

BEFORE THE  
STATE OF WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES

In the matter of VOC RACT requirements for the ) FID# 460038700  
coating of miscellaneous metal and plastic parts for )  
Kohler Power Systems located at N7650 Lakeshore Road, )  
Mosel, Sheboygan County, Wisconsin 53083 )

Administrative Order: AM-20-03

FINDINGS OF FACT, CONCLUSIONS OF LAW,  
AND ADMINISTRATIVE ORDER

FINDINGS OF FACT

Section I. Facility Information

1. Kohler Power Systems (Kohler) operates a facility that manufactures generators, transfer switches, switchgear, and other power equipment at N7650 Lakeshore Road, Town of Mosel, Sheboygan County, Wisconsin 53083.
2. Kohler is considered a synthetic minor source per ch. NR 407, Wis. Adm. Code, and is currently regulated by air pollution control operation permit 460038700-F22.
3. Kohler operates several processes that are used to coat metal and plastic parts:
  - a. E-coat primer dip (P33) – dip tank containing water-based coatings for metal parts;
  - b. E-coat powder topcoat (P34) – powder coating booth and touch-up for metal parts with curing oven;
  - c. D-line paint (P36) – spray booth for metal parts with drying oven;
  - d. Conformal coating (P39) – spray booth for plastic parts;
  - e. Aerosol can usage – miscellaneous aerosol usage for touch-up and repair of metal parts throughout the facility.

However, Kohler may install and use additional coating and other processes in the future. High volume, low pressure (HVLV) spray equipment is used in the spray booths.

4. Kohler's current operation permit (460038700-F22), which was issued in 2014, lists two additional coating processes:
  - a. Varnish (P37) – dip tank containing varnish for metal parts with curing oven;
  - b. Silk screen (P38) – silk screening operation.

However, the facility indicated that these processes have since been removed.

5. The current coatings used in the active processes above have volatile organic compound (VOC) contents ranging from essentially zero (powder coating) to 2.96 pounds per gallon, excluding water and exempt compounds, as applied (gray primer used in P36).

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6. The spray guns are currently cleaned with a small amount of acetone, a solvent exempt from the definition of "volatile organic compound" under s. NR 400.02(162), Wis. Adm. Code.
7. The spray booths are currently equipped with dry filters for removal of particulate matter (PM) resulting from paint overspray. The powder coating process uses a cyclone and a filter to control PM emissions, which are routed back indoors.
8. VOC emissions from the coating processes are not controlled by add-on control equipment.

Section II. Redesignation of the Shoreline Sheboygan County 2008 Ozone Nonattainment Area

1. Ambient air quality monitoring data collected during 2019 shows that the Shoreline Sheboygan County nonattainment area is meeting the 2008 ozone National Ambient Air Quality Standards (NAAQS).
2. Based on this data, the department is seeking to redesignate the Shoreline Sheboygan County nonattainment area to attainment for the 2008 ozone NAAQS.
3. Prior to redesignation, the Clean Air Act requires the department to demonstrate that all sources in the affected area are subject to the most up-to-date guidelines for reasonably available control technology (RACT) as they apply to VOC emissions.
4. Department rules pertaining to miscellaneous metal and plastic parts coatings in ss. NR 422.15 and NR 422.083, respectively, do not reflect the EPA's latest (2008) Control Techniques Guidelines (CTGs) for Miscellaneous Metal and Plastic Parts Coatings, which presumptively define VOC RACT for these source categories. EPA's 2008 CTG for Miscellaneous Metal and Plastic Parts Coatings is found in attachment A to this order.
5. EPA's 2008 CTG applies to Kohler because the generators and other power equipment produced by the facility are considered commercial and/or industrial machinery and thus meet the definition of miscellaneous metal products included in the CTG. In addition, records and reports submitted by the facility indicate that annual VOC emissions from coating operations have exceeded 3.0 tons per year since at least 2014.
6. The department is in the process of rulemaking that will reflect EPA's 2008 CTG in ch. NR 422, Wis. Adm. Code; however, the department is pursuing redesignation prior to the anticipated effective date of this rule.
7. This order, AM-20-03, is being issued to enforce the applicable requirements of EPA's 2008 CTG in the absence of an enforceable administrative rule.
8. The current coatings used by Kohler vary by process and were determined by the department to be as follows:
  - a. E-coat primer dip (P33) – metal, baked, general multi-component;
  - b. E-coat powder topcoat (P34) – metal, baked, general one component;
  - c. D-line paint (P36) – metal, baked, extreme performance;
  - d. Conformal coating (P39) – plastic, general one component;
  - e. Aerosol can usage – metal, air dried, repair and touch up.

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9. Based on the information provided by Kohler, all of the above coatings currently used by the facility meet the updated VOC limits from EPA's 2008 CTG for Miscellaneous Metal and Plastic Parts Coatings. However, Kohler may use additional coatings in the future.

CONCLUSIONS OF LAW

1. Section 285.11(6), Wis. Stats., requires the department to prepare and develop a State Implementation Plan (SIP), which shall conform to the federal Clean Air Act for the purposes of controlling atmospheric ozone.
2. Section 182(b)(2) of the Clean Air Act (42 USC § 7511a(b)(2)) requires states to submit revisions to their SIPs to implement RACT requirements for source categories in ozone nonattainment areas classified as moderate or above, where the EPA has issued CTGs.
3. The department has the authority under s. 285.13(2), Wis. Stats. to issue orders to effectuate the purposes of chapter 285.
4. VOC RACT requirements are presumptively satisfied by incorporating EPA's 2008 CTG for Miscellaneous Metal and Plastic Parts Coatings into the Wisconsin SIP—either through rule or some other permanent and federally enforceable mechanism.
5. This order, AM-20-03, is necessary to effectuate the purposes of chapter 285, specifically by requiring this facility, FID# 460038700, to comply with applicable VOC RACT requirements.
6. This order, AM-20-03, satisfies the department's obligation to implement applicable VOC RACT requirements for this facility, FID# 460038700. Once rulemaking reflecting EPA's 2008 CTG in ch. NR 422, Wis. Adm. Code is finalized, the rule is applicable to this facility even if updated rules have not yet been incorporated into facility permits.

ADMINISTRATIVE ORDER

The parties to this Administrative Order hereby agree to the following provisions:

Section I. Limitations and Work Practice Requirements

1. Kohler shall use coatings for metal parts coating that meet the following VOC-content limits:
  - a. Baked (general one component): 2.3 pounds per gallon of coating, excluding water and exempt compounds listed in s. NR 400.02(162)(a), Wis. Adm. Code, as applied;
  - b. Baked (general multi component): 2.3 pounds per gallon of coating, excluding water and exempt compounds listed in s. NR 400.02(162)(a), Wis. Adm. Code, as applied;
  - c. Baked (extreme performance): 3.0 pounds per gallon of coating, excluding water and exempt compounds listed in s. NR 400.02(162)(a), Wis. Adm. Code, as applied;
  - d. Air dried (repair and touch up): 3.5 pounds per gallon of coating, excluding water and exempt compounds listed in s. NR 400.02(162)(a), Wis. Adm. Code, as applied.

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2. Kohler shall use coatings for plastic parts coating that meet the following VOC-content limits:
  - a. Air dried (general one component): 2.3 pounds per gallon of coating, excluding water and exempt compounds listed in s. NR 400.02(162)(a), Wis. Adm. Code, as applied.
3. If Kohler wishes to use alternative types of coating in the future, they shall meet the VOC-content limits in the CTG for Miscellaneous Metal and Plastic Parts Coatings found in attachment A. If more than one VOC content limit in the CTG applies to a specific coating, the most stringent VOC content limit shall be applied. The department shall verify, in writing or by email, that any alternative coatings meet the limits in the CTG.
4. Kohler shall use one or a combination of the following application methods for the metal and plastic parts coating operations:
  - a. Electrostatic application.
  - b. High volume low-pressure spray equipment.
  - c. Flow coating.
  - d. Roll coating.
  - e. Dip coating, including electrodeposition.
  - f. Airless spray.
  - g. Air-assisted airless spray.
  - h. Other coating application methods approved by the department in writing or by email that are capable of achieving a VOC transfer efficiency equivalent or better than achieved by high volume low-pressure spraying .
5. Kohler shall do all of the following for coating-related activities:
  - a. Store all VOC-containing coatings, thinners, and coating-related waste materials in closed containers.
  - b. Ensure that mixing and storage containers used for VOC-containing coatings, thinners, and coating-related waste materials are kept closed at all times except when depositing or removing those materials.
  - c. Minimize spills of VOC-containing coatings, thinners, and coating-related waste materials.
  - d. Convey VOC-containing coatings, thinners, and coating-related waste materials from one location to another in closed containers or pipes.
6. Kohler shall do all of the following for cleaning materials:
  - a. Store all VOC-containing cleaning materials and used shop towels in closed containers.
  - b. Ensure that storage containers used for VOC-containing materials are kept closed at all times except when depositing or removing those materials.
  - c. Convey VOC-containing cleaning materials from one location to another in closed containers or pipes.
  - d. Minimize spills of VOC-containing cleaning materials.
  - e. Minimize emissions of VOCs during cleaning of coating application, storage, mixing, and conveying equipment by ensuring that cleaning is performed without atomizing any VOC-containing cleaning material and that the used material is captured and contained.

## Section II. Compliance Demonstration

1. To demonstrate compliance with the VOC-content limits in Section I, Kohler shall keep the records required in Section III.
2. To demonstrate compliance with the application method requirements in Section I, Kohler shall keep the records required in Section III.
3. To demonstrate compliance with the work practice requirements in Section I, Kohler shall develop and follow standard operating procedures that include but are not limited to operator instructions and training.

## Section III. Reference Test Methods, Recordkeeping, and Monitoring Requirements

1. Kohler shall collect and record the following information for each coating line or operation:
  - a. A unique name or identification number for each coating, solvent, thinner or other VOC-containing material used on each coating line, as applied.
  - b. Coating manufacturer's formulation data (such as safety data sheets SDS) documenting the VOC content, water content and s. NR 400.02(162)(a), Wis. Adm. Code exempt compound content of the inks, coatings, solvents or other VOC containing materials used, as applied.
  - c. The VOC content of each coating, as applied, in units of pounds of VOC per gallon, excluding water and exempt compounds listed in s. NR 400.02(162)(a), Wis. Adm. Code. [s. NR 439.04(1)(d), Wis. Adm. Code]
2. Kohler shall retain documentation from the manufacturer indicating the application method(s) and the transfer efficiency of the equipment used. If Kohler receives written approval from the department to use an application method other than those listed in Section I.4., Kohler shall retain a copy of the department's written approval to use an alternate application method. [s. NR 439.04(1)(d), Wis. Adm. Code]
3. Kohler shall retain and make available upon request, a copy of the standard operating procedures required by Section II. [s. NR 439.03(3), Wis. Adm. Code.]
4. Kohler shall retain copies of the above records for a period of five years or for such other period as may be specified by the department. [s. NR 439.04(2), Wis. Adm. Code.]
5. Reference Test Method for VOC Emissions: Whenever compliance emission testing is required, EPA Method 18, 25, 25A, or 25B shall be used to demonstrate compliance [s. NR 439.06(3)(a), Wis. Adm. Code].
6. Reference Test Method for VOC Content: Whenever VOC content testing is required, EPA Method 24 or 24A or an alternative method approved by the department shall be used to determine the organic solvent content, the volume of solids, the weight of solids, the water content, and the density of the coatings, inks, solvents, thinners, and other VOC-containing

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materials used. In case of an inconsistency between the Method 24 results and the formulation data, the Method 24 results will govern [s. NR 439.06(3)(b), Wis. Adm. Code].

Section IV. Termination

1. This Order will be terminated in full at such time as EPA's 2008 CTGs for Miscellaneous Metal and Plastic Parts Coatings have been promulgated as rules by the department, approved into Wisconsin's SIP by EPA, and EPA has removed this order from the SIP.

WAIVER AND STIPULATION

Kohler consents to, and agrees not to contest, the department's jurisdiction to issue this Administrative Order and to enforce its terms. To that end Kohler stipulates to the issuance of this Administrative Order and hereby waives further notice or hearing before the department regarding the foregoing Findings of Fact, Conclusions of Law, and Administrative Order under ss. 227.42 or 285.81, Wis. Stats., or any other provision of law. Kohler likewise waives its rights, if any, to challenge this Administrative Order in circuit court under ss. 227.52 and 227.53, Wis. Stats., or any other provision of law. Kohler further stipulates and agrees that this Administrative Order is effective and enforceable after being signed by both parties and that it may be enforced in accordance with ss. 299.95 and 299.97, Wis. Stats. Kohler understands that the department intends to submit this Administrative Order to EPA for purposes of temporarily satisfying Wisconsin SIP requirements, and Kohler stipulates and agrees that this Administrative Order is federally enforceable by EPA upon EPA approval and incorporation of this Administrative Order into the Wisconsin SIP. The department and Kohler further understand that this Administrative Order will terminate and be removed from the Wisconsin SIP concurrent with EPA's approval and incorporation into the Wisconsin SIP of the department's rulemaking to reflect EPA's 2008 CTG (see Section I.8.6). This Administrative Order will no longer be enforceable by EPA after removal from the Wisconsin SIP. The undersigned further certifies that he or she is authorized to execute such Administrative Order, Waiver, and Stipulation on behalf of Kohler.

Nothing in this Administrative Order, however, shall be construed as an admission on the part of Kohler for any purpose other than for an action taken by the department or EPA for failure to comply with the terms of this Order. This stipulation and waiver does not affect the right of Kohler to assert any equitable or legal defense or to challenge the interpretation or application of this Administrative Order in any challenge or alleging of violation brought by a party other than the department or EPA.

STATE OF WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES  
For the Secretary

By: Gail E. Good  
Gail Good  
Director, Air Management

2/28/2020  
Date

KOHLER POWER SYSTEMS

By: David Vogel  
David Vogel  
Superintendent of Manufacturing, Kohler Power Systems

2/28/2020  
Date

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ATTACHMENT A to Administrative Order: AM-20-03

“Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings”.  
EPA Document EPA-453/R-08-003 September 2008