

The Petitioner proposed to control the VOC emissions from the use of antifoulant specialty coatings by limiting the VOC content of the coating to 3.33 pounds per gallon or less, which is also the limit listed in Table 2 to 40 CFR 63, Subpart II (Shipbuilding and Ship Repair National Emission Standards for Hazardous Air Pollutants (NESHAP)).

The petition is submitted for the following reasons:

1. The more stringent requirements contained in 326 IAC 8-12-4 place Jeffboat LLC at an economic disadvantage as compared to shipbuilding facilities in other states. The antifoulant that was historically used by Jeffboat LLC with a VOC content of less than 2.83 pounds per gallon was discontinued by the supplier and is no longer available. There are two other antifoulant coatings that remain on the market that meet the more stringent limit. The first is specifically designed for yachts and does not have the same ablative properties that are required in barge manufacturing. The second costs three times more than other available antifoulant coatings. Jeffboat LLC is the only barge manufacturer in the nation subject to the more stringent coating limit.

A customer may request a specific manufacturer coating system be utilized on a barge. If Jeffboat LLC cannot offer the same options as other manufacturers in other states, they may have to decline business or send the barge to an outside independent shipyard in another state, which could substantially increase cost to Jeffboat LLC or negatively impact their ability to give timely service to customers. Coating suppliers are normally awarded the whole vessel for their paint system, and therefore, do not go to the expense to test antifoulants with other supplier's epoxy, and do not warranty their coating system with other supplier's antifoulants.

2. The proposed VOC content limit of 3.33 pounds per gallons represents Maximum Achievable Control Technology (MACT) as listed in the Shipbuilding and Ship Repair NESHAP at 40 CFR 63, Subpart II, Table 2.

FINDINGS

Pursuant to 326 IAC 8-1-5(b), IDEM may approve a petition for a site-specific RACT plan if the petition:

1. is submitted in accordance with 326 IAC 8-1-5(a),
2. demonstrates that the alternative control measures represent RACT, and
3. contains a compliance schedule for achieving and maintaining a reduction of volatile organic compound emissions as expeditiously as practicable.

Based on the foregoing information, IDEM finds the following:

1. The United States Environmental Protection Agency (U.S. EPA) issued a control technique guideline (CTG) on August 27, 1996, for the control of VOC emissions from surface coating operations in the shipbuilding and ship repair industry to assist states in analyzing and determining RACT for shipbuilding and ship repair operations located in

ozone nonattainment areas. The VOC content limit for antifoulant coatings in Table 1 of the Federal Register (61 FR 44053) is 400 grams per liter (3.33 pounds per gallon).

2. IDEM has identified one other U.S. EPA Region V state that has a VOC specific rule for shipbuilding and ship repair. Pursuant to Ohio Administrative Code (OAC) 3745-21-20(D)(1) - Table A (Control of VOC emissions from shipbuilding and ship repair operations (marine coatings)), the VOC content limit for antifoulant coatings shall not exceed 3.3 pounds of VOC per gallon of coating. Illinois, Michigan, Minnesota, and Wisconsin rely on the Ship Building and Ship Repair NESHAP to regulate the VOC emissions from antifoulant coatings. IDEM also regulates antifoulant coatings in the Architectural and Industrial Maintenance (AIM) Coatings rule at 326 IAC 8-14. The VOC content limit for antifoulant coatings in 326 IAC 8-14-3(b) is 400 grams per liter.
3. IDEM estimated the change in potential to emit (PTE). The estimated increase in PTE from the current limit to the new limit is 0.65 tons per year of VOC.

PTE Change of the Outdoor Spray Operations (EU-3) When Using Antifoulant Coatings			
Pollutant	PTE 326 IAC 8-12-4 Limit* (ton/yr)	PTE NewLimit* (ton/yr)	Increase from 326 IAC 8-12 Limit to the New Limit (ton/yr)
VOC	3.65	4.30	0.65

* The limit in 326 IAC 8-12-4(a)(1)(E) is 2.83 pounds per gallon and the new limit is 3.33 pounds per gallon. Both PTE are based on the maximum number of barge types that require antifoulant coatings.

4. The Petitioner has submitted a significant permit modification application. The draft technical support document (TSD) for the site-specific RACT plan is available in Appendix A.
5. IDEM supports a limit that is equivalent to the CTG. IDEM is pursuing an amendment to 326 IAC 8-12-4 to increase the VOC content limit for antifoulant coatings to 3.33 pounds per gallon consistent with the Shipbuilding and Ship Repair CTG. IDEM will work with U.S. EPA for SIP approval and will rely on reductions in the AIM rule for a CAA 110(l) anti-backsliding demonstration.

ORDER

1. This Order allows the Petitioner to use an antifoulant coating with a VOC content limit of 3.33 pounds per gallon or less, in lieu of the specialty coatings limit in 326 IAC 8-12-4 pursuant to 326 IAC 8-1-5. The Petitioner shall continue to demonstrate compliance for the outdoor surface coating operations (EU-03). Compliance with the antifoulant coating VOC content limit shall be determined by continuing to use the methods in 40 CFR 63.784 and 40 CFR 63.785, as incorporated by reference in 326 IAC 8-12-5 and 326 IAC 20-26.
2. This Order shall apply to and be binding upon the Petitioner, its successors and assigns. No change in ownership, corporate, or partnership status of the Petitioner shall in any way alter its status or responsibilities under this Order.

EFFECTIVE DATE OF ORDER

Pursuant to IC 4-21.5-3-5, IDEM will give notice of this Order to each person whom the order is directed and affected neighbors.

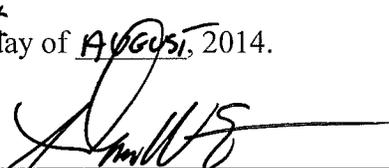
Pursuant to 40 CFR 51.102, this Order will be submitted to U.S. EPA as a revision to the Indiana state implementation plan. Upon approval by the U.S. EPA, this Order will be part of the Indiana state implementation plan.

This Order becomes effective on the eighteenth (18th) day after this Order and notice of decision are deposited in the U.S. mail. Under IC 4-21.5-3-2(e), IC 4-21.5-3-5, and IC 4-21.5-3-7(a)(3), this Order may be appealed by filing a petition for review within eighteen (18) days after the date that affected persons were given notice through service by U.S. mail. A petition for review must be submitted to the Office of Environmental Adjudication (OEA), 100 North Senate Avenue, Room N-501 E, Indianapolis, Indiana 46204 as required by IC 4-21.5-3-7. The petition must contain facts demonstrating you are either the applicant, the person aggrieved or adversely affected by this decision, or otherwise entitled to review by law. Pursuant to IC 4-21.5-3-5(d), the Administrative Law Judge will provide parties who request review with notice of prehearing conferences, preliminary hearings, stays or orders disposing of all proceedings.

Persons seeking judicial review of this Order may do so in accordance with IC 4-21.5-5.

If you have procedural or scheduling questions regarding your request for review, you may contact the Office of Environmental Adjudication at (317) 232-8591. If you have questions regarding this Order, please contact Susan Bem, Rules Development Branch, Office of Legal Counsel, by telephone at (317) 233-5697 or email at sbem@idem.in.gov.

Dated at Indianapolis, Indiana this 27th day of August, 2014.



Thomas W. Easterly
Commissioner
Indiana Department of Environmental Management

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a permit modification application, submitted by Jeffboat, LLC on March 27, 2014, relating to a site-specific Reasonably Available Control Technology (RACT) plan (326 IAC 8-1-5) as an alternative to the requirements specified in 326 IAC 8-12 (Shipbuilding or Ship Repair Operations in Clark, Floyd, Lake, and Porter Counties). Pursuant to 326 IAC 8-12-4(a)(1)(E), Jeffboat, LLC shall not use any specialty coating with a VOC content that exceeds 2.83 pounds per gallon. However, the compliant antifoulant specialty coating that was historically used by Jeffboat, LLC in the outdoor spraying operations (EU3) was recently discontinued by the supplier and is no longer available.

The antifouling coating is a specially designed coating that is applied to the underwater portion of a vessel to prevent or reduce the attachment of biological organisms and that is registered with the U.S. EPA as a pesticide under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The use of antifoulant coatings is an industry common practice that has been going on for 100 plus years. Vessels that will be used at sea or in coastal areas require this as part of their coating system. The coatings allow vessels to travel faster through water and consume less fuel when their hulls are clean and smooth and free from fouling organisms, such as barnacles, algae or mollusks. Antifoulants also drastically reduce the operator's maintenance costs to maintain and clean vessels.

Jeffboat, LLC is requesting to be allowed to use any antifoulant specialty coating with a VOC content that does not exceed 3.33 pounds per gallon minus water and exempt compounds, which is allowed under 40 CFR 63.783 and Table 2 of Subpart II, 40 CFR 63, (National Emission Standards for Shipbuilding and Ship Repair (Surface Coating)).

Jeffboat, LLC has submitted additional confidential information to demonstrate that the costs associated with complying with the limit in 326 IAC 8-12-4(a)(1)(E) create an economic burden on Jeffboat, LLC. IDEM has reviewed the confidentiality request and agrees that the information is entitled to confidential treatment under IC 5-14-3 and 326 IAC 17.1.

There are no new or modified emissions units involved this modification for Jeffboat, LLC. This permit modification does not involve any physical modifications to emission units.

PTE Change of the Outdoor Spray Operations (EU-3) When Using Antifoulant Coatings			
Pollutant	PTE - Indiana Limit* (ton/yr)	PTE - NESHAP Limit* (ton/yr)	Increase from Indiana Limit to NESHAP Limit (ton/yr)
PM	-	-	-
PM ₁₀	-	-	-
PM _{2.5}	-	-	-
SO ₂	-	-	-
VOC	3.65	4.30	0.65
CO	-	-	-
NO _x	-	-	-
HAPs	-	-	-

* Indiana limit is 2.83 pounds per gallon, while the NESHAP limit is 3.33 pounds per gallon. Both PTE is based on the maximum number of barges that require antifoulant coatings.

**326 IAC 8-1-5 (Petition for site-specific
reasonably available control technology (RACT) plan)**

Pursuant to 326 IAC 8-1-5(a), an owner or operator of a source may submit a petition to the commissioner requesting a site-specific Reasonably Available Control Technology (RACT) plan as an alternative to the requirements specified in 326 IAC 8.

On March 27, 2014, Jeffboat, LLC submitted a site-specific RACT requesting to be allowed to use any antifoulant specialty coating with a VOC content that does not exceed 3.33 pounds per gallon in lieu of complying with the VOC content limit for specialty coatings in 326 IAC 8-12-4(a)(1)(E) of 2.83 pounds per gallon.

Description of Operations Affected by site-specific RACT:

The following is the affected operation that is undergoing site specific RACT review:

Outdoor spray operations, identified as EU-03, constructed in 1939, consisting of conventional, airless and electrostatic paint spray application methods, as well as brush and roller applications, with a maximum capacity of 600 marine vessels per year. A portion of the outdoor spray operations are conducted under cover that was installed in 2006. Under 40 CFR 63, Subpart II, this is considered shipbuilding and repair.

Existing Emission Limit:

As specified in the existing permit for Jeffboat LLC, the following is the applicable requirement:

Pursuant to 326 IAC 8-12-4(a) (Shipbuilding or ship repair operations in Clark, Floyd, Lake, or Porter counties), VOC emissions from the outdoor surface coating operations (EU-03) shall be limited as follows:

- (a) During application of specialty coatings, VOC emissions shall be limited throughout the year as follows:
 - (1) Any other specialty coating shall not exceed a VOC content of two and eighty-three hundredths (2.83) pounds per gallon.

Note: Pursuant to 326 IAC 8-12-3-3(22)(C), specialty coatings includes antifoulant coating.

Proposed RACT:

Jeffboat, LLC has proposed to comply with the VOC content limit for antifoulant specialty coatings in 40 CFR 63, Subpart II - Table 2. The outdoor spray operations are considered an affected source under 40 CFR 63, Subpart II. Pursuant to the 40 CFR 63.783 and Table 2 of Subpart II (National Emission Standards for Shipbuilding and Ship Repair (Surface Coating)), the VOC content of antifoulant coatings shall not exceed 400 grams per liter of coating (3.33 pounds per gallon) minus water and exempt compounds.

Compliance with this limit will be demonstrated by complying with 40 CFR 63.788 - Recordkeeping and Reporting Requirements. The potential VOC emissions by complying with this limit will be 4.30 tons per year (See Appendix A for detailed calculations).

Schedule:

No alternative operational or equipment controls in conformance with the appropriate compliance schedule section are required for this site-specific RACT. Site training and labeling requirements required by 40 CFR 63, Subpart II will be modified to reflect the new antifoulant coating category VOC limit upon approval.

Demonstration of RACT:

(a) Coating Availability and Additional Costs

The more stringent requirements contained in Indiana's regulations have placed Jeffboat, LLC at an economic disadvantage as compared to ship building facilities in other states. This issue has recently become critical, as the Indiana compliant antifoulant coating that was historically used by Jeffboat, LLC has been discontinued and is no longer available.

There are only two (2) antifoulant coatings remaining on the market that meet the more stringent Indiana standards.

- (i) The first is specifically designed for yachts and does not have the same ablative properties that are required in barge manufacturing.
- (ii) The second coating costs three (3) times more than other available antifoulant coatings, putting Jeffboat, LLC at a severe economic disadvantage to facilities in other states that can purchase cheaper antifoulant coatings that comply with the Ship Building and Ship Repair NESHAP.

(b) Industry Standard

The antifouling coating is a specially designed coating that is applied to the underwater portion of a vessel to prevent or reduce the attachment of biological organisms and that is registered with the U.S. EPA as a pesticide under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The use of antifoulant coatings is an industry common practice that has been going on for 100 plus years. Vessels that will be used at sea or in coastal areas require this as part of their coating system. The coatings allow vessels to travel faster through water and consume less fuel when their hulls are clean and smooth and free from fouling organisms, such as barnacles, algae or mollusks. Antifoulants also drastically reduce operator's maintenance costs to maintain and clean vessels.

It is common practice in the industry for a customer to request a specific manufacturer coating system to be utilized on a barge. Furthermore, coating suppliers are normally awarded the whole vessel for their paint system and therefore do not go to the expense to test antifoulants with other supplier's epoxy. As a result, coating suppliers do not provide warranty of their coating system with other supplier's antifoulants. The more stringent Indiana limit would require Jeffboat, LLC to utilize an antifoulant coating that is different from and more expensive than what the customer requested and change the epoxy paint. Customers will be much less inclined to award business to Jeffboat, LLC, because they cannot utilize their desired paint. Since Jeffboat, LLC cannot offer the same options as manufacturers in other states, they will have to either decline the business or send the barge to an outside independent shipyard located in a state that follows the Ship Building and Ship Repair NESHAP to be painted. This substantially increases the costs to Jeffboat, LLC and negatively impacts timely customer service.

- (c) **State and Local Air Quality Permits**
 A review of Indiana Air Permits identified the following permitted facilities other than Jeffboat, LLC operating under the standard industrial classification (SIC) code 3731 (Shipbuilding and Repair):

Plant	Permit #	County	VOC Limits for Surface Coating	Major Source of HAPs
Corn Island Shipyard	147-27989-00047, issued on 12/01/2009	Spencer	VOC Content of extreme performance coatings shall not exceed 3.5 pounds of VOC per gallon of coating less water. 326 IAC 8-2-9 (Miscellaneous Metal and Plastic Parts Coating Operations)	No
Tell City Boat Works, Inc.	123-29238-00026, issued on 09/08/2010	Perry	VOC Content of extreme performance coatings shall not exceed 3.5 pounds of VOC per gallon of coating less water. 326 IAC 8-2-9 (Miscellaneous Metal and Plastic Parts Coating Operations)	No

The facilities identified above are not subject to the requirements of 326 IAC 8-12 because each source is not located in Clark, Floyd, Lake, or Porter Counties. In addition, each source has agreed to limit the potential to emit of a single HAP and/or combined HAP emissions to less than the major source thresholds. Therefore, these sources are not subject to 40 CFR 63, Subpart II.

- (d) **BACT and RACT Clearinghouse Comparison**
 A review of EPA's RACT/BACT/LAER Clearinghouse (RBLC) did not identify any permits with a more stringent VOC content limit for antifoulant coatings.
- (e) **US EPA Region 5 Comparison**
 US EPA Region 5 serves Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin and 35 tribes. A review of the air pollution rules in states other than Indiana identified only one state rule for VOC emissions from Shipbuilding and Ship Repair. Pursuant to Ohio Administrative Code (OAC) 3745-21-20(D)(1) - Table A (Control of VOC emissions from shipbuilding and ship repair operations (marine coatings)), the VOC content limit for antifoulant coatings shall not exceed 3.3 pounds of VOC per gallon of coating. Illinois, Michigan, Minnesota, and Wisconsin rely on the Ship Building and Ship Repair NESHAP to regulate the VOC emissions from antifoulant coatings.
- (f) **Capital Expenditure and Operating Costs**
 There are no capital expenditures applicable to this site-specific RACT. The cost impact of complying with the proposed RACT is not significant when compared to the significant costs that Jeffboat, LLC is experiencing due to the more restrictive VOC limit in 326 IAC 8-12-4.
- (g) **Energy Requirements**
 There are no energy requirements applicable to this site-specific RACT.
- (h) **Impact on the Environment**
 The potential VOC emissions by complying with this limit will be 4.30 tons per year. The potential VOC emissions from complying with the limit in 326 IAC 8-12-4(a)(1)(E) would be 3.65 tons per year. As a result, the VOC emissions are anticipated to increase by 0.65 tons per year, based on the same maximum number of barges that require the antifoulant coating.

- (i) Add on control
Due to the nature of the barge manufacturing operations occurring in the structure and the need for large openings, there is not a reasonable means of capturing the emissions and routing them through a stack, chimney, vent, or other functionally-equivalent opening; add on control devices are not technically and economically feasible.
- (j) Safety Implications
There are no safety implications applicable to this site-specific RACT.

Conclusion

Pursuant to 326 IAC 8-1-5 and based on the site-specific RACT petition discussed above, IDEM, OAQ has determined that the following requirement represents RACT for the outdoor surface coating operations of Jeffboat LLC (EU-03):

- (a) The VOC content of antifoulant specialty coatings used in the outdoor surface coating operations (EU-03) shall not exceed 400 grams per liter of coating (3.33 pounds per gallon) minus water and exempt compounds.

Note: The outdoor surface coating operations (EU-03) shall continue to comply with all other applicable requirements in 326 IAC 8-12 (Shipbuilding or ship repair operations in Clark, Floyd, Lake, or Porter counties). This is a Title 1 change.

SIP revision

Pursuant to 326 IAC 8-1-5(c), this site-specific RACT plan will be submitted to U.S. EPA as a SIP revision. Based on this requirement, this site-specific RACT is only state enforceable. This site-specific RACT is not federally enforceable until the revision of Indiana's State Implementation Plan (SIP) has been approved by the U.S. EPA.

Compliance Determination and Monitoring Requirements

This modification will not change the existing compliance determination requirements for the outdoor surface coating operations (EU-03) because pursuant to 326 IAC 8-12-5, the source shall demonstrate compliance using the methods in 40 CFR 63.784 and 40 CFR 63.785, as incorporated by reference in 326 IAC 20-26, in lieu of 326 IAC 8-12-5.

The Compliance Determination Requirements applicable to this site-specific RACT plan are as follows:

- (a) The outdoor surface coating operations (EU-03) shall determine compliance with the antifoulant coating VOC content limit by continuing to use the methods in 40 CFR 63.784 and 40 CFR 63.785, as incorporated by reference in 326 IAC 20-26.

