

Mr. Grant McGuire  
R. R. Donnelley & Sons, Company  
P.O. Box 837  
Warsaw, IN 46581

Re: Significant Source Modification  
No: 085-10668-00009

Dear Mr. McGuire:

R. R. Donnelley & Sons, Company applied for a Part 70 operating permit on June 3, 1996 for printing press facility. An application to modify the source was received on February 17, 1999. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

- (a) One (1) parts washer, identified as WGPW, with a maximum solvent consumption of 13,850 gallons per year, utilizing a permanent total enclosure with emissions routed to the existing carbon adsorption system for volatile organic compound emissions, exhausting to stack ID # 2/2; and
- (b) One (1) cylinder washer, identified as WCWM, with a maximum solvent consumption of 19,500 gallons per year, utilizing a permanent total enclosure with emissions routed to the existing carbon adsorption system for volatile organic compound emissions, exhausting to stack ID # 2/2.

The proposed Significant Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3). If there are no changes to the proposed construction of the emission units, the source may begin operating on the date that IDEM receives an affidavit of construction pursuant to 326 IAC 2-7-10.5(h). If there are any changes to the proposed construction the source can not operate until an Operation Permit Validation Letter is issued.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter contact Yvette de los Angeles, c/o OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, press 0 and ask for Duane Van Laningham or extension (3-6878), or dial (973) 575-2555, extension 3216.

Sincerely,

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Management

Attachments  
YD/EVP

cc: File - Kosciusko County  
U.S. EPA, Region V  
Air Compliance Section Inspector Doyle Houser  
Compliance Data Section - Jerri Curless  
Administrative and Development - Janet Mobley  
Technical Support and Modeling - Nancy Landau

# **PART 70 SIGNIFICANT SOURCE MODIFICATION OFFICE OF AIR MANAGEMENT**

**R. R. Donnelley & Sons Company  
2801 W. Old Road 30  
Warsaw, Indiana 46581**

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

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

Source Modification No.: 085-10668-00009	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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## SECTION A SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the emission units contained in conditions A.1 through 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 approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

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

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The Permittee owns and operates stationary printing press facility.

Responsible Official: Grant McGuire  
Source Address: 2801 W. Old Road 30, Warsaw, IN 46581  
Mailing Address: P.O. Box 837, Warsaw, IN 46581-0837  
Phone Number: (219) 267-9460  
SIC Code: 2754  
County Location: Kosciusko  
County Status: Attainment for all criteria pollutants  
Source Status: Part 70 Permit Program  
Major Source, under PSD  
Major Source, Section 112 of the Clean Air Act

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

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

- (a) One (1) parts washer, identified as WGPW, with a maximum solvent consumption of 13,850 gallons per year, located within a permanent total enclosure with emissions routed to the existing carbon adsorption system for volatile organic compound emissions, exhausting to stack ID # 2/2; and
- (b) One (1) cylinder washer, identified as WCWM, with a maximum solvent consumption of 19,500 gallons per year, located within a permanent total enclosure with emissions routed to the existing carbon adsorption system for volatile organic compound emissions, exhausting to stack ID # 2/2.

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

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

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

## **SECTION B GENERAL CONSTRUCTION CONDITIONS**

### **B.1 Permit No Defense [IC 13]**

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

### **B.2 Definitions [326 IAC 2-7-1]**

Terms in this approval shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

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

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

### **B.4 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]**

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

### **B.5 Significant Source Modification [326 IAC 2-7-10.5(h)]**

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) 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 emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.
- (b) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.
- (c) 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.
- (d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.

## SECTION C GENERAL OPERATION CONDITIONS

### C.1 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]

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- (a) Where specifically designated by this approval or required by an applicable requirement, any application form, report, or compliance certification submitted under this approval shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this approval, 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, on the attached Certification Form, with each submittal. Multiple forms, reports, or other submittals may be submitted as a package with a single Certification Form.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

### C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

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- (a) If required by specific condition(s) in Section D of this approval, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this approval, 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;
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

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

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM.

### C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

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- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this approval.
- (b) Any application requesting an amendment or modification of this approval shall be submitted to:

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

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

**C.4 Opacity [326 IAC 5-1]**

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

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

**C.5 Operation of Equipment [326 IAC 2-7-6(6)]**

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Unless otherwise stated in Section D of this permit, all air pollution control equipment listed in this approval and used to comply with an applicable requirement shall be operated at all times that the emission unit vented to the control equipment is in operation.

**Testing Requirements [326 IAC 2-7-6(1)]**

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

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- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval or as approved by IDEM, OAM, utilizing methods approved by IDEM, OAM.

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

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

**C.7 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

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Compliance with applicable requirements shall be documented as required by this approval. 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 approval. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend the compliance schedule an additional ninety (90) days provided the Permittee notifies:

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, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]**

**C.8 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]**

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(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:

- (1) This condition;
- (2) The Compliance Determination Requirements in Section D of this permit;
- (3) The Compliance Monitoring Requirements in Section D of this permit;
- (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
- (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
  - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and

- (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
  - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
  - (3) An automatic measurement was taken when the process was not operating; or
  - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.9 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]  
[326 IAC 2-7-6]

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- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this approval exceed the level specified in any condition of this approval, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (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, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate approval conditions may be grounds for immediate revocation of the approval to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

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

**C.10 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]**

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- (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 approval 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 approval 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 approval.
- (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.11 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]**

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- (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 for a minimum of three (3) years and available upon the request of an IDEM, OAM representative. 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 written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) 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 approval;
  - (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. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this approval, and whether a deviation from an approval condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance.

C.12 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) The reports required by conditions in Section D of this approval 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 approval, any notice, report, or other submission required by this approval 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 approval, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The first report shall cover the period commencing on the date of issuance of this approval and ending on the last day of the reporting period.

## SECTION D.1 FACILITY OPERATION CONDITIONS

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

- (a) One (1) parts washer, identified as WGPW, with a maximum solvent consumption of 13,850 gallons per year, located within a permanent total enclosure with emissions routed to the existing carbon adsorption system for volatile organic compound emissions, exhausting to stack ID # 2/2; and
- (b) One (1) cylinder washer, identified as WCWM, with a maximum solvent consumption of 19,500 gallons per year, located within a permanent total enclosure with emissions routed to the existing carbon adsorption system for volatile organic compound emissions, exhausting to stack ID # 2/2.

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

#### D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

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

The amount of single and total HAPs delivered to the parts and cylinder washers shall be limited to less than 10 and 25 tons per 12 month period, rolled on a monthly basis, respectively, utilizing a carbon adsorption system with 98% control efficiency. Therefore, the maximum achievable control technology (MACT) requirement in 326 IAC 2-4.1-1 (New Source Toxics Control) does not apply. Any change or modification, from the parts and cylinder washers that would increase in source wide single and total HAP emissions to more than 10 and 25 tons per year, shall obtain approval from the Office of Air Management (OAM), as required by 326 IAC 2-1 before such change can occur.

#### D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

### Compliance Determination Requirements

#### D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the HAP limit specified in Condition D.1.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### D.1.5 Hazardous Air Pollutants (HAP)

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The carbon adsorption unit for HAP control shall be in operation at all times when the parts and cylinder washers are in operation.

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

#### D.1.6 Carbon Adsorbers

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At all times that the control system for the parts and cylinder washers are in operation and being utilized to demonstrate compliance with the limitations set forth in Condition D.1.2. The control system shall be operated such that:

- (a) Performing a liquid-liquid material balance for each month as detailed in 40 CFR Part 63.824(b)(1)(i).
- (b) Using continuous emission monitors, conducting an initial performance test of capture efficiency, and continuously monitoring a site specific operating parameter to assure the capture efficiency as specified in 40 CFR Part 63.824(b)(1)(ii).
- (c) The source can comply with this condition by keeping the record of the malfunction reports of the systems conveying the exhaust gases from the enclosures; and other malfunction reports of the presses, when the systems conveying the exhaust gases from the enclosures to the adsorber, are not operating but the presses in the respective enclosures are in operation.

#### D.1.7 Carbon Adsorption Unit Inspections

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An inspection shall be performed each calendar quarter of the carbon adsorption unit controlling the parts and cylinder washers. All defective beds shall be replaced. The Permittee shall monitor and inspect the carbon adsorption solvent recovery system and the ducted solvent capture system to ensure proper operation and maintenance.

#### D.1.8 Carbon Adsorption Failure Detection

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In the event that a failure on the carbon adsorber has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. For the carbon adsorber, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.
- (b) Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.

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

#### D.1.9 Record Keeping Requirements

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- (a) To document compliance with Conditions D.1.2 and D.1.6, the Permittee shall maintain records in accordance with (1) through (3). Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the HAP usage limits and/or the HAP emission limits established in Condition D.1.2 and temperature limit established in Condition D.1.6.

- (1) The total VOC/HAP usage for each month; and the weight of VOC/HAPs emitted for each compliance period.
  - (2) The monthly average recovery efficiency for the carbon adsorption recovery system.
  - (3) The malfunction reports of the permanent total enclosure or the carbon adsorption recovery system.
- (b) To document compliance with Condition D.1.7, the Permittee shall maintain records of the results of the inspections required under Condition D.1.7.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.1.10 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.2 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.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION**

**PART 70 SOURCE MODIFICATION  
CERTIFICATION**

Source Name: R. R. Donnelley & Sons, Company  
Source Address: 2801 W. Old Road 30, Warsaw, IN 46581  
Mailing Address: P. O. Box 837, Warsaw, IN 46581-0837  
Source Modification No.:089-10668-00009

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

Please check what document is being certified:

- 9 Test Result (specify) \_\_\_\_\_
- 9 Report (specify) \_\_\_\_\_
- 9 Notification (specify) \_\_\_\_\_
- 9 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 MANAGEMENT  
COMPLIANCE DATA SECTION**

**Quarterly Report**

Source Name: R. R. Donnelley & Sons, Company  
Source Address: 2801 W. Old Road 30, Warsaw, IN 46581  
Mailing Address: P. O. Box 837, Warsaw, IN 46581-0837  
Source Modification No.: 089-10668-00009  
Facility: Parts and Cylinder Washers  
Parameter: Single hazardous air pollutants (HAPs)  
Limit: The single HAP usage is limited to less than 10 tons per twelve (12) month period, rolled on a monthly basis. During the first 11 months of this permit, the single HAP usage shall be limited such that the total single HAP usage divided by the accumulated months of operation shall not exceed 0.8325 tons per month.

YEAR: \_\_\_\_\_

Month	Total Single HAP Emissions This Month (tons)	Previous 11 Month Single HAP Emissions (tons)	12 Month Total Single HAP Emissions (tons)
Month 1			
Month 2			
Month 3			

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

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION**

**Quarterly Report**

Source Name: R. R. Donnelley & Sons, Company  
Source Address: 2801 W. Old Road 30, Warsaw, IN 46581  
Mailing Address: P. O. Box 837, Warsaw, IN 46581-0837  
Source Modification No.: 089-10668-00009  
Facility: Parts and Cylinder Washers  
Parameter: Total hazardous air pollutants (HAPs)  
Limit: The total HAP usage is limited to less than 25 tons per twelve (12) month period, rolled on a monthly basis. During the first 11 months of this permit, the total HAP usage shall be limited such that the total HAP usage divided by the accumulated months of operation shall not exceed 2.0825 tons per month.

YEAR: \_\_\_\_\_

Month	Total HAP Emissions This Month (tons)	Previous 11 Month HAP Emissions (tons)	12 Month Total HAP Emissions (tons)
Month 1			
Month 2			
Month 3			

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

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

**Indiana Department of Environmental Management  
Office of Air Management**

Addendum to the  
Technical Support Document (TSD) for a Source Modification to a  
Part 70 Operating Permit

**Source Background and Description**

**Source Name:** R.R. Donnelley & Sons Company  
**Source Location:** 2801 W. Old Road 30, Warsaw, Indiana 46581  
**County:** Kosciusko  
**SIC Code:** 2754  
**Operation Permit No.:** 085-10668-00009  
**Permit Reviewer:** Yvette de los Angeles/EVP

On April 8, 1999, the Office of Air Management (OAM) had a notice published in the Times Union, Warsaw, Indiana, stating that R.R. Donnelley & Sons Company had applied for a Significant Source Modification to a Part 70 Operating Permit for the construction and operation of parts and cylinder washers. 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 May 7, 1999, R.R. Donnelley & Sons Company submitted comments on the proposed Significant Source Modification to a Part 70 permit. The summary of the comments and corresponding responses are as follows (changes in bold or strikeout for emphasis):

**Comment 1:**

**A.1 General Information**

The Source Status for this facility should be modified as follows as noted in A.3:

Source Status: Part 70 Permit Program  
~~Major~~ **Minor** Source, under PSD  
~~Major~~ **Minor** Source, Section 112 of the Clean Air Act

A letter was sent to the Indiana Department of Environmental Management on 3/10/99 notifying them that the RR Donnelley & Sons Company 1998 annual emission statement (i-step program) had an error. This facility emitted 600.033 tons of VOC in 1998; therefore this facility is a Major Source under PSD and Section 112 of the Clean Air Act.

**Response 1:**

Condition A.1 has been modified as follows:

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

---

The Permittee owns and operates stationary printing press facility.  
 Source Status: Part 70 Permit Program  
~~Minor~~ **Major** Source, under PSD  
~~Minor~~ **Major** Source, Section 112 of the Clean Air Act

**Comment 2:**

**A.2 Emission Units and Pollution Control Equipment Summary**

Editorial Changes:

The description of the cylinder washing machine WGPW and WGCW [A.2(a + b)] should be modified to clarify that they are located in a permanent total enclosure.

- (a) One (1) parts washer, identified as WGPW, with a maximum solvent consumption of 13,850 gallons per year, ~~utilizing~~ **located within** a permanent total enclosure with.....
- (b) One (1) cylinder washer, identified as WCWM, with a maximum solvent consumption of 19,500 gallons per year, ~~utilizing~~ **located within** a permanent total enclosure with.....

**Response 2:**

Condition A.2 has been modified as follows:

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

---

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

- (a) One (1) parts washer, identified as WGPW, with a maximum solvent consumption of 13,850 gallons per year, ~~utilizing~~ **located within** a permanent total enclosure with emissions routed to the existing carbon adsorption system for volatile organic compound emissions, exhausting to stack ID # 2/2; and
- (b) One (1) cylinder washer, identified as WCWM, with a maximum solvent consumption of 19,500 gallons per year, ~~utilizing~~ **located within** a permanent total enclosure with emissions routed to the existing carbon adsorption system for volatile organic compound emissions, exhausting to stack ID # 2/2.

**Comment 3:**

**B.5 Significant Source Modification**

326 IAC 2-7-10.5(h) does not apply as we are not permitted under 326 2-7-10.5(f), instead we should be permitted under 326 2-7-10.5(e).

**Response 3:**

This source is subject to the permitting regulations under 326 IAC 2-7-10.5(f) because this source has the potential to emit before controls of greater than 25 tons per year for VOC. Pursuant to 326 IAC 2-7-10.5(f), this source is subject to 326 IAC 2-7-10.5(h). Therefore, there is no change to the permit due to this comment.

**Comment 4:**

**C.1 Certification**

To clarify that the multiple forms, reports, etc., that will be submitted on a regular basis can be submitted with a single Certification Form for the entire submittal and do not require individual certifications, Condition C.1(b) should be modified slightly.

- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal. **Multiple forms, reports, or other submittals may be submitted as a package with a single Certification Form.**

**Response 4:**

OAM agrees with the request and Condition C.1 will be modified as follows:

**C.1 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]**

- (a) Where specifically designated by this approval or required by an applicable requirement, any application form, report, or compliance certification submitted under this approval shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this approval, 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, on the attached Certification Form, with each submittal. **Multiple forms, reports, or other submittals may be submitted as a package with a single Certification Form.**

**Comment 5:**

**C.3 Permit Amendment or Modification**

To clarify that this facility has not yet received its Part 70 operating permit C.3(a) should be modified.

- (a) **After issuance of a Part 70 operating permit**, the Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this approval.

**Response 5:**

This source modification can be amended or modified even if the source has not received its Part 70 operating permit. Therefore, there is no change to the permit due to this comment.

**Comment 6:**

**C.4 Opacity**

Because the facility is not located in areas referenced in 326 IAC 5-1-1(c), this condition has been re-written to note the requirements of 326 IAC 5-1-2 (1A & 1B).

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

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

- (a) **Visible emissions shall not exceed an average of forty percent (40%) opacity in twenty-four (24) consecutive readings, as determined in 326 IAC 5-1-4.**
- (b) **Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.**

**Response 6:**

This condition, as stated, is the most up-to-date language for 326 IAC 5-1-2. Therefore, there is no change to the permit due to this comment.

**Comment 7:**

**C.5 Operation of Equipment**

The pollution control equipment included in this permit is not required to operate continuously for the facility to be in compliance with all applicable requirements. We have suggested a revision to this Condition to clarify this. Emission limits placed on these sources must ensure that less than 10 TPY of a Single or 25 TPY of total HAPs are not exceeded.

All air pollution control equipment listed in this permit ~~and used~~ **that must be operated continuously** to comply with an applicable requirement shall be in operation at all times that the emission units vented to the control equipment are in operation.

**Response 7:**

It has been determined that while some emission units will require control devices, it is possible that some of the processes for an emission unit may not require the use of the control device to maintain compliance with emission limitations. Therefore, new language will be added to Condition C.5 in order to include a provision for these exceptions.

C.5 Operation of Equipment [326 IAC 2-7-6(6)]

---

**Unless otherwise stated in Section D of this permit, All** air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit vented to the control equipment is in operation.

**Comment 8:**

**C.6 Performance Testing**

IDEM approval of testing may be granted for testing that is not specifically included elsewhere in the permit. Language has been added to allow for IDEM approval of alternate testing procedures without requiring a permit modification.

- (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 **or as approved by IDEM, OAM**, utilizing methods approved by IDEM, OAM.

**Response 8:**

OAM agrees with the request and Condition C.6 will be modified as follows:

C.6 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 approval **or as approved by IDEM, OAM**, utilizing methods approved by IDEM, OAM.

**Comment 9:**

**C.10 General Record Keeping Requirements**

This permit does not include any requirement for a Compliance Response Plan as specified in this condition. As such, we recommend that this Condition be deleted. In addition, we request the reference be deleted. The compliance monitoring requirements in Section D and the record keeping and reporting requirements elsewhere in Section C provide ample assurances that proper monitoring and response actions will be performed without the imposition of an additional, non-regulatory requirement for a Compliance Response Plan. Also there appears to be no regulatory basis for including who performs tasks as currently specified in Condition C.10(c)(4). We therefore request the Condition be revised to delete this requirement.

We also suggest a minor revision to Condition C.10 (d) for clarity.

(c) (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. Records of response steps taken shall indicate whether the response steps were performed in accordance with ~~the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to Take Response Steps~~, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken ~~and indicate who performed the tasks~~.

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

**Response 9:**

A Compliance Response Plan is required in this permit for Condition D.1.8. Therefore, the following condition will be added under "Corrective Actions and Response Steps" in Section C of this permit. All subsequent conditions will be renumbered accordingly.

**C.8 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6]  
[326 IAC 1-6]**

- 
- (a) **The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:**
- (1) This condition;**
  - (2) The Compliance Determination Requirements in Section D of this permit;**
  - (3) The Compliance Monitoring Requirements in Section D of this permit;**
  - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and**
  - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :**

- (A) **Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and**
  - (B) **A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.**
- (b) **For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.**
- (c) **After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:**
- (1) **The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.**
  - (2) **The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;**
  - (3) **An automatic measurement was taken when the process was not operating; or**
  - (4) **The process has already returned to operating within “normal” parameters and no response steps are required.**
- (d) **Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.**

Since a Compliance Response Plan is required in this permit, there will be no change to Condition C.10 (d) due to this comment.

**Comment 10:  
Section D.1 Facility Description**

This section requires editorial changes to be consistent with our requested changes in A.2 - Emission Units and Pollution Control Equipment Summary. The description of the cylinder washing machine WGPW and WGCW [(a) +b)] should be modified to clarify that they are located in a permanent total enclosure.

- (a) One (1) parts washer, identified as WGPW, with a maximum solvent consumption of 13,850 gallons per year, ~~utilizing~~ **located within** a permanent total enclosure with.....
- (b) One (1) cylinder washer, identified as WCWM, with a maximum solvent consumption of 19,500 gallons per year, ~~utilizing~~ **located within** a permanent total enclosure with.....

**Response 10:**

Section D (Facility Description) shall be modified as follows:

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

- (a) One (1) parts washer, identified as WGPW, with a maximum solvent consumption of 13,850 gallons per year, ~~utilizing~~ **located within** a permanent total enclosure with emissions routed to the existing carbon adsorption system for volatile organic compound emissions, exhausting to stack ID # 2/2; and
- (b) One (1) cylinder washer, identified as WCWM, with a maximum solvent consumption of 19,500 gallons per year, ~~utilizing~~ **located within** a permanent total enclosure with emissions routed to the existing carbon adsorption system for volatile organic compound emissions, exhausting to stack ID # 2/2.

**Comment 11:**

**D.1.2 Hazardous Air Pollutants**

We have reviewed the requirements of 326 IAC 2-4.1-1 (New source toxics control) and believe that it does not apply to the parts washer or the cylinder washer machines as they do not have the potential to emit greater than 10 tons per year of any HAP or 25 tons per year of any combination of HAP. Both pieces of equipment will have permit limitations on the amount of material processed and HAP emissions. This limitation means that both the cylinder washer and parts washer will be well below the major source threshold. Because separately or in combination neither of these sources is a major source, we suggest a revision of this condition. We have also included the regulatory citations used to make this determination.

The amount of single and total HAPs ~~delivered to the~~ **emitted by the** parts and cylinder washers shall be limited to less than 10 and 25 tons per 12 month period, rolled on a monthly basis, respectively, ~~utilizing a carbon adsorption system with 98% control efficiency.~~ Therefore, the maximum achievable control technology (MACT) requirement in 326 IAC 2-4.1-1 (New Source Toxics Control) does not apply. Any change or modification, from the parts and cylinder washers.....

Regulatory Citations

326 IAC 2-4.1-1 New source toxics control

(a) Any owner or operator who *constructs or reconstructs a major source of hazardous air pollutants (HAP), as defined in 40 CFR 63.41 \**, after July 27, 1997, including owners or operators with permit applications pending with the department on the effective date of this section, shall comply with the requirements of this section, except as specifically specified herein.....

*40 CFR 63.41 – Construct a major source means: (2) To fabricate, erect, or install at any developed site a new process of production unit which in and of itself emits or has the potential to emit 10 tons per year of any HAP or 25 tons per year of and combination of HAP, unless the process of production unit satisfies criteria in paragraphs (2)(i) through (vi) of this definition.*

*Pursuant to 40 CFR 63.2 and 326 IAC 2-1.1-1(16) - Potential to Emit means the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed, shall be treated s part of its design if the limitation is enforceable by the U.S. EPA, the department, or the appropriate local air pollution control agency. ....*

**Response 11:**

The OAM agrees that these facilities are not subject to 326 IAC 2-4.1-1, because the information provided by the Permittee indicates that the parts and cylinder washers have limited potential to emit of single and total HAPs of less than 10 and 25 tons per year, respectively, utilizing a carbon adsorption system with 98% control efficiency. If ever the source does emit single and total HAP emissions over 10 and 25 tons per year, respectively, the source must obtain prior approval from IDEM. Therefore, there is no change to the permit due to this comment.

**Comment 12:**

**D.1.3 Preventative Maintenance Plan**

Editorial Change is required:

A Preventive Maintenance Plan, in accordance with Section B C - Preventive Maintenance Plan...

**Response 12:**

Condition D.1.3 has been modified as follows:

**D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

---

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

**Comment 13:**

**D.1.5 Hazardous Air Pollutants (HAP)**

The pollution control equipment included in this permit is not required to operate continuously for the facility to be in compliance with all applicable requirements and the emission limit listed in D.1.2. We have suggested a revision to this Condition to clarify this.

The carbon adsorption unit for HAP control shall be in operation at all **times when necessary to comply with an applicable requirement of this permit.** ~~the parts and cylinder washer are in operation.~~

**Response 13:**

In order to make the emission limitations on HAPs, as required by Condition D.1.2 be federally enforceable, the carbon adsorption system, with 98% control efficiency must be in operation at all times when the parts and cylinder washers are in operation. Therefore, there is no change to the permit due to this comment.

**Comment 14:**

**D.1.6 Carbon Adsorbers**

The existing Compliance Monitoring Requirements (a-c) are not consistent with the Draft Part 70 Operating permit for the facility. In order to make these conditions consistent with operations and with the existing draft part 70 - permit we have included example language:

At all times that the control system for the parts and cylinder washer are in operation and being utilized to demonstrate compliance with the limitation set forth in Condition D.1.2. The control system shall be operated such that:

- (a) Performing a liquid-liquid material balance for each month as detailed in '63.824(b)(1)(i)
- (b) Using continuous emission monitors, conducting an initial performance test of capture efficiency, and continuously monitoring a site specific operating parameter to assure the capture efficiency as specified in '63.824(b)(1)(ii).

(c) The source can comply with this condition by keeping the record of the malfunction reports of the systems conveying the exhaust gases from the enclosures; and other malfunction reports of the presses, when the systems conveying the exhaust gases from the enclosures to the adsorber, are not operating but the presses in the respective enclosures are in operation.

**Response 14:**

**D.1.6 Carbon Adsorbers**

---

At all times that the control system for the parts and cylinder washers are in operation and being utilized to demonstrate compliance with the limitations set forth in Condition D.1.2. The control system shall be operated such that:

- ~~(a) The pressure drop across the carbon adsorption unit shall not be less than the pressure drop required to achieve the overall control efficiency of 98%, or a more appropriate pressure drop as determined by the most recent stack test data.~~
- ~~(b) The carbon adsorption unit shall operate above the minimum operating temperature as determined by the most recent stack test data, which has been demonstrated to achieve the overall control efficiency of 98%.~~
- ~~(c) The sensors and recording equipment measuring the pressure drop and temperature are operating.~~

- (a) Performing a liquid-liquid material balance for each month as detailed in 40 CFR Part 63.824(b)(1)(i).**
- (b) Using continuous emission monitors, conducting an initial performance test of capture efficiency, and continuously monitoring a site specific operating parameter to assure the capture efficiency as specified in 40 CFR Part 63.824(b)(1)(ii).**
- (c) The source can comply with this condition by keeping the record of the malfunction reports of the systems conveying the exhaust gases from the enclosures; and other malfunction reports of the presses, when the systems conveying the exhaust gases from the enclosures to the adsorber, are not operating but the presses in the respective enclosures are in operation.**

**Comment 15:**

**D.1.7 Carbon Adsorption Unit Inspections**

The facility has already been preparing a preventive maintenance plan, which in combination with existing operating permit requirements for this system are sufficient to meet the requirements of D.1.8.

~~An inspection shall be performed each calendar quarter of the carbon adsorption unit controlling the parts and cylinder washers. All defective beds shall be replaced.~~

**The Permittee shall monitor and inspect the carbon adsorption solvent recovery system and the ducted solvent capture system to ensure proper operation and maintenance.**

**Response 15:**

Although the source will have a PMP in place for the facility in the future, OAM determined that a periodic quarterly inspection of the facility is still required to ensure proper operation of the facility. Condition D.1.7 has been revised as follows:

**D.1.7 Carbon Adsorption Unit Inspections**

---

An inspection shall be performed each calendar quarter of the carbon adsorption unit controlling the parts and cylinder washers. All defective beds shall be replaced. **The Permittee shall monitor and inspect the carbon adsorption solvent recovery system and the ducted solvent capture system to ensure proper operation and maintenance.**

**Comment 16:**

**D.1.8 Carbon Adsorption Failure Detection**

The facility has already been preparing a preventive maintenance plan which in combination with existing operating permit requirements for this system are sufficient to meet the requirements of D.1.8. Therefore we believe that this requirement should be deleted completely.

**Response 16:**

Although the source will have a PMP in place for the facility in the future, OAM determined that this condition clarifies the emergency provisions of the Title V rule and are sufficient to ensure proper operation of the facility.

**Comment 17:**

**D.1.9 Record Keeping Requirements**

(a) To document compliance with Conditions D.1.2 and D.1.6, the Permittee shall maintain records in accordance with (1-3) below. Records maintained for (1-3) shall be taken monthly and shall be complete and sufficient to establish compliance with the HAP usage limits and/or the HAP emission limits established in Conditions D.1.2 ~~and temperature limit established in Condition D.1.6.~~

~~(1) Operating temperature and pressure drops for the carbon adsorption units.~~

**(1) The total VOC/HAP usage for each month; and the weight of VOC/HAPs emitted for each compliance period.**

**(2) The monthly average recovery efficiency for the carbon adsorption recovery system.**

**(3) The malfunction reports of the permanent total enclosure or the carbon adsorption recovery system.**

~~(b) To document compliance with condition D.1.7, the permittee shall maintain records of the results of the inspections required under Condition D.1.7.~~

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

**Response 17:**

Condition D.1.9 (a)(1) has been modified as follows:

**D.1.9 Record Keeping Requirements**

---

- (a) To document compliance with Conditions D.1.2 and D.1.6, the Permittee shall maintain records in accordance with (1) **through (3)**. Records maintained for (1) **through (3)** shall be taken monthly and shall be complete and sufficient to establish compliance with the HAP usage limits and/or the HAP emission limits established in Condition D.1.2 and temperature limit established in Condition D.1.6.

~~(1) Operating temperature and pressure drops for the carbon adsorption units.~~

- (1) **The total VOC/HAP usage for each month; and the weight of VOC/HAPs emitted for each compliance period.**
- (2) **The monthly average recovery efficiency for the carbon adsorption recovery system.**
- (3) **The malfunction reports of the permanent total enclosure or the carbon adsorption recovery system.**

Condition D.1.9(b) is needed to ensure compliance with Condition D.1.7, therefore, there is no change to the permit due to this comment.

**Comment 18:**

**Quarterly Report Forms**

Please make the following changes to the Quarterly Report forms:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF AIR MANAGEMENT  
 COMPLIANCE DATA SECTION**

**Quarterly Report**

Source Name: R. R. Donnelley & Sons, Company  
 Source Address: 2801 W. Old Road 30, Warsaw, IN 46581  
 Mailing Address: P. O. Box 837, Warsaw, IN 46581-0837  
 Source Modification No.: 089-10668-00009  
 Facility: Parts and Cylinder Washers  
 Parameter: Single hazardous air pollutants (HAPs)  
 Limit: The single HAP **emissions usage** is limited to less than 10 tons per twelve (12) month period, rolled on a monthly basis. During the first 11 months of this permit, the single HAP usage shall be limited such that the total single HAP **emissions usage** divided by the accumulated months of operation shall not exceed 0.8325 tons per month.

YEAR: \_\_\_\_\_

Month	Total Single HAP Emissions This Month (tons)	Previous 11 Month Single HAP Emissions (tons)	12 Month Total Single HAP Emissions (tons)
Month 1			
Month 2			
Month 3			

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

Submitted by: \_\_\_\_\_  
 Title / Position: \_\_\_\_\_  
 Signature: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Phone: \_\_\_\_\_

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF AIR MANAGEMENT  
 COMPLIANCE DATA SECTION**

**Quarterly Report**

Source Name: R. R. Donnelley & Sons, Company  
 Source Address: 2801 W. Old Road 30, Warsaw, IN 46581  
 Mailing Address: P. O. Box 837, Warsaw, IN 46581-0837  
 Source Modification No.: 089-10668-00009  
 Facility: Parts and Cylinder Washers  
 Parameter: Total hazardous air pollutants (HAPs)  
 Limit: The total HAP **emissions usage** is limited to less than 25 tons per twelve (12) month period, rolled on a monthly basis. During the first 11 months of this permit, the total HAP **emissions usage** shall be limited such that the total HAP **emissions usage** divided by the accumulated months of operation shall not exceed 2.0825 tons per month.

YEAR: \_\_\_\_\_

Month	Total HAP Emissions This Month (tons)	Previous 11 Month HAP Emissions (tons)	12 Month Total HAP Emissions (tons)
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.  
 Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
 Title / Position: \_\_\_\_\_  
 Signature: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Phone: \_\_\_\_\_

**Response 18:**

Limits must be specified in terms of single and total HAP input and usage, not in terms of emissions, according to PSD court determination. Therefore, there is no change to this permit due to this comment.

**Comment 19:**

**Technical Support Document**

**Permitted Emission Units and Pollution Control Equipment**

This section should be modified to indicate that there are several permitted sources and pollution control equipment at this facility:

~~There are no permitted facilities operating at this source during this review process.~~

**The permitted facilities operating at this source during this review process consists of the following permitted emission units and pollution control devices:**

- (1) Four (4) natural gas or fuel oil fired boilers with emissions exhausting to stack 1/1 describe as follows:**
  - (a) One (1) identified as B-1, with a maximum heat input capacity of 78 MMBtu/hr.**
  - (b) Two (2) identified as B-2 and B-3, each with maximum heat input capacities of 85 MMBtu/hr.**
  - (c) One (1) identified as B-4, with a maximum heat input capacity of 98.4 MMBtu/hr.**
- (2) Sixteen (16) publication rotogravure printing presses, each using a carbon adsorption solvent recovery system with seventeen (17) adsorbers as control, and exhausting to stack 2/2:**
  - (a) One (1) identified as WR-433, having a maximum printing width of 75 inches and a maximum line speed of 1800 feet per minute.**
  - (b) One (1) identified as WR-426, with a maximum printing width of 69 inches and a maximum line speed of 1600 feet per minute.**
  - (c) One (1) identified as WR-429, with a maximum printing width of 70 inches and a maximum line speed of 2400 feet per minute, and enclosed by Permanent Total Enclosure (PTE) to enhance capture efficiency.**
  - (d) One (1) identified as WRO-486, with a maximum printing width of 69 inches and a maximum line speed of 1600 feet per minute.**
  - (e) One (1) identified as WRO-487, with a maximum printing width of 69 inches and a maximum line speed of 2000 feet per minute.**
  - (f) Two (2) identified as WRO-488 and WRO-489, with each press having a maximum printing width of 70 inches and a maximum line speed of 2460 feet per minute.**
  - (g) One (1) identified as WRO-490, with a maximum printing width of 70 inches and a maximum line speed of 2756 feet per minute.**
  - (h) Four (4) identified as WRO-491, WRO-492, WRO-493, and WRO-494, with each press having a maximum printing width of 125 inches and a maximum line speed of 3000 feet per minute, and enclosed by Permanent Total Enclosure (PTE).**
  - (i) One (1) identified as WR-444, with a maximum printing width of 78 inches and a maximum line speed of 2756 feet per minute and although not required, enclosed by Permanent Total Enclosure (PTE).**

- (j) Three (3) identified as WR-441, WR-442, and WR-443, with each press having a maximum printing width of 78 inches and a maximum line speed of 2756 feet per minute, and enclosed by Permanent Total Enclosure (PTE).
  
- (3) Three (3) rotogravure proof presses using the carbon adsorption solvent recovery system described above and exhausting to stack 2/2:
  - (a) One (1) identified as WCM-440, having a maximum printing width of 75 inches and a maximum line speed of 400 feet per minute.
  - (b) One (1) identified as WCM-450, with a maximum printing width of 125 inches and a maximum line speed of 900 feet per minute.
  - (c) One (1) identified as WCM-460, with a maximum printing width of 78 inches and maximum line speed of 600 feet per minute.
  
- (4) One (1) gravure cylinder wash machine, identified as GCW, located in the east plant and exhausting to stack 3/4.
  
- (5) One (1) gravure press parts washer, identified as GPW, located in the east plant, using the carbon adsorption solvent recovery system described above, and exhausting to stack 2/2.
  
- (6) Two (2) chromium plating lines using a composite mesh pad system with a hepafilter to control emissions and exhausting to stack 5, identified as follows:
  - (a) CRT-1 having two (2) rectifiers with a maximum combined capacity of 5,000 amps,
  - (b) CRT-2 having two (2) rectifiers with a maximum combined capacity of 5,000 amps;
  
- (7) One (1) pneumatic dust and paper trim collection system located in the east plant and consisting of:
  - (a) One (1) cyclone identified as EPC-3, with air exhausting to one (1) baghouse identified as EPBH-C or to stack 3/4.
  - (b) One (1) cyclone identified as EPC-1, with air exhausting to stack 3/4.
  - (c) One (1) cyclone identified as EPC-2, with air exhausting to stack 3/4.
  - (d) One (1) concentrator identified as EPCON-5, with concentrated paper sent to cyclone, EPC-1, and air exhausting to one (1) baghouse identified as EPBH-E or to stack 3/4.
  - (e) Three (3) baghouses identified as EPBH-C, EPBH-D, and EPBH-E, with collected dust sent to one (1) concentrator, EPCON-6, and air exhausting to stack 3/4.
  - (f) One (1) concentrator identified as EPCON-6, with concentrated paper sent to one (1) cyclone, EPC-4, or to one (1) concentrator, EPCON-5, and air exhausting to one (1) baghouse identified as EPBH-E or to stack 3/4.
  - (g) One (1) cyclone identified as EPC-4, with and air exhausting to one (1) baghouse, EPBH-D, or exhausting to stack 3/4.

- (8) One (1) pneumatic paper trim collection system located in the west plant and consisting of:**
- (a) One (1) cyclone identified as WPC-1, with air exhausting to stack 3/4.**
  - (b) One (1) cyclone identified as WPC-2, with air exhausting to stack 3/4.**
  - (c) One (1) concentrator identified as WPCON-3, with concentrated paper sent to cyclone, WPC-1 or WPC-2, and air exhausting to one (1) baghouse identified as WPBH or to stack 3/4.**
  - (d) One (1) baghouse identified as WPBH, with collected dust sent to cyclone, WPC-1 or WPC-2, and air returning to bindery.**
  - (e) One (1) concentrator identified as WPCON-4, with concentrated paper sent to cyclone WPC-1 or WPC-2 and air exhausting to stack 3/4.**

**Response 19:**

This TSD only covers the units to be permitted under this Significant Source Modification. The units currently at this source do not need to be addressed under this Significant Source Modification. Therefore, there is no change due to this comment.

**Comment 20:**

**Emissions Calculations**

RR Donnelley & Sons Company has reviewed the emissions calculations included in the TSD and we believe that they do not accurately reflect the potential to emit (PTE) for the proposed sources. The PTE from the proposed modification (based on 8,760 hours of operation per year at rated capacity including enforceable emissions control and production limits) are well below 10 tons per year for any single HAP or 25 tons for any combination of HAPs.

The emissions calculations for the State of Indiana do not accurately reflect the operational limitations on material use, which will be part of the operating permit for this source. These calculations should be revised to take into account the limit on material usage on each of the pieces of equipment.

**Potential To Emit**

The potential to emit from the proposed modification (based on 8,760 hours of operation per year at rated capacity including enforceable emissions control and production limits) will be 2.41 TPY. Therefore the potential to emit determination and the determination that this facility is subject to 326 IAC 2-5-1.3 should be modified as follows:

Pollutant	Potential To Emit (tons/year)
PM	0.00
PM-10	0.00
SO <sub>2</sub>	0.00
VOC	<del>420.39</del> 2.41
CO	0.00
NOx	0.00

HAPs	Potential To Emit (tons/year)
Xylene	<del>Greater</del> less than 10
Toluene	<del>Greater</del> less than 10
Ethyl Benzene	<del>Greater</del> less than 10
Total	<del>Greater</del> less than 25

- (b) The potential to emit (as define in 326 IAC 2-1.1-1(16)) of VOC is ~~equal to or greater~~ **less** than 25 tons per year. Therefore, the source is **not** subject to the provisions of 326 IAC 2-5-1.3.
- (c) The potential to emit (as define in 326 IAC 2-1.1-1(16)) of any single HAP is ~~equal to or greater~~ **less** than ten (10) tons per year and the potential to emit (as define in 326 IAC 2-7-1(29)) of a combination HAPs is ~~greater~~ **less** than or equal to twenty-five (25) tons per year. Therefore, the source is **not** subject to the provisions of 326 IAC 2-5-1.3.

*Pursuant to 40 CFR 63.2 and 326 IAC 2-1.1-1(16) - Potential to Emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated s part of its design if the limitation or the effect it would have on emissions is federally enforceable.*

**Response 20:**

The definition of potential to emit is defined in the TSD as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.” The Potential to Emit of greater than 10 and 25 tons per year of single and total HAPs, respectively, is considered as the source’s “maximum capacity” to emit under its physical and operational design. The material limitations are not enforceable by the U.S. EPA, unless there is a condition in the permit that requires the enforceable limit. The emissions before restrictions justifies that this source is subject to the Part 70 permit program. Therefore, there will be no change to the permit due to this comment.

**Comment 21:**

**Source Status**

*As was indicated in Section A.1 - General Information* a letter was sent to the Indiana Department of Environmental Management on 3/10/99 notifying them that the RR Donnelley & Sons Company 1998 annual emission statement (i-step program) had an error. This facility emitted 600.033 tons of VOC in 1998; therefore this facility is a Major Source under PSD and Section 112 of the Clean Air Act. Therefore this section should be modified as follows:

Pollutant	Potential Emissions (ton/yr)
PM	Less than 250
PM-10	Less than 250
SO2	Less than 250
VOC	Greater than 250
CO	Less than 250
NOx	Less than 250

HAPs	Potential Emissions (tons/year)
Xylene	greater than 10
Toluene	greater than 10
TOTAL	greater than 25

- (a) The existing source **is not** a major stationary source because ~~no attainment regulated pollutant~~ VOC is emitted at a rate of 250 tons per year or more, and it is not in one potential to emit (as defined in 326 IAC 2-1.1-1(16)) of VOC
  
- (b) These emissions were based on the **3/10/99-revised** Annual Air Emission Inventory and Emission Statement for 1997.

**Proposed Modification**

This modification to an existing **major** ~~minor~~ stationary source.....

**Response 21:**

The OAM prefers that the Technical Support Document and its associated Appendix reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

Changes to the Source Status and Proposed Modification will be changed as follows:

**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	1.79
PM10	1.79
SO <sub>2</sub>	0.19
VOC	<del>60.87</del> <b>600.03</b>
CO	3.36
NO <sub>x</sub>	44.83

- (a) ~~This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.~~
- (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.**
- (b) These emissions were based on the Annual Air Emission Inventory and Emission Statement for 1997 **(revised on March 10, 1999)**.

**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 <sub>2</sub> (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO <sub>x</sub> (ton/yr)
Proposed Modification	0.00	0.00	0.00	2.41	0.00	0.00
PSD Threshold Level	<del>250</del> <b>25</b>	<del>250</del> <b>15</b>	<del>250</del> <b>40</b>	<del>250</del> <b>40</b>	<del>250</del> <b>100</b>	<del>250</del> <b>40</b>

This modification to an existing ~~minor~~ **major** stationary source is not major because the emission 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.

**Comment 22:**

**State Rule Applicability**

Because the facility is not located in areas referenced in 326 IAC 5-1-1(c), this condition has been re-written to note the requirements of 326 IAC 5-1-2 (1 A & 1B).

326 IAC 5-1 (Visible Limitations)

- (a) ~~Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.~~
- (b) ~~Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute non-overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.~~

- (a) Visible emissions shall not exceed an average of forty percent (40%) opacity in twenty-four (24) consecutive readings, as determined in 326 IAC 5-1-4.**
- (b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.**

**Response 22:**

See Comment/Response 6.

**Comment 23:**

**Compliance Requirements**

Based on comments provided D.1.9 the Permittee shall maintain records in accordance with (1) below. Records maintained for (1) shall be taken monthly and shall be complete and sufficient to establish compliance with the HAP usage limits and/or the HAP emission limits established in Conditions D.1.2 and temperature limit established in Condition D.1.6

- (a) The total VOC/HAP usage for each month; and the weight of VOC/HAPs emitted for each compliance period.**
- (b) The monthly average recovery efficiency for the carbon adsorption recovery system.**
- (c) The malfunction reports of the permanent total enclosure or the carbon adsorption recovery system.**

**Response 23:**

See Comment/Response 17.

**Comment 24:**

Fees under for a significant source modification should not apply as this modification is not listed under 326 IAC 2-7-10.5(h).

**Response 24:**

See Comment/Response 3.

**Comment 25:**

An affidavit of construction is not necessary as 326 IAC 2-7-10.5(h) does not apply since it contains the requirements for operations permitted under 326 IAC 2-7-10.5 (f) and we should be permitted under 326 IAC 2-7-10.5 (e).

**Response 25:**

See Comment/Response 3.

## **Indiana Department of Environmental Management Office of Air Management**

### **Technical Support Document (TSD) for a Significant Source Modification to a Part 70 Operating Permit**

#### **Source Background and Description**

**Source Name:** R. R. Donnelley & Sons Company  
**Source Location:** 2801 W. Old Road 30, Warsaw, IN 46581  
**County:** Kosciusko  
**SIC Code:** 2754  
**Operation Permit No.:** 085-10668-00009  
**Permit Reviewer:** Yvette de los Angeles/EVP

The Office of Air Management (OAM) has reviewed an application from R.R. Donnelley & Sons Company relating to the construction and operation of parts and cylinder washers.

#### **History**

On February 17, 1999, R. R. Donnelley & Sons Company submitted an application to the OAM requesting to add parts and cylinder washers to their existing plant. An application for a Part 70 permit (T-085-6040-00009) for the existing source was received on June 3, 1996.

#### **Permitted Emission Units and Pollution Control Equipment**

There are no permitted facilities operating at this source during this review process.

#### **Unpermitted Emission Units and Pollution Control Equipment**

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

#### **New Emission Units and Pollution Control Equipment**

The application includes information relating to the construction and operation of the following equipment:

- (a) One (1) parts washer, identified as WGPW, with a maximum solvent consumption of 13,850 gallons per year, utilizing a permanent total enclosure with emissions routed to the existing carbon adsorption system for volatile organic compound emissions, exhausting to stack ID # 2/2; and
- (b) One (1) cylinder washer, identified as WCWM, with a maximum solvent consumption of 19,500 gallons per year, utilizing a permanent total enclosure with emissions routed to the existing carbon adsorption system for volatile organic compound emissions, exhausting to stack ID # 2/2.

### Existing Approvals

The source applied for a Part 70 Operating Permit (T-085-6040-00009) on June 3, 1996. The source has been operating under previous approvals including, but not limited to, the following:

- (a) OP-43-07-88-0199, issued on October 23, 1984;
- (b) OP-43-07-88-0200, issued on October 23, 1984;
- (c) OP-43-07-88-0201, issued on October 23, 1984;
- (d) OP-43-07-88-0202, issued on October 23, 1984;
- (e) OP-43-07-88-0207, issued on January 14, 1986;
- (f) OP-2300-0009-0219, issued on July 18, 1990;
- (g) CP-085-3117-00009, issued on December 10, 1993;
- (h) CP-085-3698-00009, issued on June 30, 1994;
- (i) CP-085-4396-00009, issued on November 27, 1995;
- (j) CP-085-6372-00009, issued on December 6, 1996;
- (k) Modification 085-8155-00009, issued on June 2, 1997;
- (l) CP-085-8550-00009, issued on September 18, 1997;
- (m) Amendment 085-8369-00009, issued on April 4, 1997;
- (n) CP-085-8398-00009, issued on April 8, 1997;
- (o) Amendment 085-10207-00009, issued on December 1, 1998; and
- (p) Amendment 085-10487-00009, issued on January 20, 1999.

### Enforcement Issue

There are no enforcement actions pending.

### Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
2/2	carbon adsorption system	29' 8"	4.5	25,000-580,000	85

### Recommendation

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

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

An application for the purposes of this review was received on February 17, 1999.

### Emission Calculations

See Appendix A of this document for detailed emissions calculations (two (2) pages).

### Potential To Emit

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

Pollutant	Potential To Emit (tons/year)
PM	0.00
PM-10	0.00
SO <sub>2</sub>	0.00
VOC	120.39
CO	0.00
NO <sub>x</sub>	0.00

HAP's	Potential To Emit (tons/year)
Xylene	greater than 10
Toluene	greater than 10
Ethyl Benzene	greater than 10
TOTAL	greater than 25

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of VOC is equal to or greater than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-5-1.3.
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-5-1.3.

**County Attainment Status**

The source is located in Kosciusko County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Kosciusko County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 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	1.79
PM10	1.79
SO <sub>2</sub>	0.19
VOC	60.87
CO	3.36
NO <sub>x</sub>	44.83

- (a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.
- (b) These emissions were based on the Annual Air Emission Inventory and Emission Statement for 1997.

**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 <sub>2</sub> (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO <sub>x</sub> (ton/yr)
Proposed Modification	0.00	0.00	0.00	2.41	0.00	0.00
PSD Threshold Level	250	250	250	250	250	250

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, 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-085-6040-00009) application on June 3, 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 (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) The parts and cylinder washers are not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), (40 CFR 63.460, Subpart T). The solvent used in the parts and cylinder washers will be primarily composed of toluene, which is not a halogenated solvent.

**State Rule Applicability - Entire Source**

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of VOC. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Visible Emissions Limitations)

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

- (a) Opacity shall not exceed an average of forty percent (40%) 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.

### **State Rule Applicability - Individual Facilities**

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

The parts and cylinder washers are not subject to the requirements of 326 IAC 2-4.1-1 (New Source Toxics Control). The source will limit single and total HAP emissions to less than 10 and 25 tons per year, respectively, using a carbon adsorption unit with 98% control efficiency. Therefore, the parts and cylinder washers will not be subject to the requirements of 326 IAC 2-4.1-1 (New Source Toxics Control).

#### **326 IAC 8-3-2 (Cold Cleaner Operation)**

The parts and cylinder washers are subject to 326 IAC 8-3-2 (Cold Cleaner). Pursuant to this rule, the owner/operator of a cold degreaser shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements; and
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

#### **326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)**

The parts and cylinder washers are not subject to 326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control) because the washers are connected to an existing solvent recovery system.

### **Compliance Requirements**

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

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

The compliance monitoring requirements applicable to this source are as specified below:

1. The parts and cylinder washers have applicable compliance monitoring conditions as follows:
  - (a) The pressure drop across the carbon adsorption unit shall not be less than the pressure drop required to achieve the overall control efficiency of 98%, or a more appropriate pressure drop as determined by the most recent stack test data.
  - (b) The carbon adsorption unit shall operate above the minimum operating temperature as determined by the most recent stack test data, which has been demonstrated to achieve the overall control efficiency of 98%.
  - (c) The sensors and recording equipment measuring the pressure drop and temperature are operating.

### **Air Toxic Emissions**

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) 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) Part 70 Application Form GSD-08.

- (a) This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.
- (b) See attached calculations for detailed air toxic calculations. (Appendix A, page 2 of 2).

### **Conclusion**

The operation of this parts and cylinder washers shall be subject to the conditions of the attached proposed **Significant Source Modification Permit No. 085-10668-00009**.

**Appendix A: Emissions Calculations  
VOC and Particulate  
From Degreasing Operations**

Company Name: **R.R. Donnelley & Sons Company**  
 Address City: **2801 W. Old Road 30, Warsaw, IN 46581-0837**  
 CP: **085-10668**  
 Plt ID: **085-00009**  
 Reviewer: **Yvette de los Angeles/EVP**  
 Date: **08/11/99**

Material	Process	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/hr)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Recsol	Parts Washer (WGP)	7.2	100.00%	0.0%	100.0%	0.0%	100.00%	1.58	7.22	7.22	11.42	273.96	50.00	0.00	7.22	0%
Recsol	Cylinder Washer (WG)	7.2	100.00%	0.0%	100.0%	0.0%	100.00%	2.23	7.22	7.22	16.07	385.73	70.40	0.00	7.22	0%

**State Potential Emissions** **27.49      659.69      120.39      0.00**

<b>Federal Potential Emissions (controlled):</b>							
	Process	Control Efficiency:		Controlled VOC lbs per Hour	Controlled VOC lbs per Day	Controlled VOC tons per Year	Controlled PM tons/yr
		VOC	PM				
	WGPW	98.00%	0.00%	0.23	5.48	1.00	0.00
	WGWM	98.00%	0.00%	0.32	7.71	1.41	0.00
<b>Total Federal Potential Emissions:</b>		98.00%	0.00%	<b>0.55</b>	<b>13.19</b>	<b>2.41</b>	<b>0.00</b>

**METHODOLOGY**

- Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)
- Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)
- Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/hr)
- Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/hr) \* (24 hr/day)
- Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)
- Particulate Potential Tons per Year = (gal/hr) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \*(8760 hrs/yr) \*(1 ton/2000 lbs)
- Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)
- Controlled emission rate = uncontrolled emission rate \* (1 - control efficiency)

**Appendix A: Emission Calculations  
HAP Emission Calculations**

**Company Name: R.R. Donnelley & Sons Company**  
**Address City IN Z 2801 W. Old Road 30, Warsaw, IN 46581-0837**  
**CP#: 085-10668**  
**Plt ID: 085-00009**  
**Permit Reviewer: Yvette de los Angeles/EVP**  
**Date: 08/11/99**

Material	Process	Density (Lb/Gal)	Gallons of Material (gal/hr)	Weight % Xylene	Weight % Toluene	Weight % Ethyl Benzene	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Ethyl Benzene Emissions (ton/yr)
Recsol	Parts Washer (WGPV)	7.2	1.58	10.00%	98.00%	10.00%	5.00	49.00	5.00
Recsol	Cylinder Washer (WG)	7.2	2.23	10.00%	98.00%	10.00%	7.04	68.99	7.04

**Total State Potential Emissions** **12.04**      **117.99**      **12.04**

<b>Federal Potential Emissions (controlled):</b>					
	Process	Control Efficiency:	Controlled	Controlled	Controlled
		VOC	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Ethyl Benzene Emissions (ton/yr)
	WGPW	98.00%	0.10	0.98	0.10
	WGWM	98.00%	0.14	1.38	0.14
<b>Total Federal Potential Emissions:</b>		98.00%	<b>0.24</b>	<b>2.36</b>	<b>0.24</b>

**METHODOLOGY**

HAPS emission rate (tons/yr) = Density (lb/gal) \* Gal of Material (gal/hr) \* Weight % HAP \* 8760 hrs/yr \* 1 ton/2000 lbs  
 Controlled emission rate = uncontrolled emission rate \* (1 - control efficiency)