



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

DATE: February 18, 2009

TO: Interested Parties / Applicant

RE: RTP Company / M097-21096-00316

FROM: Iryn Calilung
Section Chief
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 501, Indianapolis, IN 46204, **within fifteen (15) calendar days of the receipt 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 Indianapolis Office of Environmental Services, Air Permits at (317) 327-2234.

Enclosures



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

Minor Source Operating Permit Renewal OFFICE OF AIR QUALITY

**RTP Company
8111 Zionsville Road
Indianapolis, Indiana 46268**

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

This permit is issued 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.: M097-21096-00316	
Issued by:  Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: February 18, 2009 ¹ Expiration Date: February 18, 2019

TABLE OF CONTENTS

A. SOURCE SUMMARY.....	4
A.1 General Information [326 IAC 2-5.1-3(c)][326 IAC 2-6.1-4(a)]	
A.2 Emission Units and Pollution Control Equipment Summary	
B. GENERAL CONDITIONS	8
B.1 Definitions [326 IAC 2-1.1-1]	
B.2 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]	
B.3 Term of Conditions [326 IAC 2-1.1-9.5]	
B.4 Enforceability	
B.5 Severability	
B.6 Property Rights or Exclusive Privilege	
B.7 Duty to Provide Information	
B.8 Certification	
B.9 Annual Notification [326 IAC 2-6.1-5(a)(5)]	
B.10 Preventive Maintenance Plan [326 IAC 1-6-3]	
B.11 Prior Permits Superseded [326 IAC 2-1.1-9.5]	
B.12 Termination of Right to Operate [326 IAC 2-6.1-7(a)]	
B.13 Permit Renewal [326 IAC 2-6.1-7]	
B.14 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]	
B.15 Source Modification Requirement	
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] [IC 13-17-3-2][IC 13-30-3-1]	
B.17 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]	
B.18 Annual Fee Payment [326 IAC 2-1.1-7]	
B.19 Credible Evidence [326 IAC 1-1-6]	
C. SOURCE OPERATION CONDITIONS	13
Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]	
C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]	
C.2 Permit Revocation [326 IAC 2-1.1-9]	
C.3 Opacity [326 IAC 5-1]	
C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]	
C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]	
C.6 Fugitive Dust Emissions [326 IAC 6-4]	
C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]	
Testing Requirements [326 IAC 2-6.1-5(a)(2)]	
C.8 Performance Testing [326 IAC 3-6]	
Compliance Requirements [326 IAC 2-1.1-11]	
C.9 Compliance Requirements [326 IAC 2-1.1-11]	
Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]	
C.10 Compliance Monitoring [326 IAC 2-1.1-11]	
C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]	
C.12 Instrument Specifications [326 IAC 2-1.1-11]	
Corrective Actions and Response Steps	
C.13 Response to Excursions or Exceedances	
C.14 Actions Related to Noncompliance Demonstrated by a Stack Test	

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

- C.15 Malfunctions Report [326 IAC 1-6-2]
- C.16 General Record Keeping Requirements [326 IAC 2-6.1-5]
- C.17 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2]
[IC 13-14-1-13]

D.1. EMISSIONS UNIT OPERATION CONDITIONS..... 19

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

- D.1.1 Particulate Matter [326 IAC 6-3-2]
- D.1.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.1.3 Particulate Control

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

- D.1.4 Visible Emissions Notations
- D.1.5 Broken or Failed Bag Detection

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

- D.1.6 Record Keeping Requirement

Certification 22
Annual Notification 23
Malfunction Report 24

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 thermoplastic compounding operation.

Source Address:	8111 Zionsville Road, Indianapolis, Indiana 46268
Mailing Address:	8111 Zionsville Road, Indianapolis, IN 46268
General Source Phone Number:	317-802-9813
SIC Code:	3087
County Location:	Marion
Source Location Status:	Nonattainment for PM2.5 standard Attainment for all other criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) Two (2) Thermoplastic Compounding 2.5" Extruders, Emission Unit IDs I-1 and I-2, with a maximum production capacity of 500 pounds per hour of specialty plastic resins each, constructed in 1997, using dust collector (DC-1) for particulate control, exhausting to stack S-1;
- (b) One (1) Thermoplastic Compounding 70 mm Extruder, Emission Unit ID I-6, with a maximum capacity of 1,000 pounds per hour of specialty plastic resins, constructed in 2001, using dust collector (DC-1) for particulate control, exhausting to stack S-1;
- (c) Two (2) Thermoplastic Compounding 3.5" Extruders, Emission Unit IDs I-7 and I-8, with a maximum capacity of 900 pounds per hour of specialty plastic resins each, constructed in 1997, using dust collector (DC-1) for particulate control, exhausting to stack S-1;
- (d) Two (2) Thermoplastic Compounding 4.5" Extruders, Emission Unit IDs I-11 and I-12, with a maximum capacity of 2,200 pounds per hour of specialty plastic resins each, constructed in 1997, using dust collector (DC-1) for particulate control, exhausting to stack S-1;
- (e) One (1) Thermoplastic Compounding 2" R&D Extruder, Emission Unit ID I-13, with a maximum capacity of 250 pounds per hour of specialty plastic resins, constructed in 1997, using dust collector (DC-2) for particulate control, exhausting to stack S-2;
- (f) One (1) Thermoplastic Compounding 1.5" R&D Extruder, Emission Unit ID I-15, with a maximum capacity of 100 pounds per hour of specialty plastic resins, constructed in 1997, using dust collector (DC-2) for particulate control, exhausting to stack S-2;

- (g) One (1) 500 pound capacity resin pre-mixer, Emission Unit ID B-00, with a maximum throughput of 100 pounds per hour of specialty plastic resins, using dust collector (DC-1) for particulate control, constructed in 1998, exhausting to stack S-1;
- (h) Two (2) 3,300 pound capacity resin pre-mixers, Emission Unit IDs B-1 and B-3, with a maximum throughput of 1,400 pounds per hour of specialty plastic resins each, constructed in 1997, using dust collector (DC-1) for particulate control, exhausting to stack S-1;
- (i) Two (2) 6,600 pound capacity resin pre-mixers, Emission Unit IDs B-6 and B-7, with a maximum throughput of 1,400 pounds per hour of specialty plastic resins each, constructed in 1997, using dust collector (DC-1) for particulate control, exhausting to stack S-1;
- (j) One (1) 22,000 pound capacity resin pre-mixer, Emission Unit ID B-10, with a maximum throughput of 1,000 pounds per hour of specialty plastic resins, constructed in 2004, using dust collector (DC-1) for particulate control, exhausting to stack S-1;
- (k) One (1) 22,000 pound capacity resin pre-mixer, Emission Unit ID B-11, with a maximum throughput of 2,200 pounds per hour of specialty plastic resins, constructed in 2004, using dust collector (DC-1) for particulate control, exhausting to stack S-1;
- (l) One (1) 3,300 pound capacity resin post-mixer, Emission Unit ID B-12, with a maximum throughput of 500 pounds per hour of specialty plastic resins, constructed in 1997. This unit is a closed unit with no exhaust.
- (m) One (1) 12,000 pound capacity resin post-mixer, Emission Unit ID B-13, with a maximum throughput of 1,400 pounds per hour of specialty plastic resins, constructed in 1997. This unit is a closed unit with no exhaust.
- (n) One (1) 6,600 pound capacity resin post-mixer, Emission Unit ID B-14, with a maximum throughput of 1,000 pounds per hour of specialty plastic resins, constructed in 1997. This unit is a closed unit with no exhaust.
- (o) Two (2) 22,000 pound capacity resin post-mixers, Emission Unit IDs B-15 and B-16, with a maximum throughput of 2,200 pounds per hour of specialty plastic resins each, with B-15 constructed in 1999 and B-16 constructed in 2002. These units are closed units with no exhaust.
- (p) One (1) Electric Dryer, Emission Unit ID D-1 with a maximum capacity of 200 pounds per hour of specialty plastic resins, constructed in 1997, using dust collector (DC-2) for particulate control, exhausting to stack S-2;
- (q) One (1) Pigment Weigh Hood, Emission Unit ID H-1, with maximum capacity of 20 pounds per hour of pigment, constructed in 1997, using dust collector (DC-2) for particulate control, exhausting to stack S-2;
- (r) One (1) Scale Station for raw material weighing, Emission Unit ID H-2, with a maximum capacity of 500 pounds per hour of raw material, constructed in 1998, using dust collector (DC-1) for particulate control, exhausting to stack S-1;
- (s) One (1) Bar Mold Machine, Emission Unit ID M-1a, with maximum capacity of 200 pounds per hour, constructed in 1997, using dust collector (DC-2) for particulate control, exhausting to stack S-2;

- (t) One (1) Bar Mold Machine, Emission Unit ID M-1b, with maximum capacity of 150 pounds per hour, constructed in 2004, using dust collector (DC-2) for particulate control, exhausting to stack S-2;
- (u) Two (2) Color Chip Mold Machines, Emission Unit IDs M-2 and M-3, with maximum capacity of 100 pounds per hour each, constructed in 1997, using dust collector (DC-2) for particulate control, exhausting to stack S-2;
- (v) One (1) VLF Extrusion Line 1, Emission Unit ID I-17, consisting of one (1) Thermoplastic Long Fiber Resin Extruder and one (1) air classifier, with a maximum production capacity of 800 pounds per hour of VLF pellets, constructed in 1997, using dust collector (DC-4) for particulate control, exhausting through two (2) stacks S-5a and S-5b. The extruder is used to process a plastic resin which consists primarily of polypropylene, polybutylene, ABS and nylon resins;
- (w) One (1) VLF Extrusion Line 2, Emission Unit ID I-18, consisting of one (1) Thermoplastic Long Fiber Resin Extruder and one (1) air classifier, with a maximum production capacity of 800 pounds per hour of VLF pellets, constructed in 1997, using dust collector (DC-5) for particulate control, exhausting through two (2) stacks S-6a and S-6b. The extruder is used to process a plastic resin which consists primarily of polypropylene, polybutylene, ABS and nylon resins;
- (x) One (1) VLF Extrusion Line 3, Emission Unit ID I-19, consisting of one (1) Thermoplastic Long Fiber Resin Extruder with associated cooling bath and chopper and one (1) air classifier, with a maximum plastic resin throughput of 420 pounds per hour and a maximum production capacity of 700 pounds per hour of VLF pellets, constructed in 2004, using a dust collector (DC-6) for particulate control, exhausting through two (2) stacks S-7a and S-7b;
- (y) One (1) VLF Extrusion Line 4, Emission Unit ID I-20, consisting of one (1) Thermoplastic Long Fiber Resin Extruder with associated cooling bath, puller and chopper and one (1) air classifier, with a maximum plastic resin throughput of 630 pounds per hour and a maximum production capacity of 1,050 pounds per hour of VLF pellets, constructed in 2006, using a dust collector (DC-7) for particulate control, exhausting through two (2) stacks S-8a and S-8b; and
- (z) One (1) VLF Extrusion Line 5, Emission Unit ID I-21, consisting of one (1) Thermoplastic Long Fiber Resin Extruder with associated cooling bath, puller and chopper and one (1) air classifier, with a maximum plastic resin throughput of 630 pounds per hour and a maximum production capacity of 1,050 pounds per hour of VLF pellets, approved for construction in 2008, using a dust collector (DC-8) for particulate control, exhausting through two (2) stacks S-9a and S-9b.
- (aa) One (1) Aspiration Separator Unit, Emission Unit ID A-1, with a maximum operating capacity of 3,000 pounds per hour of VLF pellets, and a flow rate of 7,200 acfm, constructed in 1997, using a dust collector (DC-3) as control, exhausting to stack S-4;
- (bb) One (1) IGG-17L Pyrolysis Oven, Emission Unit ID# PF-1, constructed in 1997, with a maximum heat input of 0.95 MMBTU/hr, burning natural gas, processing less than 50 pounds per hour of plastic, and exhausting to stack S-3. The pyrolysis oven operates in batch mode at a maximum of one (1) 8-hour cycle per day and is used to clean, by thermal decomposition, the plastic resin on the extruder screws;
- (cc) Eight (8) natural gas-fired heaters, each rated at 0.25 MMBtu per hour, constructed in 1997; and

- (dd) One (1) PCP Model G2T Pyrolysis Oven, Emission Unit ID# PF-2, approved for construction in 2008, with a maximum heat input of 0.475 MMBTU/hr, burning natural gas, processing a maximum of 10 pounds per hour of plastic, and exhausting to stack S-10. The pyrolysis oven operates in batch mode at a maximum of two (2) 4-hour cycles per day and is used to clean, by thermal decomposition, the plastic resin on the plastic extrusion dies.

SECTION B GENERAL CONDITIONS

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][IC 13-15-3-6(a)]

- (a) This permit, M097-21096-00316, is issued for a fixed term of ten (10) 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(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:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, IN 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) 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) 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 [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to M097-21096-00316 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 one hundred twenty (120) days 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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

- (b) A timely renewal application is one that is:
 - (1) Submitted at least one hundred twenty (120) days 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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application shall be certified by an "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 IAC 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][IC 13-17-3-2][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 the conditions of this permit;

(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 facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(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 Operational Control [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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

- (c) The Permittee may implement notice-only changes addressed in the request for a notice-only change 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 due within thirty (30) calendar days of receipt of a bill from IDEM, OAQ,.
- (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

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

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 thirty percent (30%) 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.

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]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 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
MC 61-52 IGCN 1003
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 Licensed 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 Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed 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
MC 61-53 IGCN 1003
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 an "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 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 [326 IAC 2-6.1-5(a)(2)]

C.10 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.11 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.12 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 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.13 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; and/or

- (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.

C.14 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 facility 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 retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

C.15 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.16 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 within ninety (90) days of permit issuance or ninety (90) days of initial start-up, whichever is later.

C.17 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
MC 61-53 IGCN 1003
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(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:

- (a) Two (2) Thermoplastic Compounding 2.5" Extruders, Emission Unit IDs I-1 and I-2, with a maximum production capacity of 500 pounds per hour of specialty plastic resins each, constructed in 1997, using dust collector (DC-1) for particulate control, exhausting to stack S-1;
- (b) One (1) Thermoplastic Compounding 70 mm Extruder, Emission Unit ID I-6, with a maximum capacity of 1,000 pounds per hour of specialty plastic resins, constructed in 2001, using dust collector (DC-1) for particulate control, exhausting to stack S-1;
- (c) Two (2) Thermoplastic Compounding 3.5" Extruders, Emission Unit IDs I-7 and I-8, with a maximum capacity of 900 pounds per hour of specialty plastic resins each, constructed in 1997, using dust collector (DC-1) for particulate control, exhausting to stack S-1;
- (d) Two (2) Thermoplastic Compounding 4.5" Extruders, Emission Unit IDs I-11 and I-12, with a maximum capacity of 2,200 pounds per hour of specialty plastic resins each, constructed in 1997, using dust collector (DC-1) for particulate control, exhausting to stack S-1;
- (e) One (1) Thermoplastic Compounding 2" R&D Extruder, Emission Unit ID I-13, with a maximum capacity of 250 pounds per hour of specialty plastic resins, constructed in 1997, using dust collector (DC-2) for particulate control, exhausting to stack S-2;
- (f) One (1) Thermoplastic Compounding 1.5" R&D Extruder, Emission Unit ID I-15, with a maximum capacity of 100 pounds per hour of specialty plastic resins, constructed in 1997, using dust collector (DC-2) for particulate control, exhausting to stack S-2;
- (g) One (1) 500 pound capacity resin pre-mixer, Emission Unit ID B-00, with a maximum throughput of 100 pounds per hour of specialty plastic resins, using dust collector (DC-1) for particulate control, constructed in 1998, exhausting to stack S-1;
- (h) Two (2) 3,300 pound capacity resin pre-mixers, Emission Unit IDs B-1 and B-3, with a maximum throughput of 1,400 pounds per hour of specialty plastic resins each, constructed in 1997, using dust collector (DC-1) for particulate control, exhausting to stack S-1;
- (i) Two (2) 6,600 pound capacity resin pre-mixers, Emission Unit IDs B-6 and B-7, with a maximum throughput of 1,400 pounds per hour of specialty plastic resins each, constructed in 1997, using dust collector (DC-1) for particulate control, exhausting to stack S-1;
- (j) One (1) 22,000 pound capacity resin pre-mixer, Emission Unit ID B-10, with a maximum throughput of 1,000 pounds per hour of specialty plastic resins, constructed in 2004, using dust collector (DC-1) for particulate control, exhausting to stack S-1;
- (k) One (1) 22,000 pound capacity resin pre-mixer, Emission Unit ID B-11, with a maximum throughput of 2,200 pounds per hour of specialty plastic resins, constructed in 2004, using dust collector (DC-1) for particulate control, exhausting to stack S-1;

(The information describing the process contained in this emissions unit 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 Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emissions from the following facilities shall not exceed the allowable emission rates included in the table as follows:

Emission Unit ID	Stack ID	Process Weight Rate (tons/hr)	Allowable PM emissions (lbs/hr)
Extruder, ID I-1	S-1	0.25	1.62
Extruder, ID I-2	S-1	0.25	1.62
Extruder, ID I-6	S-1	0.50	2.58
Extruder, ID I-7	S-1	0.45	2.40
Extruder, ID I-8	S-1	0.45	2.40
Extruder, ID I-11	S-1	1.10	4.37
Extruder, ID I-12	S-1	1.10	4.37
Extruder, ID I-13	S-2	0.125	1.02
Extruder, ID I-15	S-2	0.05	0.55
Resin pre-mixer, ID B-00	S-1	0.05	0.55
Resin pre-mixer, ID B-1	S-1	0.70	3.23
Resin pre-mixer, ID B-3	S-1	0.70	3.23
Resin pre-mixer, ID B-6	S-1	0.70	3.23
Resin pre-mixer, ID B-7	S-1	0.70	3.23
Resin pre-mixer, ID B-10	S-1	0.50	2.58
Resin pre-mixer, ID B-11	S-1	1.10	4.37

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

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

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

D.1.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.1.3 Particulate Control

In order to comply with condition D.1.1, the dust collectors DC-1 and DC-2 for particulate control shall be in operation and control emissions from the Extruders and Resin pre-mixers at all times that the Extruders and Resin pre-mixers are in operation.

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

D.1.4 Visible Emissions Notations

- (a) Daily visible emission notations of the dust collector DC-1 and DC-2 stack exhausts 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 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

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

D.1.6 Record Keeping Requirement

- (a) To document compliance with Condition D.1.4, the Permittee shall maintain records of visible emission notations of the stack exhausts for DC-1 and DC-2 once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY**

**MINOR SOURCE OPERATING PERMIT (MSOP)
CERTIFICATION**

Source Name: RTP Company
Source Address: 8111 Zionsville Road, Indianapolis, Indiana 46268
Mailing Address: 8111 Zionsville Road, Indianapolis, IN 46268
MSOP No.: M097-21096-00316

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify)_____
- Report (specify)_____
- Notification (specify)_____
- Affidavit (specify)_____
- Other (specify)_____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**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:	RTP Company
Address:	8111 Zionsville Road
City:	Indianapolis, Indiana 46268
Phone #:	317-802-9813
MSOP #:	M097-21096-00316

I hereby certify that RTP Company is :

still in operation.

no longer in operation.

I hereby certify that RTP Company is :

in compliance with the requirements of MSOP M097-21096-00316.

not in compliance with the requirements of MSOP M097-21096-00316.

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 ?____, 100 TONS/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 PERMIT 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:	RTP Company
Source Location:	8111 Zionsville Road, Indianapolis, Indiana 46268
County:	Marion
SIC Code:	3087
Permit Renewal No.:	M097-21096-00316
Permit Reviewer:	ERG/TE

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from RTP Company relating to the operation of a thermoplastic compounding operation.

History

On April 13, 2005, RTP Company submitted an application to the OAQ requesting to renew its operating permit. Additional information was submitted on August 17, 2005, November 21, 2007, and October 28, 2008. RTP Company was issued an initial MSOP M097-11724-00316 on July 13, 2000.

Permitted Emission Units and Pollution Control Equipment

- (a) Two (2) Thermoplastic Compounding 2.5" Extruders, Emission Unit IDs I-1 and I-2, with a maximum production capacity of 500 pounds per hour of specialty plastic resins each, constructed in 1997, using dust collector (DC-1) for particulate control, exhausting to stack S-1;
- (b) One (1) Thermoplastic Compounding 70 mm Extruder, Emission Unit ID I-6, with a maximum capacity of 1,000 pounds per hour of specialty plastic resins, constructed in 2001, using dust collector (DC-1) for particulate control, exhausting to stack S-1;
- (c) Two (2) Thermoplastic Compounding 3.5" Extruders, Emission Unit IDs I-7 and I-8, with a maximum capacity of 900 pounds per hour of specialty plastic resins each, constructed in 1997, using dust collector (DC-1) for particulate control, exhausting to stack S-1;
- (d) Two (2) Thermoplastic Compounding 4.5" Extruders, Emission Unit IDs I-11 and I-12, with a maximum capacity of 2,200 pounds per hour of specialty plastic resins each, constructed in 1997, using dust collector (DC-1) for particulate control, exhausting to stack S-1;
- (e) One (1) Thermoplastic Compounding 2" R&D Extruder, Emission Unit ID I-13, with a maximum capacity of 250 pounds per hour of specialty plastic resins, constructed in 1997, using dust collector (DC-2) for particulate control, exhausting to stack S-2;
- (f) One (1) Thermoplastic Compounding 1.5" R&D Extruder, Emission Unit ID I-15, with a maximum capacity of 100 pounds per hour of specialty plastic resins, constructed in 1997, using dust collector (DC-2) for particulate control, exhausting to stack S-2;
- (g) One (1) 500 pound capacity resin pre-mixer, Emission Unit ID B-00, with a maximum throughput of 100 pounds per hour of specialty plastic resins, using dust collector (DC-1) for particulate control, constructed in 1998, exhausting to stack S-1;

- (h) Two (2) 3,300 pound capacity resin pre-mixers, Emission Unit IDs B-1 and B-3, with a maximum throughput of 1,400 pounds per hour of specialty plastic resins each, constructed in 1997, using dust collector (DC-1) for particulate control, exhausting to stack S-1;
- (i) Two (2) 6,600 pound capacity resin pre-mixers, Emission Unit IDs B-6 and B-7, with a maximum throughput of 1,400 pounds per hour of specialty plastic resins each, constructed in 1997, using dust collector (DC-1) for particulate control, exhausting to stack S-1;
- (j) One (1) 22,000 pound capacity resin pre-mixer, Emission Unit ID B-10, with a maximum throughput of 1,000 pounds per hour of specialty plastic resins, constructed in 2004, using dust collector (DC-1) for particulate control, exhausting to stack S-1;
- (k) One (1) 22,000 pound capacity resin pre-mixer, Emission Unit ID B-11, with a maximum throughput of 2,200 pounds per hour of specialty plastic resins, constructed in 2004, using dust collector (DC-1) for particulate control, exhausting to stack S-1;
- (l) One (1) 3,300 pound capacity resin post-mixer, Emission Unit ID B-12, with a maximum throughput of 500 pounds per hour of specialty plastic resins, constructed in 1997. This unit is a closed unit with no exhaust.
- (m) One (1) 12,000 pound capacity resin post-mixer, Emission Unit ID B-13, with a maximum throughput of 1,400 pounds per hour of specialty plastic resins, constructed in 1997. This unit is a closed unit with no exhaust.
- (n) One (1) 6,600 pound capacity resin post-mixer, Emission Unit ID B-14, with a maximum throughput of 1,000 pounds per hour of specialty plastic resins, constructed in 1997. This unit is a closed unit with no exhaust.
- (o) Two (2) 22,000 pound capacity resin post-mixers, Emission Unit IDs B-15 and B-16, with a maximum throughput of 2,200 pounds per hour of specialty plastic resins each, with B-15 constructed in 1999 and B-16 constructed in 2002. These units are closed units with no exhaust.
- (p) One (1) Electric Dryer, Emission Unit ID D-1 with a maximum capacity of 200 pounds per hour of specialty plastic resins, constructed in 1997, using dust collector (DC-2) for particulate control, exhausting to stack S-2;
- (q) One (1) Pigment Weigh Hood, Emission Unit ID H-1, with maximum capacity of 20 pounds per hour of pigment, constructed in 1997, using dust collector (DC-2) for particulate control, exhausting to stack S-2;
- (r) One (1) Scale Station for raw material weighing, Emission Unit ID H-2, with a maximum capacity of 500 pounds per hour of raw material, constructed in 1998, using dust collector (DC-1) for particulate control, exhausting to stack S-1;
- (s) One (1) Bar Mold Machine, Emission Unit ID M-1a, with maximum capacity of 200 pounds per hour, constructed in 1997, using dust collector (DC-2) for particulate control, exhausting to stack S-2;
- (t) One (1) Bar Mold Machine, Emission Unit ID M-1b, with maximum capacity of 150 pounds per hour, constructed in 2004, using dust collector (DC-2) for particulate control, exhausting to stack S-2;

- (u) Two (2) Color Chip Mold Machines, Emission Unit IDs M-2 and M-3, with maximum capacity of 100 pounds per hour each, constructed in 1997, using dust collector (DC-2) for particulate control, exhausting to stack S-2;
- (v) One (1) VLF Extrusion Line 1, Emission Unit ID I-17, consisting of one (1) Thermoplastic Long Fiber Resin Extruder and one (1) air classifier, with a maximum production capacity of 800 pounds per hour of VLF pellets, constructed in 1997, using dust collector (DC-4) for particulate control, exhausting through two (2) stacks S-5a and S-5b. The extruder is used to process a plastic resin which consists primarily of polypropylene, polybutylene, ABS and nylon resins;

Note: VLF Extrusion Line 1 was formerly identified as emission units 18 and 19.

- (w) One (1) VLF Extrusion Line 2, Emission Unit ID I-18, consisting of one (1) Thermoplastic Long Fiber Resin Extruder and one (1) air classifier, with a maximum production capacity of 800 pounds per hour of VLF pellets, constructed in 1997, using dust collector (DC-5) for particulate control, exhausting through two (2) stacks S-6a and S-6b. The extruder is used to process a plastic resin which consists primarily of polypropylene, polybutylene, ABS and nylon resins;

Note: VLF Extrusion Line 2 was formerly identified as emission units 20 and 21.

- (x) One (1) VLF Extrusion Line 3, Emission Unit ID I-19, consisting of one (1) Thermoplastic Long Fiber Resin Extruder with associated cooling bath and chopper and one (1) air classifier, with a maximum plastic resin throughput of 420 pounds per hour and a maximum production capacity of 700 pounds per hour of VLF pellets, constructed in 2004, using a dust collector (DC-6) for particulate control, exhausting through two (2) stacks S-7a and S-7b;

Note: VLF Extrusion Line 3 was formerly identified as emission units 22 and 23.

- (y) One (1) Aspiration Separator Unit, Emission Unit ID A-1, with a maximum operating capacity of 3,000 pounds per hour of VLF pellets, and a flow rate of 7,200 acfm, constructed in 1997, using a dust collector (DC-3) as control, exhausting to stack S-4;
- (z) One (1) IGG-17L Pyrolysis Oven, Emission Unit ID# PF-1, constructed in 1997, with a maximum heat input of 0.95 MMBTU/hr, burning natural gas, processing less than 50 pounds per hour of plastic, and exhausting to stack S-3. The pyrolysis oven operates in batch mode at a maximum of one (1) 8-hour cycle per day and is used to clean, by thermal decomposition, the plastic resin on the extruder screws; and
- (aa) Eight (8) natural gas-fired heaters, each rated at 0.25 MMBtu per hour, constructed in 1997.

New Emission Units and Pollution Control Equipment Added to the Source

The source has requested that the following new emission units, with potential emissions at exempt levels (refer to Appendix A for calculations), be added to the permit:

- (a) One (1) VLF Extrusion Line 4, Emission Unit ID I-20, consisting of one (1) Thermoplastic Long Fiber Resin Extruder with associated cooling bath, puller and chopper and one (1) air classifier, with a maximum plastic resin throughput of 630 pounds per hour and a maximum production capacity of 1,050 pounds per hour of VLF pellets, constructed in 2006, using a dust collector (DC-7) for particulate control, exhausting through two (2) stacks S-8a and S-8b;

- (b) One (1) VLF Extrusion Line 5, Emission Unit ID I-21, consisting of one (1) Thermoplastic Long Fiber Resin Extruder with associated cooling bath, puller and chopper and one (1) air classifier, with a maximum plastic resin throughput of 630 pounds per hour and a maximum production capacity of 1,050 pounds per hour of VLF pellets, approved for construction in 2008, using a dust collector (DC-8) for particulate control, exhausting through two (2) stacks S-9a and S-9b; and
- (c) One (1) PCP Model G2T Pyrolysis Oven, Emission Unit ID# PF-2, approved for construction in 2008, with a maximum heat input of 0.475 MMBTU/hr, burning natural gas, processing a maximum of 10 pounds per hour of plastic, and exhausting to stack S-10. The pyrolysis oven operates in batch mode at a maximum of two (2) 4-hour cycles per day and is used to clean, by thermal decomposition, the plastic resin on the plastic extrusion dies.

Emission Units and Pollution Control Equipment Removed From the Source

- (a) Two (2) Thermoplastic Compounding 2.5" Extruders, Emission Units IDs #3 and #4, with a maximum capacity of 500 lb/hr each;
- (b) One (1) Thermoplastic Compounding 53 mm Twin Extruder Emission Unit ID #5 (this unit was never installed at the source);
- (c) One (1) Thermoplastic Compounding 57 mm Extruder, Emission Unit ID #9, with a maximum capacity of 700 lb/hr;
- (d) One (1) Thermoplastic Compounding 70 mm Extruder, Emission Unit ID #10, with a maximum capacity of 1,000 lb/hr;
- (e) One (1) Thermoplastic Compounding 2" R&D Extruder, Emission Unit ID #14, with a maximum capacity of 250 lb/hr;
- (f) One (1) Thermoplastic Compounding 30 mm R&D Extruder, Emission Unit ID #16, with a maximum capacity of 100 lb/hr; and
- (g) Five (5) Resin Mixers, Emission Unit IDs B2, B4, B5, B8 and B9, with a maximum capacity of 1,400 lb/hr each (Mixers B5, B8 and B9 were never installed at this source).

Existing Approvals

Since the issuance of the MSOP 097-11724-00316 on July 13, 2000, the source has constructed or has been operating under the following additional approvals:

- (a) MSOP Notice-Only Change No. 097-14927-00316 issued on September 19, 2001;
- (b) MSOP Minor Permit Revision No. 097-18659-00316 issued on March 1, 2004; and
- (c) MSOP Notice-Only Change No. 097-20008-00316 issued on October 18, 2004.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

The following terms and conditions from previous approvals have been revised in this MSOP Renewal:

D.1.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations: Particulate Emissions Limitations), the PM emissions from the twelve (12) Extruders (Emission Units #1 to #12 controlled by Dust Collector DC-1), and the two (2) Extruders (Emission Units #13 and #14 controlled by the Dust Collector DC-2), as stated in the Construction Permit Amendment CP-A099-0316-01 issued on November 17, 1999, shall not exceed the pound per hour emission rate established as E in the following formula below.

Pursuant to 326 IAC 6-3-2, Emission Units B 10 and B 11 as stated in the minor MSOP revision number 097-18659-00316, shall not exceed the pound per hour emission rate established as E in the formula below:

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

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

The combined process weight rate for the twelve (12) Extruders (Emission Units 1 to 12 controlled by Dust Collector DC-1) is 6 tons per hour. Therefore pursuant to 326 IAC 6-3-2, the allowable emissions rate for the (12) Extruders (Emission Units #1 to #12 controlled by DC-1) is 13.62 pounds per hour.

The combined process weight rate for the two (2) Extruders (Emission Units #13 and #14 controlled by the Dust Collector DC-2) is 0.2 tons per hour. Therefore pursuant to 326 IAC 6-3-2, the allowable emissions rate for the (2) Extruders (Emission Units 13 and 14 controlled by DC-2) is 1.39 pounds per hour.

The combined process weight rate for two (2) Blenders/Mixers (Emission Units B10 and B11 controlled by Dust Collector DC-1), is 1.6 tons per hour. Therefore pursuant to 326 IAC 6-3-2, the allowable emission rate is 5.6175 pounds per hour for the blenders specified above.

The limits pursuant to 326 IAC 6-3-2 must be calculated on a unit by unit basis. The process weight rates for several units cannot be combined to calculate a combined allowable emission rate as was done in the original condition. Therefore, the condition has been revised to include a table with the allowable particulate emissions listed for each individual emission unit based on the process weight rate of each unit.

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Marion County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Attainment effective February 18, 2000, for the part of the city of Indianapolis bounded by 11 th Street on the north; Capitol Avenue on the west; Georgia Street on the south; and Delaware Street on the east. Unclassifiable or attainment effective November 15, 1990, for the remainder of Indianapolis and Marion County.
O ₃	Attainment effective November 8, 2007, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
PM _{2.5}	Basic Nonattainment effective April 5, 2005.
NO ₂	Cannot be classified or better than national standards.
Pb	Attainment effective July 10, 2000, for the part of Franklin Township bounded by Thompson Road on the south; Emerson Avenue on the west; Five Points Road on the east; and Troy Avenue on the north. Attainment effective July 10, 2000, for the part of Wayne Township bounded by Rockville Road on the north; Girls School Road on the east; Washington Street on the south; and Bridgeport Road on the west. The remainder of the county is not designated.
¹ Attainment effective October 18, 2000, for the 1-hour ozone standard for the Indianapolis area, including Marion County, and is a maintenance area for the 1-hour ozone National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X*. The 1-hour designation was revoked effective June 15, 2005.	

(a) Ozone Standards

- (1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
- (2) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and St. Joseph as attainment for the 8-hour ozone standard.
- (3) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Marion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) PM2.5

Marion County has been classified as nonattainment for PM2.5 in 70 FR 943 dated January 5, 2005. On May 8th, 2008, U.S. EPA promulgated specific New Source Review rules for PM2.5 emissions, and the effective date of these rules was July 15th, 2008. Therefore, direct PM2.5 and SO₂ emissions were reviewed pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5. See the State Rule Applicability – Entire Source section.

- (c) Other Criteria Pollutants
Marion 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.
- (d) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

Unrestricted Potential Emissions

Appendix A of this TSD reflects the unrestricted potential emissions of the source.

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all criteria pollutants is less than 100 tons per year. The source is not subject to the provisions of 326 IAC 2-7. The potential to emit of PM and PM10 is still greater than 25 tons per year. Therefore, the source will be issued an MSOP Renewal.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year.
- (c) Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-7, fugitive emissions are not counted toward the determination of Part 70 applicability.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this source.
- (b) The source is not subject to the NSPS, 40 CFR 60, Subpart DDD, Standards for VOC Emissions from the Polymer Manufacturing Industry, because it does not manufacture polymers but purchases the resins as polymer, mixes additives and colorants, and re-extrudes the resins as polymers.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this permit renewal.
- (d) The source is not considered a major source under 40 CFR Part 63, Subpart A, and as such, is not subject to the NESHAP, 40 CFR Part 63, Subpart WWWW, Reinforced Plastic Composites Production.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-1.1-5 (Nonattainment New Source Review)

- (a) This existing stationary source is not major for PSD because the emissions of each attainment criteria pollutant are less than two hundred fifty (<250) tons per year, and it is not one of the twenty-eight (28) listed source categories.
- (b) This existing source is not a major stationary source, under nonattainment new source review rules (326 IAC 2-1.1-5) since PM_{2.5} and SO₂ are not emitted at a rate of 100 tons per year or more.

326 IAC 2-6 (Emission Reporting)

This source is located in Marion County, it is not subject to 326 IAC 2-7 (Part 70), and the potential to emit of each criteria pollutant is less than one hundred (100) tons per year. Therefore, the regular reporting requirements of 326 IAC 2-6 do not apply. However, the source is subject to the additional information requests in 326 IAC 2-6-5.

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 thirty percent (30%) 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 6.5 (Particulate Matter Limitations)

This source does not have potential particulate matter emissions greater than 100 tons per year and actual PM emissions will be less than 10 tons per year. Therefore, although this source is located in Marion county, 326 IAC 6.5-1 does not apply.

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

The operation of this source will emit less than 10 tons per year of a single HAP and less than 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 1-7 (Stack Height Provisions)

Pursuant to 326 IAC 1-7-1(a), this source is subject to this rule because it has an exhaust stack (S-1) with potential particulate matter emissions of greater than 25 tons per year. However, pursuant to 326 IAC 1-7-5(a), this source is exempt from the requirements of 326 IAC 1-7-3(a) because the particulate matter emissions from stack S-1 are less than 25 tons per year after control.

State Rule Applicability – Individual Facilities

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

Pursuant to 326 IAC 6-3-2, the particulate emissions from the following facilities shall be limited as follows:

Emission Unit ID	Stack ID	Process Weight Rate (tons/hr)	Allowable PM emissions (lbs/hr)	Able to Comply?
Extruder, ID I-1	S-1	0.25	1.62	Yes
Extruder, ID I-2	S-1	0.25	1.62	Yes
Extruder, ID I-6	S-1	0.50	2.58	Yes
Extruder, ID I-7	S-1	0.45	2.40	Yes
Extruder, ID I-8	S-1	0.45	2.40	Yes
Extruder, ID I-11	S-1	1.10	4.37	Yes
Extruder, ID I-12	S-1	1.10	4.37	Yes
Extruder, ID I-13	S-2	0.125	1.02	Yes
Extruder, ID I-15	S-2	0.05	0.55	Yes
Resin pre-mixer, ID B-00	S-1	0.05	0.55	Yes
Resin pre-mixer,	S-1	0.70	3.23	Yes

Emission Unit ID	Stack ID	Process Weight Rate (tons/hr)	Allowable PM emissions (lbs/hr)	Able to Comply?
ID B-1				
Resin pre-mixer, ID B-3	S-1	0.70	3.23	Yes
Resin pre-mixer, ID B-6	S-1	0.70	3.23	Yes
Resin pre-mixer, ID B-7	S-1	0.70	3.23	Yes
Resin pre-mixer, ID B-10	S-1	0.50	2.58	Yes
Resin pre-mixer, ID B-11	S-1	1.10	4.37	Yes

The above limits are based on the following equation:

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

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

The dust collectors DC-1 and DC-2 shall be in operation at all times the Extruders and Resin pre-mixers are in operation in order to comply with these limits.

The resin post-mixers, ID Nos. B-12 through B-16, the Pigment Weigh Hood, ID No. H-1, the Scale Station ID No. H-2, the two (2) Bar Mold Machines, Emission Unit ID Nos. M-1a and M-1b, the two (2) Color Chip Mold Machines, Emission Unit IDs M-2 and M-3, the three (3) VLF Extrusion Lines 1, 2, and 3, Emission Unit ID Nos. I-17, I-18, and I-19, and the one (1) Aspiration Separator Unit, Emission Unit ID No. A-1, are not subject to this rule because the potential emissions of particulate matter are less than 0.551 pound per hour. Therefore, pursuant to 326 IAC 6-3-1(b)(14), these operations are exempt from this rule.

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

None of the facilities at this source are subject to this rule because the source-wide potential to emit VOC is less than 25 tons per year.

Recommendation

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

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

An application for the purposes of this review was received on April 13, 2005. Additional information was received on August 17, 2005 and November 21, 2007.

Conclusion

The operation of this thermoplastic compounding operation shall be subject to the conditions of the attached MSOP Renewal No. M097-21096-00316.

**Appendix A: Emissions Calculations
Plantwide Potential to Emit**

Company Name: RTP Company
Address City IN Zip: 8111 Zionsville Road, Indianapolis, IN 46268
Permit Number: MSOP Renewal 097-21096-00316
Submitted by: John Wellspring on behalf of RTP Company, 1/29/08
Reviewed & Verified by: Trish Earls/ERG, 5/08

Emission Unit(s)	Controlled Potential Emissions (lb/hr)	Controlled Potential Emissions (lb/day)	Controlled Potential Emissions (ton/yr)	Uncontrolled Potential Emissions (ton/yr)
Pyrolysis Ovens⁽¹⁾				
Units PF-1 and PF-2				
<i>PM/PM10</i>	0.041	0.33	0.06	2.99
<i>VOC</i>	0.0524	0.42	0.08	3.83
<i>NOx</i>	0.0811	0.65	0.12	0.12
<i>CO</i>	0.150	1.20	0.22	10.95
<i>SO2</i>	0.0054	0.04	0.01	0.01
Production Blending & Extrusion				
Units I-1, I-2, I-6, I-7, I-8, I-11 & I-12, B-00, B-1, B-3, B-6, B-7, B-10, and B-11				
<i>PM/PM10</i>	0.08	1.97	0.36	35.92
<i>VOC</i>	1.55	37.20	6.79	6.79
<i>Single HAP (Styrene)</i>	1.05	25.22	4.60	4.60
<i>Total HAPs</i>	1.23	29.41	5.37	6.61
R & D Blending, Extrusion, & Injection Molding				
Units I-13, I-15, M-1a, M-1b, M-2, M-3, D-1, H-1 and H-2				
<i>PM/PM10</i>	0.01	0.22	0.04	3.94
<i>VOC</i>	0.17	4.08	0.75	0.75
<i>Single HAP (Styrene)</i>	0.11	2.72	0.50	0.50
<i>Total HAPs</i>	0.13	3.23	0.59	0.73
VLF Air Classification				
Units A-1, I-17, I-18, I-19, I-20, I-21				
<i>PM/PM10</i>	0.009	0.21	0.04	3.89
VLF Extrusion				
Units I-17, I-18, I-19, I-20, I-21				
<i>PM/PM10</i>	0.22	5.38	0.98	0.98
<i>VOC</i>	0.58	13.93	2.54	2.54
<i>Single HAP (Styrene)</i>	3.28E-05	0.0008	0.0001	0.0001
<i>Total HAPs</i>	0.01	0.16	0.03	0.03
Natural Gas Combustion				
Eight (8) natural gas-fired heaters				
<i>PM</i>	0.004	0.09	0.02	0.02
<i>PM10</i>	0.015	0.36	0.07	0.07
<i>VOC</i>	0.011	0.26	0.05	0.05
<i>NOx</i>	0.20	4.80	0.88	0.88
<i>CO</i>	0.168	4.03	0.74	0.74
<i>SO2</i>	0.0012	0.03	0.01	0.01
Plantwide Totals				
	<i>PM</i>		1.50	47.74
	<i>PM10</i>		1.55	47.79
	<i>VOC</i>		10.20	13.95
	<i>NOx</i>		0.99	0.99
	<i>CO</i>		0.95	11.69
	<i>SO2</i>		0.01	0.01
	<i>Single HAP (Styrene)</i>		5.10	5.10
	<i>Total HAPs</i>		5.99	7.37

(1) Each Pyrolysis Oven operation is a Batch Operation - maximum of 8 hours per day, maximum 2 days per week. Conservative uncontrolled emission estimate is made based on Manufacturer specified lb/hr emission rate after control and Afterburner efficiency at a maximum of 2,920 (8 * 365) hours of operation per year. Controlled emission estimate is based on Manufacturer specified lb/hr emission rate after control at a maximum of 2,920 hours of operation per year.

Appendix A: Emissions Calculations

Company Name: RTP Company
 Address City IN Zip: 8111 Zionsville Road, Indianapolis, IN 46268
 Permit Number: MSOP Renewal 097-21096-00316
 Submitted by: John Wellspring on behalf of RTP Company, 1/29/08
 Reviewed & Verified by: Trish Earls/ERG, 5/08

Emission Unit#s	Stack ID	Emission Unit Description Type of Emission Factor Hourly Capacity of Unit	Potential Pollutant(s)	Source of Emission Factor	Emission Factor Units	A	B	C	D	E	F	G	H			
						Uncontrolled Emission Factor (lb/unit)	Maximum Production Rate (unit/hr)	Uncontrolled Potential Emissions A x B (lb/hr)	Control Efficiency (%)	Controlled Potential Emissions C x (100-D) (lb/hr)	Controlled Potential Emissions E x 24 (lb/day)	Controlled Potential Emissions E x 8760 2000 (ton/yr)	Uncontrolled Potential Emissions C x 8760 2000 (ton/yr)			
NA	NA	Total of 8 Natural Gas Fired Heaters at 250,000 BTU/hr heat input each Natural Gas Emission Factors (2,000,000 BTU/hr total) (1000 BTU/lb)(1,000,000) = 0.0020 10 ⁶ ft ³ /hr														
						PM	AP-42 1.4	10 ⁶ ft ³	1.9	0.002	0.004	0%	0.004	0.09	0.017	0.017
						PM10	AP-42 1.4	10 ⁶ ft ³	7.6	0.002	0.015	0%	0.015	0.36	0.067	0.067
						SO2	AP-42 1.4	10 ⁶ ft ³	0.6	0.002	0.001	0%	0.001	0.0288	0.005	0.005
						NOx	AP-42 1.4	10 ⁶ ft ³	100	0.002	0.200	0%	0.200	4.80	0.876	0.876
						VOC	AP-42 1.4	10 ⁶ ft ³	5.5	0.002	0.011	0%	0.011	0.26	0.048	0.048
						CO	AP-42 1.4	10 ⁶ ft ³	84	0.002	0.168	0%	0.168	4.03	0.736	0.736
Hexane	AP-42 1.4	10 ⁶ ft ³	1.8	0.002	0.004	0%	0.004	0.09	0.016	0.016						
A-1	S-4	Aspiration Separator Unit Site Specific Emission Factor Operating data: 0.1% of throughput to DC-3 Particle size analysis: 12% PM EF = 1000(.12) = 120 10 ⁶ lb/hr 3000 lb/hr total throughput capacity 3,000 / 1,000,000 = 0.0030 10 ⁶ lb/hr	PM/PM10	Site Specific	10 ⁶ lb	120.0	0.0030	0.36	99.0%	0.0036	0.086	0.016	1.577			
I-17, I-18, I-19	S-5a, S-5b, S-6a, S-6b, S-7a, S-7b	Air classification of Long Fibers with dust collection control (plastic + glass) Site Specific Emission Factor 120 lb/1,000,000 lb = 120 lb per 10 ⁶ lb 2300 lb/hr total product throughput capacity 2300 / 1,000,000 = 0.0023 x 10 ⁶ lb/hr	PM/PM10	Site Specific (from process mass balance and particle size distribution analysis)	10 ⁶ lb	120.0	0.00230	0.276	99.0%	0.0028	0.066	0.0121	1.209			
I-17, I-18, I-19	S-5a, S-5b, S-6a, S-6b, S-7a, S-7b	Extrusion onto Long Fibers (glass, graphite carbon, Kevlar, or stainless steel) with polypropylene or nylon resin Emission Factor - AWMA Journal Polypropylene Extrusion 2020 lb/hr total plastic resin thrupt capacity 2020 / 1,000,000 = 0.00202 x 10 ⁶ lb/hr	PM/PM10	1999 AWMA Journal	10 ⁶ lb	68.4	0.00202	0.138	0.0%	0.1382	3.32	0.605	0.605			
			VOC	1999 AWMA Journal	10 ⁶ lb	177	0.00202	0.358	0.0%	0.3575	8.58	1.566	1.566			
			Formaldehyde	1999 AWMA Journal	10 ⁶ lb	1.38	0.00202	0.002788	0.0%	0.00279	0.06690	0.01221	0.01221			
			Acrolein	1999 AWMA Journal	10 ⁶ lb	0.05	0.00202	0.000101	0.0%	0.00010	0.00242	0.00044	0.00044			
			Acetaldehyde	"	10 ⁶ lb	0.54	0.00202	0.001091	0.0%	0.00109	0.02618	0.00478	0.00478			
			Propionaldehyde	"	10 ⁶ lb	0.07	0.00202	0.000141	0.0%	0.00014	0.00339	0.00062	0.00062			
Styrene	"	10 ⁶ lb	0.01	0.00202	0.000020	0.0%	0.00002	0.00048	0.00009	0.00009						
			Total VOHAP	1999 AWMA Journal	10 ⁶ lb	2.1	0.00202	0.004141	0.0%	0.00414	0.09938	0.01814	0.01814			

Appendix A: Emissions Calculations

Company Name: RTP Company
 Address City IN Zip: 8111 Zionsville Road, Indianapolis, IN 46268
 Permit Number: MSOP Renewal 097-21096-00316
 Submitted by: John Wellspring on behalf of RTP Company, 1/29/08
 Reviewed & Verified by: Trish Earls/ERG, 5/08

Emission Units	Stack ID	Emission Unit Description Type of Emission Factor Hourly Capacity of Unit	Potential Pollutant(s)	Source of Emission Factor	Emission Factor Units	A Uncontrolled Emission Factor (lb/unit)	B Maximum Production Rate (unit/hr)	C Uncontrolled Potential Emissions A x B (lb/hr)	D Control Efficiency (%)	E Controlled Potential Emissions C x (100-D) (lb/hr)	F Controlled Potential Emissions E x 24 (lb/day)	G Controlled Potential Emissions E x 8760 (ton/yr)	H Uncontrolled Potential Emissions C x 8760 (ton/yr)
I-20, I-21	S-8a, S-8b, S-9a, S-9b	Air classification of Long Fibers with dust collection control (plastic + glass) Site Specific Emission Factor 120 lb/1,000,000 lb = 120 lb per 10 ⁶ lb 2100 lb/hr total product throughput capacity 2100 / 1,000,000 = 0.0021 x 10 ⁶ lb/hr	PM/PM10	Site Specific (from process mass balance and particle size distribution analysis)	10 ⁶ lb	120.0	0.00210	0.252	99.0%	0.0025	0.060	0.0110	1.104
I-20, I-21	S-8a, S-8b, S-9a, S-9b	Extrusion onto Long Fibers (glass, graphite carbon, Kevlar, or stainless steel) with polypropylene or nylon resin Emission Factor - AWMA Journal Polypropylene Extrusion 1260 lb/hr total plastic resin thruput capacity 1260 / 1,000,000 = 0.00126 x 10 ⁶ lb/hr	PM/PM10 VOC	1999 AWMA Journal Formaldehyde Acrolein Acetaldehyde Propionaldehyde Styrene Total VOHAP	10 ⁶ lb 10 ⁶ lb 10 ⁶ lb 10 ⁶ lb 10 ⁶ lb 10 ⁶ lb 10 ⁶ lb	68.4 177 1.38 0.05 0.54 0.07 0.01 2.1	0.00126 0.00126 0.00126 0.00126 0.00126 0.00126 0.00126 0.00126	0.086 0.223 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	0.0% 0.0% 0.00174 0.00006 0.00068 0.00009 0.00001 0.00258	0.0862 0.2230 0.04173 0.00151 0.01633 0.00212 0.00030 0.06199	2.07 5.35 0.00762 0.00028 0.00298 0.00039 0.00006 0.01131	0.377 0.977 0.00762 0.00028 0.00298 0.00039 0.00006 0.01131	
All		Plantwide Totals (including pyrolysis oven)	PM PM10*	(Highest)				10.22 10.228 0.273 0.046 0.046 0.046 0.046 0.046 0.319 2.31 0.460 0.00080 0.042 0.030 1.164 0.071 0.085 0.055 0.004 1.364 0.001 0.20 0.17 1.68	0.33 0.339 0.003 0.000 0.000 0.000 0.000 0.000 0.003 2.31 0.460 0.00080 0.042 0.030 1.164 0.071 0.085 0.055 0.004 1.364 0.001 0.20 0.17 1.37	7.87 8.146 0.066 0.011 0.011 0.011 0.011 0.011 0.076 55.48 11.029 0.01922 1.010 0.184 0.184 0.131 27.942 1.701 2.029 1.315 0.086 32.725 0.029 4.80 4.03 32.80	1.50 1.55 0.012 0.002 0.002 0.002 0.002 0.002 0.014 10.20 2.01 0.00351 0.184 0.184 0.131 5.10 0.310 0.370 0.240 0.016 5.97 0.01 0.99 0.95 5.99	46.72 46.77 1.196 0.199 0.199 0.199 0.199 0.199 1.395 12.68 2.01 0.00351 0.184 0.184 0.131 5.10 0.310 0.370 0.240 0.016 5.97 0.01 0.95 8.04 7.37	

* For all other emission units other than natural gas combustion, PM is assumed to equal PM10.

Appendix A: Emissions Calculations

Company Name: RTP Company
Address City IN Zip: 8111 Zionsville Road, Indianapolis, IN 46268
Permit Number: MSOP Renewal 097-21096-00316
Submitted by: John Wellspring on behalf of RTP Company, 1/29/08
Reviewed & Verified by: Trish Earls/ERG, 5/08

Table 1

Table of Comparison of Available Emission Factor Data for Plastic Extrusion
 Various Sources and Resins as Noted
 (lb emitted/million lb resin extruded)

Emission Factor Source	Resin Manufacturer	SCC 30101821 WebFIRE Database	AWMA Journal		
			1995	Jun-96	Jun-96
Resin Type	Acetal	PS	ABS	HDPE	LDPE
Pollutants					
PM				26.63	242.2
VOC	50	150	189	38.5	157.4
HAPs:					
Formaldehyde	50			0.06	8.11
Acrolein				ND	0.07
Acetaldehyde				0.05	4.43
Propionaldehyde				ND	3.26
Styrene		128.15	126		
Acrylonitrile			7.79		
Acetophenone			9.29		
Ethylbenzene			6.02		
Total HAP	50	128.15	149.1	0.11	15.87

ND- Non-detect

Appendix A: Emissions Calculations

Company Name: RTP Company
Address City IN Zip: 8111 Zionsville Road, Indianapolis, IN 46268
Permit Number: MSOP Renewal 097-21096-00316
Submitted by: John Wellspring on behalf of RTP Company, 1/29/08
Reviewed & Verified by: Trish Earls/ERG, 5/08

1. Unit PF-1

	After Control	Efficiency	Batch Operation PTE
	lb/hr		Before Control, 8*365 hr/yr ⁽¹⁾ ton/yr
PM	0.027	98.0%	1.971
VOC	0.035	98.0%	2.555
SO2	0.0036	0.0%	0.0053
NOx	0.054	0.0%	0.079
CO	0.100	98.0%	7.300
Manufacturer Data			

(1) Pyrolysis Oven operation is a Batch Operation - maximum of 8 hours per day, maximum 2 days per week. Conservative emission estimate is made based on Manufacturer specified lb/hr emission rate after control and Afterburner efficiency.

2. Unit PF-2

	After Control	Efficiency	Batch Operation PTE
	lb/hr		Before Control, 8*365 hr/yr ⁽¹⁾ ton/yr
PM	0.014	98.0%	1.022
VOC	0.0174	98.0%	1.270
SO2	0.0018	0.0%	0.003
NOx	0.0271	0.0%	0.040
CO	0.050	98.0%	3.650
Manufacturer Data			

(1) Pyrolysis Oven operation is a Batch Operation - maximum of 8 hours per day, maximum 2 days per week. Conservative emission estimate is made based on Manufacturer specified lb/hr emission rate after control and Afterburner efficiency.