

Dennis Henderson  
Environmental Coordinator  
Mallory North American Capacitor Company  
1701 Indianapolis Road  
P.O. Box 489  
Greencastle, IN 46135-0489

Re: Registered Construction and Operation Status,  
**CP 133-11674-00039**

Dear Mr. Henderson:

The application from Mallory North American Capacitor Company, received on December 17, 1999, has been reviewed. Based on the data submitted and the provisions 326 IAC 2-5.1 and 326 IAC 2-5.5, it has been determined that the following zinc spray coating booth, to be located at 1701 Indianapolis Road, Greencastle, Indiana, is classified as registered:

- (a) one (1) metal spray coating booth with a maximum coating rate of 10.54 pounds per hour consisting of an arc spray gun for applying zinc coating to metalized film capacitor bodies with particulate matter overspray controlled by a cartridge dust collector.

The following conditions shall be applicable:

1. 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:
  - (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.
2. Pursuant to 326 IAC 6-3-2(c) (Particulate Emission Limitations), the allowable particulate matter emission rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
3. In order to comply with the particulate matter limit of 0.551 pounds per hour, the cartridge dust collector must be in operation to control particulate matter emissions from overspray at all times that the zinc spray coating booth is in operation.

4. Parametric Monitoring [326 IAC 2-5.5-4(b)]  
The Permittee shall record the total static pressure drop across the cartridge dust collector used in conjunction with the spray coating booth, at least once daily when the spray coating booth is in operation when venting to the atmosphere. The pressure drop across the dust collector shall be maintained within the range of 1.0 and 7.0 inches of water or a range established during the latest stack test.

The instrument used for determining the pressure shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ( $\pm 2\%$ ) of full scale reading, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

5. Cartridge Dust Collector Inspections [326 IAC 2-5.5-4(b)]  
An inspection shall be performed each calendar quarter of the dust collector controlling the spray coating booth when venting to the atmosphere. A dust collector inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors.

6. Cartridge Dust Collector Failure Detection [326 IAC 2-5.5-4(b)]  
In the event that dust collection failure has been observed:

Failed units and the associated process will be shut shown immediately until the failed units have been repaired or replaced.

7. Record Keeping Requirements [326 IAC 2-5.5-4(b)]
- (a) To document compliance with Condition 4, the Permittee shall maintain the following:
- (1) Records of the following operational parameters during normal operation when venting to the atmosphere once per shift:
    - (A) Inlet and outlet differential static pressure; and
    - (B) Cleaning cycle: frequency and differential pressure.
  - (2) Documentation of all response steps implemented, per event.
  - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
  - (4) Quality Assurance/Quality Control (QA/QC) procedures.
  - (5) Operator standard operating procedures (SOP).
  - (6) Manufacturer's specifications or its equivalent.
  - (7) Equipment "troubleshooting" contingency plan.
  - (8) The date the vents are redirected.

- (b) To document compliance with Condition 5, the Permittee shall maintain records of the results of the inspections required under Condition 5.
  - (c) **General Record Keeping Requirements [326 IAC 2-5.5-4(b)]**
    - (1) 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.
    - (2) Records of required monitoring information shall include, where applicable:
      - (A) The date, place, and time of sampling or measurements;
      - (B) The dates analyses were performed;
      - (C) The company or entity performing the analyses;
      - (D) The analytic techniques or methods used;
      - (E) The results of such analyses; and
      - (F) The operating conditions existing at the time of sampling or measurement.
    - (3) Support information shall include, where applicable:
      - (A) Copies of all reports required by this permit; and
      - (B) All calibration and maintenance records.
8. **Annual Notice [326 IAC 2-5.5-4(a)(3)]**  
The source shall provide an annual notice to the commissioner, stating that the source is in operation, and certifying that its operations are in compliance with the requirements of this Registration. The above annual notice shall be submitted to:

**Compliance Data Section  
Office of Air Management  
100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, IN 46206-6015**

no later than January 30 of each year, with the annual notice being submitted in the format attached.

This registration is the first air approval issued to this source.

Any change or modification which may increase the potential PM or PM<sub>10</sub> emissions to 25 tons per year or more from the equipment covered in this registration must be approved by the Office of Air Management (OAM) before such change may occur.

Sincerely,

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Management

RLM

cc: File - Putnam County  
Putnam County Health Department  
Air Compliance - Marc Goldman  
Compliance Data Section - Karen Nowak  
Administrative and Development - Janet Mobley  
Technical Support and Modeling - Michele Boner

## Registration

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3).

<b>Company Name:</b>	<b>Mallory North American Capacitor Company</b>
<b>Address:</b>	<b>1701 Indianapolis Road</b>
<b>City:</b>	<b>Greencastle, Indiana 46135</b>
<b>Contact Person:</b>	
<b>Phone #:</b>	
<b>Registration #:</b>	<b>133-11674-00039</b>

I hereby certify that Mallory North American Capacitor Company is still in operation and is in compliance with the requirements of Registration No. 133-11674-00039.

<b>Name (typed):</b>
<b>Title:</b>
<b>Signature:</b>
<b>Date:</b>

# Indiana Department of Environmental Management Office of Air Management

## Technical Support Document (TSD) for a Registration

### Source Background and Description

**Source Name:** Mallory North American Capacitor Company  
**Source Location:** 1701 Indianapolis Road, Greencastle, Indiana 46135  
**County:** Putnam  
**SIC Code:** 3675  
**Registration No.:** 133-11674-00039  
**Permit Reviewer:** Rachel Meredith

The Office of Air Management (OAM) has reviewed an application for a registration to install and operate a zinc spray coating booth. The facility description for the new surface coating operation is as follows:

One (1) metal spray coating booth with a maximum coating rate of 10.54 pounds per hour consisting of an arc spray gun for applying zinc coating to metalized film capacitor bodies with particulate matter overspray controlled by a cartridge dust collector.

### Existing Approvals

This is the first air approval issued to this source.

### Enforcement Issue

There are no enforcement actions pending.

### Recommendation

The staff recommends to the Commissioner that the Registration 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 administratively complete application for the purposes of this review was received on December 17, 1999.

### County Attainment Status

The source is located in Putnam County.

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

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone standards. Putnam County has been designated as attainment or unclassifiable for ozone.

### 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 Emissions (tons/year)
PM	9.93
PM-10	9.93
SO <sub>2</sub>	0.0
VOC	0.0
CO	0.0
NO <sub>x</sub>	0.0

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential Emissions (tons/year)
Total HAPs	0.0

See Appendix A for detailed emissions calculations.

- (a) The potential to emit from the spray coating booth was calculated based on uncontrolled emissions because the add-on control device (cartridge dust collector) does not meet the criteria to be considered an integral part of the spray coating process as indicated by the applicant. In order for the dust collector to be considered an integral part of the spray coating process, one of the following three criteria must be met.
1. The process cannot operate with the control equipment.
  2. The control equipment serves a primary purpose other than pollution control.
  3. The control equipment has an overwhelming positive net economic effect.

The source has not provided justification that the cartridge dust collector meets any of the above criteria. Therefore, because the uncontrolled potential to emit is greater than 5 tons per year for PM and PM<sub>10</sub>, registered construction and operation status pursuant to 326 IAC 2-5.5-2 is required.

### Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS), 40 CFR 60, applicable to this source.

- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 63, applicable to this source.

### State Rule Applicability

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

This source is not one of the twenty eight (28) listed sources under 326 IAC 2-2-1(p)(1) and the potential to emit from the new surface coating operation is below the threshold established in 326 IAC 2-2-1(p)(2). Therefore, the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 and 40 CFR 52.21 will not apply.

#### 326 IAC 5-1-2 (Opacity 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:

- (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.
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#### 326 IAC 6-3-2(c) (Particulate Emission Limitations)

Pursuant to 326 IAC 6-3-2(c) (Particulate Emission Limitations), the allowable particulate matter emission rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

### Compliance Determination

In order to comply with the particulate matter limit of 0.551 pounds per hour, the cartridge dust collector must be in operation to control particulate matter emissions from overspray at all times that the zinc spray coating booth is in operation.

### Compliance Monitoring

- (a) Parametric Monitoring [326 IAC 2-5.5-4(b)]  
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months thereafter. Inspections are optional when venting to the indoors.

- (c) Cartridge Dust Collector Failure Detection [326 IAC 2-5.5-4(b)]  
In the event that dust collection failure has been observed:

Failed units and the associated process will be shut shown immediately until the failed units have been repaired or replaced.

### **Record Keeping and Reporting Requirements [326 IAC 2-5.5-4(b)] [326 IAC 2-5.5-4(a)(3)]**

#### Record Keeping Requirements [326 IAC 2-5.5-4(b)]

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- (1) Records of the following operational parameters during normal operation when venting to the atmosphere once per shift:
    - (A) Inlet and outlet differential static pressure; and
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- (C) The company or entity performing the analyses;
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  - (F) The operating conditions existing at the time of sampling or measurement.
- (3) Support information shall include, where applicable:
- (A) Copies of all reports required by this permit; and
  - (B) All calibration and maintenance records.

Annual Notice [326 IAC 2-5.5-4(a)(3)]

The source shall provide an annual notice to the commissioner, stating that the source is in operation, and certifying that its operations are in compliance with the requirements of this Registration. The above annual notice shall be submitted to:

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### **Air Toxic Emissions**

Indiana presently requests applicants to provide information on emissions of the 187 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 no air toxics.

### **Conclusion**

The construction of the spray coating booth shall be subject to the conditions of the attached proposed **Registration No. 133-11674-00039**.