# STATE OF MISSISSIPPI AIR POLLUTION CONTROL TITLE V PERMIT

# TO OPERATE AIR EMISSIONS EQUIPMENT

# **THIS CERTIFIES THAT**

Halter Marine and Offshore, Inc. 601 Bayou Casotte Parkway Pascagoula, Jackson County, Mississippi

has been granted permission to operate air emissions equipment in accordance with emission limitations, monitoring requirements and conditions set forth herein. This permit is issued in accordance with Title V of the Federal Clean Air Act (42 U.S.C.A. § 7401 - 7671) and the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder.

Permit Issued: October 11, 2022

Effective Date: As specified herein.

### MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

Krustal Rudolph

AUTHORIZED SIGNATURE MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Expires: September 30, 2027

Permit No.: 1280-00118

6653 PER20170002

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# SECTION 1. GENERAL CONDITIONS

1.1 The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Federal Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(a).)

1.2 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(b).)

1.3 This permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(c).)

- 1.4 Prior to its expiration, this permit may be reopened in accordance with the provisions listed below:
  - (a) This permit shall be reopened and revised under any of the following circumstances:
    - (1) Additional applicable requirements under the Federal Act become applicable to a major Title V source with a remaining permit term of three (3) or more years. Such a reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended.
    - (2) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
    - (3) The Permit Board or the EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit.

- (4) The Administrator or the Permit Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- (b) Proceedings to reopen and issue this permit shall follow the same procedures as apply to initial permit issuance and shall only affect those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.
- (c) Reopenings shall not be initiated before a notice of such intent is provided to the Title V source by the MDEQ at least thirty (30) days in advance of the date that the permit is to be reopened, except that the Permit Board may provide a shorter time period in the case of an emergency.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.G.)

1.5 The permittee shall furnish to the MDEQ within a reasonable time any information the MDEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the MDEQ copies of records required to be kept by the permittee or, for information to be confidential, the permittee shall furnish such records to MDEQ along with a claim of confidentiality. The permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(e).)

1.6 This permit does not convey any property rights of any sort, or any exclusive privilege.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(d).)

1.7 The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(5).)

- 1.8 The permittee shall pay to the MDEQ an annual permit fee. The amount of fee shall be determined each year based on the provisions of regulated pollutants for fee purposes and the fee schedule specified in the Commission on Environmental Quality's order which shall be issued in accordance with the procedure outlined in Mississippi Administrative Code, Title 11, Part 2, Chapter 6.
  - (a) For purposes of fee assessment and collection, the permittee shall elect for actual or allowable emissions to be used in determining the annual quantity of emissions unless the Commission determines by order that the method chosen by the applicant for calculating actual emissions fails to reasonably represent actual emissions.

Actual emissions shall be calculated using emission monitoring data or direct emissions measurements for the pollutant(s); mass balance calculations such as the amounts of the pollutant(s) entering and leaving process equipment and where mass balance calculations can be supported by direct measurement of process parameters, such direct measurement data shall be supplied; published emission factors such as those relating release quantities to throughput or equipment type (e.g. air emission factors); or other approaches such as engineering calculations (e.g. estimating volatilization using published mathematical formulas) or best engineering judgments where such judgments are derived from process and/or emission data which supports the estimates of maximum actual emission.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.A(2).)

(b) If the Commission determines that there is not sufficient information available on a facility's emissions, the determination of the fee shall be based upon the permitted allowable emissions until such time as an adequate determination of actual emissions is made. Such determination may be made anytime within one year of the submittal of actual emissions data by the permittee.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.A(2).)

(c) If at any time within the year the Commission determines that the information submitted by the permittee on actual emissions is insufficient or incorrect, the permittee will be notified of the deficiencies and the adjusted fee schedule. Past due fees from the adjusted fee schedule will be paid on the next scheduled quarterly payment time.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.D(2).)

(d) The fee shall be due September 1<sup>st</sup> of each year. By July 1<sup>st</sup> of each year, the permittee shall submit an inventory of emissions for the previous year on which the fee is to be assessed. The permittee may elect a quarterly payment method of four (4) equal payments; notification of the election of quarterly payments must be made to the MDEQ by the first payment date of September 1<sup>st</sup>. The permittee shall be liable for penalty as prescribed by State Law for failure to pay the fee or quarterly portion thereof by the date due.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.D.)

(e) If in disagreement with the calculation or applicability of the Title V permit fee, the permittee may petition the Commission in writing for a hearing in accordance with State Law. Any disputed portion of the fee for which a hearing has been requested

will not incur any penalty or interest from and after the receipt by the Commission of the hearing petition.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.C.)

1.9 No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(8).)

1.10 Any document required by this permit to be submitted to the DEQ shall contain a certification by a responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.2.E.)

- 1.11 The permittee shall allow the MDEQ, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to perform the following:
  - (a) Enter upon the permittee's premises where a Title V source is located or emissionsrelated activity is conducted, or where records must be kept under the conditions of this permit;
  - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - (c) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
  - (d) As authorized by the Federal Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.C(2).)

1.12 Except as otherwise specified or limited herein, the permittee shall have necessary sampling ports and ease of accessibility for any new air pollution control equipment, obtained after May 8, 1970, and vented to the atmosphere.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.I(1).)

1.13 Except as otherwise specified or limited herein, the permittee shall provide the necessary sampling ports and ease of accessibility when deemed necessary by the Permit Board for air pollution control equipment that was in existence prior to May 8, 1970.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.I(2).)

1.14 Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance where such applicable requirements are included and are specifically identified in the permit or where the permit contains a determination, or summary thereof, by the Permit Board that requirements specifically identified previously are not applicable to the source.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F(1).)

- 1.15 Nothing in this permit shall alter or affect the following:
  - (a) The provisions of Section 303 of the Federal Act (emergency orders), including the authority of the Administrator under that section;
  - (b) The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
  - (c) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Federal Act.
  - (d) The ability of the EPA to obtain information from a source pursuant to Section 114 of the Federal Act.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F(2).)

1.16 The permittee shall comply with the requirement to register a Risk Management Plan if permittee's facility is required pursuant to Section 112(r) of the Act to register such a plan.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.H.)

1.17 Expiration of this permit terminates the permittee's right to operate unless a timely and complete renewal application has been submitted. A timely application is one which is submitted at least six (6) months prior to expiration of the Title V permit. If the permittee submits a timely and complete application, the failure to have a Title V permit is not a violation of regulations until the Permit Board takes final action on the permit application. This protection shall cease to apply if, subsequent to the completeness determination, the permittee fails to submit by the deadline specified in writing by the MDEQ any additional information identified as being needed to process the application.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.C(2)., R. 6.4.B., and R. 6.2.A(1)(c).)

- 1.18 The permittee is authorized to make changes within their facility without requiring a permit revision (ref: Section 502(b)(10) of the Act) if:
  - (a) The changes are not modifications under any provision of Title I of the Act;
  - (b) The changes do not exceed the emissions allowable under this permit;
  - (c) The permittee provides the Administrator and the Department with written notification in advance of the proposed changes [at least seven (7) days, or such other time frame as provided in other regulations for emergencies] and the notification includes:
    - (1) A brief description of the change(s);
    - (2) The date on which the change will occur;
    - (3) Any change in emissions; and
    - (4) Any permit term or condition that is no longer applicable as a result of the change.
  - (d) The permit shield shall not apply to any Section 502(b)(10) change.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.F(1).)

1.19 Should the Executive Director of the Mississippi Department of Environmental Quality declare an Air Pollution Emergency Episode, the permittee will be required to operate in accordance with the permittee's previously approved Emissions Reduction Schedule or, in the absence of an approved schedule, with the appropriate requirements specified in Mississippi Administrative Code, Title 11, Part, 2, Chapter 3, "Regulations for the Prevention of Air Pollution Emergency Episodes," for the level of emergency declared.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 3.)

1.20 Except as otherwise provided herein, a modification of the facility may require a Permit to Construct in accordance with the provisions of Mississippi Administrative Code, Title 11, Part, 2, Chapter 2, "Permit Regulations for the Construction and/or Operation of Air Emissions Equipment," and may require modification of this permit in accordance with Mississippi Administrative Code, Title 11, Part 2, Chapter 6, "Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act."

"Modification" is defined as [a]ny physical change in or change in the method of operation of a facility which increases the actual emissions or the potential uncontrolled emissions of any air pollutant subject to regulation under the Federal Act emitted into the atmosphere by that facility or which results in the emission of any air pollutant subject to regulation under the Federal Act into the atmosphere not previously emitted. A physical change or change in the method of operation shall not include:

- (a) Routine maintenance, repair, and replacement;
- (b) Use of an alternative fuel or raw material by reason of an order under Sections 2 (a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
- (c) Use of an alternative fuel by reason of an order or rule under Section 125 of the Federal Act;
- (d) Use of an alternative fuel or raw material by a stationary source which:
  - (1) The source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51 – Subpart I, or 40 CFR 51.166; or
  - (2) The source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51 Subpart I, or 40 CFR 51.166;
- (e) An increase in the hours of operation or in the production rate unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51 – Subpart I or 40 CFR 51.166; or
- (f) Any change in ownership of the stationary source.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.C(15).)

1.21 Any change in ownership or operational control must be approved by the Permit Board.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.D(4).)

1.22 This permit is a Federally approved operating permit under Title V of the Federal Clean Air Act as amended in 1990. All terms and conditions, including any designed to limit the source's potential to emit, are enforceable by the Administrator and citizens under the Federal Act as well as the Commission.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.B(1).)

1.23 Except as otherwise specified or limited herein, the open burning of residential, commercial, institutional, or industrial solid waste, is prohibited. This prohibition does not apply to infrequent burning of agricultural wastes in the field, silvicultural wastes for forest management purposes, land-clearing debris, debris from emergency clean-up operations, and ordnance.

Open burning of land-clearing debris must not use starter or auxiliary fuels which cause excessive smoke (rubber tires, plastics, etc.); must not be performed if prohibited by local ordinances; must not cause a traffic hazard; must not take place where there is a High Fire Danger Alert declared by the Mississippi Forestry Commission or Emergency Air Pollution Episode Alert imposed by the Executive Director and must meet the following buffer zones.

- (a) Open burning without a forced-draft air system must not occur within five hundred (500) yards of an occupied dwelling.
- (b) Open burning utilizing a forced-draft air system on all fires to improve the combustion rate and reduce smoke may be done within 500 yards of but not within fifty (50) yards of an occupied dwelling.
- (c) Burning must not occur within 500 yards of commercial airport property, private airfields, or marked off-runway aircraft approach corridors unless written approval to conduct burning is secured from the proper airport authority, owner or operator.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.G.)

- 1.24 Except as otherwise specified herein, the permittee shall be subject to the following provision with respect to emergencies:
  - (a) Except as otherwise specified herein, an "*emergency*" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
  - (b) An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in Part (c) of this condition are met.
  - (c) The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:

- (1) An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
- (4) The permittee submitted notice of the emergency to the MDEQ within two (2) working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- (d) In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (e) This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.
- (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.G.)
- 1.25 Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, startups, and shutdowns.
  - (a) Upsets (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
    - (1) For an upset, the Commission may pursue an enforcement action for noncompliance with an emission standard or other requirement of an applicable rule, regulation, or permit. In determining whether to pursue enforcement action, and/or the appropriate enforcement action to take, the Commission may consider whether the source has demonstrated through properly signed contemporaneous operating logs or other relevant evidence the following:
      - (i) An upset occurred and that the source can identify the cause(s) of the upset;
      - (ii) The source was at the time being properly operated;
      - (iii) During the upset the source took all reasonable steps to minimize levels of emissions that exceeded the emission standard or other requirement of an applicable rule, regulation, or permit;
      - (iv) That within five (5) working days of the time the upset began, the source submitted a written report to the Department describing the

upset, the steps taken to mitigate excess emissions or any other noncompliance, and the corrective actions taken and;

- (v) That as soon as practicable but no later than 24 hours of becoming aware of an upset that caused an immediate adverse impact to human health or the environment beyond the source boundary or caused a general nuisance to the public, the source provided notification to the Department.
- (2) In any enforcement proceeding by the Commission, the source seeking to establish the occurrence of an upset has the burden of proof.
- (3) This provision is in addition to any upset provision contained in any applicable requirement.
- (4) These upset provisions apply only to enforcement actions by the Commission and are not intended to prohibit EPA or third party enforcement actions.
- (b) Start-ups and Shutdowns (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
  - (1) Start-ups and shutdowns are part of normal source operation. Emission limitations apply during startups and shutdowns unless source specific emission limitations or work practice standards for startups and shutdowns are defined by an applicable rule, regulation, or permit.
  - (2) Where the source is unable to comply with existing emission limitations established under the State Implementation Plan (SIP) and defined in this Mississippi Administrative Code, Title 11, Part 2, Chapter 1, the Department will consider establishing source specific emission limitations or work practice standards for startups and shutdowns. Source specific emission limitations or work practice standards established for startups and shutdowns are subject to the requirements prescribed in Mississippi Administrative Code, Title 11, Part 2, Chapter 1, Rule 1.10.B(2)(a) through (e).
  - (3) Where an upset as defined in Rule 1.2 occurs during startup or shutdown, see the upset requirements above.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.10.)

1.26 The permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61 – Subpart M, as adopted by reference in Regulation Mississippi Administrative Code, Title 11, Part 2, Chapter 1,

Rule 1.8. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities.

(Ref.: 11 Miss Admin. Code Pt. 2, R. 1.8.)

# SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

Emission Point	Description		
AA-001	<ul> <li>Facility-Wide Surface Coating Operations, including the following emission sources:</li> <li>Spray booth following the wheel-a-brator at the Plate Line (Location 1), with emissions routed to a baghouse,</li> <li>Surface coating at the Paint Building (Location 2), with building kept at negative pressure and emissions routed through fabric filters, and</li> <li>Outdoor surface coating.</li> </ul>		
AA-001a	Surface Coating of Miscellaneous Metal Parts and Products subject to 40 CFR 63, Subpart MMMM		
AA-001b	Surface Coating Operations associated with Shipbuilding and Ship Repair subject to 40 CFR 63, Subpart II		
AA-002	Indoor Abrasive Blasting Operations: Wheel-a-brator at the Plate Line (Location 1), with emissions routed to a baghouse.		
AA-003	Outdoor Abrasive Blasting Operations		
AA-004	Metal Working Operations [Including welding, cutting, grinding, etc.]		
AA-005	Tank Storage [Including a 1,900-gallon gasoline tank. All other tanks are insignificant activities.]		

# SECTION 3. EMISSION LIMITATIONS & STANDARDS

#### A. FACILITY-WIDE EMISSION LIMITATIONS & STANDARDS

- 3.A.1 Except as otherwise specified or limited herein, the permittee shall not cause, permit, or allow the emission of smoke from a point source into the open air from any manufacturing, industrial, commercial, or waste disposal process that exceeds forty percent (40%) opacity subject to the exceptions provided in Parts (a) and (b) below:
  - (a) Start-up operations may produce emissions, which exceed 40% opacity for up to fifteen (15) minutes per start-up in any one (1) hour and not to exceed three (3) start-ups per stack in any twenty-four (24) hour period.
  - (b) Emissions resulting from soot blowing operations (i.e. ash removal) shall be permitted provided such emissions do not exceed sixty percent (60%) opacity, and provided further that the aggregate duration of such emissions during any twenty-four (24) hour period does not exceed ten (10) minutes per billion BTU gross heating value of fuel in any one (1) hour.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.A.)

3.A.2 Except as otherwise specified or limited herein, the permittee shall not cause, allow, or permit the discharge into the ambient air from any point source or emissions, any air contaminant of such opacity as to obscure an observer's view to a degree in excess of 40% opacity, equivalent to that provided in Condition 3.A.1. This shall not apply to vision obscuration caused by uncombined water droplets.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.B.)

- 3.A.3 For the entire facility, the permittee shall not cause, permit, or allow the emission of particles or any contaminants in sufficient amounts or of such duration from any process as to be injurious to humans, animals, plants, or property, or to be a public nuisance, or create a condition of air pollution.
  - (a) The permittee shall not cause or permit the handling, transporting, or storage of any material in a manner which allows or may allow unnecessary amounts of particulate matter to become airborne.
  - (b) When dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance to property other than that from which it originated or to violate any other provision of 11 Miss. Admin. Code Pt. 2, Ch. 1, the Commission may order such corrected in a way that all air and gases or air and gasborne material leaving the building or equipment are controlled or removed prior to discharge to the open air.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.C.)

### B. EMISSION POINT SPECIFIC EMISSION LIMITATIONS & STANDARDS

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limit / Standard
AA-001	11 Miss. Admin. Code Pt. 2, R.2.2.B(10)., as established in the Title V Operating Permit issued June 26, 2003, and modified October 11, 2022 (PSD-Avoidance Limit)	3.B.1	VOC	245.0 tpy (12-month rolling total)
	40 CFR Part 63, Subpart MMMM			
AA-001a	NESHAP for Surface Coating of Miscellaneous Parts and Products 40 CFR 63.3880, 63.3881(b), 63.3882(e), 63.3901, and Table 2	3.B.2	HAPs	Applicability
	Subpart MMMM			
	40 CFR 63.3890(b)(1) and 63.3900(a)(1), Subpart MMMM	3.B.3	Organic HAPs	2.6 lb organic HAP / gallon of coating solids
	40 CFR 63.3881(c)(3) and (c)(12), Subpart MMMM	3.B.4	Coating Usage	Exemption for coatings used under specified volume or coatings addressed in 40 CFR Part 63, Subpart II
	40 CFR Part 63, Subpart II			
AA-001b	NESHAP for Shipbuilding and Ship Repair (Surface Coating)	3.B.5	VOHAP	General Applicability
	40 CFR 63.780, 63.781(a), and Table 1			
	40 CFR 63.783(a), Subpart II	3.B.6	VOHAP	As-applied VOHAP content limit dependent on the type of coating
	40 CFR 63.781(b), Subpart II	3.B.7	VOHAP	Low-usage exemption
	40 CFR 63.781(c), Subpart II	3.B.8	VOHAP	Exemption for aerosol containers
AA-001 and AA-002	11 Miss. Admin. Code Pt. 2, R.2.2.B(10)., as established in the Title V Operating Permit issued October 11, 2022	3.B.9	PM (filterable only)	Control Device Requirement

3.B.1 For Emission Point AA-001, Facility-wide Surface Coating Operations, the permittee shall limit emissions of volatile organic compound (VOC) to no more than 245.0 tons per year (tpy) as determined for each consecutive 12-month period.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the Title V Operating Permit issued June 26, 2003, and modified October 11, 2022 (PSD-Avoidance Limit))

3.B.2 For Emission Point AA-001a, the permittee is subject to and shall comply with all applicable standards of the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products (40 CFR 63, Subpart MMMM) and the applicable General Provisions (40 CFR 63, Subpart A), as required in Table 2 to Subpart MMMM. Emission Point AA-001b is considered an existing affected source under Subpart MMMM.

(Ref.: 40 CFR 63.3880, 63.3881(b), 63.3882(e), 63.3901, and Table 2 to Subpart MMMM)

3.B.3 For Emission Point AA-001a, the permittee shall limit organic hazardous air pollutant (HAP) emissions to no more than 2.6 pounds organic HAP per gallon of coating solids used during each 12-month compliance period. The permittee shall be in compliance with this limit at all times.

(Ref.: 40 CFR 63.3890(b)(1) and 63.3900(a)(1), Subpart MMMM)

3.B.4 For Emission Point AA-001a, 40 CFR 63, Subpart MMMM does not apply to coatings used in volumes of less than 50 gallons per year, provided that the total volume of coatings exempt under this provision does not exceed 250 gallons per year at the facility. Subpart MMMM also does not apply to surface coating of metal components of ships that meet the applicability of Condition 3.B.5.

(Ref.: 40 CFR 63.3881(c)(3) and (c)(12), Subpart MMMM)

3.B.5 Emission Point AA-001b consists of surface coating operations conducted during shipbuilding or ship repair. 40 CFR 63.782 defines "ship" as follows:

Ship means any marine or fresh-water vessel used for military or commercial operations, including self-propelled vessels, those propelled by other craft (barges), and navigational aids (buoys). This definition includes, but is not limited to, all military and Coast Guard vessels, commercial cargo and passenger (cruise) ships, ferries, barges, tankers, container ships, patrol and pilot boats, and dredges. For purposes of this subpart, pleasure crafts and offshore oil and gas drilling platforms are not considered ships.

Emission Point AA-001b is subject to and shall comply with 40 CFR Part 63, Subpart II – National Emission Standards for Hazardous Air Pollutants (NESHAP) for Shipbuilding

and Ship Repair and the applicable provisions of 40 CFR Part 63, Subpart A – General Provisions, as specified in Table 1 to Subpart II.

(Ref.: 40 CFR 63.780, 63.781(a), 63.782, and Table 1, Subpart II)

3.B.6 For Emission Point AA-001b, the permittee shall not cause or allow the application of any coating to a ship with an as-applied volatile organic hazardous air pollutant (VOHAP) content exceeding the applicable limit given in Table 2 of Subpart II (included in Appendix D). The as-applied VOHAP content shall be determined by using the procedures described in Condition 5.B.7.

(Ref.: 40 CFR 63.783(a), Subpart II)

3.B.7 For Emission Point AA-001b, the provisions of Subpart II do not apply to any coating used in a volume less than 52.8 gallons per year provided the total volume of all exempted coatings used at the facility does not exceed 264 gallons per year. Each exempt coating used shall be labeled as "low-usage exempt" and the records concerning the usage of each shall be maintained in accordance with Condition 5.B.12.

(Ref.: 40 CFR 63.781(b), Subpart II)

3.B.8 For Emission Point AA-001b, the provisions of Subpart II do not apply to coatings applied with hand-held, non-refillable, aerosol containers.

(Ref.: 40 CFR 63.781(c), Subpart II)

3.B.9 For Emission Points AA-001 and AA-002, the permittee shall operate each control device (i.e., the baghouse or fabric filters) at the Plate Line and Paint Building at all times when the respective blasting or surface coating operation is ongoing. In the event of a failure of the pollution control equipment, the permittee shall cease operations until such time repairs are made and the proper efficiency of the pollution control equipment is restored.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the Title V Operating Permit issued October 11, 2022)

#### C. <u>INSIGNIFICANT AND TRIVIAL ACTIVITY EMISSION LIMITATIONS &</u> <u>STANDARDS</u>

There are no insignificant activities at the facility with applicable federal or state requirements.

#### D. WORK PRACTICE STANDARDS

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-001b	40 CFR 63.783(b), Subpart II	3.D.1	VOHAP	Handling, transfer, and condition of containers and piping systems
AA-001a	40 CFR 63.3900(b), Subpart MMMM	3.D.2	Organic HAP	Good air pollution control practices
AA-001	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.D.3	PM (filterable only)	Spray gun requirements for outdoor surface coating
AA-003	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.D.4	PM (filterable only)	Prohibition on reuse of dry abrasive blasting media

- 3.D.1 For Emission Point AA-001b, those surface coating operations subject to 40 CFR 63, Subpart II, the permittee shall ensure that:
  - (a) At all times the permittee must operate and maintain the affected source in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the DEQ which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
  - (b) All handling and transfer of VOHAP-containing materials to and from containers, tanks, vats, drums, and piping systems is conducted in a manner that minimizes spills.
  - (c) All containers, tanks, vats, drums, and piping systems are free of cracks, holes, and other defects and remain closed unless materials are being added to or removed from them.

(Ref.: 40 CFR 63.783(b), Subpart II)

3.D.2 For Emission Point AA-001a, at all times, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring

equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the DEQ that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the affected source.

(Ref.: 40 CFR 63.3900(b), Subpart MMMM)

3.D.3 For surface coating conducted outdoors (Emission Point AA-001), the permittee shall use high-volume, low-pressure (HVLP) spray guns, electrostatic application, airless spray guns, air-assisted airless spray guns, or an equivalent coating technology that is demonstrated to achieve a transfer efficiency comparable to one of these spray gun technologies for a comparable operation, and for which written approval has been obtained from the DEQ.

The procedure used to demonstrate spray gun transfer efficiency is equivalent to that of an HVLP spray gun must be equivalent to the California South Coast Air Quality Management District's "Spray Equipment Transfer Efficiency Test Procedure for Equipment User, May 24, 1989" and "Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray Guns, September 26, 2002", Revision 0 (attached in Appendix E), or most recent version.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

3.D.4 For Emission Point AA-003, dry abrasive blasting media used for outdoor blasting shall not be reused unless contaminants (i.e., any material other than the base metal, such as paint residue) have been removed by filtration or screening and the abrasive material conforms to its original size.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

# SECTION 4. COMPLIANCE SCHEDULE

- 4.1 Unless otherwise specified herein, the permittee shall be in compliance with all requirements contained herein upon issuance of this permit.
- 4.2 Except as otherwise specified herein, the permittee shall submit to the Permit Board and to the Administrator of the EPA Region IV a certification of compliance with the permit terms and conditions, including emission limitations, standards, or work practices, by January 31<sup>st</sup> for the preceding calendar year. If the permit was reissued or modified during the course of the preceding calendar year, the compliance certification shall address each version of the permit. Each compliance certification shall include the following:
  - (a) The identification of each term or condition of the permit that is the basis of the certification;
  - (b) The compliance status;
  - (c) Whether compliance was continuous or intermittent;
  - (d) The method(s) used for determining the compliance status of the source, currently and over the applicable reporting period;
  - (e) Such other facts as may be specified as pertinent in specific conditions elsewhere in this permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.C(5)(a), (c), (d).)

# SECTION 5. MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS

#### A. <u>GENERAL MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS</u>

5.A.1 The permittee shall install, maintain, and operate equipment and/or institute procedures as necessary to perform the monitoring and recordkeeping specified below.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)

- 5.A.2 In addition to the recordkeeping specified below, the permittee shall include with all records of required monitoring information the following:
  - (a) The date, place as defined in the permit, and time of sampling or measurements;
  - (b) The date(s) analyses were performed;
  - (c) The company or entity that performed the analyses;
  - (d) The analytical techniques or methods used;
  - (e) The results of such analyses; and
  - (f) The operating conditions existing at the time of sampling or measurement.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(b)(1).)

5.A.3 Except where a longer duration is specified in an applicable requirement, the permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(b)(2).)

5.A.4 Except as otherwise specified herein, the permittee shall submit reports of any required monitoring by July 31<sup>st</sup> and January 31<sup>st</sup> for the preceding six-month period. All instances of deviations from permit requirements must be clearly identified in such reports and all required reports must be certified by a responsible official consistent with Mississippi Administrative Code, Title 11, Part 2, Chapter 6, Rule 6.2.E. For applicable periodic reporting requirements in 40 CFR Parts 60, 61, and 63, the permittee shall comply with the deadlines in this condition for reporting conducted on a semiannual basis. Additionally, any required quarterly reports shall be submitted by the end of the month following each calendar quarter (i.e., April 30th, July 31st, October 31st, and January

31st), and any required annual reports shall be submitted by January 31<sup>st</sup> following each calendar year.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1)., 40 CFR 60.19(c), 61.10(g), and 63.10(a)(5).)

5.A.5 Except as otherwise specified herein, the permittee shall report all deviations from permit requirements, including those attributable to upsets, the probable cause of such deviations, and any corrective actions or preventive measures taken. Said report shall be made within five (5) working days of the time the deviation began.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(2).)

5.A.6 Except as otherwise specified herein, the permittee shall perform emissions sampling and analysis in accordance with EPA Test Methods and with any continuous emission monitoring requirements, if applicable. All test methods shall be those versions or their equivalents approved by the MDEQ and the EPA.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)

5.A.7 The permittee shall maintain records of any alterations, additions, or changes in equipment or operation.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)

5.A.8 Unless otherwise specified in Section 4, upon permit issuance, the monitoring, testing, recordkeeping, and reporting requirements of Section 5 herein supersede the requirements of any preceding permit to construct and/or operate.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)

### B. <u>SPECIFIC MONITORING AND RECORDKEEPING REQUIREMENTS</u>

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Monitoring / Recordkeeping Requirement
AA-001	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.1	VOC	Monitoring and recordkeeping requirements
AA-001a	40 CFR 63.3891(a) and (b), Subpart MMMM	5.B.2	Organic HAP	Compliance options
	40 CFR 63.3930(a) through (j), Subpart MMMM	5.B.3		Recordkeeping requirements
	40 CFR 63.3931, Subpart MMMM	5.B.4		Recordkeeping requirements
	40 CFR 63.3942 and 63.3952, Subpart MMMM	5.B.5		Continuous compliance
AA-001b	40 CFR 63.785(a), Subpart II	5.B.6	VOHAP	Determination and certification of compliance with VOHAP limit(s)
	40 CFR 63.785(b), (c), and (d), Subpart II	5.B.7		Compliance demonstration for VOHAP limit(s)
	40 CFR 63.785(e), Subpart II	5.B.8		Demonstrate continuous compliance
	40 CFR 63.786(a), (b), and (c), Subpart II	5.B.9		Compliance test methods and procedures
	40 CFR 63.786(d), Subpart II	5.B.10		Use of proper forms and procedures
	40 CFR 63.787(b), Subpart II	5.B.11		Prepare and maintain a written implementation plan
	40 CFR 63.788(b)(2) and (3), Subpart II	5.B.12		Monthly records requirement
	40 CFR 63.788(b)(4), Subpart II	5.B.13		Specific deviation/violation recordkeeping requirements
AA-001	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.14	Operating Equipment	Records of HVLP or other high transfer efficiency spray paint systems
AA-001 AA-002	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.15	Visible Emissions	Perform daily visible emissions observations and inspections of control devices

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Monitoring / Recordkeeping Requirement
AA-003	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.16	Blasting Media	Records of type and amount of blasting media used and amount of any reused
Facility- wide	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.17	Dust	Comply with Site Dust Control Plan in Appendix C
Facility- wide	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.18	Visible Emissions	EPA Method 22 procedures for visible emissions observations

- 5.B.1 For Emission Point AA-001, Facility-wide Surface Coating Operations, the permittee shall determine and maintain sufficient records to document the following for each coating, adhesive, solvent or other VOC-containing material used:
  - (a) Identification and total quantity in gallons (gal) or pounds (lb) of each coating, adhesive, solvent, or other VOC-containing material used on a monthly basis.
  - (b) The VOC content of each coating, adhesive, solvent or other VOC-containing material used. A description of the method used to determine the VOC content shall accompany this data. When determining VOC content, the permittee may utilize data supplied by the manufacturer, or analysis of VOC content by EPA Test Method 24, 40 CFR 60, Appendix A.
  - (c) The density (lb/gal), unless material usages are measured in lb.
  - (d) The total VOC emissions from the use of VOC-containing materials calculated for each month and for each 12-month rolling period.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.2 For Emission Point AA-001a, the permittee shall include all coatings (as defined in 40 63.3981), thinners and/or other additives, and cleaning materials used in the affected source when determining whether the organic HAP emission rate is equal to or less than the applicable emission limit in Condition 3.B.3. To make this determination, the permittee shall use at least one of the compliance options listed in Condition 5.B.2(a) or (b). The permittee may apply any of the compliance options to an individual coating operation, or to multiple coating operations as a group, or to the entire affected source. The permittee may use different compliance options for different coating operations, or at different times on the same coating operation. The permittee may employ different compliance options when different parts. However, the permittee may not use different compliance options at the same time on the same coating operation. If the permittee switches between compliance options for any coating operation or group of coating

operations, the permittee shall document this switch as required by Condition 5.B.3(c), and the permittee shall report it in the next semiannual compliance report required in Condition 5.C.2. The permittee shall utilize either of the following options to demonstrate compliance with the emission limitation of Condition 3.B.3:

- (a) *Compliant material option*. Demonstrate that the organic HAP content of each coating used in the coating operation(s) is less than or equal to the emission limit in Condition 3.B.3, and that each thinner and/or other additive, and cleaning material used contains no organic HAP. The permittee shall meet all the requirements of Condition 5.B.5 to demonstrate compliance with the applicable emission limit using this option.
- (b) Emission rate without add-on controls option. Demonstrate that, based on the coatings, thinners and/or other additives, and cleaning materials used in the coating operation(s), the organic HAP emission rate for the coating operation(s) is less than or equal to the applicable emission limit in Condition 3.B.3, calculated as a rolling 12-month emission rate and determined on a monthly basis. The permittee shall meet all the requirements of Condition 5.B.5 to demonstrate compliance with the emission limit using this option.

(Ref.: 40 CFR 63.3891(a) and (b), Subpart MMMM)

- 5.B.3 For Emission Point AA-001a, the permittee shall collect and keep records of the data and information as specified below. Failure to collect and keep these records is a deviation from 40 CFR 63, Subpart MMMM.
  - (a) A copy of each notification and report that the permittee submitted to comply with this subpart, and the documentation supporting each notification and report. The permittee shall also keep records of any data used in the calculation of the facility specific emission limit for each 12-month compliance period included in the semiannual compliance reports.
  - (b) A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner and/or other additive, and cleaning material, and the volume fraction of coating solids for each coating. If the permittee conducted testing to determine mass fraction of organic HAP, density, or volume fraction of coating solids, the permittee shall keep a copy of the complete test report. If the permittee uses information provided to the permittee by the manufacturer or supplier of the material that was based on testing, the permittee shall keep the summary sheet of results provided to the permittee by the manufacturer or supplier. The permittee is not required to obtain the test report or other supporting documentation from the manufacturer or supplier.
  - (c) For each compliance period, the records specified below:

- (1) A record of the coating operations on which the permittee used each compliance option and the time periods (beginning and ending dates and times) for each option the permittee used.
- (2) For the compliant material option, a record of the calculation of the organic HAP content for each coating, using Equation 2 of 40 CFR 63.3941.
- (3) For the emission rate without add-on controls option, a record of the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1, 1A through 1C, and 2 of 40 CFR 63.3951; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to 40 CFR 63.3951(e)(4); the calculation of the total volume of coating solids used each month using Equation 2 of 40 CFR 63.3951; and the calculation of each 12-month organic HAP emission rate using Equation 3 of 40 CFR 63.3951.
- (d) A record of the name and volume of each coating, thinner and/or other additive, and cleaning material used during each compliance period. If the permittee is using the compliant material option for all coatings at the source, the permittee may maintain purchase records for each material used rather than a record of the volume used.
- (e) A record of the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each compliance period unless the material is tracked by weight.
- (f) A record of the volume fraction of coating solids for each coating used during each compliance period.
- (g) If the emission rate without add-on controls option is used, the density for each coating, thinner, and/or other additive, and cleaning material used during each compliance period.
- (h) If the permittee uses an allowance in Equation 1 of 40 CFR 63.3951 for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage, and disposal facility (TSDF) according to 40 CFR 63.3951(e)(4), the permittee shall keep records of the information specified below.
  - (1) The name and address of each TSDF to which the permittee sent waste materials for which the permittee uses an allowance in Equation 1 of 40 CFR 63.3951; a statement of which subparts under 40 CFR parts 262, 264, 265, and 266 apply to the TSDF; and the date of each shipment.

- (2) Identification of the coating operations producing waste materials included in each shipment and the month or months in which the permittee used the allowance for these materials in Equation 1 of 40 CFR 63.3951.
- (3) The methodology used in accordance with 40 CFR 63.3951(e)(4) to determine the total amount of waste materials sent to or the amount collected, stored, and designated for transport to a TSDF each month; and the methodology to determine the mass of organic HAP contained in these waste materials. This must include the sources for all data used in the determination, methods used to generate the data, frequency of testing or monitoring, and supporting calculations and documentation, including the waste manifest for each shipment.
- (i) For each deviation from an emission limitation reported under Condition 5.C.2, a record of the information specified in paragraphs (1) through (4) below, as applicable.
  - (1) The date, time, and duration of the deviation, as reported under Condition 5.C.2.
  - (2) A list of the affected sources or equipment for which the deviation occurred and the cause of the deviation, as reported under Condition 5.C.2.
  - (3) An estimate of the quantity of each regulated pollutant emitted over any applicable emission limit in Condition 3.B.3, and a description of the method used to calculate the estimate, as reported under Condition 5.C.2.
  - (4) A record of actions taken to minimize emissions in accordance with Condition 3.D.2 and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

(Ref.: 40 CFR 63.3930(a) through (j), Subpart MMMM)

5.B.4 For Emission Point AA-001a, records shall be maintained in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). Where appropriate, the records may be maintained as electronic spreadsheets or as a database. On and after January 5, 2021, any records required to be maintained by this subpart that are in reports that were submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to DEQ or the EPA as part of an on-site compliance evaluation. Each record shall be kept for five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Each record shall be kept on-site for at least two (2) years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.

according to 40 CFR 63.10(b)(1). The permittee may keep the records off-site for the remaining three (3) years.

(Ref.: 40 CFR 63.3931, Subpart MMMM)

- 5.B.5 For Emission Point AA-001a, the permittee shall utilize either of the following options to demonstrate continuous compliance with the emission limitation of Condition 3.B.3 and shall maintain records as specified in Conditions 5.B.3 and 5.B.4:
  - (a) *Compliant material option.* 
    - (1) For each compliance period to demonstrate continuous compliance, the permittee shall use no coating for which the organic HAP content (determined using Equation 2 of 40 CFR 63.3941) exceeds the applicable emission limit in Condition 3.B.3, and use no thinner and/or other additive, or cleaning material that contains organic HAP, determined according to 40 CFR 63.3941(a). A compliance period consists of 12 months. Each month, after the end of the initial compliance period described in 40 CFR 63.3940, is the end of a compliance period consisting of that month and the preceding 11 months.
    - (2) If the permittee chooses to comply with the emission limitations by using the compliant material option, the use of any coating, thinner and/or other additive, or cleaning material that does not meet the criteria specified in paragraph (1) above is a deviation from the emission limitations that must be reported as specified in Condition 5.C.2.
    - (3) As part of each semiannual compliance report required by Condition 5.C.2, the permittee shall identify the coating operation(s) for which the permittee used the compliant material option. If there were no deviations from the applicable emission limit in Condition 3.B.3, submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because the permittee used no coatings for which the organic HAP content exceeded the applicable emission limit in Condition 3.B.3, and the permittee used no thinner and/or other additive, or cleaning material that contained organic HAP, determined according to 40 CFR 63.3941(a).
  - (b) *Emission rate without add-on controls option.* 
    - (1) To demonstrate continuous compliance, the organic HAP emission rate for each compliance period, determined according to 40 CFR 63.3951 must be less than or equal to the applicable emission limit in Condition 3.B.3. A compliance period consists of 12 months. Each month, after the end of the initial compliance period described in 40 CFR 63.3950, is the end of a compliance period consisting of that month and the preceding 11 months. The

permittee shall perform the calculations in 40 CFR 63.3951 on a monthly basis using data from the previous 12 months of operation.

- (2) If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit in Condition 3.B.3, this is a deviation from the emission limitation for that compliance period and shall be reported as specified in Condition 5.C.2(e) or (f).
- (3) As part of each semiannual compliance report required by Condition 5.C.2, the permittee shall identify the coating operation(s) for which the permittee used the emission rate without add-on controls option. If there were no deviations from the emission limitations, the permittee shall submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit in Condition 3.B.3, determined according to 40 CFR 63.3951.

(Ref.: 40 CFR 63.3942 and 63.3952, Subpart MMMM)

- 5.B.6 For Emission Point AA-001b, for each batch of coating received for use, the permittee shall:
  - (a) Determine the coating category and applicable VOHAP limit as specified in Condition 3.B.6 of the federally enforceable permit herein; and
  - (b) Certify the as-supplied VOC content of the batch of coating using a certification supplied by the manufacturer for the batch, although the permittee retains liability should subsequent testing reveal a violation. If the permittee performs the certification testing, only one of the containers in which the batch of coating was received is required to be tested.

(Ref.: 40 CFR 63.785(a), Subpart II)

- 5.B.7 For Emission Point AA-001b, as an alternative to testing each batch of coating, as applied, the permittee may determine compliance with the applicable limits determined in Condition 5.B.6(a) using any combination of the following procedures. The procedure used for each coating shall be determined and documented prior to application. The results of any compliance demonstration conducted using Method 24 shall take precedence over the results using the procedures in paragraphs (a) through (c) below. The results of any compliance demonstration conducted by the permittee or any regulatory agency using an approved test method to determine VOHAP content shall take precedence over the results using the procedures in paragraph (d) below.
  - (a) For coatings to which thinning solvent (or any other material) will not be added under any circumstance or to which only water is added, the permittee shall:

- (1) Certify the as-applied VOC content of each batch of coating.
- (2) Notify the persons responsible for applying the coating that no thinning solvent may be added to the coating by affixing a label to each container of coating in the batch or through another means described in the implementation plan required in Condition 5.B.11.
- (3) If the certified as-applied VOC content of each batch of coating used during a calendar month is less than or equal to the applicable VOHAP limit in Condition 3.B.6, then compliance is demonstrated for that calendar month, unless a violation is revealed using Method 24 of Appendix A of 40 CFR Part 60.
- (b) For a coating to which thinning solvent is routinely or sometimes added, the permittee shall:
  - (1) Prior to the first application of each batch, designate a single thinner for the coating and calculate the maximum allowable thinning ratio (or ratios) using the equation and procedures specified in 40 CFR 63.785(c)(2)(i).
  - (2) Prior to the first application of each batch, notify painters and other persons, as necessary, of the designated thinner and maximum allowable thinning ratio(s) for each batch of the coating by affixing a label to each container of coating or through another means described in the implementation plan required in Condition 5.B.11.
  - (3) By the 15th day of each calendar month, determine the volume of each batch of the coating used, as-supplied during the previous month.
  - (4) By the 15th day of each calendar month, determine the total allowable volume of thinner for the coating used during the previous month using Equation 3 specified in 40 CFR 63.785(c)(2)(iv).
  - (5) By the 15th day of each calendar month, determine the volume of thinner actually used with the coating during the previous month.
  - (6) If the volume of thinner actually used with the coating is less than or equal to the total allowable volume of thinner for the coating, then compliance is demonstrated, unless a violation is revealed using Method 24 of Appendix A of 40 CFR Part 60.
- (c) For coatings to which the same thinning solvent (or other material) is routinely or sometimes added, the permittee shall:

- (1) Designate a single thinner to be added to each coating during the month and "group" coatings according to their designated thinner.
- (2) Prior to the first application of each batch, calculate the maximum allowable thinning ratio for each batch of coating in the group using the equations in 40 CFR 63.785(c)(2)(i).
- (3) Prior to the first application of each "batch," notify painters and other persons, as necessary, of the designated thinner and maximum allowable thinning ratio(s) for each batch in the group by affixing a label to each container of coating or through another means described in the implementation plan required in Condition 5.B.11.
- (4) By the 15th day of each calendar month, determine the volume of each batch of the group used, as-supplied, during the previous month.
- (5) By the 15th day of each calendar month, determine the total allowable volume of thinner for the group for the previous month using Equation 3 specified in 40 CFR 63.785(c)(2)(iv).
- (6) By the 15th day of each calendar month, determine the volume of thinner actually used with the group during the previous month.
- (7) If the volume of thinner actually used with the group is less than or equal to the total allowable volume of thinner for the group, then compliance is demonstrated, unless a violation is revealed using Method 24 of Appendix A of 40 CFR Part 60.
- (d) For demonstrating compliance through alternative test methods, the permittee shall follow the requirements below.
  - (1) Certify the as-supplied VOHAP content  $(g_{VOHAP}/L_{solids})$  of each batch of coating.
  - (2) If no thinning solvent will be added to the coating, the permittee shall follow the procedure described in paragraph (a) of this condition, except that VOHAP content shall be used in lieu of VOC content.
  - (3) If thinning solvent will be added to the coating, the permittee shall follow the procedure described in paragraph (b) or (c) of this condition, except that in Equation 1 of this 40 CFR 63.785(c)(2), the term "mVOC" shall be replaced by the term "mVOHAP," defined as the VOHAP content of the coating as supplied (g<sub>VOHAP</sub>/L<sub>coating</sub>) and the term "Dth" shall be replaced by the term "Dth(VOHAP)" defined as the average density of the VOHAP thinner(s) (g/L).

(e) A violation revealed through any approved test method shall result in a 1-day violation for enforcement purposes. A violation revealed through the recordkeeping procedures shall result in a 30-day violation for enforcement purposes, unless the owner or operator provides sufficient data to demonstrate the specific days during which noncompliant coatings were applied.

(Ref.: 40 CFR 63.785(b), (c), and (d), Subpart II)

5.B.8 For Emission Point AA-001b, the permittee shall demonstrate continuous compliance with the emissions standards and operating limits of Subpart II by using the performance test methods and procedures in Conditions 5.B.9 and 5.B.10 for each affected source. The permittee must monitor and collect data, and provide a site specific monitoring plan, as required by Condition 5.B.11.

(Ref.: 40 CFR 63.785(e), Subpart II)

- 5.B.9 For Emission Point AA-001b, the permittee shall use the following test methods and procedures as applicable:
  - (a) When using the compliance procedures described in Condition 5.B.7(a) through (c), the permittee shall use Method 24 of Appendix A of 40 CFR Part 60 to determine the VOC content of coatings as-supplied or as-applied. When a coating or thinner contains exempt compounds that are volatile HAP or VOHAP, the permittee shall ensure, when determining the VOC content of a coating, that the mass of these exempt compounds is included.
  - (b) When using the compliance procedure described in Condition 5.B.7(d), the permittee shall use a DEQ-approved method that meets the specified accuracy limits in 40 CFR 63.786(b).
  - (c) The permittee may use batch formulation data as a test method in lieu of Method 24 of Appendix A of 40 CFR Part 60 to certify the as-supplied VOC content of a coating if it has been determined that the batch formulation data have a consistent and quantitatively known relationship to Method 24 results. This determination shall consider the role of cure volatiles, which may cause emissions to exceed an amount based solely upon coating formulation data. Notwithstanding such determination, in the event of conflicting results, Method 24 of appendix A of 40 CFR part 60 shall take precedence.

(Ref.: 40 CFR 63.786(a), (b), and (c), Subpart II)

5.B.10 For Emission Point AA-001b, the permittee shall use or ensure that the manufacturer uses the forms and procedures in Appendix A of Subpart II to determine the values for the thinner and coating parameters to be used in Equations 1 and 2 of 40 CFR 63.785(c). The permittee shall ensure that the coating/thinner manufacturer (or supplier) provides information on the VOC and VOHAP contents of the coatings/thinners and the procedure(s) used to determine these values.

(Ref.: 40 CFR 63.786(d), Subpart II)

- 5.B.11 For Emission Point AA-001b, within one year of becoming subject to 40 CFR 63, Subpart II, , the permittee shall prepare and maintain a written implementation plan that addresses the following subject areas:
  - (a) *Coating compliance procedures.* The implementation plan shall include the compliance procedure(s) under Condition 5.B.7(a) through (d) that the source intends to use.
  - (b) *Recordkeeping procedures.* The implementation plan shall include the procedures for maintaining the records required under Condition 5.B.12, including the procedures for gathering the necessary data and making the necessary calculations.
  - (c) *Transfer, handling, and storage procedures.* The implementation plan shall include the procedures for ensuring compliance with Condition 3.D.1.

(Ref.: 40 CFR 63.787(b), Subpart II)

- 5.B.12 For Emission Point AA-001b, the permittee shall keep the following records on a monthly basis and retain them in accordance with Condition 5.A.3:
  - (a) All documentation supporting initial notification;
  - (b) A copy of the approved implementation plan;
  - (c) The volume of each low-usage exempt coating applied;
  - (d) Identification of the coatings used, their appropriate coating categories, and the applicable VOHAP limit;
  - (e) Certification of the as-supplied VOC content of each batch coating;
  - (f) A determination of whether containers meet the standards as described in 40 CFR 63.783(b)(2) (Condition 3.D.1(c)); and
  - (g) The results of any Method 24 or approved VOHAP measurement test conducted on individual containers or coating, as-applied.

In addition to the records in (a) through (g) above, the permittee shall also include additional records required in 40 CFR 63.788(b)(3)(i) through (iv), as determined by the compliance procedure(s) described in Condition 5.B.7(a)-(d) and summarized in Table 3 to Subpart II (included in Appendix D).

(Ref.: 40 CFR 63.788(b)(2) and (3), Subpart II)

- 5.B.13 For Emission Point AA-001b, if the permittee detects a violation of the standards specified in Condition 3.B.6 and 3.D.1, the permittee shall, for the remainder of the reporting period during which the violation(s) occurred, include the following information in the records:
  - (a) A summary of the number and duration of deviations during the reporting period classified by reason, including known causes for which a Federally-approved or promulgated exemption from an emission limitation or standard may apply.
  - (b) Identification of the data availability achieved during the reporting period, including a summary of the number and total duration of incidents that the monitoring protocol failed to perform in accordance with the design of the protocol or produced data that did not meet minimum data accuracy and precision requirements, classified by reason.
  - (c) Identification of the compliance status as of the last day of the reporting period and whether compliance was continuous or intermittent during the reporting period.
  - (d) If, pursuant to paragraph (c), the permittee identifies any deviation as resulting from a known cause for which no Federally-approved or promulgated exemption from an emission limitation or standard applies, the monitoring report shall also include all records that the source is required to maintain that pertain to the periods during which such deviation occurred and:
    - (1) The magnitude of each deviation;
    - (2) The reason for each deviation;
    - (3) A description of the corrective action taken for each deviation, including action taken to minimize each deviation and action taken to prevent recurrence; and
    - (4) All quality assurance activities performed on any element of the monitoring protocol.

(Ref.: 40 CFR 63.788(b)(4), Subpart II)

5.B.14 For spray paint delivery systems used in outdoor surface coating (Emission Point AA-001), the permittee shall document the use of HVLP or other high transfer efficiency spray paint delivery systems. This documentation must include the manufacturer's specifications for the equipment and any manufacturer's operation instructions. If the permittee has obtained written approval for an alternative spray application system in accordance with Condition 3.D.3, the permittee must maintain a record of the approval along with documentation of the demonstration of equivalency. These records shall be maintained on-site and made readily available for review by DEQ personnel.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.15 For Emission Points AA-001 and AA-002, the permittee shall conduct daily observations for visible emissions from the baghouses and fabric filters used to control particulate matter emissions at the Plate Line and Blast House while emissions are being routed to each. The observations shall be conducted for at least six consecutive minutes at the stack or vent for each control device during daylight hours. If any visible emissions are noted, the permittee shall immediately inspect the control device for holes, plugging, etc. and take corrective action to restore the control device to a condition of no visible emissions. Following corrective action, the permittee shall conduct a follow-up visible emissions observation to confirm the corrective actions were effective.

The baghouses and filters shall also be inspected per the manufacturer's recommendations or per internal procedures developed by the permittee, which shall be kept on site and made available for review by DEQ personnel. The permittee shall record in log form the date, time, and initials of the employee conducting the visible emissions observations and routine inspections. The log shall note whether any visible emissions were observed, any corrective actions taken, and the results of any subsequent visible emissions following the corrective action.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.16 For Emission Point AA-003 (outdoor blasting), the permittee shall maintain records of the type and amount of each abrasive blasting media used during each calendar month. The permittee shall note any amount of blasting media reused and the method used to treat the media to remove contaminants and media fines not conforming to the original media size.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.17 To minimize fugitive emissions of particulate matter site-wide and comply with Condition 3.A.3, the permittee shall utilize best management practices, as stated in the permittee's Site Dust Control Plan located in Appendix C of the permit. The Site Dust Control Plan shall be updated to address changes to best management practices needed to reflect changes in operations at the facility or to implement corrective actions. Any records (e.g., inspection forms) required by the plan shall be maintained on-site and made readily available for review by DEQ personnel.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.18 Visible emissions observations required by the permit and attached Site Dust Control Plan shall be performed according to the procedures in EPA Method 22 of 40 CFR Part 60, Appendix A. Employees conducting visible emissions observations shall be trained in EPA Method 22 procedures prior to performing visible emissions observations and shall receive refresher training every calendar year thereafter. A log of employees trained to perform Method 22 observations shall be maintained on-site, including the dates of initial training and all subsequent annual refresher training. A copy of all training materials shall be maintained for five years from the date training is provided. These records shall be maintained on-site and made readily available for review by DEQ personnel.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Reporting Requirement
AA-001	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.1	VOC	Submit semiannual monitoring reports of VOC-containing materials
AA-001a	40 CFR 63.3920(a)(1) through (6), (f), (g), and (h), Subpart MMMM	5.C.2	Organic HAPs	Submit semiannual monitoring reports
	40 CFR 63.788(c), Subpart II	5.C.3	VOHAP	Semiannual report
AA-001b	40 CFR 63.787(b)(1)(ii) and Table 3, Subpart II	5.C.4	VOHAP	Initial notification and implementation plan submittal
AA-001 AA-002	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.5	Visible Emissions	Submit semiannual monitoring reports of visible emissions observation and inspection logs
AA-003	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.6	Blast Media	Submit semiannual report of monthly amounts and types of blast media and amount of any reused
Facility- wide	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.7	Fugitive Dust	Semiannual submittal of revised Site Dust Control Plan or statement declaring no changes and submittal of any inspection logs required by the plan

## C. Specific Reporting Requirements

5.C.1 For Emission Point AA-001, Facility-wide Surface Coating Operations, the permittee shall submit a semiannual report in accordance with Condition 5.A.4 containing a summary of the information required by Condition 5.B.1, including the monthly and 12-month rolling total VOC emissions.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).)

- 5.C.2 For Emission Point AA-001a, the permittee shall submit the semiannual compliance reports for each affected source under 40 CFR 63, Subpart MMMM according to the requirements below:
  - (a) *Dates*: Semiannual compliance reports for each affected source shall be submitted in accordance with Condition 5.A.4.
  - (b) *Inclusion with Title V report*. The permittee must report all deviations from 40 CFR 63, Subpart MMMM, in the semiannual monitoring reports.

- (c) *General requirements*. Each semiannual compliance report must contain the information specified below:
  - (1) Company name and address.
  - (2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
  - (3) Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31. Note that the information reported for each of the 6 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.
  - (4) Identification of the compliance option or options specified in Condition 5.B.2 that the permittee used on each coating operation during the reporting period. If the permittee switched between compliance options during the reporting period, the permittee shall report the beginning and ending dates for each option the permittee used.
  - (5) If the permittee used the emission rate without add-on controls compliance option, the calculation results for each rolling 12-month organic HAP emission rate during the 6-month reporting period.
- (d) *No deviations*. If there were no deviations from the emission limitations in Condition 3.B.3, the semiannual compliance report must include a statement that there were no deviations from the emission limitations during the reporting period.
- (e) *Deviations: Compliant material option*. If the permittee used the compliant material option and there was a deviation from the applicable organic HAP content requirements in Condition 3.B.3, the semiannual compliance report must contain the information specified below:
  - (1) Identification of each coating used that deviated from the applicable emission limit, and each thinner and/or other additive, and cleaning material used that contained organic HAP, and the dates and time periods each was used
  - (2) The calculation of the organic HAP content (using Equation 2 of 40 CFR 63.3941) for each coating identified in paragraph (e)(1) above. The permittee does not need to submit background data supporting this calculation (e.g., information provided by coating suppliers or manufacturers, or test reports).
  - (3) The determination of mass fraction of organic HAP for each thinner and/or other additive, and cleaning material identified in (e)(1) above. The permittee

does not need to submit background data supporting this calculation (e.g., information provided by material suppliers or manufacturers, or test reports).

- (4) A statement of the cause of each deviation (including unknown cause, if applicable).
- (5) The number of deviations and, for each deviation, a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any applicable emission limit in Condition 3.B.3, a description of the method used to estimate the emissions, and the actions you took to minimize emissions in accordance with Condition 3.D.2.
- (f) *Deviations: Emission rate without add-on controls option*. If the permittee used the emission rate without add-on controls option and there was a deviation from the applicable emission limit in Condition 3.B.3, the semiannual compliance report must contain the information specified below.
  - (1) The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit in Condition 3.B.3.
  - (2) The calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred. The permittee shall submit the calculations for Equations 1, 1A through 1C, 2, and 3 of 40 CFR 63.3951; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to 40 CFR 63.3951(e)(4). The permittee does not need to submit background data supporting these calculations (e.g., information provided by materials suppliers or manufacturers, or test reports).
  - (3) A statement of the cause of each deviation (including unknown cause, if applicable).
  - (4) The number of deviations and, for each deviation, the date, time, duration, a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any applicable emission limit in Condition 3.B.3, a description of the method used to estimate the emissions, and the actions you took to minimize emissions in accordance with Condition 3.D.2.
- (g) Semiannual compliance reports. Once the reporting template has been available on the CEDRI website for one (1) year, the permittee shall submit the semiannual compliance report required by Condition 5.C.2 to the EPA via the CEDRI website. Regarding submittals to EPA via the CEDRI website, the permittee shall comply with the requirements of 40 CFR 63.3920(f), (g), and (h), as applicable. In addition to submitting semiannual compliance reports to EPA via the CEDRI website, the permittee shall continue to submit semiannual compliance reports directly to DEQ in accordance with Condition 5.A.4.

(Ref.: 40 CFR 63.3920(a)(1) through (6), (f), (g), and (h), Subpart MMMM)

5.C.3 For Emission Point AA-001b, the permittee shall submit a semiannual report to the DEQ and EPA, in accordance with Condition 5.A.4, of all of the information that must be retained pursuant to Condition 5.B.12, except for the following (1) all documentation supporting the initial notification, (2) a copy of the approved implementation plan, (3) manufacturer's certifications, and (4) the density and mass fraction of water and exempt compounds of each thinner and the volume fraction of solids (nonvolatiles) in each batch, including any calculations. If a violation at an affected source is detected, the permittee shall also report the information specified in Condition 5.B.13 for the report shall be organized according to the compliance procedure(s) followed each month by the permittee.

If there was a malfunction during the reporting period, the semiannual report must also include the number, duration and a brief description of each malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with Condition 3.D.1(a), including actions taken to correct a malfunction.

(Ref.: 40 CFR 63.788(c), Subpart II)

5.C.4 For Emission Point AA-001b, the permittee shall submit notification required in 40 CFR 63.9(a)-(d) of the General Provisions. Also, not later than one year after becoming subject to 40 CFR 63, Subpart II, the permittee shall submit the implementation plan required by Condition 5.B.11.

(Ref.: 40 CFR 63.787(b)(1)(ii) and Table 3, Subpart II)

5.C.5 For Emission Points AA-001 and AA-002, in accordance with Condition 5.A.4, the permittee shall submit a copy of the visible emissions observations and inspection log required by Condition 5.B.15.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).)

5.C.6 For Emission Point AA-003 (outdoor blasting), in accordance with Condition 5.A.4, the permittee shall submit semiannual records summarizing the type and amount of each abrasive blasting media used during each calendar month in the semiannual period. The permittee shall note any amount of blasting media reused and the method used to treat the media to remove contaminants and media fines not conforming to the original media size.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).)

5.C.7 In accordance with Condition 5.A.4, the permittee shall submit a semiannual notification summarizing revisions made to the Site Dust Control Plan (if any). If an amendment is

made to the plan in any semiannual period, the permittee shall include the revised plan with the corresponding semiannual monitoring report. If no amendments are made to the plan during the semiannual period, the permittee shall include a statement declaring that no revisions occurred. DEQ reserves the right to comment on the plan or request changes, as needed, to ensure fugitive dust does not create nuisance conditions off-site.

The permittee shall also submit a copy of all inspection reports generated during the semiannual period to demonstrate compliance with the requirements of the Site Dust Control Plan. These shall include, but are not limited to, logs related to outdoor blasting (e.g., the Dust Escapement Log), use and maintenance of the water truck, and inspections of curtains uses during outdoor blasting/painting.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).)

## SECTION 6. ALTERNATIVE OPERATING SCENARIOS

6.1 None permitted.

## SECTION 7. TITLE VI REQUIREMENTS

The following are applicable or potentially applicable requirements originating from Title VI of the Clean Air Act – Stratospheric Ozone Protection. The full text of the referenced regulations may be found on-line at <u>http://www.ecfr.gov/</u> under Title 40, or DEQ shall provide a copy upon request from the permittee.

- 7.1 If the permittee produces, transforms, destroys, imports or exports a controlled substance or imports or exports a controlled product, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart A Production and Consumption Controls.
- 7.2 If the permittee performs service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart B Servicing of Motor Vehicle Air Conditioners.
- 7.3 The permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart E The Labeling of Products Using Ozone-Depleting Substances, for the following containers and products:
  - (a) All containers in which a class I or class II substance is stored or transported;
  - (b) All products containing a class I substance; and
  - (c) All products directly manufactured with a process that uses a class I substance, unless otherwise exempted by this subpart or, unless EPA determines for a particular product that there are no substitute products or manufacturing processes for such product that do not rely on the use of a class I substance, that reduce overall risk to human health and the environment, and that are currently or potentially available. If the EPA makes such a determination for a particular product, then the requirements of this subpart are effective for such product no later than January 1, 2015.
- 7.4 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart F Recycling and Emissions Reduction:
  - (a) Servicing, maintaining, or repairing appliances;
  - (b) Disposing of appliances, including small appliances and motor vehicle air conditioners; or
  - (c) Refrigerant reclaimers, technician certifying programs, appliance owners and operators, manufacturers of appliances, manufacturers of recycling and recovery equipment, approved recycling and recovery equipment testing organizations, as

well as persons selling, offering for sale, and/or purchasing class I, class II, or non-exempt substitute refrigerants.

- 7.5 The permittee shall be allowed to switch from any ozone-depleting substance to any acceptable alternative that is listed in the Significant New Alternatives Policy (SNAP) program promulgated pursuant to 40 CFR Part 82, Subpart G Significant New Alternatives Policy Program. The permittee shall also comply with any use conditions for the acceptable alternative substance.
- 7.6 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart H Halon Emissions Reduction:
  - (a) Any person testing, servicing, maintaining, repairing, or disposing of equipment that contains halons or using such equipment during technician training;
  - (b) Any person disposing of halons;
  - (c) Manufacturers of halon blends; or
  - (d) Organizations that employ technicians who service halon-containing equipment.

# **APPENDIX** A

## List of Abbreviations Used in this Permit

11 Miss. Admin. Code Pt. 2, Ch. 1.	Air Emission Regulations for the Prevention, Abatement, and
	Control of Air Contaminants
11 Miss. Admin. Code Pt. 2, Ch. 2.	Permit Regulations for the Construction and/or Operation of Air
	Emissions Equipment
11 Miss. Admin. Code Pt. 2, Ch. 3.	Regulations for the Prevention of Air Pollution Emergency
Episodes	6 5
11 Miss. Admin. Code Pt. 2, Ch. 4.	Ambient Air Quality Standards
11 Miss. Admin. Code Pt. 2, Ch. 5.	Regulations for the Prevention of Significant Deterioration of Air
······································	Quality
11 Miss. Admin. Code Pt. 2, Ch. 6.	Air Emissions Operating Permit Regulations for the Purposes of
	Title V of the Federal Clean Air Act
11 Miss. Admin. Code Pt. 2, Ch. 7.	Acid Rain Program Permit Regulations for Purposes of Title IV
11 Wiss. Admin. Code 1 t. 2, Cli. 7.	of the Federal Clean Air Act
BACT	
	Best Available Control Technology
CEM	Continuous Emission Monitor
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COM	Continuous Opacity Monitor
COMS	Continuous Opacity Monitoring System
DEQ	Mississippi Department of Environmental Quality
EPA	United States Environmental Protection Agency
gr/dscf	Grains Per Dry Standard Cubic Foot
Η̈́Ρ	Horsepower
HAP	Hazardous Air Pollutant
lbs/hr	Pounds per Hour
M or K	Thousand
MACT	Maximum Achievable Control Technology
MM	Million
MMBTUH	Million British Thermal Units per Hour
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emissions Standards for Hazardous Air
	Pollutants, 40 CFR 61 or National Emission Standards for
	Hazardous Air Pollutants for Source Categories, 40 CFR 63
NMVOC	Non-Methane Volatile Organic Compounds
NO <sub>x</sub>	Nitrogen Oxides
NSPS	New Source Performance Standards, 40 CFR 60
O&M PM	Operation and Maintenance Particulate Matter
PM	
$PM_{10}$	Particulate Matter less than 10 µm in diameter
ppm DSD	Parts per Million
PSD	Prevention of Significant Deterioration, 40 CFR 52
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
TPY	Tons per Year
TRS	Total Reduced Sulfur
VEE	Visible Emissions Evaluation
VOHAP	Volatile Organic Hazardous Air Pollutant
VOC	Volatile Organic Compound

## **APPENDIX B**

## List of Regulations Referenced in this Permit

The full text of the regulations referenced in this permit may be found on-line at http://www.deq.state.us.us and <u>http://www.ecfr.gov</u>, or the Mississippi Department of Environmental Quality (MDEQ) will provide a copy upon request. A list of regulations referenced in this permit is shown below:

11 Miss. Admin. Code Pt. 2, Ch. 1, Mississippi Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants (Amended December 14, 2011)

11 Miss. Admin. Code Pt. 2, Ch. 2, Permit Regulations for the Construction and/or Operation of Air Emissions Equipment (Amended July 28, 2005)

11 Miss. Admin. Code Pt. 2, Ch. 6, Mississippi Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Air Emissions Operating Permit Regulations for the Purpose of Title V of the Federal Clean Air Act (Amended December 14, 2011)

40 CFR Part 82 – Title VI of the Clean Air Act (Stratospheric Ozone Protection)

40 CFR Part 60, Appendix A, Method 24 – Determination of Volatile Matter Content, Water Content, Density, Volume Solids, And Weight Solids Of Surface Coatings

40 CFR Part 63, Subpart A – General Provisions

40 CFR Part 63, Subpart II – National Emission Standards for Shipbuilding and Ship Repair (Surface Coating)

40 CFR Part 63, Subpart MMMM – National Emission Standards for Surface Coating of Miscellaneous Metal Parts and Products

# **APPENDIX C**

Site Dust Control Plan

# **APPENDIX D**

Tables 2 and 3 to Subpart II of Part 63

# Table 2 to Subpart II of Part 63—Volatile Organic HAP (VOHAP) Limits for Marine Coatings

	<b>VOHAP limits<sup>a b c</sup></b>		
Coating category	Grams/liter coating (minus water and	Gram soli	
	exempt compounds)	t≥4.5 °C	t <4.5 °C <sup>e</sup>
General use	340	571	728
Specialty:			
Air flask	340	571	728
Antenna	530	1,439	
Antifoulant	400	765	971
Heat resistant	420	841	1,069
High-gloss	420	841	1,069
High-temperature	500	1,237	1,597
Inorganic zinc high-build	340	571	728
Military exterior	340	571	728
Mist	610	2,235	
Navigational aids	550	1,597	
Nonskid	340	571	728
Nuclear	420	841	1,069
Organic zinc	360	630	802
Pretreatment wash primer	780	11,095	
Repair and maint. of thermoplastics	550	1,597	
Rubber camouflage	340	571	728
Sealant for thermal spray aluminum	610	2,235	
Special marking	490	1,178	
Specialty interior	340	571	728
Tack coat	610	2,235	
Undersea weapons systems	340	571	728
Weld-through precon. primer	650	2,885	

<sup>a</sup>The limits are expressed in two sets of equivalent units. Either set of limits may be used for the compliance procedure described in 63.785(c)(1), but only the limits expressed in units of g/L solids (nonvolatiles) shall be used for the compliance procedures described 63.785(c)(2) through (4).

<sup>b</sup>VOC (including exempt compounds listed as HAP) shall be used as a surrogate for VOHAP for those compliance procedures described in §63.785(c) (1) through (3).

<sup>c</sup>To convert from g/L to lb/gal, multiply by (3.785 L/gal)(1/453.6 lb/g) or 1/120. For compliance purposes, metric units define the standards.

<sup>d</sup>VOHAP limits expressed in units of mass of VOHAP per volume of solids were derived from the VOHAP limits expressed in units of mass of VOHAP per volume of coating assuming the coatings contain no water or exempt compounds and that the volumes of all components within a coating are additive.

<sup>e</sup>These limits apply during cold-weather time periods, as defined in §63.782. Cold-weather allowances are not given to coatings in categories that permit less than 40 percent volume solids (nonvolatiles). Such coatings are subject to the same limits regardless of weather conditions.

[60 FR 64336, Dec. 15, 1995, as amended at 61 FR 66228, Dec. 17, 1996; 76 FR 72070, Nov. 21, 2011]

 Table 3 to Subpart II of Part 63—Summary of Recordkeeping and Reporting

 Requirements

Requirement		All ots.	-	tion 1	-	tion 2		tion 3
_	Rec	Rep	Rec	Rep	Rec	Rep	Rec	Rep
Notification (§63.9(a)-(d))	X	X						
Implementation plan (§63.787(b)) <sup>d</sup>	X	X						
Volume of coating applied at unaffected major sources (§63.781(b))	X							
Volume of each low-usage-exempt coating applied at affected sources (§63.781(c))	X	X						
ID of the coatings used, their appropriate coating categories, and the applicable VOHAP limit	X	X						
Determination of whether containers meet the standards described in §63.783(b)(3)	X	X						
Results of M-24 or other approved tests	X	X						
Certification of the as-supplied VOC content of each batch	X							
Certification of the as-applied VOC content of each batch			X					
Volume of each coating applied			X	X				
Density of each thinner and volume fraction of solids in each batch					X	X		
Maximum allowable thinning ratio(s) for each batch	1				X	X	X	X
Volume used of each batch, as supplied		-			X	X	X	X
Total allowable volume of thinner					X	X	X	X
Actual volume of thinner used					X	X	X	X
Identification of each group of coatings and designated thinners							X	X

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<sup>a</sup>Affected sources that comply with the cold-weather limits must record and report additional information, as specified in §63.788(b)(3) (ii)(C), (iii)(C), and (iv)(D).

<sup>b</sup>Affected sources that detect a violation must record and report additional information, as specified in §63.788(b)(4).

<sup>c</sup>OPTION 4: the recordkeeping and reporting requirements of Option 4 are identical to those of Options 1, 2, or 3, depending on whether and how thinners are used. However, when using Option 4, the term "VOHAP" shall be used in lieu of the term "VOC," and the owner or operator shall record and report the Administrator-approved VOHAP test method or certification procedure.

<sup>d</sup>Major sources that intend to become area sources by the compliance date may, in lieu of submitting an implementation plan, choose to submit a statement of intent as specified in §63.787(b)(4).

[60 FR 64336, Dec. 15, 1995, as amended at 76 FR 72071, Nov. 21, 2011]

## **APPENDIX E**

South Coast Air Quality Management District: "Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray Guns, September 26, 2002"



# South Coast Air Quality Management District

## **Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray Guns**

September 26, 2002

**Revision 0** 

Prepared by: Engineering and Compliance Science and Technology Advancement



# ST Engineering Halter Marine and Offshore (STEHMO) Site Dust Control Plan

August 23, 2021 REV 3

ST Engineering Halter Marine and Offshore, Inc. dba Halter Marine and Offshore 601 Bayou Casotte Parkway, Pascagoula, MS39581 Mail: P.O. Box 1308, Pascagoula, MS 39568 T: (228) 762-0010

Halter Marine and Offshore I. Responsible individuals for implementing the plan are as follows:

Responsibility	Responsible Person	Title	Phone Number	
Development & Review	Robert Dearth	Compliance Manager	228-762-0010 Ext 1274	
Implementation of Plan	W.A. Shouse	Production	228-762-0010 Ext. 1250	
Observance and Reporting of Dust	All Employees		N/A	
Technical Aspects		EHS Dept.		
Management Overview	Jeffrey Gehrmann	Executive Vice President or Ops.	228-762-0010	

II. Locations of potential/actual dust sources.

A. ST Engineering Halter Marine and Offshore (STEHMO), an approx. 91 acre metal fabrication site located on Bayou Casotte in Pascagoula, MS, is covered by an approximately 50% concrete and 50% soil-sand- aggregate complex. The facility is approximately 40% buildings and 60% is open. The entire facility is open to in-yard traffic by limited vehicles, forklifts, cranes and small transportation vehicles. Asphalt parking lots and concrete roads are present at the yard as well. During periods when the substrate is sufficiently dry, dust can be generated when material becomes airborne by equipment movement or by the wind.

B. Outdoor abrasive blasting takes place near the south property line (see Figure 1).

C. Abrasive blasting can/does take place on vessels that are moored at the facilities docks.

D. STEHMO uses the watering of the facility via a rented water truck, when applicable, to assist in controlling the offsite disbursement of dust. The STEHMO yard does have a dedicated abrasive blast machine on site and; therefore, STEHMO attempts to minimize dust control via this process on site.

E. Spray painting operations are conducted on structures and may produce dust in the form of overspray.

F. Spray painting operations may be conducted in open air on the yard.

G. Grinding and welding operations are conducted on structures and may produce dust in the form of grinding dust or welding fume(s).

III. Peripheral areas of potential impact from dust.

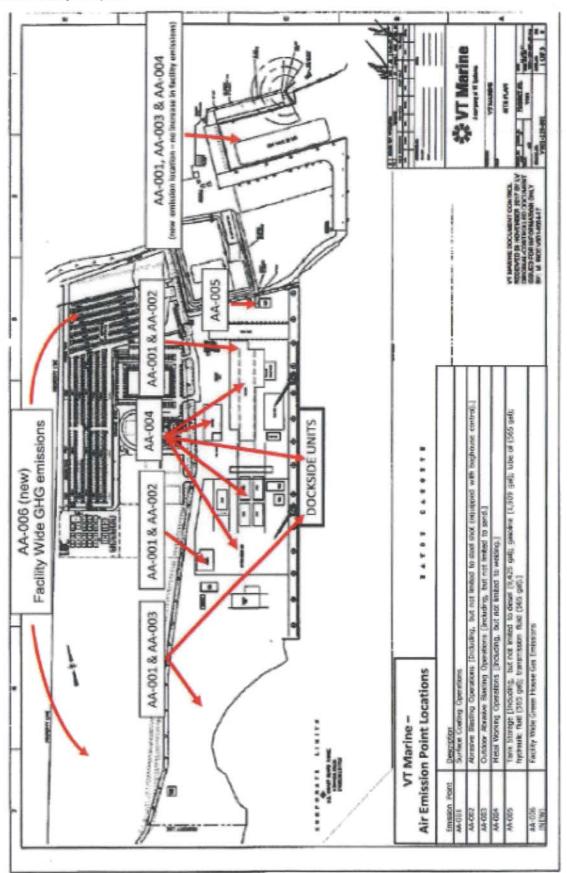
The following areas are within 1 mile of STEHMO facility:

A. East side. Pascagoula State Docks and Chevron are within one mile east of the facility.

B. North side. VT Halter Marine is located within one mile (actually adjacent) north of the facility.

C. West side. Various City of Pascagoula neighbourhood(s) are located within one mile west and northwest of the facility.

Figure 1.STEHMOfacility site plan



## IV. Suppressants used or available.

- A. Water is the sole item used to suppress road/yard dust.
- V. Contingencies to address inability to control dust emissions.

The roadway water truck is inspected by United Rentals before the truck is delivered and maintained at the rental company. The water truck is inspected by the operator at least once a day when in use. United Rentals has a maintenance worker who at regular intervals services the water truck here at the yard. This is achieved by United Rentals discretion. If found inoperative during a dust generating event a backup watering truck will be brought in to replace the inoperative water truck. Inspection Log (See attachment D)

Should containment structures become degraded to the point of not containing blast dust or paint overspray, operations will cease until repaired to a serviceable condition.

## VI. Best Management Practices for controlling dust emissions.

A. Vehicle Speed Limits

Facility STEHMO maintains a 5 mph speed limit on all property.

- B. Containment during abrasive blasting/painting conducted at the dock
- 1. Contained blasting

Blasting that occurs at the dock on vessels and selected items on the yard will be contained (with plastic shrink wrap or containment screens) during blasting/coating operations. This BMP essentially eliminates any dust from escaping. Spent blasting material will be either swept, scooped or vacuumed during production and moved to covered containers dockside. Containers/dumpsters will be left covered until the material is sent for disposal at an approved landfill. Records of blast sand disposal will be kept at STEHMO.

### 2. Open air blasting

\*Please note; per process knowledge and discussions with the STEHMO coatings department, the 25 mph wind speed was established as a benchmark as to when/if blasting operations should be abated. STEHMO will always use visual observations as a guideline to determine negative offsite impacts of any material being transferred/blown beyond the facility's property.

Open air blasting will be conducted during low wind conditions (<25 mph)

Low dust producing abrasive materials will used when appropriate. This material would include grits produced from coal slag (Black Beauty) or garnet. White quartz sand is avoided except when a

specific profile is required for coatings. During abrasive blasting with white quartz sand additional containment will be employed.

Blasting operations will be monitored during the operations for the release of dust. Should blast dust be observed escaping operations will cease immediately, regardless of wind speed. Blasting will resume when conditions change or have been adjusted to prevent escapement past the property line. Incidents of dust escapement will be recorded by the supervisory personnel on site. Records will be kept within the coatings department and copies of those records will be forwarded to the environmental department.

Containment screens are utilized to help with dust control. Inspection of the screens are completed prior to blasting operation, and monitored during the operations for the release of dust. Maintenance will be completed to maintain the dust control. When in use the following must be followed at a minimum:

- Screens will need to be set up around all sides, or as necessary to contain the dust.
- Extent at least 10 feet above the operations.
- Have no tears greater than 12 inches.

Blasting operations as stated above will be observed for dust migration. Inspection within 15 minutes of beginning open air blasting will take place and periodically thereafter, should wind speed and/or direction change. (See attachment A)

Spent blasting material deposited on the ground will be scooped up periodically and moved to covered containers. Containers/dumpsters will be left covered until the material is sent for disposal at an approved landfill. Records of blast sand disposal will be kept at STEHMO.

### 3. Painting

Waterside/dockside painting will be conducted within plastic, shrink wrap containment usually supported by scaffolding to eliminate the migration of overspray off site.

Open air painting, while infrequent, will be conducted in or adjacent to the blast yard to take advantage wind direction mitigate overspray migration offsite. Open air painting will be limited to low wind conditions (<6 mph). Airless spray equipment will be used to apply coatings, thereby reducing the production of overspray. Brushing and rolling will be used, when appropriate, which eliminates overspray production.

Painting operations as stated above will be observed for overspray migration. Inspection within 15 minutes of beginning open air coating will take place and periodically thereafter, should wind speed and/or direction change. (See Attachment B)

## C. Road Dust

Road dust is the primary dust that might be generated at STEHMO. Limiting vehicle speed greatly reduces the generation of dust. When needed, areas producing dust will be watered sufficiently to eliminate any production of dust.

When winds do pick up, or we suspect high winds are in the forecast we could have roadway dust, the roadways must be observed to ensure a dust control measures are carried out. If a dust cloud is present the water truck will be delivered to the yard and roadway watering will begin. A log will be maintained during watering truck operations. (See attachment C)

During dust suppression using applied water STEHMO will never exceed a delivery volume that would cause runoff to occur. The water applied is absorbed into the surface substrate with very little pooling.

## VII. Compliance with Plan

- A. All employees who have the potential to create dust as presented in this plan are responsible to adhere to the plans best management practices to minimize the creation and migration off site of dust.
- B. All new employees will be given training on the minimization of dust creation on site. Specific, advanced training will be given to supervisory personnel relative to dust creation within their scope of work. Annual refresher training on mitigating dust creation will be presented through the gang box topic program at STEHMO
- C. Training records will be kept on site.

Attachment A

# **Dust Escapement Log – Blasting Operations**

Corrective Actions Taken						
Results of the inspection / Observations						
Wind direction						
Wind speed MPH						
Responsible Supervisor						
Date/Time of Observation						

Instructions: Within 15 minutes of outdoor abrasive blasting not within a containment screens, the supervisor will monitor to see if the Representative. Necessary changes will be utilized to help mitigate the occurrence, and then work will resume. The observation and actions taken must be documented and readily available for inspection by the MDEQ. blasting operations is creating a dust cloud that could drift to the neighboring community. If a dust cloud is observed drifting toward the neighboring community the work must be stopped and be evaluated by the Supervisor, Production Manager and EHS

Attachment B

# **Dust Escapement Log – Painting Operations**

Corrective Actions Taken						
Results of the inspection / Observations						
Wind direction						
Wind speed MPH						
Responsible Supervisor						
Date/Time of Observation						

Instructions: Within 15 minutes of outdoor painting operations not within a containment screens, the supervisor will monitor to see if EHS Representative. Necessary changes will be utilized to help mitigate the occurrence. The observation and actions taken must be the painting operations is creating paint overspray that could drift to the neighboring community. If the paint overspray is observed drifting toward the neighboring community the work must be stopped and be evaluated by the Supervisor, Production Manager and documented, and readily available for inspection by the MDEQ.

Attachment C

# Dust Escapement Log – Roadway Dust Control

Corrective Actions Taken						
Results of the inspection / Observations			¥.			64
Wind direction						
Wind speed MPH						
Responsible Supervisor						
Date/Time of Observation						

Instructions: When high winds create roadway dust, the rigging supervisor or other supervisor will monitor to see if the dust cloud could drift to the neighboring community. If any roadway dust clouds are observed drifting toward the neighboring community the supervisor will contact the purchasing department, and they will contact United Rentals to have the water truck delivered to the yard. The observation and actions taken must be documented, and readily available for inspection by the MDEQ.

Attachment D

# Water Truck Operator Inspection

FACILITY: \_\_\_\_\_

DATE:	TRUCK TYPE:	OPERATOR:
VISUAL INSPECTION	CHECKED	COMMENTS & ADJUSTMENTS
WHEELS & TIRES		
TRANSMISSION FLUID	YES NO	
ENGINE OIL	YES NO	
HYDRAULIC OIL	YES NO	
BATTERY	YES NO	
WATER		
FUEL		
AIR COMPRESSOR HOLDING	TANK: YES NO	
OPERATIONAL INSPECTIO	N CHECKED	COMMENTS AND ADJUSTMENTS
PARKING BRAKE & AIR BRAK		
LIGHTS	YES NO	
HORN & BACK-UP ALARM		
STEERING & FLUID		
WATER FILL HOSE CONDITIO		
WATER TANK FILLED		
WATER GAUGES WORKING		
WINDOWS		
SIDE MIRRORS		
HYDRANT WORKING BY SAF	ETY YES NO	
ADDITIONAL COMMENTS:		



# Certification by Responsible Official

I certify that I am familiar with the information contained in this Dust Management Plan for STEHMO facility and that to the best of my knowledge and belief such information is true, complete, and accurate. To the best of my ability STEHMO will commit the necessary resources and personnel to fulfil the plans requirements.

Jeffrey Gehrmann

**Executive Vice President of Operations** 

Printed Name of Responsible Party

Title

Ekemany

Signature

8-23-21

Date

Contact: Robert Dearth, EHS Manager – (228)762-0010

Halter Marine and Offshore

## Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray Guns

Many District regulations require the use of High-Volume, Low-Pressure (HVLP) spray guns, or a demonstrated equivalent to the HVLP guns, in order to achieve a transfer efficient spray application. Historically, equivalency demonstrations were performed and approved on a facility specific basis. A number of conditions accompanied these approvals, which restricted the operation of the candidate spray gun to settings which reflected the parameters of the equivalency test. However, an equivalency demonstration of a non-HVLP spray gun under District Rule 1151 (Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations) was recently approved for multiple facilities, which generated a high level of interest for equivalency testing by other gun manufacturers. In response to the requests from spray gun manufacturers for guidelines to assist in the planning and development of an equivalency test program, this document was prepared as a companion document to the District's "Spray Equipment Transfer Efficiency Test Procedure For Equipment User" dated May 24, 1989 (hereafter referred to as the Transfer Efficiency Procedure). These guidelines can only be used for source specific rules that require alternative application methods to have a transfer efficiency that is equivalent to or better than HVLP spray technology. They are not applicable to source specific rules that require alternative application methods to have a transfer efficiency of at least sixty-five (65) percent.

## **Industry Survey**

The manufacturer of the candidate spray gun shall perform a survey of the applicable industry to determine:

- a) The make, model, and manufacturer of the HVLP guns used by the industry. The two most popular, commercially available HVLP guns shall be selected to test for equivalency.
- b) The types of coatings that are applied by the HVLP guns. For example, the automotive refinishing industry generally applies three types of coatings: primer, basecoat, and clearcoat.
- c) The major manufacturers that supply the majority of the types of coatings identified in item (b). If, for example, a manufacturer provides only two out of three types of coatings, the survey shall identify which coatings the manufacturer provides.
- d) The mixing ratios and reducers typically used to dilute the coatings. Solvent manufacturers shall also be identified.
- e) A range of part sizes for the particular industry. Of special interest are the commonly sprayed items that would result in the lowest transfer efficiency (often the smallest or thinnest part).

At the District's option, the facilities surveyed by the gun manufacturer may be contacted by the District for further questioning. As a result, upon request, the raw survey data as well as each facility name and contact shall be submitted for review. It is important to note that this survey

shall be conducted for industries located and operating in the South Coast Air Basin under valid permits issued by the District.

## **Manufacturer's Test Protocol**

A testing protocol, which describes the testing procedures, shall be submitted to the District for written approval prior to conducting the transfer equivalency testing. As a supplement to the requirements in the District's Transfer Efficiency Procedure, the following items must be addressed.

Gun Operation, Coating Information, and Spray Methodology

- a) Information regarding the candidate gun shall be submitted with the test protocol. A manufacturer's specification sheet is often acceptable.
- b) The make, model, and manufacturer of the two HVLP guns which are proposed to be tested.
- c) A minimum of two target sizes that are proposed to be sprayed. Generally, a "large" and a "small" target will be identified. The size of the targets shall be selected based on the survey. It should be noted that any District approval of the candidate spray gun may be conditioned based on the smallest target size tested during the equivalency testing.
- d) The type of substrate (wood, metal, etc.) proposed for the target, and whether aluminum foil will be used to cover the substrate during spraying. If a foil covering is proposed, the protocol shall specify the foil thickness and the method of attachment to the substrate.
- e) The types of coatings which are proposed to be sprayed by each gun. These coatings, as well as the mixing ratios and reducers, will also be selected based on the industry survey.
- f) The method for triggering and spraying the guns. The spraying shall be automated, and the protocol shall contain information on the spraying machine.
- g) The spray pattern proposed for each type of target. The protocol shall detail how many passes will be performed to paint the target, what percent of each pass will overlap the previous pass, the amount of planned overspray above and below the spray target, the distance prior to the leading edge of the target where the gun will be triggered, and the distance following the trailing edge where the trigger will be released. A schematic of the spray pattern will greatly assist in the evaluation.
- h) The proposed gun-target distance, gun speed, spraying time, and anticipated film thickness. These parameters may be based on usage information obtained from the survey. The protocol shall also state how these parameters will be measured during the test.
- i) The proposed gun parameters to be used during testing, such as the fluid flow rate, air pressure, and airflow, and the method for measuring these parameters. Air pressure and flow shall be determined at the spray gun's Inlet, Center, and Horn. The manufacturer's test protocol should justify these parameters to assure that the gun is not operated outside the manufacturer's recommended settings. Additionally, the manufacturer of the

candidate gun is cautioned that any District approval may be conditioned on the parameters used during the test.

- j) Estimates of the fan width and pattern thickness based on the Spreader Position, and justify the selected position. This information might also be obtained from the industry survey.
- k) The protocol should state the maximum time a coating mixture will be allowed to sit before mixing. Note this time interval will be coating dependent.
- A testing sequence shall be developed which tests for each combination of factors. The testing combinations must be randomized, and the proposed testing sequence shall be submitted for the District's approval prior to testing. As an example, one test combination may consist of the following factors:

Factor	Combination
Spray Gun	HVLP Gun #1
Coating	Basecoat
Coating Supplier	Supplier #1
Target Size	Large

A minimum of three replicates shall be performed for each test combination; these replicates may be performed sequentially.

## Laboratory Information and Procedures

- a) The test protocol shall describe the testing laboratory, its staff, and experience in performing transfer efficiency tests.
- b) The ambient conditions that will be monitored (such as barometric pressure, temperature and humidity), the frequency of measurement, and the location of the monitoring instruments in relation to the spray booth.
- c) A description of the spray booth shall be submitted, which includes information on the booth manufacturer, dimensions, and airflow rate. A schematic showing the booth dimensions and the spray target location within the booth shall also be included.
- d) The spraying direction relative to the booth airflow rate shall be indicated.
- e) The type of drying oven to be used, and the oven temperature setting for each of the proposed coatings to be used.
- f) Procedures for determining as-applied coating temperature, viscosity, specific gravity, and percent solids shall be submitted. Additionally, the protocol shall state how often these variables will be measured per day, given the "shelf life" of the mixed coating.
- g) Procedures for determining the baking time of the target panels shall be described.
- h) Submit a list of equipment and instruments that will be used for the test. For weight measurements, indicate the range, accuracy, and precision of the scale.

## Calculation Procedures

a) The procedure for establishing equivalency shall be described. In general, a statistical calculation such as the Analysis of Variance (ANOVA) procedure is usually appropriate.

## Quality Assurance

- a) The protocol shall describe how the quality of the panel finish will be evaluated. The finish quality shall be evaluated using (but not be limited to) wet and dry film thickness, gloss measurements, DOI, and orange peel.
- b) The quantity and locations of film thickness, gloss, and DOI measurements for each test panel shall be proposed. At least three film thickness measurements shall be made along an axis which is perpendicular to the spray direction. The measurement locations are best shown using a diagram. Following testing, panel samples shall be submitted at the District's request for evaluation of spray finish.
- c) The procedure for tagging panels to identify each spray combination shall be described. Additionally, procedures for insuring the integrity of the coating analyses when performing measurements of specific gravity, weight percent solids, etc. shall also be described.
- d) Sample data and calculation sheets shall be included with the test protocol.
- e) Preventative steps to assure quality data of critical measurements should be included with the protocol. For example, the laboratory may wish to prevent air currents or dampen fan vibrations during panel weight measurements.
- f) The protocol shall include calibration procedures, and the maintenance schedule of all instruments used in determining transfer efficiency.
- f) Other miscellaneous procedures, such as assuring that the target panels are sufficiently cleaned or prepared.

## Protocol Format

- a) The protocol must be signed and dated. The contacts for both the candidate gun manufacturer and the testing laboratory should be identified along with the postal address, phone number, and e-mail address of both contacts.
- b) To facilitate review, the protocol should also be logically organized, with each page individually numbered.
- c) A statement shall be provided that the independent testing laboratory meets the requirements of District Rule 304, Subdivision (k).

It should be noted that these guidelines are generic, and were not meant to address all possible testing situations. Hence, the District reserves the right to add, delete, and amend the above guidelines depending on the application. It is expected that the testing laboratory will share the responsibility in developing equivalency testing procedures by submitting a test protocol for

District approval prior to testing. The submission of a test protocol should follow the procedures below in order to expedite the protocol's receipt and evaluation by the District.

## **Protocol Submittal**

The test protocol shall be submitted as a Plan Application to the attention of Manager, Coating, Printing and Aerospace Operations, Engineering and Compliance, South Coast Air Quality Management District, P.O. Box 4944, Diamond Bar, CA 91765. Form 400-P, which may be downloaded via the AQMD Website at <u>www.aqmd.gov/permit/int-400e.html</u>, must be completed and submitted with the test protocol, along with the required fees specified in Rule 306(c) and Rule 306(h). A Plan Evaluation Fee will be determined in accordance with Rule 306(d) after the evaluation of the test protocol is completed and the applicant will be notified of any additional amount due.

The following is a step by step instruction for completing Form 400-P.

## Section I - Company Information

Legal Name of Applicant – This is the name of the manufacturer of the spray gun to be tested.

IRS or S.S. Number – This is the Internal Revenue Service number or social security number of the manufacturer of the spray gun to be tested.

Permit to Be Issued to – This is typically the name of the manufacturer of the spray gun to be tested.

Business Mailing Address – This is the mailing address of the manufacturer of the spray gun to be tested.

## Section II – Facility Information

Equipment Address/Location – This is the address where the transfer efficiency testing will occur.

Facility Name – This is the name of the facility where the transfer efficiency testing will occur.

Facility ID Number – This is the AQMD ID number of the facility where the transfer efficiency testing will occur, leave blank if unknown.

Name of Contact Person – This is the name of the contact person at the manufacturer of the spray gun.

Title – This is the title of the contact person.

Contact Telephone Number – This is the telephone number of the contact person.

Type of Business at this Facility – Describe the type of business at the facility where the transfer efficiency testing will occur.

Business Type Code – This is the four digit Standard Industrial Classification (SIC) business code for the business where the transfer efficiency testing will occur.

## Section III – Equipment Information

Application hereby submitted for: This is the make and model of the spray gun to be tested.

Rule Number which this Application Applies to: This is the rule number for which the transfer efficiency equivalency is being requested.

Type of Plan Application: Check the "Other" box and write in "spray gun transfer efficiency test."

If this Application is Associated with Certain District Application(s)/permit(s), enter application/permit number: Enter not applicable.

Operating Schedule – Leave blank.

For AECP Please Fill in the Table Below: Leave blank.

## Section IV – Signature

Signature of Responsible Official of Firm: This is the responsible official from the manufacturer of the spray gun to be tested.

Signature of Preparer: This is the individual who was responsible for preparing the application package.

Transfer Efficiency Testing Guidelines for HVLP Equivalency