

April 3, 2003

Mr. Franco Garcia
Valmont Industries, Inc.
58027 Charlotte Avenue
Elkhart, IN 46517

Re: 039-16924
First Administrative Amendment to
FESOP No.: 039-14186-00237

Dear Mr. Garcia:

Valmont Industries, Inc. was issued a FESOP on April 3, 2002, for a fabricated metal products facility which manufactures light poles. A letter requesting the addition of the following emission units was received on March 17, 2003:

- (1) One (1) powder coating booth, identified as EU-05, with a maximum coating rate of 22.53 pounds per hour, exhausting through two (2) cartridge type dust collectors identified as CD-05a and CD-05b and venting back into the building.
- (2) One (1) buffing unit equipped with a dust collector, with a maximum flow rate of 1,400 acfm and a grain loading of less than 0.03 grains per cubic foot.

According to 326 IAC 2-8-10(a)(14), a FESOP administrative amendment can be used for "a modification that adds an emissions unit or units of the same type that are already permitted and that will comply with the same applicable requirements and permit terms and conditions as the existing emission unit or units, except of the modification would result in a potential to emit greater than the thresholds in 326 IAC 2-2 or 326 IAC 2-3". The new powder coating booth EU-05 at this minor PSD source is of the same type as the existing powder coating booth EU-04, with an uncontrolled potential to emit of 47.5 tons per year of PM/PM-10. Therefore, it meets the above requirement. Also, according to 326 IAC 2-8-10(a)(6), an administrative amendment can be used for a modification that "revises descriptive information where the revision will not trigger a new applicable requirement or violate a permit term". The addition of the buffing unit, which qualifies as an insignificant activity, as defined under 326 IAC 2-7-1(21)(xxiii), meets this requirement. In addition, the source requested that Condition D.1.5 be amended to be consistent with Condition D.1.8, and also to note that the shotblaster identified as EU-03 vents indoors. According to 326 IAC 2-8-10(a)(5), an administrative amendment can be used for a "change to a monitoring, maintenance, or record-keeping requirement that is not environmentally significant".

Therefore, pursuant to the provisions of 326 IAC 2-8-10 the permit is hereby administratively amended as follows (~~strikeout~~ to show deletions and **bold** to show additions):

(1) Section A.2 is amended as follows:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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

- (a) One (1) shotblaster, identified as EU-03, utilizing steel shot, with a maximum blast rate of 108 tons of steel shot per hour, exhausting through cartridge type filters identified as CD-

03a and CD-03b, vented indoors; and

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- (b) Two (2) powder coating booths, identified as EU-04A and EU-04B; EU-04B is also known as the small parts line. Booth EU-04A has a maximum coating rate of 21.33 pounds per hour and is equipped with three (3) electrostatic applicators only two of which can be used at any one time, exhausting through two (2) cartridge type dust collectors identified as CD-04a and CD-04b and venting back into the system as make up air. Booth EU-04B has a maximum coating rate of 10.67 pounds per hour and is equipped with one (1) electrostatic applicator, exhausting through one (1) cartridge type dust collector identified as CD-04c and venting back into the system as make up air.
- (c) **One (1) powder coating booth, identified as EU-05, with a maximum coating rate of 22.53 pounds per hour, exhausting through two (2) cartridge type dust collectors identified as CD-05a and CD-05b and venting back into the building.**

(2) Section A.3(k) is amended as follows:

- (k) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors, and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, **including one (1) buffing unit equipped with a dust collector, with a maximum flow rate of 1,400 acfm and a grain loading of less than 0.03 grains per cubic foot.;**

(3) Section D.1 is amended as follows:

Facility Description [326 IAC 2-8-4(10)]:

- (a) One (1) shotblaster, identified as EU-03, utilizing steel shot, with a maximum blast rate of 108 tons of steel shot per hour, exhausting through cartridge type filters identified as CD-03a and CD-03b, vented indoors; and
- (b) Two (2) powder coating booths, identified as EU-04A and EU-04B; EU-04B is also known as the small parts line. Booth EU-04A has a maximum coating rate of 21.33 pounds per hour and is equipped with three (3) electrostatic applicators, only two of which can be used at any one time, exhausting through two (2) cartridge type dust collectors identified as CD-04a and CD-04b and venting back into the system as makeup air. Booth EU-04B has a maximum coating rate of 10.67 pounds per hour and is equipped with one (1) electrostatic applicator, exhausting through one (1) cartridge type dust collector identified as CD-04c and venting back into the system as make up air.
- (c) **One (1) powder coating booth, identified as EU-05, with a maximum coating rate of 22.53 pounds per hour, exhausting through two (2) cartridge type dust collectors identified as CD-05a and CD-05b and venting back into the building.**

(4) Condition D.1.1 is amended as follows:

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

- (a) Pursuant to 326 IAC 6-3-2, the particulate matter from the one (1) shotblaster, identified as EU-03 shall be limited to 13.83 pounds per hour, based on a process weight rate of 108 tons of steel shot per hour.
- (b) Pursuant to 326 IAC 6-3-2, the particulate matter from the two (2) powder coating booths,

identified as EU-04A, ~~and EU-04B~~, **and EU-05** shall be limited by the following:

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

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$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

(5) Condition D.1.4 is amended as follows:

D.1.4 Particulate Matter (PM)

- (a) In order to comply with D.1.1(a), the cartridge filters for PM control shall be in operation at all times when the one (1) shotblaster, identified as EU-03 is in operation.
- (b) In order to comply with D.1.1(b), the cartridge type dust collectors shall be in operation at all times when the ~~two (2)~~ **three (3)** powder coating booths, identified as EU-04A, ~~and EU-04B~~ **and EU-05** are in operation.

(6) Condition D.1.5 is amended as follows:

D.1.5 Parametric Monitoring

The Permittee shall record the total static pressure drop **once per shift** across each cartridge filter unit, CD-03a and CD-03b controlling the one (1) shotblaster (EU-03) when the one (1) shotblaster (EU-03) is in operation and venting **indoors to the atmosphere**. When for any one reading, the pressure drop across cartridge filter unit CD-03a is outside the normal range of 2.0 to 8.0 inches of water or a range established during the latest stack test and the pressure drop across filter unit CD-03b is outside the normal range of 0.5 and 2.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Failure to Take Response Steps. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

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, please contact Madhurima Moulik, at (800) 451-6027, press 0 and ask for Madhurima Moulik or extension 3-0868, or dial (317) 233-0868.

Sincerely,
Original signed by Paul Dubenetzky

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

mm

cc: File - Elkhart County
U.S. EPA, Region V
Elkhart County Health Department

Northern Regional Office
Air Compliance Section Inspector - Tony Pelath
Compliance Data Section - Karen Nowak
Administrative and Development
Technical Support and Modeling - Michele Boner

**FEDERALLY ENFORCEABLE STATE
OPERATING PERMIT (FESOP) Renewal
OFFICE OF AIR QUALITY**

Valmont Industries, Inc.
58027 Charlotte Avenue
Elkhart, Indiana 46517

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 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.

Operation Permit No.: F039-14186-00237	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: April 3, 2002 Expiration Date: April 3, 2007

1 st Administrative Amendment No.: 039-16924	Pages Modified: 4, 5, 24, 25
Issued by:Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:April 3, 2003

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a fabricated metal products facility which manufactures light poles.

Authorized individual:	Franco Garcia, General Manager
Source Address:	58027 Charlotte Avenue, Elkhart, IN 46517
Mailing Address:	58027 Charlotte Avenue, Elkhart, IN 46517
SIC Code:	3499
Source Location Status:	Elkhart
County Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD Minor Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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

- (a) One (1) shotblaster, identified as EU-03, utilizing steel shot, with a maximum blast rate of 108 tons of steel shot per hour, exhausting through cartridge type filters identified as CD-03a and CD-03b, vented indoors; and
- (b) Two (2) powder coating booths, identified as EU-04A and EU-04B; EU-04B is also known as the small parts line. Booth EU-04A has a maximum coating rate of 21.33 pounds per hour and is equipped with three (3) electrostatic applicators only two of which can be used at any one time, exhausting through two (2) cartridge type dust collectors identified as CD-04a and CD-04b and venting back into the system as make up air. Booth EU-04B has a maximum coating rate of 10.67 pounds per hour and is equipped with one (1) electrostatic applicator, exhausting through one (1) cartridge type dust collector identified as CD-04c and venting back into the system as make up air.
- (c) One (1) powder coating booth, identified as EU-05, with a maximum coating rate of 22.53 pounds per hour, exhausting through two (2) cartridge type dust collectors identified as CD-05a and CD-05b and venting back into the building.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) One (1) natural gas fired air make-up unit, with a maximum rated capacity of 3.3 million British thermal units per hour;
- (b) One (1) natural gas fired air make-up unit, with a maximum rated capacity of 2.2 million British thermal units per hour;

- (c) One (1) natural gas fired heating unit, with a maximum rated capacity of 3.0 million British thermal units per hour;
- (d) Two (2) natural gas fired bake ovens, each oven with a maximum rated capacity of 3.0 million British thermal units per hour;

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- (e) Two (2) air make-up air units, each with a maximum rated capacity of 9.0 mmBtu/hr;
- (f) MIG welding stations;
- (g) Gas metal arc welding;
- (h) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month;
- (i) Paved and unpaved roads and parking lots with public access;
- (j) Burn tables;
- (k) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors, and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including one (1) buffing unit equipped with a dust collector, with a maximum flow rate of 1,400 acfm and a grain loading of less than 0.03 grains per cubic foot;
- (l) Oxyacetylene cutting torches;
- (m) Cutting of metal parts;
- (n) Aluminum wipe down operation;
- (o) Hot aluminum extrusion process with no significant emissions, consisting of a die cleaning process to clean metal dies (this process will use NaOH in the cleaning process and no regulated pollutants will be emitted); and
- (p) One chip collector associated with the new hot aluminum extrusion process with two (2) cold cut saws, and [The hot aluminum extrusion process, addressed in the administrative amendment submitted on June 1, 2000, included a chip collector from an aluminum saw. Particle size testing on the material collected by the chip collector indicates that 0.36% of the material is \leq 100 microns and 0.13% of the material is \leq 10 microns with a PTE of < 5 TPY for both 100 and 10 microns classifying this as an insignificant activity.] one (1) hot cut saw without a chip collector.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) to renew a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
 - (1) incorporated as originally stated,

(2) revised, or

(3) deleted

by this permit.

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SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (a) One (1) shotblaster, identified as EU-03, utilizing steel shot, with a maximum blast rate of 108 tons of steel shot per hour, exhausting through cartridge type filters identified as CD-03a and CD-03b, vented indoors; and
- (b) Two (2) powder coating booths, identified as EU-04A and EU-04B; EU-04B is also known as the small parts line. Booth EU-04A has a maximum coating rate of 21.33 pounds per hour and is equipped with three (3) electrostatic applicators, only two of which can be used at any one time, exhausting through two (2) cartridge type dust collectors identified as CD-04a and CD-04b and venting back into the system as makeup air. Booth EU-04B has a maximum coating rate of 10.67 pounds per hour and is equipped with one (1) electrostatic applicator, exhausting through one (1) cartridge type dust collector identified as CD-04c and venting back into the system as make up air.
- (c) One (1) powder coating booth, identified as EU-05, with a maximum coating rate of 22.53 pounds per hour, exhausting through two (2) cartridge type dust collectors identified as CD-05a and CD-05b and venting back into the building.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

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

- (a) Pursuant to 326 IAC 6-3-2, the particulate matter from the one (1) shotblaster, identified as EU-03 shall be limited to 13.83 pounds per hour, based on a process weight rate of 108 tons of steel shot per hour.
- (b) Pursuant to 326 IAC 6-3-2, the particulate matter from the two (2) powder coating booths, identified as EU-04A, EU-04B, and EU-05 shall be limited by the following:

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

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

D.1.2 FESOP Limit [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4 (FESOP), PM10 from the one (1) shotblater, identified as EU-03 shall be limited to 7.43 pounds per hour, which is equivalent to 32.55 tons of PM10 per year.

D.1.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

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

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.4 Particulate Matter (PM)

- (a) In order to comply with D.1.1(a), the cartridge filters for PM control shall be in operation at all times when the one (1) shotblaster, identified as EU-03 is in operation.
- (b) In order to comply with D.1.1(b), the cartridge type dust collectors shall be in operation at all times when the three (3) powder coating booths, identified as EU-04A, EU-04B, and EU-05 are in operation.

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D.1.5 Parametric Monitoring

The Permittee shall record the total static pressure drop once per shift across each cartridge filter unit, CD-03a and CD-03b controlling the one (1) shotblaster (EU-03) when the one (1) shotblaster (EU-03) is in operation and venting indoors. When for any one reading, the pressure drop across cartridge filter unit CD-03a is outside the normal range of 2.0 to 8.0 inches of water or a range established during the latest stack test and the pressure drop across filter unit CD-03b is outside the normal range of 0.5 and 2.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Failure to Take Response Steps. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.6 Broken or Failed Cartridge Filter Detection

In the event that cartridge filter failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business 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) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) For single compartment cartridge filters, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

D.1.7 Cartridge Filter Inspections

An inspection shall be performed each calendar quarter of all cartridge filters controlling the one (1) shotblaster (EU-03) when venting to the atmosphere. A cartridge filter inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective cartridge filters shall be replaced.

D.1.8 Record Keeping Requirements

(a) To document compliance with Condition D.1.5, the Permittee shall maintain the following:

(1) Once per shift records of the following operational parameters during normal operation when venting to the atmosphere:

(A) Inlet and outlet differential static pressure; and