM10*	SO ₂	**NO _x	VOC	CO
Emission Factor in lbs/MMCF	7.6	7.6	0.6	100	5.5	84.0
Potential to Emit in tons/yr	0.37	0.37	0.03	4.82	0.27	4.05

*PM and PM10 emission factors are condensable and filterable PM10 combined.

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

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

Methodology

All emission factors are based on normal firing.
 MMBtu = 1,000,000 Btu
 MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF/yr) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
 Potential to Emit (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lbs/MMCF) x 1 ton/2000 lbs