



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant
DATE: August 26, 2005
RE: Digger Specialties, Inc. / 099-21428-00101
FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Registration

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 4-21.5-3-4(d) this order is effective when it is served. When served by U.S. mail, the order is effective three (3) calendar days from the mailing of this notice pursuant to IC 4-21.5-3-2(e).

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FN-REGIS.dot 1/10/05



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

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Larry Burkholder
Digger Specialties, Inc.
P.O. Box 241
Bremen, IN 46506-0241

August 26, 2005

Re: Registered Construction and Operation Status
099-21428-00101

Dear Mr. Burkholder,

The application from Digger Specialties, Inc., received on July 13, 2005, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.1, it has been determined that your emission source, an aluminum fencing manufacturing plant located at 3639 Destiny Drive, Bremen, IN 46506-9076, is classified as registered. The emission source consists of the following emission units and pollution control devices:

- (a) One (1) powder coating booth, equipped with eight (8) robotic spray nozzles and two (2) manual spray guns, with a maximum capacity of 150 pounds of powder coating per hour. The booth includes two (2) modular powder coating recovery systems.

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 Alternative Opacity Limitations), 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(d) (Particulate Emissions Limitations), surface coating manufacturing processes shall be controlled by a dry particulate filter, waterwash, or an equivalent control device. The powder coating recovery systems are considered to be equivalent to dry particulate filters.
 - (a) The source shall operate the control device in accordance with manufacturer's specifications.
 - (b) If overspray is visibly detected at the exhaust or accumulates on the ground, the source shall inspect the control device and do either of the following no later than four (4) hours after such observation:

- (i) Repair the control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
- (ii) Operate the equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected, the source shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

This registration is the first air approval issued to this emission source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Quality that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.1-2(f)(3). The annual notice shall be submitted to:

Compliance Data Section
Office of Air Quality
100 North Senate Avenue
Indianapolis, IN 46204

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Original signed by
Nysa L. James, Section Chief
Permits Branch
Office of Air Quality

ARD

cc: File - Marshall County
Marshall County Health Department
IDEM – Northern Regional Office
Air Compliance Section Inspector - Rick Reynolds
Permit Tracking
Compliance Data Section

Registration Annual Notification

This form should be used to comply with the notification requirements under 326 IAC 2-5.1-2(f)(3).

Company Name:	Digger Specialties, Inc.
Address:	3639 Destiny Drive
City:	Bremen, IN 46506-9076
Authorized individual:	Loren Graber
Phone #:	574-546-2811
Registration #:	099-21428-00101

I hereby certify that Digger Specialties, Inc. is still in operation and is in compliance with the requirements of Registration 099-21428-00101.

Name (typed):
Title:
Signature:
Date:

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Registration

Source Background and Description

Source Name:	Digger Specialties, Inc.
Source Location:	3639 Destiny Drive, Bremen, IN 46506-9076
County:	Marshall
SIC Code:	3471
Registration No.:	099-21428-00101
Permit Reviewer:	Allen R. Davidson

The Office of Air Quality (OAQ) has reviewed a FESOP renewal application from Digger Specialties, Inc. relating to the construction and operation of an aluminum fencing manufacturing plant located at 3639 Destiny Drive, Bremen, IN 46506-9076.

Emission Units and Pollution Control Equipment

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

- (a) One (1) powder coating booth, equipped with eight (8) robotic spray nozzles and two (2) manual spray guns, with a maximum capacity of 150 pounds of powder coating per hour. The booth includes two (2) modular powder coating recovery systems.

History

This application is the first received for this emission source.

Digger Specialties, Inc. has previously operated at this location without emission units. Because no emission units previously existed at this location, this location is being treated as a new emission source for purposes of this review.

Enforcement Issues

This is a new emission source. There are no enforcement actions pending against this emission source.

Recommendation

The staff recommends to the Commissioner that the applicant be issued a registration. 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 July 13, 2005.

Emission Calculations

Under the black powder coating scenario, the powder coating recovery system is considered to be integral to the normal operation of the facility. There is significant economic benefit to its use; the applicant recovers the capital cost of one (1) modular powder coating recovery system in less than 120 hours of use. Black powder coating takes place with the eight (8) robotic spray nozzles. The maximum capacity under this scenario is 150 pounds of powder coating per hour.

Under all other powder coating scenarios, the powder coating recovery system is not considered to be integral to the normal operation of the facility. The process would require a separate recovery system for each color in order to recycle that color, and coating with other colors is not frequent. The applicant will use one (1) modular powder coating recovery system to collect all non-black colors and the collected non-black powder coating will not be reused. Non-black powder coating takes place with the two (2) manual spray guns. The maximum capacity of this scenario is 30 pounds of powder coating per hour.

Of the two scenarios, the non-black powder coating scenario produces the higher hourly emission rate. Therefore, the non-black powder coating scenario was used to calculate potential to emit.

See Appendix A for detailed emission calculations. (1 page)

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 or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA, the department, or the appropriate local air pollution control agency.”

The source's potential to emit is as follows:

Pollutant	Potential to Emit (tons/yr)
PM	21.4
PM ₁₀	21.4
SO ₂	0
VOC	0
CO	0
NO _x	0

HAPs	Potential to Emit (tons/yr)
Total	0

The potential to emit particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM₁₀) are each less than 25 tons per year, but both are greater than five tons per year. Therefore, the existing source is classifiable as a registration under 326 IAC 2-5.1.

County Attainment Status

The source is located in Marshall County.

Pollutant	Status
PM ₁₀	attainment
PM _{2.5}	attainment
SO ₂	attainment
NO ₂	attainment
Ozone (1-hour)	attainment
Ozone (8-hour)	attainment
CO	attainment
Lead	attainment

- (a) Marshall County has been classified as attainment or unclassifiable for PM_{2.5}. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM_{2.5} emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for PM_{2.5} emissions, it has directed states to regulate PM₁₀ emissions as surrogate for PM_{2.5} emissions.
- (b) Volatile organic compounds (VOC) and nitrogen oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Marshall County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (c) Marshall County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

See "State Rule Applicability – Entire Source" for more details regarding PSD rule applicability.

Federal Rule Applicability

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

There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) included in this review.

State Rule Applicability – Entire Source

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

This source is not a major source for Prevention of Significant Deterioration, 326 IAC 2-2. No attainment regulated pollutant has the potential to emit at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

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

This source is not subject to 326 IAC 2-4.1-1 (New Source Toxics Control). The source does not have emissions of hazardous air pollutants.

326 IAC 2-6 (Emission Reporting)

This source is located in Sullivan County, and is not required to have an operating permit under 326 IAC 2-7. Therefore, 326 IAC 2-6 does not apply.

326 IAC 2-7 (Part 70 Permit Program)

The potential to emit particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM₁₀) are less than 100 tons per year. Therefore, the source is not subject to the provisions of 326 2-7.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following:

- (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.

State Rule Applicability – Powder Coating Booth

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

This emission unit is subject to 326 IAC 6-3-2. Pursuant to 326 IAC 6-3-2(d), surface coating manufacturing processes shall be controlled by a dry particulate filter, waterwash, or an equivalent control device. The powder coating recovery systems are considered to be equivalent to dry particulate filters.

- (a) The source shall operate the control device in accordance with manufacturer's specifications.
- (b) If overspray is visibly detected at the exhaust or accumulates on the ground, the source shall inspect the control device and do either of the following no later than four (4) hours after such observation:
 - (i) Repair the control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
 - (ii) Operate the equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected, the source shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

Conclusion

The construction and operation of this emission source shall be subject to the conditions of Registration 099-21428-00101.

Appendix A: Emissions Calculations

Company Name: Digger Specialties, Inc.
Address City IN Zip: 3639 Destiny Drive, Bremen IN 46506
ID: 099-21428-00101
Reviewer: Allen R. Davidson
Date: 08/29/05

$$\frac{150 \text{ lb coating}^*}{\text{hr}} \times 25\% \text{ overspray} = 37.5 \frac{\text{lb overspray}}{\text{hr}}$$

$$\frac{37.5 \text{ lb overspray}^*}{\text{hr}} \times \frac{\$4.50}{\text{lb}} = \$168.75 \frac{\text{overspray}}{\text{hr}}$$

$$\frac{\$20,000 \text{ capital cost}^*}{\$168.75 \text{ overspray}} \text{ hr} = 118.52 \text{ hrs to recover}$$

Scenario 1: Black Coating

$$\frac{37.5 \text{ lb overspray}^*}{\text{hr}} \times 65\% \text{ as PM}^* \times 2\% \text{ emitted}^* \times \frac{8760 \text{ hr}^*}{\text{yr}} \times \frac{\text{lb}}{2000 \text{ ton}} = 2.14 \frac{\text{ton PM}}{\text{yr}}$$

Scenario 2: Non-Black Coating

$$\frac{30 \text{ lb coating}^*}{\text{hr}} \times 25\% \text{ overspray} = 7.5 \frac{\text{lb overspray}}{\text{hr}}$$

$$\frac{7.5 \text{ lb overspray}^*}{\text{hr}} \times 65\% \text{ as PM}^* \times 100\%^* \times \frac{8760 \text{ hr}^*}{\text{yr}} \times \frac{\text{lb}}{2000 \text{ ton}} = 21.35 \frac{\text{ton PM}}{\text{yr}}$$

$$\text{After controls: } \frac{21.35 \text{ ton PM}^*}{\text{yr}} \times 2\% \text{ emitted} = 0.43 \frac{\text{ton PM}}{\text{yr}}$$