CONSTRUCTION PERMIT
OFFICE OF AIR MANAGEMENT

Tenneco Packaging AVI
1411 Pidco Drive
Plymouth, Indiana 46563

This permit is issued to the above mentioned company (herein known as the Permittee) under the provisions of 326 IAC 2-1 and 40 CFR 52.780, with conditions listed on the attached pages.

Construction Permit No.: CP-099-9807-00028	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM), and presented in the permit application.

A.1 General Information

The Permittee owns and operates a foam sheet manufacturing operation with a thermal oxidizer for VOC emission control.

Responsible Official:	Terry Smith
Source Address:	1411 Pidco Drive, Plymouth, Indiana 46563
Mailing Address:	1411 Pidco Drive, Plymouth, Indiana 46563
SIC Code:	3086
County Location:	Marshall
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD Rules

A.2 Emission Units and Pollution Control Equipment Summary

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

(a) One (1) enclosed foam sheet profile line, designated as line #4,controlled by a regenerative thermal oxidizer designated #3 and exhausts through a stack designated as SC-3 and consists of the following equipment:
   1.) One (1) extruder;
   2.) One (1) foam profile die;
   3.) One (1) curing chamber; and
   4.) One (1) automated grinder and reclaim.

(b) A modification of the existing foam sheet lines, designated as #1 and #2, and the existing profile foam lines which consists of the following:

   1.) Switch to a new blowing agent for sheet fabrication operations (foam sheet lines and profile lines);
   2.) Install a permanent total enclosure for the existing Sheet Line #1;
   3.) Re-locate RTO #2 from building #8 to building #1 and dedicate this control device to Sheet Line #1;
   4.) RTO #1 will control Sheet Line #2 and grind/reclaim operations;
   5.) Install a permanent total enclosure for the existing profile line cooling tables (#1, #2 and #3);
   6.) Install a permanent total enclosure for the existing profile line side trimming and perforation operations and controlled by a new RTO designated as #3;
   7.) Control existing profile lines #1, #2 and #3 with a RTO designated as #3; and
   8.) Re-locate two (2) existing plastic pellet silos from building #6 to building #10.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

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

(a) It is a major source, as defined in 326 IAC 2-7-1(22).
(b) The source has submitted their Title V application (T-099-5969-00028), on May 30, 1996.

SECTION B GENERAL CONSTRUCTION AND OPERATION CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

Construction Conditions [326 IAC 2-1-3]

B.1 General Construction Conditions

(a) The data and information supplied with the application shall be considered part of this permit. Prior to any proposed change in construction which may affect allowable emissions, the change must be approved by the Office of Air Management (OAM).

(b) This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Effective Date of the Permit [IC13-15-5-3]

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

B.3 Revocation of Permits [326 IAC 2-1-9(b)]

Pursuant to 326 IAC 2-1-9(b)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.4 Permit Review Rules [326 IAC 2]

Notwithstanding Condition B.11, all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.5 First Time Operation Permit [326 IAC 2-1-4]

This document shall also become a first-time operation permit pursuant to 326 IAC 2-1-4 (Operating Permits) when, prior to start of operation, the following requirements are met:

(a) The attached affidavit of construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section, verifying that the facilities were constructed as proposed in the application. The facilities covered in the Construction Permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.

(b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

(c) Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.

(d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-7-19 (Fees).

(e) The source has submitted their Part 70 permit application (T-099-5969-00028) on December 13, 1996. The equipment covered under this permit shall be incorporated in the submitted Part 70 application.

Operation Conditions

B.6 General Operation Conditions

(a) The data and information supplied in the application shall be considered part of this permit. Prior to any change in the operation which may result in an increase in allowable emissions exceeding those specified in 326 IAC 2-1-1 (Construction and Operating Permit Requirements), the change must be approved by the Office of Air Management (OAM).

(b) The Permittee shall comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC13-17) and the rules promulgated thereunder.

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

Pursuant to 326 IAC 1-6-3 (Preventive Maintenance Plans), the Permittee shall prepare and maintain a preventive maintenance plan, including the following information:

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

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

(c) Identification of the replacement parts which will be maintained in inventory for quick replacement.

The preventive maintenance plan shall be submitted to IDEM, OAM upon request and shall be subject to review and approval.

B.8 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 Management (OAM) 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 OAM, 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]

B.9 Transfer of Permit [326 IAC 2-1-6]

Pursuant to 326 IAC 2-1-6 (Transfer of Permits):

(a) In the event that ownership of this foam sheet manufacturing operation is changed, the Permittee shall notify OAM, Permit Branch, within thirty (30) days of the change. Notification shall include the date or proposed date of said change.

(b) The written notification shall be sufficient to transfer the permit from the current owner to the new owner.

(c) The OAM shall reserve the right to issue a new permit.

B.10 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and 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 326 IAC 2-1 (Permit Review Rules).

B.11 Availability of Permit [326 IAC 2-1-3(l)]

Pursuant to 326 IAC 2-1-3(l), the Permittee shall maintain the applicable permit on the premises of the source and shall make this permit available for inspection by the IDEM, or other public official having jurisdiction.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitation and Standards

C.1 PSD Major Source Status [326 IAC 2-2] [40 CFR 52.21]

(a) The VOC PTE of the entire source shall not exceed 249 tons per year. Therefore, the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 and 40 CFR 52.21, will not apply.

(b) Any change or modification which may increase the potential emissions to the following:

1.) 25 tons per year or more (326 IAC 2-1),

2.) 100 tons per year or more, and greater than 10 tons per year for a single HAP or combination HAPs greater than 25 tons per year (326 IAC 2-7),

3.) 250 tons per year or more (326 IAC 2-2),

from the equipment covered in this construction permit must be approved by the Office of Air Management (OAM) before such change may occur.

C.2 Operation of Equipment

All air pollution control equipment listed in this permit shall be in placed or operated at all times that the emission units vented to the control equipment are in operation, as described in Section D of this permit.

Testing Requirements

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

That pursuant to 326 IAC 2-1-3 (Construction and Operating Permit Requirements) compliance stack tests shall be performed for the VOC control efficiency of the recuperative thermal oxidizer and the minimum operating temperature, 1500 degrees Fahrenheit, or a minimum operating temperature as determined by the most recent compliance test, of the recuperative thermal oxidizer to maintain at least a 100% capture efficiency and a 98% destruction rate for the winder process of the foam sheet and profile lines, 98% capture efficiency and 97% destruction rate for the scrap lines, within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up. Retention data tests, to determine the appropriate emission factors, shall be ran on all grades being utilized by the source. These tests shall be performed according to 326 IAC 3-6 (Source Sampling Procedures) using the methods specified in the rule or as approved by the Commissioner.

(a) A test protocol shall be submitted to the OAM, Compliance Data Section, 35 days in advance of each test.

(b) The Compliance Data Section shall be notified of the actual test date at least two (2) weeks prior to the date.

(c) All test reports must be received by the Compliance Data Section within 45 days of completion of the testing.

(d) Whenever the results of the stack test performed exceed the level specified in this permit, appropriate corrective actions shall be implemented within thirty (30) days of receipt of the test results. These actions shall be implemented immediately unless notified by OAM that they are acceptable. The Permittee shall minimize emissions while the corrective actions are being implemented.

(e) Whenever the results of the stack test performed exceed the level specified in this permit, a second test to demonstrate compliance shall be performed within 120 days. Failure of the second test to demonstrate compliance may be grounds for immediate revocation of this permit to operate the affected facility.

Compliance Monitoring Requirements

C.4 Compliance Monitoring [326 IAC 2-1-3]

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, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee shall notify:

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

in writing, no more than ninety (90) days after receipt of this permit, with full justification of the reasons for the inability to meet this date and a schedule which it expects to meet. If a denial of the request is not received before the monitoring is fully implemented, the schedule shall be deemed approved.

C.5 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the requirements of this permit shall be performed, according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

Corrective Actions and Response Steps

C.6 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval to:

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

within 180 days from the date on which this source commences operation.

(c) If the ERP is disapproved by IDEM, OAM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP. If after this time, the Permittee does not submit an approvable ERP, then IDEM, OAM, shall supply such a plan.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(f) Upon direct notification by IDEM, OAM, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

Record Keeping and Reporting Requirements

C.7 Annual Emission Reporting [326 IAC 2-6]

That pursuant to 326 IAC 2-6 (Emission Reporting), the Permittee must annually submit an emission statement for the source. This statement must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31.

C.8 Monitoring Data Availability [326 IAC 2-1-3]

(a) With the exception of performance tests conducted in accordance with Section C-Performance Testing. All observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.

(b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.

(c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

(d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

(e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

(f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.9 General Record Keeping Requirements [326 IAC 2-1-3]

(a) Records of all required monitoring data and support information 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 kept at the source location and available within one (1) hour upon verbal request of an IDEM, OAM, representative, for a minimum of three (3) years. They may be stored elsewhere for the remaining two (2) years providing they are made available within thirty (30) days after written request.

(b) Records of required monitoring information shall include, where applicable:

(1) The date, place, and time of sampling or measurements;

(b) The dates analyses were performed;

(3) The company or entity performing the analyses;

(4) The analytic techniques or methods used;

(5) The results of such analyses; and

(6) The operating conditions existing at the time of sampling or measurement.

(c) Support information shall include, where applicable:

(1) Copies of all reports required by this permit;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

(4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures.

(d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.10 General Reporting Requirements [326 IAC 2-1-3]

(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 Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

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

(c) Unless otherwise specified in this permit, any report shall be submitted within thirty (30) days of the end of the reporting period.

(d) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

(1) an excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or

(2) an emergency as defined in 326 IAC 2-7-1(12); or

(3) failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.

(4) failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's's's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.

(e) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.

(f) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

SECTION D.1 FACILITY CONDITIONS

(a) One (1) enclosed foam sheet profile line, designated as line #4, controlled by a regenerative thermal oxidizer designated #3 and exhausts through a stack designated as SC-3 and consists of the following equipment:
1. One (1) extruder;
2. One (1) foam profile die;
3. One (1) curing chamber; and
4. One (1) automated grinder and reclaim.

(a) A modification of the existing foam sheet lines, designated as #1 and #2, and the existing profile foam lines which consists of the following:

1. Switch to a new blowing agent for sheet fabrication operations (foam sheet lines and profile lines);
2. Install a permanent total enclosure for the existing Sheet Line #1;
3. Re-locate RTO #2 from building #8 to building #1 and dedicate this control device to Sheet Line #1;
4. RTO #1 will control Sheet Line #2 and grind/reclaim operations;
5. Install a permanent total enclosure for the existing profile line cooling tables (#1, #2 and #3);
6. Install a permanent total enclosure for the existing profile line side trimming and perforation operations and controlled by a RTO designated as #3;
7. Control existing profile lines #1, #2 and #3 with a RTO designated as #3; and
8. Re-locate two (2) existing plastic pellet silos from building #6 to building #10.

Emissions Limitation and Standards

D.1.1 New Facilities; General Reduction Requirements [326 IAC 8-1-6]

(a) Pursuant to 326 IAC 8-1-6 (New Facilities; General Reduction Requirements), the BACT for the source shall be a regenerative thermal oxidizer, described below in Condition D.1.7. The overall efficiency of this control device shall be the following:
(1) 98 % efficiency for the winder process of the foam sheet and profile lines; and
(2) 95% efficiency for the scrap lines.

(b) The VOC limit for the facilities subject to 326 IAC 8-1-6 are described in Condition D.1.3.

D.1.2 PM Process Operations [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), profile line #4 shall comply with 326 IAC 6-3-2(c). The allowable PM emission rate for profile line #4 shall not exceed 1.03 pounds per hour when operating at a process weight rate of 2,100 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

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

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

D.1.3 PSD Minor Modification

(a) That the input of blowing agent of the entire source shall be limited to 1429.8 tons per twelve month period, rolled on a monthly basis. This production limitation is equivalent to VOC emissions of 249.0 tons per year, rolled on a monthly basis. Therefore, the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 and 40 CFR 52.21, will not apply.

During the first 12 months of operation, the input raw material usage shall be limited such that the total usage divided by the accumulated months of operation shall not exceed 119.15 ton/month.

(b) Any change or modification which may increase the VOC PTE of this source to greater than 250 tons per year, shall need prior approval.

D.1.4 Preventive Maintenance Plan [326 IAC1-6-3]

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

Compliance Determinations

D.1.5 Testing Requirements

(a) Testing of this facility is specifically required by this permit. Compliance with the control efficiency and minimum operating temperature specified in Condition D.1.7 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

(b) During the period within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, a performance test shall be required to demonstrate that the source is complying with 326 IAC 8-2-9.

(1) If the oxidizer is determined to demonstrate compliance, the required temperature and control efficiency shall be specified.

(2) If the oxidizer is determined to not demonstrate compliance, the efficiency needed to comply with 326 IAC 8-2-9 shall be determined by the performance test.

(3) The source shall be required to comply with the required control efficiency as determined by the performance test.

(c) Retention data tests, to determine the appropriate emission factors for the various grade types, shall be ran on all grades being utilized by the source. The source shall calculate the potential to emit (PTE) based on the worst case emission factors until the various emission factors for all other sheet grades have been verified and approved by OAM.

D 1.6 Volatile Organic Compound (VOC) Compliance Determination

Compliance with the VOC content and usage limitations contained in Condition D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) using formulation data supplied by the coating manufacturer. However, IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.7 Particulate Matter (PM)

(a) The dust collector for PM control shall be in operation at all times when profile line #4 is in operation.

Compliance Monitoring Requirements

D 1.8 Recuperative Thermal Oxidizer Operations

(a) The recuperative thermal oxidizer shall operate at all times, to demonstrate compliance with Conditions D.1.1, when foam sheet lines #1 and #2, profile sheet lines #1-#4 and the scrap lines are in operation. When operating, the thermal oxidizer shall maintain a minimum operating temperature of 1500° F, or a minimum operating temperature as determined by the most recent compliance test, to maintain a 100% capture efficiency and a 98% destruction rate for the winder process of the foam sheet and profile lines, and a 98% capture efficiency and a 97% destruction rate for the scrap lines.

(b) Any change or modification which may increase the VOC actual emissions to 250 tons per year or more shall require prior approval.

D.1.9 Dust Collector Inspections

An inspection shall be performed each calendar quarter of the all the dust collector. Defective bags shall be replaced. A record shall be kept of the results of the inspection and the number of bags replaced.

D.1.10 Failure Detection

In the event that a dust collector's failure has been observed:

(a) The affected compartments will be shut down immediately until the failed units have been replaced.

(b) Based upon the findings of the inspection, any additional corrective actions will be devised within eight (8) hours of discovery and will include a timetable for completion.

Record Keeping and Reporting Requirements

D.1.11 Record Keeping Requirements

(a) To document compliance with Conditions D.1.1 the Permittee's shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.1.1.

(1) The amount of VOC content by weight of the blowing agent in all stages of the processes (winder, warehouse finishes goods and scrap recycling). Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Spreadsheet data shall be maintained to demonstrate how the VOC contents were determined.

(2) A log of the dates of use;

(3) The total blowing agent usage for each month; and

(4) Monthly emissions in pounds of VOC;

(b) To document compliance with Condition D.1.7, records of the minimum operating temperature shall be maintained monthly.

(c) To document compliance with Condition D.1.8, records of the inspections shall be maintained on each calendar quarter.

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

D.1.12 Reporting Requirements

(a) A quarterly summary of the information to document compliance with Condition D.1.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

MALFUNCTION REPORT

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

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

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE: IT HAS POTENTIAL TO EMIT 25 LBS/HR PARTICULATES ?_____, 100 LBS/HR VOC ?_____, 100 LBS/HR SULFUR DIOXIDE ?_____ OR 2000 LBS/HR OF ANY OTHER POLLUTANT ?_____ 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: Tenneco Packaging AVI. PHONE NO. (219) 936-4170

LOCATION: Plymouth, Indiana Marshall County
PERMIT NO. 099-9807 AFS PLANT ID: 099-00028 AFS POINT ID: _____ INSP: _____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON:

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

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:_____

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

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER:_____
ESTIMATED AMOUNT OF POLLUTANT MITTED 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:_____

FAX NUMBER - 317 233-5967

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. The requirements of this rule (326 IAC 1-6) shall apply to the owner or operator of any facility which has the potential to emit twenty-five (25) pounds per hour of particulates, one hundred (100) pounds per hour of volatile organic compounds or SO2, or two thousand (2,000) pounds per hour of any other pollutant; or to the owner or operator of any facility with emission control equipment which suffers a malfunction that causes emissions in excess of the applicable limitation.

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. (Air Pollution Control Board; 326 IAC 1-2-39; filed Mar 10, 1988, 1:20 p.m. : 11 IR 2373)

***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 Management
Compliance Data Section

Quarterly Report

Company Name: Tenneco Packaging AVI
Location: 1411 Pidco Drive, Plymouth, Indiana 46563
Permit No.: 099-9807-00028
Source: Entire Source
Pollutant: VOC PTE
Limit: 1429.8 tons per twelve month period

Year: _____

Month	Blowing Agent Usage (tons/month)	Blowing Agent Usage for previous month(s) (tons)	Blowing Agent Usage for twelve month period (tons)

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD) for New Construction and Operation

Source Background and Description

Source Name:	Tenneco Packaging AVI
Source Location:	1411 Pidco Drive, Plymouth, IN. 46563
County:	Marshall
Construction Permit No.:	CP-099-9807-00028
SIC Code:	3086
Permit Reviewer:	Nysa L. James

The Office of Air Management (OAM) has reviewed an application from Tenneco Packaging AVI relating to the construction and operation of a foam sheet manufacturing operation, consisting of the following equipment:

(a) One (1) enclosed foam sheet profile line, designated as line #4, controlled by a new regenerative thermal oxidizer designated as #3, exhausts through a stack designated as SC-3 and consists of the following equipment:
1. One (1) extruder;
2. One (1) foam profile die;
3. One (1) curing chamber; and
4. One (1) automated grinder and reclaim.

(b) A modification of the existing foam sheet lines, designated as #1 and #2, and the existing profile foam lines, designated as #1-#4, which consists of the following:

1. Switch to a new blowing agent for sheet fabrication operations (foam sheet lines and profile lines);
2. Install a permanent total enclosure for the existing Sheet Line #1;
3. Re-locate RTO #2 from building #8 to building #1 and dedicate this control device to Sheet Line #1;
4. RTO #1 will control Sheet Line #2 and grind/reclaim operations;
5. Install a permanent total enclosure for the existing profile line cooling tables (#1, #2 and #3);
6. Install a permanent total enclosure for the existing profile line side trimming and perforation operations and controlled by a new RTO designated as #3;
7. Control existing profile lines #1, #2 and #3 with a RTO designated as #3; and
8. Re-locate two (2) existing plastic pellet silos from building #6 to building #10.

Stack Summary (New Equipment):

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
SC-3	New Incinerator	40	3	20,000	350

Recommendation

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

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

An application for the purposes of this review was received on May 29, 1998, with additional information received on September 8, 1998.

Emissions Calculations

The source has submitted emission information to the Office of Air Management (OAM). This information shall be considered confidential per the request of the source. OAM has reviewed and verified the information submitted and determined the information to be correct.

Total Potential and Allowable Emissions (New Profile Line and Modification)

Indiana Permit Allowable Emissions Definition (after compliance with applicable rules, based on 8,760 hours of operation per year at rated capacity):

Pollutant	Allowable Emissions (tons/year)	Potential Emissions (tons/year)
Particulate Matter (PM)	18.5	37.5
Particulate Matter (PM10)	--	--
Sulfur Dioxide (SO_2)	--	--
Volatile Organic Compounds (VOC)	--	1300.9
Carbon Monoxide (CO)	--	--
Nitrogen Oxides (NO_x)	--	--
Single Hazardous Air Pollutant (HAP)	--	--
Combination of HAPs	--	--

(a) Allowable emissions are determined from the applicability of rule 326 IAC 6-3. Profile line #4 shall comply with 326 IAC 6-3-2(c) using the following equation:

E = 4.10 * P^0.67; where P = process weight in tons per hour
E = rate of emission in pounds per hour.

E = 4.10 * (2100 lb/hr * ton/2000lb)$^{0.67}$ = 4.24 lb/hr; 4.24 lb/hr * 8760 hr/yr * ton/2000 lb = 18.5 ton/yr.

The above listed facility is in compliance with 326 IAC 6-3 because the after control emissions of 0.75 ton/yr is less than the allowable emissions of 18.5 ton/yr.

(b) The allowable emissions based on the rules cited are less than the potential emissions, therefore, the allowable emissions are used for the permitting determination.

(c) Allowable emissions (as defined in the Indiana Rule) of VOC are greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-1, Sections 1 and 3, a construction permit is required.

County Attainment Status

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marshall County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Marshall County has been classified as attainment or unclassifiable for PM10, NOX, SO2 and CO. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	3.0
PM10	3.0
SO_2	0.00
VOC	387.8
CO	0.00
NO_x	0.00

(a) This existing source is a major stationary source because at least one attainment regulated pollutant is emitted at a rate of 250 tons per year.

Proposed Modification

PTE from the proposed modification (based on 8,760 hours of operation per year at rated capacity including enforceable emission control and production limit, where applicable):

Pollutant	PM (ton/yr)	PM10 (ton/yr)	SO_2 (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO_x (ton/yr)
Proposed Modification	0.75	0.75	0.00	-14.5	0.00	0.00
Contemporaneous Increases	--	--	--	--	--	--
Contemporaneous Decreases	--	--	--	--	--	--

Net Emissions	--	--	--	--	--	--
PSD or Offset Significant Level	25	15	40	40	100	40

(a) This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source has submitted their Part 70 (T-099-5969-00028) application on May 30, 1996. The equipment being reviewed under this permit shall be incorporated in the submitted Part 70 application.

Federal Rule Applicability

(a) There are no New Source Performance Standards 40 CFR Part 60 applicable to these facilities.

(b) There are no NESHAP 40 CFR Part 63 applicable to these facilities.

State Rule Applicability

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

The source has taken a limit of the amount of blowing agent input, 1429.8 tons per year. This limit in the blowing agent input is equivalent to a potential to emit of 249 tons per year of VOC. The source shall be considered minor for PSD purposes after the issuance of this construction permit.

326 IAC 2-6 (Emission Reporting)

This facility is subject to 326 IAC 2-6 (Emission Reporting), because the source emits more than 100 tons/yr of VOC. Pursuant to this rule, the owner/operator of this facility must annually submit an emission statement of the facility. The annual statement must be received by July 1 of each year and must contain the minimum requirements as specified in 326 IAC 2-6-4.

326 IAC 6-3-2(c) (Process Operations):

Pursuant to 326 IAC 6-3 (Process Operations):

(a) The dust collectors for particulate matter control shall be in operation at all times when profile line #4 is in operation.

(b) Profile line #4 shall comply with 326 IAC 6-3-2(c) using the following equation:

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

(c) Daily inspections shall be performed to verify the placement, integrity and particulate loading of the collector.

(d) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

(e) An inspection shall be performed each calendar quarter of the all the dust. Defective dust collectors shall be replaced. A record shall be kept of the results of the inspection and the number of dust collectors replaced.

(f) In the event that a dust collector's failure has been observed:

(i) The affected compartments will be shut down immediately until the failed units have been replaced.

(ii) Based upon the findings of the inspection, any additional corrective actions will be devised within eight (8) hours of discovery and will include a timetable for completion.

(g) That visible emission notations of all exhaust to the atmosphere from the dust collector shall be performed once per working shift. A trained employee will record whether emissions are normal or abnormal.

1. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, 80% of the time, the process is in operation, not counting start up or shut down time.

2. In the case of batch or discontinuous operation, readings shall be taken during that part of the operation specified in the facility's specific condition prescribing visible emissions.

3. 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 and abnormal visible emissions for that specific process.

4. The Preventive Maintenance Plan for this facility shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

The source is in compliance with 326 IAC 6-3-2 because of the dust collectors utilized for control purposes.

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

The source submitted a regenerative thermal incinerator, designated as #3, as the BACT to control VOC emissions from the new Profile Line #4. The recuperative thermal oxidizer shall operate at all times, to demonstrate compliance with Conditions D.1.1, when foam sheet lines #1 and #2, profile sheet lines #1-#4 and the scrap lines are in operation. When operating, the thermal oxidizer shall maintain a minimum operating temperature of 1500° F, or a minimum operating temperature as determined by the most recent compliance test, to maintain a 100% capture efficiency and a 98% destruction rate for the winder process of the foam sheet and profile lines, and a 98% capture efficiency and a 97% destruction rate for the scrap lines.

Retention data tests, to determine the appropriate emission factors for the various grade types, shall be ran on all grades being utilized by the source. The source shall calculate the potential to emit (PTE) based on the worst case emission factors until the various emission factors for all other sheet grades have been verified and approved by OAM.

A cost analysis shall not be reviewed because this control device is sufficient to satisfy the requirements of 326 IAC 8-1-6.

No other 326 IAC 8 rules apply.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

(a) None of these listed air toxics will be emitted from this proposed construction.

(b) 326 IAC 2-1-3.4 does not apply to the source because there no HAPs emitted.

Conclusion

The construction of this foam sheet manufacturing operation will be subject to the conditions of the attached proposed **Construction Permit No. CP-099-9807-00028.**

Indiana Department of Environmental Management
Office of Air Management

Addendum to the
Technical Support Document for New Construction and Operation

Source Name:	Tenneco Packaging AVI
Source Location:	1411 Pidco Drive, Plymouth, IN. 46563
County:	Marshall
Construction Permit No.:	CP-099-9807-00028
SIC Code:	3086
Permit Reviewer:	Nysa L. James

On September 22, 1998, the Office of Air Management (OAM) had a notice published in the Plymouth Pilot, P.O. Box 220, Plymouth, Indiana, stating that Tenneco Packaging AVI had applied for a construction permit to modify a foam sheet manufacturing operation with control. The notice also stated that OAM proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On October 15, 1998, Tenneco Packaging AVI submitted comments on the proposed construction permit. The summary of the comments and corresponding responses is as follows (changes are bolded and crossed out for emphasis):

Comment 1: The regulation cited in the heading of Condition B.1, Construction Conditions [326 IAC 2-1-3.4] is incorrect. This section relates to HAP emissions which does not apply to our facility. We believe that 326 IAC 2-1-3 is the correct citation.

Response 1: Condition B.1, Construction Conditions, is amended to the following (changes are bolded and crossed out for emphasis):

Construction Conditions [326 IAC 2-1-3~~.4~~]

B.1 General Construction Conditions

(a) The data and information supplied with the application shall be considered part of this permit. Prior to any proposed change in construction which may affect allowable emissions, the change must be approved by the Office of Air Management (OAM).

(b) This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

Comment 2: In Condition D.1.3, the blowing agent limit is stated as 1429.80 tons per 12-month period. Other areas of the permit state a limit of 1300.9 tons per year.

Response 2: Condition.1.3, PSD Minor Modification, states 1429.80 tons blowing agent used per twelve (12) month period. This usage limit is equivalent to 249 tons of VOC per year. The permit does not list 1300.9 tons per year as a usage or emission limit. The technical support document (TSD) lists the potential VOC emissions as 1300.9 tons per year.

These emissions are not a limit, but a worst case emission value. The source shall be limited to the amount listed in Condition D.1.3.