INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

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

August 20, 2004

TO: Interested Parties / Applicant

RE: Color-Box, LLC / MSOP 177-18637-00063

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

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER.dot 9/16/03

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MINOR SOURCE OPERATING PERMIT RENEWAL
OFFICE OF AIR QUALITY

Color-Box, LLC - Richmond Division
1056 Industries Road
Richmond, Indiana 47374

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

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 177-18637-00063	
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: August 20, 2004 Expiration Date: August 20, 2009

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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 and A.2 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 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary lithographic printing source that prints shipping and display containers.

Authorized Individual:	General Manager
Source Address:	1056 Industries Road, Richmond, Indiana 47374
Mailing Address:	623 South G Street, Richmond, Indiana 47374
General Source Phone:	(765) 966-7588
SIC Code:	2752
County Location:	Wayne
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Minor Source, under PSD Rules; Minor Source, Section 112 of the Clean Air Act

A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

(a) Four (4) non-heatset offset lithographic printing presses, identified as Presses 1, 2, 3, and 4, each with a maximum line speed of 262.5 feet per minute and a maximum print width of 65 inches, and coating up to 6,500 paper sheets per hour, each exhausting to one (1) stack respectively identified as V1, V2, V3 and V4. Presses 1, 2 and 3 were installed in 1999, and Press 4 was installed in 2004.

(b) One (1) pneumatic starch conveyance system, installed in 2001, processing up to 3,500 pounds starch per hour, and connected to the following equipment:

(1) One (1) starch silo, identified as S-1, with a storage capacity of 65 tons of starch, using a baghouse for particulate matter control, exhausting to one (1) stack, identified as EP #1; and

(2) One (1) starch kitchen (mixer), identified as S-2, using a filter sock for particulate matter control, and exhausting to one (1) stack, identified as EP #2.

(c) One (1) pneumatic scrap paper conveyance system using one (1) air separator/air screen, identified as S-3, installed in 2001, processing up to 5,000 pounds scrap paper per hour, using a cartridge filter for particulate control, exhausting at one (1) stack identified as EP #4, and connected to the following equipment:

(1) One (1) corrugator, identified as C-1;

(2) One (1) laminator, identified as L-1;

(3) One (1) shredder, identified as SH-1; and

(4) One (1) die cutter, identified as DC-1.

(d) One (1) scrap paper baler, identified as BA-1.

(e) One (1) natural gas fired steam generator, identified as B-1, installed in 2001, with a maximum heat input capacity of 6.2 million (MM) British thermal units (Btu) per hour, and exhausting to one stack identified as EP #3.

(f) One (1) above ground storage tank with a capacity of 5,000 gallons, installed in 2001, storing laminating glue.

(g) One (1) above ground storage tank with a capacity of 6,000 gallons, installed in 2004, storing aqueous coating.

SECTION B GENERAL CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to operate 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.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Permit Term and Renewal [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions of this permit do not affect the expiration date.

The Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date. If a timely and sufficient permit application for a renewal has been made, this permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

B.5 Modification to Permit [326 IAC 2]

All requirements and conditions of this operating permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.6 Annual Notification [326 IAC 2-6.1-5(a)(5)]

(a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

(b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.

(c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

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

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

B.7 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

(b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.8 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

(a) Permit revisions are governed by the requirements of 326 IAC 2-6.1-6.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

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

Any such application shall be certified by an “authorized individual” as defined by 326 IAC 2-1.1-1.

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

(d) No permit amendment or modification is required for the addition, operation or removal of a non-road engine, as defined in 40 CFR 89.2.

B.9 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)] [IC 13-14-2-2] [IC13-17-3-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.10 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)]:

(a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.

(b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).

(c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

B.11 Annual Fee Payment [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing.

(b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds Per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to operate may be revoked for any of the following causes:

(a) Violation of any conditions of this permit.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3 Opacity [326 IAC 5-1]

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 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 non-overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee 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 (Fugitive Dust Emissions).

C.5 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an “authorized individual” as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

Testing Requirements

C.6 Performance Testing [326 IAC 3-6]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, 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

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

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14 days) prior to the actual date.

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ (and local agency) not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, (and local agency), if the Permittee 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.

Compliance Requirements [326 IAC 2-1.1-11]

C.7 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U.S. EPA.

Compliance Monitoring Requirements

C.8 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.9 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.10 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11]

(a) Whenever a condition in this permit requires the measurement of total static pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (2%) of full scale reading.

(b) Whenever a condition in this permit requires the measurement of a (temperature or flow rate), the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (2%) of full scale reading.

(c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

C.11 Compliance Response Plan - Preparation and Implementation

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ, upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan, the Permittee shall amend its Compliance Response Plan to include such response steps taken.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or

(2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be ten (10) days or more until the unit or device will be shut down, then the Permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down. The notification shall also include the status of the applicable compliance monitoring parameter with respect to normal, and the results of the response actions taken up to the time of notification.

(4) Failure to take reasonable response steps shall be considered a deviation from the permit.

(c) The Permittee is not required to take any further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within “normal” parameters and no response steps are required.

(d) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

Record Keeping and Reporting Requirements

C.12 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.

(b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

(c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.13 General Record Keeping Requirements [326 IAC 2-6.1-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented when operation begins.

C.14 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) Reports required by conditions in Section D of this permit 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

(b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) Unless otherwise specified in this permit, any quarterly or semi-annual reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) Four (4) non-heatset offset lithographic printing presses, identified as Presses 1, 2, 3, and 4, each with a maximum line speed of 262.5 feet per minute and a maximum print width of 65 inches, and coating up to 6,500 paper sheets per hour, each exhausting to one (1) stack respectively identified as V1, V2, V3 and V4. Presses 1, 2 and 3 were installed in 1999, and Press 4 was installed in 2004.

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

Emission Limitations and Standards

D.1.1 Volatile Organic Compounds (VOCs) [326 IAC 8-1-6]

Any change or modification that would increase the potential to emit of VOC at any press to 25 tons per year or more shall require prior approval from the Office of Air Quality (OAQ), as required by 326 IAC 2-1.1, before such change can occur.

D.1.2 Hazardous Air Pollutants (HAPs) [326 IAC 2-4.1-1] [326 IAC 2-7]

Any change or modification that would increase the potential to emit of a single HAP to 10 tons per year or more, or the combination of HAPs to 25 tons per year or more, shall require prior approval from the Office of Air Quality (OAQ), as required by 326 IAC 2-1.1, before such change can occur.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.3 Record Keeping Requirements

(a) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records for each printing press in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC and HAP emission limits respectively established in Conditions D.1.1 and D.1.2. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(1) The amount and VOC and HAP content of each ink, 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. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) The total VOC and HAP usage for each month; and

(3) The weight of VOCs and HAPs emitted for each compliance period.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(b) One (1) pneumatic starch conveyance system, installed in 2001, processing up to 3,500 pounds starch per hour, and connected to the following equipment:

(1) One (1) starch silo, identified as S-1, with a storage capacity of 65 tons of starch, using a baghouse for particulate matter control, exhausting to one (1) stack, identified as EP #1; and

(2) One (1) starch kitchen (mixer), identified as S-2, using a filter sock for particulate matter control, and exhausting to one (1) stack, identified as EP #2.

(c) One (1) pneumatic scrap paper conveyance system using one (1) air separator/air screen, identified as S-3, installed in 2001, processing up to 5,000 pounds scrap paper per hour, using a cartridge filter for particulate control, exhausting at one (1) stack identified as EP #4, and connected to the following equipment:

(1) One (1) corrugator, identified as C-1;

(2) One (1) laminator, identified as L-1;

(3) One (1) shredder, identified as SH-1; and

(4) One (1) die cutter, identified as DC-1.

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

Emission Limitations and Standards

D.2.1 Particulate [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the starch silo S-1 shall not exceed 5.96 pounds per hour when operating at a process weight rate of 1.75 tons per hour.

(b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the starch kitchen S-2 shall not exceed 5.96 pounds per hour when operating at a process weight rate of 1.75 tons per hour.

(c) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from air separator/air screen S-3, connected to the corrugator (C-1), laminator (L-1), shredder (SH-1) and die cutter (DC-1), shall not exceed 7.57 pounds per hour when operating at a process weight rate of 2.5 tons per hour.

The above pounds per hour limitations were each calculated with the following equation:

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

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

D.2.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Any change or modification which would increase the potential to emit VOC from the corrugator (C-1)/laminator (L-1) to twenty-five (25) tons per year or more, shall obtain prior approval from IDEM, OAQ and shall be subject to the requirements of 326 IAC 8-1-6.

D.2.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the pneumatic starch and scrap paper conveyance systems and their control devices.

Compliance Determination Requirements

D.2.4 Particulate Control

Pursuant to Minor Permit Revision No. 177-14208, issued on May 10, 2001, and in order to comply with condition D.2.1, the Permittee shall comply as follows:

(a) The baghouse for particulate control shall be in operation and control emissions from the starch silo (S-1) at all times that the starch silo is in operation.

(b) The filter sock for particulate control shall be in operation and control emissions from the starch kitchen (S-2) at all times that the starch kitchen is in operation.

(c) The air separator/air screen with cartridge filter (S-3) for particulate control shall be in operation and control emission from the corrugator (C-1), laminator (L-1), shredder (SH-1) and the die cutter (DC-1) at all times that these facilities are in operation.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.5 Visible Emissions Notations

(a) Visible emission notations of the starch silo (S-1), starch kitchen (S-2), and corrugator (C-1), laminator (L-1), shredder (SH-1) and die cutter (DC-1) stack exhausts (i.e., stack vents EP-1, EP2 and EP4, respectively) shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation and Implementation shall be considered a deviation from this permit.

D.2.6 Parametric Monitoring

(a) The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the starch silo (S-1), at least once per shift when the starch silo (S-1) is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 0.5 and 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation and Implementation. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation and Implementation shall be considered a deviation from this permit.

(b) The Permittee shall record the total static pressure drop across the filter sock used in conjunction with the starch kitchen (S-2), at least once per shift when the starch kitchen (S-2) is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the filter sock is outside the normal range of 0.5 and 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation and Implementation. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation and Implementation shall be considered a deviation from this permit.

(c) The Permittee shall record the total static pressure drop across the air separator/air screen filter (S-3) used in conjunction with the corrugator (C-1), laminator (L-1), shredder (SH-1) and the die cutter (DC-1), at least once per shift when the corrugator (C-1), laminator (L-1), shredder (SH-1) and the die cutter (DC-1) are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the filter is outside the normal range of 0.5 and 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation and Implementation. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation and Implementation shall be considered a deviation from this permit.

The instrument used for determining the pressure in paragraphs (a), (b) and (c) shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.2.7 Baghouse and Filter Inspections

An inspection shall be performed each calendar quarter of all bags controlling the starch silo (S-1), and the filters controlling the starch kitchen (S-2) and the corrugator (C-1), laminator (L-1), shredder (SH-1) and die cutter (DC-1) connected to the air separator/air screen (S-3), when venting to the atmosphere. A baghouse and filter inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags and filters shall be replaced.

D.2.8 Broken or Failed Bag and Filter Detection

In the event that bag or filter failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation and Implementation shall be considered a deviation from this permit. If operations continue after bag or filter failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

(b) For single compartment baghouses and filters, if failure is indicated by a significant drop in the baghouse's or filter's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag or filter failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.

Record Keeping and Reporting Requirement [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.9 Record Keeping Requirements

(a) To document compliance with Condition D.2.5, the Permittee shall maintain records of visible emission notations of the starch silo (S-1), starch kitchen (S-2), and corrugator (C-1), laminator (L-1), shredder (SH-1) and die cutter (DC-1) stack exhausts (i.e., stack vents EP-1, EP2 and EP4, respectively) once per shift when venting to the atmosphere.

(b) To document compliance with Condition D.2.6, the Permittee shall maintain records once per shift of the total static pressure drop during normal operation when venting to the atmosphere.

(c) To document compliance with Condition D.2.7, the Permittee shall maintain records of the results of the inspections required under Condition D.2.7.

(d) To document compliance with Condition D.2.3, the Permittee shall maintain records of any 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.

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(e) One (1) natural gas fired steam generator, identified as B-1, installed in 2001, with a maximum heat input capacity of 6.2 million (MM) British thermal units (Btu) per hour, and exhausting to one stack identified as EP #3.

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

Emission Limitations and Standards

D.3.1 Particulate [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating), PM emissions from the natural gas fired steam generator, as an indirect heating facility installed after September 21, 1983, shall be limited to 0.6 pounds per MMBtu heat input.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH

MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	**Color-Box, LLC - Richmond Division**
Address:	**1056 Industries Road**
City:	**Richmond**
Phone #:	**(765) 966-7588**
MSOP #:	**177-18637-00063**

I hereby certify that **[source]** is ☐ still in operation.
☐ no longer in operation.

I hereby certify that **[source]** is ☐ in compliance with the requirements of MSOP 177-18637-00063.
☐ not in compliance with the requirements of MSOP 177-18637-00063.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-5967

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMI LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY:_____PHONE NO. ( )_____
LOCATION: (CITY AND COUNTY)_____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP:_____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON:_____
_____

DATE/TIME MALFUNCTION STARTED: _____/_____/ 19____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:
_____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE_____/_____/ 19____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER:_____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____
_____

MEASURES TAKEN TO MINIMIZE EMISSIONS:_____
_____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES:_____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS:_____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT:_____
INTERIM CONTROL MEASURES: (IF APPLICABLE)_____
_____
_____

MALFUNCTION REPORTED BY:_____TITLE:_____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY:_____DATE:_____TIME:_____
*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

_____

_____

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Minor Source Operating Permit (MSOP) Renewal

Source Background and Description

Source Name:	**Color-Box, LLC - Richmond Division**
Source Location:	**1056 Industries Road, Richmond, Indiana 47374**
County:	**Wayne**
SIC Code:	**2752**
Operating Permit No.:	**MSOP 177-10567-00063**
Operating Permit Issuance Date:	**April 29, 1999**
Permit Renewal No.:	**177-18637-00063**
Permit Reviewer:	**Michael Hirtler/EVP**

The Office of Air Quality (OAQ) has reviewed an MSOP renewal application from Color-Box, LLC - Richmond Division relating to the operation of a lithographic printing source that prints shipping and display containers.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(a) Four (4) non-heatset offset lithographic printing presses, identified as Presses 1, 2, 3, and 4, each with a maximum line speed of 262.5 feet per minute and a maximum print width of 65 inches, and coating up to 6,500 paper sheets per hour, each exhausting to one (1) stack respectively identified as V1, V2, V3 and V4. Presses 1, 2 and 3 were installed in 1999, and Press 4 was installed in 2004.

(b) One (1) pneumatic starch conveyance system, installed in 2001, processing up to 3,500 pounds starch per hour, and connected to the following equipment:

(1) One (1) starch silo, identified as S-1, with a storage capacity of 65 tons of starch, using a baghouse for particulate matter control, exhausting to one (1) stack, identified as EP #1; and

(2) One (1) starch kitchen (mixer), identified as S-2, using a filter sock for particulate matter control, and exhausting to one (1) stack, identified as EP #2.

(c) One (1) pneumatic scrap paper conveyance system using one (1) air separator/air screen, identified as S-3, installed in 2001, processing up to 5,000 pounds scrap paper per hour, using a cartridge filter for particulate control, exhausting at one (1) stack identified as EP #4, and connected to the following equipment:

(1) One (1) corrugator, identified as C-1;

(2) One (1) laminator, identified as L-1;

(3) One (1) shredder, identified as SH-1; and

(4) One (1) die cutter, identified as DC-1.

(Note: Minor Permit Revision No. 177-14208, issued on May 10, 2001, approved the installation of two (2) die cutters; however, the Permittee has indicated during this review that one die cutter, as DC-2, was not installed and such will not be reference in this approval).

(d) One (1) scrap paper baler, identified as BA-1.

(e) One (1) natural gas fired steam generator, identified as B-1, installed in 2001, with a maximum heat input capacity of 6.2 million (MM) British thermal units (Btu) per hour, and exhausting to one stack identified as EP #3.

(f) One (1) above ground storage tank with a capacity of 5,000 gallons, installed in 2001, storing laminating glue.

(g) One (1) above ground storage tank with a capacity of 6,000 gallons, installed in 2004, storing aqueous coating.

Unpermitted Emission Units and Pollution Control Equipment

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

Existing Approvals

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

(a) Minor Source Operating Permit No. 177-10567-00063, issued on April 29, 1999;

(b) Notice-Only-Change No. 177-12877, issued on December 19, 2000;

(c) Minor Permit Revision No. 177-14208, issued on May 10, 2001; and

(d) Significant Permit Revision No. 177-18522, issued on April 21, 2004.

All conditions from previous approvals were incorporated into this permit except the following:

(a) All construction conditions from all previously issued permits.

Reason not incorporated: All facilities previously permitted have already been constructed; therefore, the construction conditions are no longer necessary as part of the operating permit. Any facilities that were previously permitted but have not yet been constructed would need new pre-construction approval before beginning construction.

(b) Minor Source Operating Permit No. 177-10567-00063, issued on April 29, 1999.

The maximum paper sheet feed rate for the three (3) existing non-heatset offset lithographic printing Presses 1, 2, and 3 is revised from 4500 sheets per hour to the 6500 sheets per hour rate of Press 4, which was approved for installation in April 2004 as SPR No. 177-18522.

Reason changed: On June 9, 2004, the Permittee verbally requested that the capacities of the four (4) printing presses be made the same in this approval, and that they all be reflective of newly permitted Press 4. The Permittee indicated this would result in an a relatively slight overstatement of the capacities on Presses 1, 2 and 3, but wanted this approval to reflect identical press capacities and material usages. The potential to emit of VOC due to this increased capacity is 4.94 tons per year (see Appendix A, page 4). Since this change does not affect the source permit status nor does it trigger new or change existing applicable rules for Presses 1, 2 or 3, Section A.2 and the D.1 equipment description box reflect the requested equipment description. No other changes are made to this approval due to this request.

Air Pollution Control Justification as an Integral Part of the Process

The following justifications were approved by OAQ in Minor Permit Revision (MPR) 177-14208, issued on May 10, 2001, and have been incorporated into this permit:

(a) The company has submitted the following justification to support the Air Separator/Air Screen with cartridge filter (S-3) as an integral part of the scrap paper pneumatic conveyance system connected to the corrugator (C-1), laminator (L-1), shredder (SH-1), and die cutter 1 (DC-1):

(1) The system referenced above has been designed to pneumatically convey trim scrap paper generated at the indicated equipment to a central location. At this central location scrap paper is separated by the Air Separator/Air Screen (S-3). The air is discharged from the Air Separator/Air Screen inside the building for energy recovery and the paper scrap drops into a baler that bales the material for shipment to a paper mill for recycling. Without the scrap separation system the pneumatic conveyance of this material would not be feasible.

(2) This system could not operate without a mechanical means to separate the scrap from the air stream. The primary purpose of the scrap system (S-3) is efficient material handling and recovery, not pollution control.

As indicated above, IDEM, OAQ has previously approved the Air Separator/Air Screen (S-3) as an integral part of the corrugator (C-1), laminator (L-1), shredder (SH-1), and die cutter 1 (DC-1) scrap paper pneumatic conveyance system. IDEM, OAQ agreed that the use of an air screen with filter on a pneumatic conveying system is integral to the process. Therefore, the permitting level is determined using the potential to emit after the Air Separator/Air Screen. Operating conditions in the permit continue to specify that Air Separator/Air Screen shall operate at all times when the corrugator (C-1), laminator (L-1), shredder (SH-1), and die cutter 1 (DC-1) are in operation.

(b) The company has submitted the following justification to support the baghouse for the starch silo (S-1) and the filter sock for the starch kitchen (S-2) as an integral part of the pneumatic starch conveyance system connected to these units:

(1) The system referenced above has been designed to pneumatically convey powdered cornstarch from a bulk truck to the silo and from the silo to the starch kitchen. The cornstarch is used as a raw material in the adhesive mixture for the corrugation process. The air is discharged from the silo vent to relieve the pressure and vent the air used to convey the material.

(2) The primary purpose of the vent system is to relieve the pressure build-up in the silo associated with filling the silo.

As indicated above, IDEM, OAQ has previously approved the baghouse for the starch silo (S-1) and the filter sock for the starch kitchen (S-2) as integral parts of the pneumatic starch conveyance system connected to these units. Therefore, the permitting level is determined using the potential to emit after the baghouse and filter sock. Operating conditions in the permit continue to specify that the baghouse and filter sock shall operate at all times when the starch silo (S-1) and the starch kitchen (S-2) are in operation.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the MSOP 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 January 22, 2004.

Emission Calculations

See Appendix A of this document for detailed emission calculations (four (4) pages)

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, inclulding 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/yr)
PM	3.31
PM-10	3.47
SO_2	0.02
VOC	87.26
CO	2.28
NO_x	2.72

HAPs	Potential to Emit (tons/yr)
Vinyl acetate	2.66
Acetaldehyde	2.66
Formaldehyde	0.28
Methyl alchohol	0.07
Glycol ether	3.47
Xylene	0.40
Cumene	0.31
Ethylene glycol	2.07
Methylene chloride	0.57
Misc. Combustion HAPs	0.05
Total	12.54

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of volatile organic compounds (VOC) is less than 100 tons per year and greater than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1. An MSOP will be issued.

(b) 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 VOC emissions are not counted toward determination of PSD applicability.

County Attainment Status

Pollutant	Status
PM-10	Attainment
SO_2	Maintenance attainment
NO_2	Attainment
1-hour Ozone	Attainment
8-hour Ozone	Attainment
CO	Attainment
Lead	Attainment

(a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC emissions and NOx are considered when evaluating the rule applicability relating to ozone. Wayne County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions and NOx were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

(b) Wayne County has been classified as attainment or unclassifiable in Indiana for the remaining 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

Existing Source PSD, Part 70, or FESOP Definition (emissions after controls, based on 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	3.30
PM-10	3.46
SO_2	0.02
VOC	87.44
CO	2.28
NO_x	2.72
Single HAP	3.47
Combination HAPs	12.55

(a) This existing source is not a PSD major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories.

(b) This existing source is not a Part 70 or FESOP stationary source because no attainment regulated 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.

(c) These emissions are based on the TSD to Significant Permit Revision No. 177-18522, issued on April 21, 2004.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit 177-18637-00063, is still 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 status is based on all the air approvals issued to the source. This status has been verified by the OAQ inspector assigned to the source.

Federal Rule Applicability

(a) New Source Performance Standards, 326 IAC 12, (40 CFR Part 60):

(1) The one (1) natural gas fired steam generator (B-1), installed in 2001, with a maximum heat input rate of 6.2 MMBtu/hr, is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.40, Subpart Dc), because the boiler is rated at less than the rule applicability threshold of 10 MMBtu/hr.

(2) The four (4) non-heatset offset lithographic printing presses 1, 2, 3 and 4 are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.430, Subpart QQ), as they are not rotogravure printers.

(3) The 5,000 gallon laminating glue storage tank and the 6,000 gallon aqueous coating storage tank, respectively installed in 2001 and 2004, are not subject to the requirements of 326 IAC 12, (40 CFR Parts 60.110, 110a - 115a or 110b - 117b, as Subparts K, Ka, and Kb, respectively), since the tanks each have a storage capacity below the minimum applicable threshold to the three rules at 40 cubic meters (10,568 gallons).

There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14 and 40 CFR Part 61) applicable to this source.

(c) National Emission Standards for Hazardous Air Pollutants (NESHAPs), 326 IAC 20, (40 CFR Part 63):

(1) The four (4) non-heatset offset lithographic printing presses 1, 2, 3 and 4 are not subject to the requirements of 40 CFR 63, Subpart KK (National Emission Standards for Printing and Publishing Industry), as these units are not rotogravure or flexographic printing presses, nor is this a major source of HAPs as defined at 40 CFR 63.2 (i.e., the source does not have the potential to emit a single HAP at 10 tons per year (tpy) or the combination of HAPs at 25 tpy).

(2) The four (4) non-heatset offset lithographic printing presses 1, 2, 3 and 4 are not subject to the requirements of 40 CFR Part 63, Subpart OOOO (National Emission Standards for Hazardous Air Pollutants for Printing, Coating and Dyeing of Fabric and other Textiles), as these presses are not used for printing fabric or other textiles, and this is not a major source of HAPs as defined at 40 CFR 63.2.

(3) The four (4) non-heatset offset lithographic printing presses 1, 2, 3 and 4 are not subject to the requirements of 40 CFR Part 63, Subpart JJJJ (National Emission Standards for Hazardous Air Pollutants for Paper and Web Coating), as these presses are not used for web coating, and this is not a major source of HAPs as defined at 40 CFR 63.2.

There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 20 and 40 CFR Part 63) applicable to this source.

(d) The requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) are not applicable to this source because the source is not a major source of hazardous air pollutant (HAP) emissions (i.e., the source does not have the potential to emit 10 tons per year or greater of a single HAP or 25 tons per year or greater of a combination of HAPs) and the source does not include one or more units that belong to one or more source categories affected by the Section 112(j) MACT Hammer date of May 15, 2002.

(e) The requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not applicable to this source. Such requirements apply to a pollutant-specific emissions unit (PSEU), as defined in 40 CFR 64.1, at a major source that is required to obtain a Part 70 or 71 permit if the PSEU meets the following criteria:

(1) the unit is subject to an emission limitation or standard for an applicable regulated air pollutant,

(2) the unit uses a control device as defined in 40 CFR 64.1 to comply with that emission limitation or standard, and

(3) the unit has a potential to emit (PTE) before controls equal to or greater than 100 percent of the amount (tons per year) of the pollutant required for a source to be classified as a Part 70 major source.

This source is an MSOP source and is not a major Part 70 source. Therefore, the requirements of 40 CFR 64, Compliance Assurance Monitoring, are not applicable to this source.

State Rule Applicability – Entire Source

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

Pursuant to 326 IAC 2-2 (PSD), this existing minor source, originally constructed in 1999 after the August 7, 1977 rule applicability date, is still not considered a major source. This source is not one of the 28 listed source categories and it has never operated at, nor does not have the potential to emit of, 250 tons per year (tpy) or more of any regulated pollutant. The uncontrolled PTE for the worst-case criteria pollutant emitted at this source, VOC, is 87.3 tons per year, below the 250 tpy PSD rule applicability threshold. Therefore, the requirements of 326 IAC 2-2 (PSD) do not apply.

326 IAC 2-6 (Emission Reporting)

This source is not required to have an operating permit under 326 IAC 2-7, Part 70 Permit, it is not located in Lake or Porter County, and it does not have the potential to emit of lead at five (5) tons per year or more. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Visible Emissions Limitations)

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

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-4 (Fugitive Dust Emissions Limitations)

This rule requires the source 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 (Fugitive Dust Emissions).

State Rule Applicability – Individual Facilities

326 IAC 2-4.1-1 (New Source Toxics Control)

The operation of each of the four (4) presses at this source, which were constructed after the July 27, 1997 rule applicability date, will each emit less than 10 tons per year of a single HAP and less than 25 tons per year of the combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating)

Pursuant to 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating), PM emissions from the natural gas fired steam generator B-1, as an indirect heating facility installed after September 21, 1983, shall be limited to 0.6 pounds per MMBtu heat input determined as the **lesser** of the value *Pt* computed with the following formula,

$$Pt = \frac{1.09}{Q^{0.26}}$$

where: Pt = pounds of PM emitted per MMBtu heat input (lb/MMBtu)
Q = total source operating capacity rating (MMBtu/hr)

or six-tenths (0.6) pounds per MMBtu, for values of Q less than ten (10) MMBtu per hour.

Pt for this indirect heating facility is computed as follows:

Pt $= 1.09 / (6.2)^{0.26}$
$= 0.678$ lb/MMBtu;
however, pursuant to 326 IAC 6-2-4(a), Pt shall not exceed 0.6 lb/MMBtu for Q less than 10 MMBtu.

Potential PM emissions for steam generator B-1:
= 0.05 tons per year, based on page 1 of 4 of Appendix A
= (0.05 tons PM/yr) * (2,000 lbs/ton) * (1 yr / 8,760 hrs) * (1 hr / 6.2 MMBtu)
= 0.0018 lbs PM / MMBtu

Based on these calculations, the steam generator complies with the rule.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

(a) Pursuant to Minor Permit Revision No. 177-14208, issued on May 10, 2001, the particulate from the starch silo S-1 shall not exceed 5.96 pounds per hour when operating at a process weight rate of 1.75 tons per hour. The pounds per hour limitation was calculated using 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:

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

The baghouse shall be in operation at all times that starch silo S-1 is in operation, in order to comply with this limit.

(b) Pursuant to Minor Permit Revision No. 177-14208, issued on May 10, 2001, the particulate from the starch kitchen S-2 shall not exceed 5.96 pounds per hour when operating at a process weight rate of 1.75 tons per hour. The pounds per hour limitation was calculated using 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:

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

The filter sock shall be in operation at all times that starch kitchen S-2 is in operation, in order to comply with this limit.

(c) Pursuant to Minor Permit Revision No. 177-14208, issued on May 10, 2001, the particulate from air separator/air screen S-3, connected to the corrugator (C-1), laminator (L-1), shredder (SH-1) and die cutter (DC-1), shall not exceed 7.57 pounds per hour when operating at a process weight rate of 2.5 tons per hour. The pounds per hour limitation was calculated using 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:

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

The air separator/air screen S-3 shall be in operation at all times that facilities C-1, L-1, SH-1 and DC-1 are in operation, in order to comply with this limit.

326 IAC 8-1-6 (General Reduction Requirements)

This rule applies to facilities located anywhere in the state that were constructed on or after January 1, 1980, which have potential volatile organic compounds (VOC) emissions of 25 tons per year or more, and which are not otherwise regulated by another provision of Article 8.

This source was initially constructed in 1999. The non-heatset offset lithographic printing presses 1, 2, 3 and 4, and the corrugator (C-1)/laminator (L-1), each have a potential to emit of VOC less than 25 tons per year. Therefore, these facilities are not subject to the requirements of 326 IAC 8-1-6 (New Facilities; General Reduction Requirements).

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

Pursuant to 326 IAC 8-9-1, on and after October 1, 1995 stationary vessels used to store volatile organic liquids (VOL) must comply with the requirement of the rule if located in Clark, Floyd, Lake or Porter Counties. The source is located in Wayne County and the rule does not apply to this source for the two (2) storage tanks (i.e., 5,000 gallon laminating glue storage tank and 6,000 gallon aqueous coating storage tank).

Testing Requirements

While IDEM may require compliance testing at any time to determine if the source is in compliance with an applicable limit or standard, compliance testing is not required for this renewal. Compliance has been demonstrated based on emission rate calculations using AP-42 and other EPA approved emission factors, coating materials that assume 2,000 pounds of VOC per tons of VOC input, and particulate emitting activities controlled by baghouses with controlled emissions below the related allowable particulate matter emission rates.

Conclusion

The operation of this lithographic printing source that prints shipping and display containers shall be subject to the conditions of the Minor Source Operating Permit 177-18637-00063.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

Company Name: Color-Box, LLC
Address City IN Zip: 1056 Industries Road, Richmond, IN 47374
MSOP Renewal No.: 177-18637-00063
Reviewer: MH/EVP
Date: June 2004

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
6.2	54.3

Reflects one 6.2 MMBtu/hr steam generator

Pollutant

	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.05	0.21	0.02	2.72	0.15	2.28

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

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

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 7/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	5.703E-05	3.259E-05	2.037E-03	4.888E-02	9.233E-05

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	1.358E-05	2.987E-05	3.802E-05	1.032E-05	5.703E-05

Methodology is the same as above.
The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations
VOC and HAP Emissions from the Corrugator/Laminator *

Company Name: Color-Box, LLC
Address City IN Zip: 1056 Industries Road, Richmond, IN 47374
MSOP Renewal No.: 177-18637-00063
Reviewer: MH/EVP
Date: June 2004

Emissions from the Corrugator (C-1)/Laminator (L-1)

Maximum Line Speed	500	ft/min
Maximum Product Width	64	inches

Glue Usage: 5.5 lbs/msf; 0.6% VOC & less than 0.15% HAPs
Starch Usage: 6.5 lbs/msf; 0.009% VOCs & 0.009% HAPs from starch additive

500	ft/min x	63	inches /	12	inches/foot /	1000	=	2.63	msf/min	
5.5	lbs/msf x	2.63	msf/min x	60	min/hr	=	868	lbs of glue/hr		
6.5	lbs of starch/msf x	2.63	msf/min x	60	min/hr	=	1026	lbs of starch mix/hr		

Maximum Potential VOC Emissions

868	lbs/hr of glue x	0.60%	% VOCs	=	5.21	lbs/hr	22.81	tons/yr
1026	lbs/hr of starch x	0.0017%	% VOCs	=	0.017	lbs/hr	0.08	tons/yr

Maximum Potential HAP Emissions

868	lbs/hr of glue x	0.07%	% Vinyl Acetate	=	0.608	lbs/hr	2.66	tons/yr
868	lbs/hr of glue x	0.07%	% Acetaldehyde	=	0.608	lbs/hr	2.66	tons/yr
868	lbs/hr of glue x	0.007%	% Formaldehyde	=	0.061	lbs/hr	0.27	tons/yr
1026	lbs/hr of starch x	0.0015%	% Methyl Alcohol	=	0.015	lbs/hr	0.07	tons/yr
1026	lbs/hr of starch x	0.00022%	% Formaldehyde	=	0.0023	lbs/hr	0.01	tons/yr

* Taken from Minor Permit Modification No. 177-14208, issued on May 10, 2001.

Appendix A: Process Particulate Emissions

Company Name: Color-Box, LLC
Address City IN Zip: 1056 Industries Road, Richmond, IN 47374
MSOP Renewal No.: 177-18637-00063
Reviewer: MH/EVP
Date: June 2004

Potential to Emit (tons/year)						
Process Baghouse/Filter*	No. of Units	Grain Loading per Actual Cubic Foot of Outlet Air	Air to Cloth Ratio Air Flow (acfm/ft²)	Total Filter Area (ft²)	Control Efficiency	Total PM/PM10 (tons/yr)
EP-1	1	0.0400	4.7	64	99.9%	0.45
EP-2	1	0.0400	3.06	64	99.9%	0.29
EP-4	1	0.0020	1.99	16,800	99.9%	2.51
Total Potential to Emit Based on Rated Capacity at 8,760 Hours/Yea						**3.26**

Methodology:
Baghouse (tons/yr) = No. Units * Outlet Loading (grains/acf) * Air/Cloth Ratio (acfm/ft²) * Filter Area (ft²) * 1 lb/7,000 grains * 60 min/hr * 8760 hr/yr * 1 ton/2,000 lbs

* Note: Pursuant to Minor Permit Modification No. 177-14208, issued on May 10, 2001, control equipment is considered an integral part of the process since emission units are connected to controls that are part of a pneumatic conveyance system.
Baghouse EP-1 controls PM/PM10 emissions from the Starch Silo (S-1)
Baghouse EP-2 controls PM/PM10 from Starch Kitchen (S-2)
Cartridge filter EP-4 controls PM/PM10 emissions from Corrugator (C-1), Laminator (L-1), Shredder (SH-1), Die Cutter 1 (DC-1) and Die Cutter 2 (DC-2)

Appendix A: Emissions Calculations
VOC From Printing Press Operations

Company Name: Color-Box, LLC
Address City IN Zip: 1056 Industries Road, Richmond, IN 47374
MSOP Renewal No.: 177-18637-00063
Reviewer: MH/EVP
Date: June 2004

Press I.D.	MAXIMUM LINE SPEED (FEET/MIN)	MAXIMUM PRINT WIDTH (INCHES)	MAXIMUM SHEET FEED (SHEETS/HR)
Presses 1, 2, 3 & 4 (each)*	262.5	65	6,500

* Each press is a non-heatset offset type of lithographic printing press.

Potential to Emit of VOC from Non-Heatset Offset Lithographic Printing Press Operations*

Material	Material Usage at Each of Presses 1, 2, 3 & 4**		VOC Content	Percentage Flash Off	Uncontrolled VOC PTE per Press (tons/yr)	Uncontrolled VOC PTE All Presses (tons/yr)
Ink	26.00	lbs/hr	40.00 % (wt)	5%	2.28	9.11
Aqueous Coating	42.25	lbs/hr	4.00 % (wt)	100%	7.40	29.61
Blanket Wash	93.0	gallon/month	6.71 lbs VOC/gal	100%	3.74	14.98
Fountain Solution	109.2	gallon/month	3.21 lbs VOC/gal	100%	2.10	8.41
Metering Roll Cleaner	12.6	gallon/month	4.93 lbs VOC/gal	100%	0.37	1.49
Alcohol	4.0	gallon/month	6.51 lbs VOC/gal	100%	0.16	0.62
				Total (ton/yr):	**16.06**	**64.22**

Potential to Emit of HAPs from Non-Heatset Offset Lithographic Printing Press Operations*

Material	HAP	Material Usage at Each of Presses 1, 2, 3 & 4**		HAP Content	Percentage Flash Off	Uncontrolled HAP PTE per Press (tons/yr)	Uncontrolled HAP PTE All Presses (tons/yr)
Ink	none	26.00	lbs/hr	0.00%	5%	0.00	0.00
Aqueous Coating	glycol ether	42.25	lbs/hr	0.20 % (wt)	100%	0.37	1.48
Blanket Wash	xylene	93.0	gallon/month	0.1779 lbs HAP/gal	100%	0.10	0.40
	cumene			0.1403 lbs HAP/gal	100%	0.08	0.31
Fountain Solution	ethylene glycol	109.2	gallon/month	0.79 lbs HAP/gal	100%	0.52	2.07
	glycol ether			0.76 lbs HAP/gal	100%	0.50	1.99
Metering Roll Cleaner	methylene chloride	12.6	gallon/month	1.87 lbs HAP/gal	100%	0.14	0.57
Alcohol	none	4.0	gallon/month	0 lbs HAP/gal	100%	0.00	0.00
					Total Combined HAPs(ton/yr):	**1.70**	**6.82**
					Total Single HAP (glycol ether) (ton/yr):	**0.87**	**3.47**

METHODOLOGY

* Based on Significant Permit Revision No. 177-18522, issued on April 21, 2004 for Press 4. The same material usage rates applied at Press 4 are used herein for Presses 1, 2 and 3. The Permittee has requested as part of this review that the capacity of Presses 1, 2 and 3, each at 4,500 sheets per hour, be made the same as Press 4 at 6,500 sheets per hour. Assuming material usage to be linear, the potential to emit due to this increased capacity is 4.94 tons VOC per year (i.e., 16.06-(16.06*4500/6500)).

** Ink usage (lb/hr) reflects a maximum of 4 lb ink/1000 sheets, and the aqueous coating usage (lb/hr) reflects a maximum of 6.5 lbs aqueous coating/1000 sheets, per SPR No. 177-18522, issued on April 21, 2004. Information reflects the worst emitting ink.

VOC & HAP emissions = Material usage, lb/hr * % VOC or HAP by wt. * flash off (%) * 8760 hr/yr * ton/2000 lb
= Material usage, gal/month * VOC or HAP content, lb/gal * flash off (%) * 12 month/yr * ton/2000 lb

NOTE: NON-HEAT SET OFFSET PRINTING HAS AN ASSUMED FLASH OFF OF 5% (95% RETAINED IN SUBSTRATE).
(Source -OAQPS Draft Guidance, "Control of Volatile Organic Compound Emisions from Offset Lithographic Printing (9/93))