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

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: January 5, 2007

RE: Spartech Plastics / 085-23083-00026

FROM: Nisha Sizemore
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 03/23/06

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MINOR SOURCE OPERATING PERMIT RENEWAL
OFFICE OF AIR QUALITY

Spartech Plastics
3454 North Detroit Street
Warsaw, Indiana 46581

(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.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a MSOP under 326 IAC 2-6.1.

Operation Permit No.: MSOP 085-23083-00026	
Issued by: Original signed by Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date:January 5, 2007 Expiration Date:January 5, 2012

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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 plastic sheet and molded plastics manufacturing plant.

Authorized Individual:	Plant Manager
Source Address:	3454 North Detroit Street, Warsaw, Indiana 46581
Mailing Address:	P.O. Box 958, Warsaw, Indiana 46581-0958
General Source Phone:	574-267-9716
SIC Code:	3081, 3082
County Location:	Kosciusko
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Minor Source, under PSD Minor Source, Section 112 of the Clean Air Act Not in 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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

(a) One (1) flat stock production department, located in buildings 105 and 106, consisting of one (1) squaring saw, ten (10) extrusion lines, one (1) scrap granulator, and blending operations, having a maximum production capacity of 5,310 pounds of product per hour. Particulate matter emissions from the blending operations are controlled using two (2) baghouses (identified as BH-2 and BH-8), which exhaust to stacks EU-06/BH-2 and EU-06/BH-8. Particulate matter emissions from the squaring saw are controlled using one (1) baghouse (identified as BH-15), which exhausts at stack EU-2/BH-15.

(b) One (1) calender production department, located in building 107, for blending, mixing, milling, and calendering, consisting of one (1) size 3D banbury mixer, two (2) 60 inch mills, and one (1) 72 inch calender, having a maximum production capacity of 1,750 pounds of product per hour. Particulate matter emissions are controlled using three (3) baghouses (identified as BH-1, BH-14, and BH-9), which exhaust to EU-06/BH-1, EU-06/BH-14, and EU-3/BH-9.

(c) One (1) dicer production line, located in building 107, for blending, milling, dicing and cutting operations, consisting of one (1) size D banbury mixer and one (1) 84 inch mill. The maximum production capacity of the dicer production line is 6,000 pounds per hour. Particulate matter emissions from the blending operations are controlled using two (2) baghouses (identified as BH-1 and BH-14), which exhaust at stacks EU-06/BH-1 and EU-06/BH-14. Particulate matter emissions from the dicing and cutting operations are controlled using one (1) baghouse (identified as BH-4), which exhausts at stack EU-04/BH-4. Particulate emissions from the milling operations are controlled using one (1) baghouse (identified as BH-10), which exhausts at stack EU-04/BH-10.

(d) One (1) FCM production department, located in building 107, consisting of two (2) extrusion lines, blending operations, and dicing and cutting operations, having a maximum production capacity of 350 pounds per hour, with particulate matter emissions

controlled using one (1) baghouse (identified as BH-13), exhausting at stack EU-05/BH-13.

(e) One scrap plastic granulation facility, located in building 102, for granulation and blending operations, having a maximum production capacity of 2,500 pounds per hour, with particulate matter emissions controlled using one (1) baghouse (identified as BH-12), exhausting at stack EU-06/BH-12.

(f) Material storage and handling for plastic granules and powders, consisting of three (3) powder storage silos and a pneumatic conveyance system, with particulate matter emissions controlled using three (3) baghouses (identified as BH-5, BH-6 and BH-7); exhausting at stacks EU-07/BH-5, EU-07/BH-6, and EU-07/BH-7, and thirteen (13) cyclones (identified as C-A through C-M). These baghouses and cyclones are considered to be integral to the process.

(g) Two (2) portable pneumatic sandblasting units, identified as S-1 and S-2, used for calender roll etching, with particulate matter emissions controlled by a cyclone and dust collector, and exhausting inside the building.

(h) One (1) 1.0 MMBtu per hour, natural gas-fired, high-pressure boiler (identified as H-1), with emissions exhausting at stack EU-09/H-1.

(i) One (1) 0.75 MMBtu per hour, natural gas-fired, low-pressure boiler (identified as H-2), with emissions exhausting at stack EU-09/H-2.

(j) One (1) 2.45 MMBtu per hour, natural gas-fired oil heater (identified as H-3), with emissions exhausting at stack EU-09/H-3.

(k) Six (6) natural gas-fired, process line dryers, consisting of three (3) dryers each having a maximum rated heat input of 0.14 MMBtu per hour and three (3) dryers each having a maximum rated heat input of 0.20 MMBtu per hour.

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 Definitions [326 IAC 2-1.1-1]

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.2 Permit Term [326 IAC 2-6.1-7(a)] [326 IAC 2-1.1-9.5] [IC13-15-3-6(a)]

(a) This permit, M085-23083-00026, 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, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

B.3 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Severability

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Provide Information

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1. Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain

certification by an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.9 Annual Notification [326 IAC 2-6.1-5(a) (5)]

(a) An annual notification shall be submitted by an authorized individual 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) The annual notice 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
Indianapolis, Indiana 46204-2251

(c) 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.10 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) The Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) for the source as described in 326 IAC 1-6-2. At a minimum, the PMPs shall include:

(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) 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 PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) 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.11 Prior Permits Superseded [326IAC 2-1.1-9.5] [325 IAC 2-7-10.5]

(a) All terms and conditions of permits established prior to 085-23083-00026 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted.

(b) All previous registrations and permits are superseded by this permit.

B.12 Termination of Right to Operate [326 IAC 2-6.1-7(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

B.13 Permit Renewal [326 IAC 2-6.1-7]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-6.1-7. Such information shall be included in the application for each emission unit at this source. The renewal application does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

(b) A timely renewal application is one that is:

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(2) 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) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-6.1 until IDEM, OAQ,, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as being needed to process the application.

B.14 Permit Amendment or Revision [326 IAC 2-5.1-3(e) (3)] [326 IAC 2-6.1-6]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

(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
Indianapolis, Indiana 46204-2251

Any such application shall be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

B.15 Source Modification Requirement

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

B.16 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.17 Transfer of Ownership or Operation [326 IAC 2-6.1-6]

(a) The Permittee must comply with the requirements of 326 IAC 2-6-1-6 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

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

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-6.1-6(d) (3)]

B.18 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.

B.19 Credible Evidence [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

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, OAQ, 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 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2.

C.6 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.7 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
Indianapolis, Indiana 46204-2251

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 2-1.1-1(1).

(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 [326 IAC 2-6.1-5(a) (2)]

C.8 Performance Testing [326 IAC 3-6]

(a) 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
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14 days) prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, 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.9 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.10 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.11 Instrument Specifications [326 IAC 2-1.1-11]

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale.

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

Corrective Actions and Response Steps

C.12 Response to Excursions or Exceedances

(a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records;

(3) inspection of the control device, associated capture system, and the process.

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

(e) The Permittee shall maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

Corrective Actions and Response Steps

C.13 Actions Related to Noncompliance Demonstrated by a Stack Test

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected emissions unit while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that re-testing in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the re-testing deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to non-compliant stack tests.

The response action documents submitted pursuant to this condition do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1.

Record Keeping and Reporting Requirements

C.14 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.15 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.16 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-5] [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
Indianapolis, Indiana 46204-2251

(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, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1(1).

(d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description [326 IAC 2-6.1-5(a) (1)]:

(a) One (1) flat stock production department, located in buildings 105 and 106, consisting of one (1) squaring saw, ten (10) extrusion lines, one (1) scrap granulator, and blending operations, having a maximum production capacity of 5,310 pounds of product per hour. Particulate matter emissions from the blending operations are controlled using two (2) baghouses (identified as BH-2 and BH-8), which exhaust to stacks EU-06/BH-2 and EU-06/BH-8. Particulate matter emissions from the squaring saw are controlled using one (1) baghouse (identified as BH-15), which exhausts at stack EU-2/BH-15.

(b) One (1) calender production department, located in building 107, for blending, mixing, milling, and calendering, consisting of one (1) size 3D banbury mixer, two (2) 60 inch mills, and one (1) 72 inch calender, having a maximum production capacity of 1,750 pounds of product per hour. Particulate matter emissions are controlled using three (3) baghouses (identified as BH-1, BH-14, and BH-9), which exhaust to EU-06/BH-1, EU-06/BH-14, and EU-3/BH-9.

(c) One (1) dicer production line, located in building 107, for blending, milling, dicing and cutting operations, consisting of one (1) size D banbury mixer and one (1) 84 inch mill. The maximum production capacity of the dicer production line is 6,000 pounds per hour. Particulate matter emissions from the blending operations are controlled using two (2) baghouses (identified as BH-1 and BH-14), which exhaust at stacks EU-06/BH-1 and EU-06/BH-14. Particulate matter emissions from the dicing and cutting operations are controlled using one (1) baghouse (identified as BH-4), which exhausts at stack EU 04/BH-4. Particulate emissions from the milling operations are controlled using one (1) baghouse (identified as BH-10), which exhausts at stack EU-04/BH-10.

(d) One (1) FCM production department, located in building 107, consisting of two (2) extrusion lines, blending operations, and dicing and cutting operations, having a maximum production capacity of 350 pounds per hour, with particulate matter emissions controlled using one (1) baghouse (identified as BH-13), exhausting at stack EU-05/BH-13.

(e) One scrap plastic granulation facility, located in building 102, for granulation and blending operations, having a maximum production capacity of 2,500 pounds per hour, with particulate matter emissions controlled using one (1) baghouse (identified as BH-12), exhausting at stack EU-06/BH-12.

(f) Material storage and handling for plastic granules and powders, consisting of three (3) powder storage silos and a pneumatic conveyance system, with particulate matter emissions controlled using three (3) baghouses (identified as BH-5, BH-6 and BH-7); exhausting at stacks EU-07/BH-5, EU-07/BH-6, and EU-07/BH-7, and thirteen (13) cyclones (identified as C-A through C-M). These baghouses and cyclones are considered to be integral to the process.

(g) Two (2) portable pneumatic sandblasting units, identified as S-1 and S-2, used for calender roll etching, with particulate matter emissions controlled by a cyclone and dust collector, and exhausting inside the building.

(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 2-6.1-5(a) (1)]

D.1.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the flat stock production and squaring saw, calender production, dicer production, FCM production, scrap plastic granulation facility, sandblasting units, and pneumatic conveyance systems shall not exceed the following emission limits:

Process/Facility	Process Weight (Tons/hr)	PM Emission Limit (Pounds/hr)
Flat Stock Production Department	2.66	7.9
Calender Production Department	0.875	3.7
Dice Production Line	3.0	8.6
FCM Production Department	0.175	1.3
Scrap Plastic Granulation Facility	1.25	4.8
Sandblasting Units	0.24 (each)	1.6 (each)
Pneumatic Conveyance Systems:		
C-A	10	19.2
C-B through C-I, C-L and C-M	0.225 (each)	1.5 (each)
C-J and C-K	0.7 (each)	3.2 (each)
BH-5	0.43	2.3
BH-6	0.56	2.8
BH-7	0.88	3.8

The pounds per hour limitation was 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;
P = process weight rate in tons per hour

D.1.2 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 this facility and any control devices.

Compliance Determination Requirements

D.1.3 Particulate Control

Pursuant to MSOP 085-14149-00026, issued on October 10, 2001, and in order to comply with Condition D.1.1, the cyclones, baghouses, and bag filters for particulate control shall be in operation and control emissions from the flat stock production and squaring saw, calender production, dicer production, FCM production, scrap plastic granulation facility, sandblasting units, and pneumatic conveyance systems 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.1.4 Visible Emissions Notations

(a) Daily visible emission notations of the pneumatic conveyance system C-A stack exhaust shall be performed 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) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.1.5 Parametric Monitoring

The Permittee shall record the pressure drop across the cyclone used in conjunction with the pneumatic conveyance system (C-A), at least once daily when the pneumatic conveyance system is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the cyclone is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. 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 - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

D.1.6 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

D.1.7 Record Keeping Requirements

(a) To document compliance with Conditions D.1.4 and D.1.5, the Permittee shall maintain records of daily visible emission notations of the pneumatic conveyance system C-A stack exhausts and the daily pressure drop readings, when exhausting to the atmosphere.

(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 [326 IAC 2-6.1-5(a) (1)]:

(h) One (1) 1.0 MMBtu per hour, natural gas-fired, high-pressure boiler (identified as H-1), with emissions exhausting at stack EU-09/H-1.

(i) One (1) 0.75 MMBtu per hour, natural gas-fired, low-pressure boiler (identified as H-2), with emissions exhausting at stack EU-09/H-2.

(j) One (1) 2.45 MMBtu per hour, natural gas-fired oil heater (identified as H-3), with emissions exhausting at stack EU-09/H-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 [326 IAC 6-2-3(e)]

D.2.1 Particulate Matter (PM) [326 IAC 6-2-3(e)]

Pursuant to 326 IAC 6-2-3 (Particulate Matter Emission Limitations for Sources of Indirect Heating), the PM emissions from each boiler and the hot oil heater 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:	**Spartech Plastics**
Address:	**3454 North Detroit Street**
City:	**Warsaw, Indiana 46581**
Phone #:	**574-267-9716**
MSOP #:	**085-23083-00026**

I hereby certify that Spartech Plastics is
- ☐ still in operation.
- ☐ no longer in operation.

I hereby certify that Spartech Plastics is
- ☐ in compliance with the requirements of MSOP 085-23083-00026.
- ☐ not in compliance with the requirements of MSOP 085-23083-00026.

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 - 317 233-6865

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: _____/_____/ 20____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE_____/_____/ 20____ _____ 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 Renewal

Source Background and Description

Source Name:	Spartech Plastics
Source Location:	3454 North Detroit Street, Warsaw, IN 46581
County:	Kosciusko
SIC Code:	3081, 3082
Operation Permit No.:	085-14149-00026
Operation Permit Issuance Date:	August 10, 2001
Permit Renewal No.:	085-23083-00026
Permit Reviewer:	ERG/ST

The Office of Air Quality (OAQ) has reviewed an application from Spartech Plastics relating to the operation of a plastic sheet and molded plastics manufacturing plant.

Permitted Emission Units and Pollution Control Equipment

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

(a) One (1) flat stock production department, located in buildings 105 and 106, consisting of one (1) squaring saw, ten (10) extrusion lines, one (1) scrap granulator, and blending operations, having a maximum production capacity of 5,310 pounds of product per hour. Particulate matter emissions from the blending operations are controlled using two (2) baghouses (identified as BH-2 and BH-8), which exhaust to stacks EU-06/BH-2 and EU-06/BH-8. Particulate matter emissions from the squaring saw are controlled using one (1) baghouse (identified as BH-15), which exhausts at stack EU-2/BH-15.

(b) One (1) calender production department, located in building 107, for blending, mixing, milling, and calendering, consisting of one (1) size 3D banbury mixer, two (2) 60 inch mills, and one (1) 72 inch calender, having a maximum production capacity of 1,750 pounds of product per hour. Particulate matter emissions are controlled using three (3) baghouses (identified as BH-1, BH-14, and BH-9), which exhaust to EU-06/BH-1, EU-06/BH-14, and EU-3/BH-9.

(c) One (1) dicer production line, located in building 107, for blending, milling, dicing and cutting operations, consisting of one (1) size D banbury mixer and one (1) 84 inch mill. The maximum production capacity of the dicer production line is 6,000 pounds per hour. Particulate matter emissions from the blending operations are controlled using two (2) baghouses (identified as BH-1 and BH-14), which exhaust at stacks EU-06/BH-1 and EU-06/BH-14. Particulate matter emissions from the dicing and cutting operations are controlled using one (1) baghouse (identified as BH-4), which exhausts at stack EU-04/BH-4. Particulate emissions from the milling operations are controlled using one (1) baghouse (identified as BH-10), which exhausts at stack EU-04/BH-10.

(d) One (1) FCM production department, located in building 107, consisting of two (2) extrusion lines, blending operations, and dicing and cutting operations, having a

maximum production capacity of 350 pounds per hour, with particulate matter emissions controlled using one (1) baghouse (identified as BH-13), exhausting at stack EU-05/BH-13.

(e) One scrap plastic granulation facility, located in building 102, for granulation and blending operations, having a maximum production capacity of 2,500 pounds per hour, with particulate matter emissions controlled using one (1) baghouse (identified as BH-12), exhausting at stack EU-06/BH-12.

(f) Material storage and handling for plastic granules and powders, consisting of three (3) powder storage silos and a pneumatic conveyance system, with particulate matter emissions controlled using three (3) baghouses (identified as BH-5, BH-6 and BH-7); exhausting at stacks EU-07/BH-5, EU-07/BH-6, and EU-07/BH-7, and thirteen (13) cyclones (identified as C-A through C-M). These baghouses and cyclones are considered to be integral to the process.

(g) Two (2) portable pneumatic sandblasting units, identified as S-1 and S-2, used for calender roll etching, with particulate matter emissions controlled by a cyclone and dust collector, and exhausting inside the building.

(h) One (1) 1.0 MMBtu per hour, natural gas-fired, high-pressure boiler (identified as H-1), with emissions exhausting at stack EU-09/H-1.

(i) One (1) 0.75 MMBtu per hour, natural gas-fired, low-pressure boiler (identified as H-2), with emissions exhausting at stack EU-09/H-2.

(j) One (1) 2.45 MMBtu per hour, natural gas-fired oil heater (identified as H-3), with emissions exhausting at stack EU-09/H-3.

(k) Six (6) natural gas-fired, process line dryers, consisting of three (3) dryers each having a maximum rated heat input of 0.14 MMBtu per hour and three (3) dryers each having a maximum rated heat input of 0.20 MMBtu per hour.

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 Minor Source Operating Permit 085-14149-00026, issued on August 10, 2001, and the following previous approvals:

(a) First Notice-Only Change 085-15988-00026, issued on September 12, 2002;

(b) Second Notice-Only Change 085-15988-00026, issued on October 8, 2002; and

(c) Third Notice-Only Change 085-23081-00026, issued on June 28, 2006.

Air Pollution Control Justification as an Integral Part of the Process

The following justification was incorporated into this permit from the previous MSOP:

The company has submitted the following justification such that the baghouses (identified as BH-5, BH-6, and BH-7) and cyclones (identified as C-A through C-M) be considered as an integral part of the pneumatic conveyor system:

(a) The pneumatic conveyance system cannot operate without the control equipment. PVC and ABS pellets and powders are pneumatically conveyed from railcars and shipping containers to silos and between the various production lines within the plant. The primary function of the baghouses and cyclones is to transport the product and separate the product from air when the product has reached its destination.

(b) The control equipment's primary purpose is not pollution control. The baghouses and cyclones serve to neutralize air pressure at the end of the transport train and separate raw materials from air prior to storage or further processing. The value of the product recovered by the bin vent dust collectors and the dust collectors exceeds the total capital and operating costs of these devices.

(c) Economic Benefit for Plastic Powder Handling (Baghouses BH-5, BH-6, BH-7):

	Amount (PVC)	Amount (ABS)	Amount (SAN)	Units
Plastic Powder Throughput	5,512,000	951,000	799,000	lbs/year
Filter Recovery Efficiency[1]	10	10	10	%
Plastic Powder Recovered	551,200	95,100	79,900	lbs/year
Cost of Plastic Powder	$ 0.57	$1.20	$ 1.13	per lb
Expense With No Baghouse	$ 314,184	114,120	$ 90,287	per year
Annualized Cost of Baghouse	$ 5,000	$ 5,000	$ 5,000	per year
Economic Benefit of Filter Systems	$ 309,184	109,120	$ 85,287	per year

[1] In the best-case scenario, the source estimates that 10% of material would be lost or wasted without the use of the integral baghouses.

(d) Economic Benefit for Plastic Pellet/Chip Handling (Cyclones C-A through C-M):

	Amount (PVC Chips)	Units
Plastic Pellet/Chip Throughput	551,200	lbs/year
Recovery Efficiency[1]	10	%
Plastic Pellet/Chip Recovered	55,120	lbs/year
Cost of Plastic Pellet/Chip	$ 0.57	per lb
Expense With No Baghouse	$ 31,418	per year
Annualized Cost of Cyclones	$ 6,000	per year
Economic Benefit of Filter Systems	$ 25,418	per year

Estimate 10% waste being recycled within plant.

[1] In the best-case scenario, the source estimates that 10% of material would be lost or wasted without the use of the integral cyclones. The chips and scrap transported by the pneumatic conveyors/cyclones are large fragments, chips and pellets and the source believes that the particulate content is negligible.

IDEM, OAQ evaluated these justifications and agreed that the baghouses and cyclones identified above should be considered as an integral part of the pneumatic conveyance system. Therefore, the permitting level was determined using the potential to emit after the baghouses and cyclones. Operating conditions in the proposed permit will specify that these baghouses and cyclones must operate at all times when the pneumatic conveyance systems are in operation.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

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

A complete application for the purposes of this review was received on May 12, 2006.

Emission Calculations

See Appendix A of this document for detailed emission calculations (pages 1 through 5).

Potential to Emit of the Source Before Controls

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

Pollutant	Potential to Emit (tons/yr)
PM	167
PM-10	25.2
SO_2	0.01
VOC	11.2
CO	1.88
NO_x	2.24

HAPs	Potential to Emit (tons/yr)
Styrene	7.4
Acrylonitrile	0.46
Ethylbenzene	0.47
All Other HAPs	0.57
Total	8.90

The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM is greater than twenty-five (25) tons per year. The potential to emit of PM_{10}, SO_2, VOC, CO, and NO_x are less than 100 tons per year. The potential to emit any single HAP is less than ten (10) tons per year and the potential to emit of combined HAP is less than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1. An MSOP will be issued.

County Attainment Status

The source is located in Kosciusko County.

Pollutant	Status
PM-10	Attainment
PM2.5	Attainment
SO_2	Attainment
NO_2	Attainment
8-hour Ozone	Attainment
CO	Attainment
Lead	Attainment

(a) Kosciusko County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM 2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions. See the State Rule Applicability - Entire Source section.

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

(c) Kosciusko County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

(d) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

(e) On October 25, 2006, the Indiana Air Pollution Control Board approved a permanent rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.

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	7.1
PM-10	1.9
SO_2	0.01
VOC	11.2
CO	1.88
NO_x	2.24
Single HAP	7.4
Combination HAPs	8.9

This existing source is not a 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.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) each criteria pollutant is less than 100 tons per year,

(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and

(c) any combination of HAPs is less than 25 tons per year.

This status is based on all the air approvals issued to the source.

Federal Rule Applicability

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

The requirements of the New Source Performance Standard (NSPS) 40 CFR 60, Subpart Dc - Standards of Performance for Small Industrial - Commercial - Institutional Steam Generating Units (326 IAC 12) are not included in this permit for the natural gas-fired boilers, identified as H-1 and H-2, because these boilers have maximum heat input capacities less than the 10 MMBtu per hour applicability threshold.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14 and 40 CFR Part 63) included in this permit.

The requirements of the National Emission Standards for Hazardous Air Pollutants for Polyvinyl Chloride and Copolymers Production (40 CFR 63, Subpart J) and the National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins (40 CFR 63, Subpart JJJ) are not included in this permit for the plastics forming facilities at this plant because this source does not produce the plastic compounds from raw materials. This plant buys manufactured plastic resins and pellets and reforms them into commercial products.

State Rule Applicability – Entire Source

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

This source is not in 1 of the 28 source categories and there are no applicable New Source Performance Standards that were in effect on August 7, 1980; therefore, fugitive emissions of VOC and PM are not counted towards applicability of PSD.

The potential to emit of the entire source for PM, PM10, SO_2, VOC, CO and NO_x are less than 250 tons per year. This source is a minor source under PSD for any future modifications.

326 IAC 2-6 (Emission Reporting)

This source is located in Kosciusko County, is not required to operate under the Part 70 permit program and has a potential to emit lead that is less than 5 tons per year. Therefore, the requirements of 326 IAC 2-6 do not apply.

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 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.

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

The operation of this plastic sheet and molded plastics manufacturing plant will emit less than 10 tons per year of a single HAP and less than 25 tons per year of any combination of HAPs. Therefore, the requirements of 326 IAC 2-4.1 do not apply.

State Rule Applicability – Plastics Production

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

The particulate matter (PM) from the flat stock production and squaring saw, calender production, dicer production, FCM production, scrap plastic granulation facility, sandblasting units, and pneumatic conveyance systems, shall be limited as follows:

Process/Facility	Process Weight (Tons/hr)	PM Emission Limit (Pounds/hr)
Flat Stock Production Department	2.66	7.9
Calender Production Department	0.875	3.7
Dice Production Line	3.0	8.6
FCM Production Department	0.175	1.3
Scrap Plastic Granulation Facility	1.25	4.8
Sandblasting Units	0.24 (each)	1.6 (each)
Pneumatic Conveyance Systems:		
C-A	10	19.2
C-B through C-I, C-L and C-M	0.225 (each)	1.5 (each)
C-J and C-K	0.7 (each)	3.2 (each)
BH-5	0.43	2.3
BH-6	0.56	2.8
BH-7	0.88	3.8

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 baghouses, bag filters, and cyclones shall be in operation at all times their respective facilities are in operation, in order to comply with this limit.

326 IAC 8-1-6 (New Facilities - General Reduction Requirement)

This source does not have any facility with potential VOC emissions equal to or greater than twenty five (25) tons per year; therefore this source is not subject to the provisions of 326 IAC 8-1-6.

State Rule Applicability – Boilers and Oil Heater

326 IAC 6-2-3 (Particulate Matter Emission Limitations for Sources for Indirect Heating)

The boilers and oil heater are used for indirect heating and received permission to construct prior to September 21, 1983 and began operation after June 8, 1972. Pursuant to 326 IAC 6-2-3,

indirect heating facilities existing and in operation before September 21, 1983 shall be limited by the following equation or by 0.6 lbs per MMBtu, whichever is more stringent.

$$Pt = \frac{C \times a \times h}{76.5 \times Q^{0.75} \times N^{0.25}}$$

Where

C = max ground level concentration (= 50 Fm/m^3)
Pt = emission rate limit (lbs/MMBtu)
Q = total source heat input capacity (MMBtu/hr) = (1.0 + 0.75 + 2.45) = 4.2 MMBtu/hr
N = number of stacks = 3
a = plume rise factor = 0.67
h = weighted stack height (ft) = 25.7 ft

The emission rate limit established from the equation above equals:

$$Pt = \frac{50 \times 0.67 \times 25.7}{76.5 \times (4.2)^{0.75} \times 3^{0.25}} = 2.91 \text{ lbs/MMBtu}$$

Therefore, pursuant to 326 IAC 6-2-3(e), the most stringent PM emission limit for the boilers and hot oil heater is 0.6 lbs/MMBtu. Based on calculations, the boilers and hot oil heater are in compliance with the limit.

State Rule Applicability – Process Line Dryers

The six (6) process line dryers are a source of direct heating. Therefore, the requirements of 326 IAC 6-2 do not apply.

Compliance Requirements

Permits issued under 326 IAC 2-6.1 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 2-6.1-5. 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 in 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 approporiate corrective actions within a specific time period.

The compliance monitoring requirements applicable to the pneumatic conveyance system C-A are as follows:

(a) Daily visible emission notations of the pneumatic conveyance system C-A stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal. 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. 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. 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. If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

(b) The Permittee shall record the pressure drop across the cyclone used in conjunction with the pneumatic conveyance system (C-A), at least once daily when the pneumatic conveyance system 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 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. 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 - Response to Excursions or Exceedances shall be considered a deviation from this permit. The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

(c) In the event that cyclone failure has been observed, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

These monitoring conditions are necessary because the pneumatic conveyance system C-A and its control devices must operate properly to ensure compliance with 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) and 326 IAC 2-6.1 (MSOP).

Conclusion

The operation of this plastic sheet and molded plastics manufacturing plant shall be subject to the conditions of the Minor Source Operating Permit 085-23083-00026.

Appendix A: Emission Calculations
VOC and HAP Emissions From the Extrusion Lines

Company Name: Spartech Plastics
Address: 3454 North Detroit Street, Warsaw, Indiana 46581
MSOP: 085-23083-00026
Reviewer: ERG/ST
Date: November 6, 2006

Emissions Unit ID	Material Type	Maximum Process Rate (lbs/hour)	VOC Emission Factor (lbs/MMlb)	Acrylonitrile Emission Factor (lbs/MMlb)	Ethylbenzene Emission Factor (lbs/MMlb)	Styrene Emission Factor (lbs/MMlb)	Other HAPs Emission Factor (lbs/MMlb)	PTE of VOC (tons/year)	PTE of Acrylonitrile (tons/year)	PTE of Ethylbenzene (tons/year)	PTE of Styrene (tons/year)	PTE of Other HAPs (tons/year)
Flat Stock Production	PVC or ABS	5,310	189	7.79	8.02	126	9.0	4.40	0.18	0.19	2.93	0.21
Calender Production	PVC or ABS	1,750	189	7.79	8.02	126	9.0	1.45	0.060	0.061	0.97	0.069
Dicer Production	PVC or ABS	6,000	189	7.79	8.02	126	9.0	4.97	0.20	0.21	3.31	0.24
FCM Production	PVC or ABS	350	189	7.79	8.02	126	9.0	0.29	0.012	0.012	0.19	0.014
							Totals	**11.10**	**0.46**	**0.47**	**7.40**	**0.53**

ABS plastic is chosen as worst case material for both VOC and HAPs.
Emission factors for VOC and HAP for ABS plastic are from "Sampling and Analysis of Volatile Organic Compounds Evolved During Thermal Processing of Acrylonitrile Butadiene Styrene Composite Resins", Journal of Air and Waste Management Association, September 1995.
Emission factors for VOC and HAPs for PVC plastic are from "Emission Factor Development for the PVC Pipe Manufacturing Industry", The Vinyl Institute, December 1995 and "Process Emissions for the Vinyl Pipe Industry", Journal of Vinyl and Additive Technology, September 1996.

METHODOLOGY

PTE of VOC/HAP (tons/year) = Maximum Process Rate (lbs/hour) x VOC/HAP Emission Factor (lbs/1,000,000 lb) x 8760 hours/year x 1 ton/2000 lbs

Appendix A: Emission Calculations
Particulate Matter Emissions from Production Operations

Company Name: Spartech Plastics
Address: 3454 North Detroit Street, Warsaw, Indiana 46581
MSOP: 085-23083-00026
Reviewer: ERG/ST
Date: November 6, 2006

Bag House ID	Capture/ Control Efficiency (%)*	Material Collected (tons/year)*	Number of Operation Hours*	Max. Potential Material Collected (tons/year)	% PM	% PM10	PTE of PM Before Controls (tons/year)	PTE of PM-10 Before Controls (tons/year)	PTE of PM After Controls (tons/year)	PTE of PM10 After Controls (tons/year)
Flat Stock Process:										
BH-2	99.9%	43.20	6,912	54.8	37.1%	3.60%	20.3	1.97	0.020	0.002
BH-8	99.9%	9.50	6,912	12.0	26.2%	22.6%	3.16	2.72	0.003	0.003
BH-15	99.9%	19.87	6,912	25.2	44.5%	0.00%	11.2	0.00	0.011	0.000
Calender Process:										
BH-1	99.9%	2.98	1,920	13.6	84.4%	21.6%	11.5	2.93	0.011	0.003
BH-14	99.9%	2.98	1,920	13.6	84.4%	21.6%	11.5	2.93	0.011	0.003
BH-9	99.8%	7.75	1,920	35.4	78.6%	2.80%	27.8	0.99	0.056	0.002
Dice Process:										
BH-1 and BH-14 (see Calender Process)										
BH-4	99.8%	0.64	1,920	2.92	100%	100%	2.93	2.93	0.006	0.006
BH-10	99.8%	17.25	1,920	78.7	78.6%	2.80%	62.0	2.21	0.124	0.004
FCM Process:										
BH-13	99.9%	0.23	3,840	0.52	100%	100%	0.53	0.53	0.001	0.001
Scrap Plastic Granulation Line:										
BH-12	99.9%	5.28	3,840	12.0	0.0%	0.0%	0.0	0.0	0.0	0.0
Total		**110**		**249**			**151**	**17.2**	**0.24**	**0.02**

* Based on data provided by facility.
Data on percentage of PM and PM10 in the process material collected in baghousesis based on stack tests.

Methodology :
Maximum Potential Material Collected (tons/year) = Material Collected (tons/year) / Hours of Operation x 8760 (hours/year)
PTE Before Controls (tons/year) = Maximum Potential Material Collected (tons/year) x (% PM or PM10) / Capture Control Efficiency (%))
PTE After Controls (tons/year) = PTE Before Controls (tons/year) x (1 - Capture/ Control Efficiency (%))

Appendix A: Emission Calculations
Particulate Emissions from the Pneumatic Conveyors

Company Name: Spartech Plastics
Address: 3454 North Detroit Street, Warsaw, Indiana 46581
MSOP: 085-23083-00026
Reviewer: ERG/ST
Date: November 6, 2006

Baghouse	Collection Efficiency (%)	Material Collected (lbs/hr)*	Material Collected (tons/year)	% PM	% PM10	Potential to Emit PM (tons/year)	Potential to Emit PM10 (tons/year)
BH-5	99.9%	863	3,780	14.8%	2.8%	0.56	0.11
BH-6	99.9%	1,119	4,901	37.7%	16.8%	1.85	0.82
BH-7	99.9%	1,759	7,706	57.0%	10.0%	4.39	0.77
Total		**3,741**	**16,387**			**6.80**	**1.70**

* Based on data provided by facility for 2032 hours of operation per year.
Data on percentage of PM and PM10 in the process material collected in baghouses 5 - 7 is from stack tests.
Note : The baghouses and the cyclones to which they are connected (C-a through C-m) are considered to be integral to the pneumatic conveyor system. Potential to Emit is calculated after the effect of the integral cyclones and baghouses.

Methodology :
Material Collected (tons/year) = Material Collected (lbs/hour) / 2032 Hours of Operation x 8760 (hours/year)
PTE Controls (tons/year) = Material Collected (tons/year) x (%PM or PM10) x (1 - Control Efficiency (%)
PTE After Controls (tons/year) = Max. PTE before Controls (tons/year) * (1 - Efficiency (%))

Appendix A: Emission Calculations
Particulate Emissions from Shot Blast Machines

Company Name: Spartech Plastics
Address: 3454 North Detroit Street, Warsaw, Indiana 46581
MSOP: 085-23083-00026
Reviewer: ERG/ST
Date: November 6, 2006

							Potential to Emit (tons/year)			
Sand Blast Machine Emissions Unit ID	Blast Rate (lbs grit/hour)	Actual Hours of Operation (hours/week)	Potential Hours of Operation (hours/year)	Pollutant	Emission Factor (lbs/lb grit)	Capture/ Control Efficiency (%)	PTE of PM Before Controls	PTE of PM10 Before Controls	PTE of PM After Controls	PTE of PM10 After Controls
S-1	100	8	8760	PM	0.010	99%	4.38	3.07	0.0438	0.0307
				PM10	0.007					
S-2	100	2	8760	PM	0.010	99%	4.38	3.07	0.0438	0.0307
				PM10	0.007					

Emission factors for the Sand Blast Machine are from STAPPA/ALAPCO, Section 3 "Abrasive Blasting" for abrasive grit. PM10 emissions are 0.70 that of PM.

The sand blasting units are used on a limited basis to clean and maintain the surface of the rollers on the plastics forming machines. When in operation, the sand blasting units are mounted on the plastics forming machines and clean the rollers, which are left in place on the plastics forming machines during this operation. The plastics forming machinery cannot operate while the sand blasting units are in place and cleaning portions of the machine essential to the plastics production process. Therefore, the plastics forming equipment and sand blasters cannot operate simultaneously. Although the sand blast machines are in operation only ten hours per week, this limited hours of operation is not enforceable in the permit. Therefore, potential to emit is based on 8760 hours of operation per year.

Control is by cyclone and bag filters and capture/control efficiency is as reported by source. Captured abrasive is reused.

Methodology

PTE of PM/PM10 Before Controls (tons/year) = Blast Rate (lbs shot/hour) x Emission Factor (lbs/lb shot) x 8,760 hours/year x 1 ton/2,000 lbs
PTE of PM/PM10 After Controls (tons/year) = PTE of PM/PM10 Before Controls (tons/year) x (1 - Capture/Control Efficiency (%))

Appendix A: Emission Calculations
Combustion Emissions for Natural Gas Fired Boilers, Heater, and Dryers

Company Name: Spartech Plastics
Address: 3454 North Detroit Street, Warsaw, Indiana 46581
MSOP: 085-23083-00026
Reviewer: ERG/ST
Date: November 6, 2006

Emission Unit Description	Emission Unit ID	Heat Input Capacity (MMBtu/hour)	Maximum Potential Throughput (MMCF/year)
Natural Gas-Fired Boiler	H-1	1.00	8.59
Natural Gas-Fired Boiler	H-2	0.75	6.44
Natural Gas-Fired Oil Heater	H-3	2.45	21.0
Natural Gas-Fired Dryers	Dryers	1.02	8.76

Pollutant Emission Factors (lbs/MMCF)						
PM*	PM10*	SO_2	NOx**	CO	VOC	HAPs
1.9	7.6	0.6	100	84.0	5.5	1.89

Potential To Emit (tons/yr)							
Emission Unit ID	PM	PM10	SO_2	NOx	CO	VOC	HAPs
H-1	0.01	0.03	0.00	0.43	0.36	0.02	0.01
H-2	0.01	0.02	0.00	0.32	0.27	0.02	0.01
H-3	0.02	0.08	0.01	1.05	0.88	0.06	0.02
Dryers	0.01	0.03	0.00	0.44	0.37	0.02	0.01
TOTALS	**0.04**	**0.17**	**0.01**	**2.24**	**1.88**	**0.12**	**0.04**

* PM emission factor is for filterable PM only. PM10 emission factor is for filterable and condensable PM and PM10 combined.
**Emission factors for NOx: Uncontrolled = 100 lb/MMCF
Emission factors are from AP-42, Chapter 1.4 - Natural Gas Combustion, Tables 1.4-1, 1.4-2, 1.4-3 and 1.4-4. SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03. (AP-42 Supplement D 7/98)

Methodology
Max. Potential Throughput (MMCF/year) = Heat Input Capacity (MMBtu/hour) x 8,760 (hours/year) x 1 MMCF/1,020 MMBtu
PTE (tons/year) = Max. Potential Throughput (MMCF/year) x Emission Factor (lbs/MMCF) x 1 ton/2,000 lbs