

**OhioEPA**  
Division of Air Pollution Control

**Response to Comments  
Proposed Rule Language Comment Period**

**Rule: OAC Chapter 3745-21 – VOC RACT Phase III**

**Agency Contact for this Package**

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Ohio EPA provided a 30-day comment period which ended on January 11, 2011 and a public hearing held on January 11, 2011. This document summarizes the comments and questions received at the public hearing and/or during the associated comment period.

Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. The name of the commenter follows the comment in parentheses.

**Rule 3745-21-01 “Definitions”**

**Comment 1:**

The following definitions should be added to Rule 3745-21-01 of the Administrative Code:

“On press screen cleaning: is a solvent cleaning activity carried out during press runs in screen printing operation to remove excess inks and contaminants from a screen that is still attached to the press”

“Screen Reclamation: is a solvent cleaning activity carried out in screen printing operation where the screen is completely cleaned for recycling or reuse of the screen for other production runs.

“Screen Printing: is a process in which the printing ink passes through a web or a fabric to which a refined form of stencil has been applied. The stencil openings determine the form and dimensions of the imprint.”

“Digital Printing: A print-on-demand method of printing in which an electronic output device transfers variable data, in the form of an image, from a computer to a variety of substrates. Digital printing methods include, but are not limited to, inkjet printing, electrophotographic printing, dye sublimation printing, thermal wax printing and solid ink printing.”

**(Marcia Y. Kinter, Specialty Graphic Imaging Association(SGIA))**

**Response 1:**

Ohio EPA agrees with the definitions and will add the definitions for “Screen Printing” and “Digital Printing.” Because Ohio EPA will not be adopting the suggested limit in comment 2 below, the definitions for “On press screen printing” and “Screen Reclamation” are redundant and will not be added.

**Rule 3745-21-23 “Industrial Cleaning Solvents.”**

**Comment 2:**

SGIA advocates that the OH EPA establish a limit for the cleaning of ink application equipment for screen printing operations of 6.4 pounds VOC per gallon. This limit allows screen printing operations to use solvents for both on press and off press cleaning activities that meet the technical limitations of both cleaning processes. In lieu of this proposed limit, SGIA recommends that two separate limits be established for solvent usage by screen printing facilities recognizing the different uses:

For on press cleaning: 6.4 lbs/gallon  
For screen reclamation: 4.2 lbs/gallon

**(Marcia Y. Kinter, Specialty Graphic Imaging Association(SGIA))**

**Response 2:**

The Ohio EPA acknowledges your comment. However, Ohio EPA, in consultation with U.S. EPA considers the VOC limit of 6.4 lbs/gallon as proposed by the commenter to be excessive. This analysis is based upon the current allowable VOC content limit as established by the South Coast rule and the Bay Area rule. Therefore, no change will be made to the proposed rule.

**Comment 3:**

The US EPA’s CTG guidelines also include a recommended control measure of an alternative composite vapor pressure limit. While inclusion of this control measure is only an EPA recommendation, SGIA strongly suggests that the Ohio EPA include this measure as a control option for all industrial applications. Inclusion of this control measure aligns Ohio’s proposal with that of other states

that have incorporated the provisions of this CTG into their air pollution control standards. **(Marcia Y. Kinter, Specialty Graphic Imaging Association(SGIA))**

**Response 3:**

Paragraph (C)(6)(a) of this rule specifies an alternative compliance option for the use of a material with a specific composite vapor pressure limit. Specifically, a facility may use solvents or solvent solutions for industrial cleaning operations which have a VOC composite partial pressure of less than or equal to 8 mm of mercury at 20 degrees Celcius.

**Comment 4:**

As the CTG is not technically considered a regulation, and so that this burgeoning technology is not crippled, SGIA urges the OH EPA to adopt an exemption for digital printing operations. Other states, most notably Illinois, included an exemption for digital printing in its final Industrial Solvent Cleaning regulation (218.187, Other Industrial Solvent Cleaning Operations). As it stands now, the adoption of a limit of .42 lbs/gallon would both economically and technologically cripple an entire industry sector. We propose that the following exemption be added in Section (D):

Cleaning operations associated with digital printing.

**(Marcia Y. Kinter, Specialty Graphic Imaging Association(SGIA))**

**Response 4:**

Ohio EPA agrees with the comment. Therefore, paragraph (D) of this rule will be amended by adding an exemption for "cleaning operations associated with digital printing."

**Rule 3745-21-28 "Control Techniques Guidelines for Miscellaneous Industrial Adhesives."**

**Comment 5:**

In reviewing the proposed draft of OAC 3745-21-28, PIANKO requests that the OEPA include graphic arts sources in the list of exempt sources. As offset lithographic printing, letterpress printing, and flexible package printing are specifically mentioned as categories that are not included in the Miscellaneous Industrial Adhesive CTG, these processes should be excluded from the miscellaneous industrial adhesive rule. This is supported by EPA's statement contained in the CTG under the applicability section.

Page 4 of the 2008 CTG for miscellaneous industrial adhesives states:

“The miscellaneous industrial adhesives product category does not include adhesives that are addressed by CTGs already issued for categories listed under CAA Section 183(e) or by earlier CTGs. These include the CTGs issued under Section 183(e) for aerospace coatings; metal furniture coatings; large appliance coatings; flat wood paneling coatings; paper, film, and foil coatings; offset lithographic printing and letterpress printing; and flexible package printing. Coil coating, fabric coating, and rubber tire manufacturing were not listed under CAA Section 183(e), however, they were the subject of earlier CTGs which address adhesives used in those processes.”

Additionally, the 2008 CTG is based on guidelines issued in the October 8, 2008 Federal Register Vol. 73, No. 195. Page 58482 of that Federal Register contains a chart describing the Miscellaneous Industrial Adhesive category as follows:

Category	NAICS code	Examples of affected entities
Miscellaneous industrial adhesives	316, 321, 326, 331, 332, 333, 334, 336, 337, 339, 482, 811.	Facilities that manufacture and repair leather and allied products, wood products, plastic and rubber products, fabricated metal, machinery, computer and electronic equipment, transportation equipment, furniture and related products, rail transportation equipment, and facilities involved in miscellaneous manufacturing.

Again, neither lithographic and letterpress commercial printing (NAICS code 323) or any other graphic arts operations are identified either by NAICS code, or by example. The adhesives used in graphic arts operations were not studied by EPA as the intent of the rule was to specifically not include them.

It is clear that lithographic and letterpress printing, flexible packaging and other graphic arts operations are not miscellaneous industrial adhesive operations, as specified in the October 8, 2008 Federal Register and the 2008 CTG, these sources should be exempt.

Therefore, the following exemption should be added to Section (A):

(3) Adhesives used in lithographic, letterpress, digital, and flexographic printing operations are not subject to this rule.

#### Response 5:

The Control Techniques Guidance (CTG) Document for miscellaneous Industrial Adhesives provides that the category does not include adhesives already addressed under other CTG documents, including: aerospace coatings; metal furniture coatings; large appliance coatings; flat wood paneling coatings; paper, film, and foil coatings; offset lithographic printing and letterpress printing; flexible package printing; coil coating; fabric coating; and rubber tire manufacturing.

Ohio EPA will add paragraph (A)(3) to clarify that this rule does not apply to an adhesive if the operation using the adhesive is already regulated by one of the other CTG categories mentioned above.

**Rule 3745-110-03 “RACT limitations for emissions of NOx from stationary sources .”**

**Comment 6:**

The proper legal name listed in OAC 3745-110-03(L) is requested to be revised from “ArcelorMittal Cleveland, Inc.” to “ArcelorMittal Cleveland Inc.”

**(Rich Zavoda, ArcelorMittal Cleveland Inc.)**

**Response 6:**

Ohio EPA will incorporate the suggested change as recommended in this comment.

**Comment 7:**

In accordance with OAC 3745-110, ArcelorMittal Cleveland Inc. submitted a NOx Reasonably Available Control Technology (RACT) study in correspondence dated December 12, 2008. Subsequent to Ohio EPA’s review of the NOx RACT December 12, 2008 report, the Ohio EPA issued an April 29, 2009 response stating that “Ohio EPA approves of this RACT study.” This Ohio EPA response also included the appropriate terminology to describe the specific ArcelorMittal Cleveland emission units. The April 29, 2009 Ohio EPA response is attached as Appendix A.

However, the January 3, 2011 proposed rule amendments in OAC 3745-110-03(L) included emission unit description revisions that deviate from the April 29, 2009 descriptions. The suggested corrections included in Appendix B conform these emission unit descriptions to those included in the NOx RACT Plan and those included in Ohio EPA’s April 29, 2009 letter. This will ensure that the final rule does not introduce ambiguity regarding the affected emission units when the rule is implemented or enforced.

ArcelorMittal requests that the proposed revisions included as a mark-up of the proposed OAC 3745-110-03(L) in Appendix B be incorporated in the final rule. The mark-up also includes the correct current descriptions of P905 and P906, which were revised from No. 2 BOF to No. 1 BOF, and P925 and P926 which were revised from No. 1 BOF to No. 2 BOF.

**(Rich Zavoda, ArcelorMittal Cleveland Inc.)**

### **Response 7:**

The Ohio EPA agrees with the commenter. Therefore, the suggested revisions will be made to the rule.

### **Comment 8:**

The January 3, 2011 draft amendments of OAC rule 3745-110 (L), incorrectly propose to reduce the existing NOx limitation, applicable to the natural gas fired, Continuous (Hot Dip) Galvanizing Line (Anneal Furnace) P071 from 0.23 lbs NOx/MMBtu to 0.18 lbs NOx/MMBtu. The 0.23 lbs NOx/MMBtu limit is a Best Available Technology (BAT) determination pursuant to OAC rule 3745-31-05(A)(3) issued in PTI 13-01915 dated November 1, 2005 that ArcelorMittal is currently employing. According to OAC rule 3745-110-03(I)4, a BAT determination of this vintage (within five years prior to 12-22-07) presumptively satisfies NOx RACT. Ohio EPA's April 29, 2009 letter (Appendix A) acknowledged that ArcelorMittal proposed a RACT limit of 0.23 lb/MMBtu and confirmed that additional emission control measures for P071 "were not considered to be technically and/or economically feasible." ArcelorMittal has not received any notification from the Director that Ohio EPA determined that BAT in this instance would not satisfy NOx RACT. Therefore, the 0.23 lbs NOx/MMBtu is the appropriate NOx RACT limit for P071.

In support of this determination, we have attached PTI 13-0196 (November 1, 2005) as Appendix C. The BAT determination for P071 was based on a stack test result of 0.19 lbs NOx/MMBtu and a twenty percent contingency. A recent stack test in 2007 confirmed compliance with the BAT NOx rate by testing at 0.15 lb/MMBtu. Both of these stack tests are valid for the current operating configuration for P071. Thus, the source has demonstrated variability of 0.15 to 0.19 lb/MMBtu for NOx. To ensure that NOx RACT is achievable under all operating conditions, Ohio EPA must consider all of the valid NOx data. Thus, NOx RACT is appropriately based on the higher tested emission rate plus a margin of safety. This is how the 0.23 lb/MMBtu NOx BAT was established in the 2005 PTI. Therefore, Ohio EPA has strong support for accepting the presumption that BAT constitutes NOx RACT for this source.

**(Rich Zavoda, ArcelorMittal Cleveland Inc.)**

### **Response 8:**

Upon further consideration the Ohio EPA agrees with the comment. Therefore, the NOx emission limitation for emissions units P071 will be revised to reflect a 0.23 lb/MMBtu NOx emission limit, which is consistent with the BAT determination established in the 2005 PTI.

**Comment 9:**

The proposed rule amendments in OAC 3745-110-03(L) include the following emission units that do not have stacks capable of being tested with approved U.S.EPA test methods: P049, Anneal –North; P050, Anneal – South; P905, No. 1 BOF Ladle Preheaters; P906, No. 1 BOF Ladle Preheaters; P925, No. 2 BOF Ladle Preheaters; and P926, No. 2 BOF Ladle Preheaters. The Ohio EPA is requested to appropriately acknowledge, in the rule or otherwise, that stack testing of these sources is not required. Compliance demonstrations for these units should be based on the use of natural gas fuel and the continued use of burner technology that Ohio EPA acknowledged in its April 29, 2009 determination as sufficient to meet NOx RACT.

**(Rich Zavoda, ArcelorMittal Cleveland Inc.)**

**Response 9:**

Ohio EPA is not aware that these sources do not have stacks capable of accommodating appropriate emissions testing as stated in your comment. Ohio EPA would need to further investigate this matter before making a commitment as to the appropriate compliance methodology. Typically, the appropriate compliance methodology for these sources would be defined in the facilities valid operating (i.e., Title V) permit.

**End of Response to Comments**